METRO Agenda

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

MEETING: METRO COUNCIL
DATE: July 11, 1991
DAY: Thursday
TIME: 5:30 p.m.
PLACE: Metro Council Chamber

Approx. Time*		Presented By
5:30 (5 min.)	**CALL TO ORDER/ROLL CALL**	
	1. INTRODUCTIONS	
	2. CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS	
	3. EXECUTIVE OFFICER COMMUNICATIONS	
5:35 (5 min.)	4. CONSENT AGENDA	
	4.1 Minutes of October 25, November 8, November 29, 1990 and April 25, 1991	
5:40 (5 min.)	5. ORDINANCES, FIRST READINGS	
	5.1 Ordinance No. 91-413, For the Purpose of Approving an Increase in the Transfer Rate for the Forest Grove Transfer Station (Action Requested: Refer to the Solid Waste Committee)	
	5.2 Ordinance No. 91-414, An Ordinance Amending Ordinance No. 91-390A Revising the FY 1991-92 Budget and Appropriations Schedule for the Purpose of Funding Modifications for the STRAP Project (Action Requested: Refer to the Finance Committee)	
	6. RESOLUTIONS	
	(REFERRED FROM THE SOLID WASTE COMMITTEE)	Gardner
5:45 (10 min.)	**6.1 Resolution No. 91-1466,** For the Purpose of Authorizing an Exemption to the Requirement of Competitive Bidding and Authorizing Issuance of a Request for Proposals from Hazardous Waste Transportation and Disposal Contractors to Transport, Recycle, Treat and Dispose of Wastes Collected at Metro's Permanent Household Hazardous Waste Collection Facilities (Action Requested: Motion to Adopt the Resolution)	

(Continued)

* All times listed on this agenda are approximate. Items may not be considered in the exact order listed.

Approx. Time*		Presented By
	6. RESOLUTIONS (Continued)	
	(REFERRED FROM THE GOVERNMENTAL AFFAIRS COMMITTEE)	
	BEFORE THE CONTRACT REVIEW BOARD	
6:05 (10 min.)	**6.2 Resolution No. 91-1479,** For the Purpose of Waiving Metro Code Section 2.04.053 and 2.04.054 to Authorize A Contract with Principia Graphica for Metro Public Information and Identification Project (Action Requested: Motion to Adopt the Resolution)	
6:15 (15 min)	**7. COUNCILOR COMMUNICATIONS AND COMMITTEE REPORTS**	
6:30	**ADJOURN**	

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: July 22, 1991

TO: Metro Council
Executive Officer
Interested Staff

FROM: Paulette Allen, Clerk of the Council

RE: COUNCIL ACTIONS OF JULY 11, 1991 (REGULAR MEETING)

COUNCILORS PRESENT: Presiding Officer Tanya Collier, Deputy Presiding Officer Jim Gardner, Roger Buchanan, Richard Devlin, Tom DeJardin, Sandi Hansen, David Knowles, Ruth McFarland, Susan McLain and George Van Bergen.
COUNCILORS ABSENT: Larry Bauer and Judy Wyers.

AGENDA ITEM	ACTION TAKEN
1. INTRODUCTIONS	John Houser, new Council Analyst, was introduced.
2. CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS	Teace Adams, League of Women Voters, distributed an article to the Council.
2.A NON-REFERRED RESOLUTIONS	
Resolution No. 91-1480, For the Purpose of Expressing Appreciation to Jessica P. Marlitt for Services Rendered to the Metropolitan Service District	The motion to suspend the rules to consider a non-referred resolution passed unanimously (DeJardin/Gardner; 10-0 vote). Adopted (DeJardin/Hansen; 10-0 vote).
3. EXECUTIVE OFFICER COMMUNICATIONS	Executive Officer Cusma announced Metro had received P/OVA's "Portlandia" award for construction of the Oregon Convention Center as the most significant contribution to the region for the year.
4. CONSENT AGENDA	
4.1 Minutes of October 25, November 8, November 29, 1990 and April 25, 1991	Adopted (DeJardin/Hansen; 10-0 vote).

(Continued)

5. ORDINANCES, FIRST READINGS

5.1	**Ordinance No. 91-413,** For the Purpose of Approving an Increase in the Transfer Rate for the Forest Grove Transfer Station	Referred to the Solid Waste Committee for consideration.
5.2	**Ordinance No. 91-414,** An Ordinance Amending Ordinance No. 91-390A Revising the FY 1991-92 Budget and Appropriations Schedule for the Purpose of Funding Modifications for the STRAP Project	Referred to the Finance Committee for consideration.

6. RESOLUTIONS

6.1	**Resolution No. 91-1466,** For the Purpose of Authorizing an Exemption to the Requirement of Competitive Bidding and Authorizing Issuance of a Request for Proposals from Hazardous Waste Transportation and Disposal Contractors to Transport, Recycle, Treat and Dispose of Wastes Collected at Metro's Permanent Household Hazardous Waste Collection Facilities	Adopted by the Contract Review Board (Gardner/DeJardin; 10-0 vote).
6.2	**Resolution No. 91-1479,** For the Purpose of Waiving Metro Code Section 2.04.053 and 2.04.054 to Authorize a Contract with Principia Graphica for Metro Public Information and Identification Project	Removed from the agenda.

7. COUNCILOR COMMUNICATIONS AND COMMITTEE REPORTS

Neil Saling, Director of Regional Facilities, and Pam Erickson, Acting Project Manager, gave a report on the proposed new arena including discussion and activity to-date. Mr. Saling briefed the Council on Metro's proposed acquisition of the Sears Building. Councilor Van Bergen requested staff submit written responses to Council staff's questions.

ADDITIONAL AGENDA ITEM

8. EXECUTIVE SESSION Pursuant to ORS 192.660(1)(h) for the Purpose of Having General Counsel Discuss Potential Litigation Matters

Executive Session held; no action requested.

Meeting Date: July 11, 1991
Agenda Item No. 4.1

MINUTES

MINUTES OF THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

October 25, 1990
Regular Meeting

COUNCILORS PRESENT: Tanya Collier (Presiding Officer), Gary Hansen (Deputy Presiding Officer), Lawrence Bauer, Roger Buchanan, Tom DeJardin, Richard Devlin, Jim Gardner, David Knowles, Ruth McFarland, David Saucy, Jr., George Van Bergen and Judy Wyers

COUNCILORS ABSENT: None

The Presiding Officer called the meeting to order at 5:30 p.m. She announced that agenda item 6.1, Ordinance No. 90-365, For the Purpose of Amending Metro Code Section 2.06 to Update the Investment Policy, had been renumbered to agenda item 5.2. She also announced that agenda item 7.2, Resolution No. 90-1314, For the Purpose of Approving an Intergovernmental Agreement to Assume Custody of Certain Monies and Ownership at the St. Johns Landfill and Certain Adjacent Land from the City of Portland, had been removed from the agenda as an action item and that a briefing on Resolution 90-1314 would occur under Executive Officer Communications. The Presiding Officer also announced that agenda item 7.4, Resolution No. 90-1342, For the Purpose of Expressing Opposition to Ballot Measure #5, would be heard immediately following agenda item 7.1.

1. INTRODUCTIONS

Mr. Steve Larrance, Washington County Commissioner commented on a recent special meeting with Washington County officials to develop a facilities siting plan. He thanked Metro Council members who attended and stated that work would continue on refining the procurement process.

2. CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS

2.1 Letter from Les Ruark

The Presiding Officer advised the Council that Mr. Les Ruark, a resident of Arlington, Oregon, had requested his letter to The Oregonian editor regarding relocation of Metro Central Offices be included in the agenda packet under Citizen Communications to Council on Non-agenda Items.

3. EXECUTIVE OFFICER COMMUNICATIONS

3.1 Briefing on Resolution No. 90-1314, For the Purpose of Approving an Intergovernmental Agreement to Assume Custody

of Certain Monies and Ownership at the St. Johns Landfill and Certain Adjacent Land from the City of Portland

Deputy Executive Officer Dick Engstrom introduced Metro Solid Waste Department staff Bob Martin, Jim Watkins and Dennis O'Neill who reviewed the agenda materials including the resolution, staff report, intergovernmental agreement and draft closure plan. No action was requested on the resolution. The resolution will be considered by the Solid Waste Committee and at a joint meeting between the Portland City Council and Metro Council on November 8, 1990.

4. CONSENT AGENDA

The Presiding Officer announced that the following actions were on the Consent Agenda for consideration:

4.1 Minutes of Special Meeting July 12, 1990

4.2 Resolution No. 90-1334, For the Purpose of Approving Metro's Participation in the National Red Ribbon Campaign

4.3 Resolution No. 90-1336, Establishing the FY 1990-91 Metro Legislative Task Force

Motion: Councilor Devlin moved, seconded by Councilor Saucy, Jr. to adopt the Consent Agenda.

Vote: The eleven councilors present voted in favor of the motion. Councilor Wyers was absent for the vote.

The motion carried.

5. ORDINANCES, FIRST READINGS

5.1 Ordinance No. 90-369, An Ordinance Establishing an Office of Government Relations to Provide Government Relation Services to the Metropolitan Service District

The Clerk read the ordinance by title only for a first time. The Presiding Officer referred the ordinance to the Intergovernmental Relations Committee.

5.2 Ordinance No. 90-365, For the Purpose of Amending Metro Code Section 2.06 to Update the Investment Policy

The Clerk read the ordinance by title only for a first time. The Presiding Officer referred the ordinance to the Finance Committee.

6. ORDINANCES, SECOND READINGS

6.1 Ordinance No. 90-365, For the Purpose of Amending Metro Code Section 2.06 to Update the Investment Policy

Renumbered to agenda item 5.2; introduced for first reading and referral to Finance Committee.

6.2 Ordinance No. 90-361, For the Purpose of Amending Metro Code Chapter 3.02, Amending the Regional Wastewater Management Plan and Submitting it for Recertification

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that Ordinance No. 90-361 was first read before the Council on September 27 and referred to the Intergovernmental Relations Committee. The Committee held a public hearing on the ordinance on October 9 and recommended the Council adopt the ordinance.

Motion: Councilor Devlin moved, seconded by Councilor Gardner, to adopt Ordinance No. 90-361.

Councilor Devlin presented the Intergovernmental Relations Committee's report and recommendations contained in the agenda materials. He advised that adoption of the Plan would update collection area maps, specify studies to be completed and approve submittal of the Plan document to the Oregon Environmental Quality Commission and Department of Environmental Quality, and subsequently, the U. S. Environmental Protection Agency.

A public hearing was opened and closed. No one offered testimony.

Vote: A roll call vote was taken. The twelve councilors present voted in favor of the motion.

The motion carried.

6.3 Ordinance No. 90-331A, For the Purpose of Adding Chapter 5.06 to the Metro Code to Provide for a Composter Community Enhancement Program and Creating a Composter Community Enhancement Committee

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that as a result of Council adoption of Resolution No. 89-1103, the Composter Community Enhancement Advisory Committee had been established. After several community meetings, the Enhancement Advisory Committee recommendations were incorporated into Ordinance No. 331 which was first read before the Council on January 11, 1990 and referred to the Solid Waste Committee. The Solid Waste Committee held a public hearing on the ordinance on February 26. To address issues regarding the composition of the permanent Enhancement Committee, the Presiding Officer appointed Councilors Wyers and Gardner to a task force. On October 16, 1990, the

Solid Waste Committee amended the ordinance and voted unanimously to recommend Council adopt Ordinance No. 90-331A which incorporated Enhancement Committee composition recommendations forwarded by the task force.

The public hearing was opened. Mr. Gordon Hunter, Portland, Oregon, said that he thought the census tract figures for the Rose City Park area were incorrect. He distributed a map which is filed with the record. Mr. Hunter said that he thought that population for the Rose City Park area was over estimated by approximately 1,000. Mr. Hunter requested that the map he distributed be a part of the record (and has been filed with the record).

Councilors Gardner and Hansen spoke in favor of the ordinance. Both councilors said that while there were some shortcomings in the ordinance, they felt that cooperative efforts could be employed to address outstanding issues.

Vote: A roll call vote was taken. All twelve councilors voted in favor of the ordinance.

The motion carried unanimously.

7. RESOLUTIONS

7.1 Resolution No. 90-1339, Transmitting Housekeeping Legislation o the Oregon State Legislature for Introduction to the 1991 Legislative Session

Motion: Councilor Gardner moved, seconded by Councilor Saucy, Jr. to adopt Resolution No. 90-1339.

Councilor Gardner said that Resolution No. 90-1339 would transmit housekeeping legislation to the State Legislature for the 1991 session. He said that the resolution would: provide for judicial review of Metro Voters' Pamphlet materials by the Circuit Court; make permanent the selection process for Metro's Boundary Commission members; amend the Builders' License Program; amend the detailed description of Metro boundaries; and amend ORS 268 to effect ordinances within 90 days and provide an emergency clause.

Vote: The eleven councilors present voted in favor of the motion. Councilor Van Bergen was absent for the vote.

The motion carried.

7.2 Resolution No. 90-1342, For the Purpose of Expressing Opposition to Ballot Measure #5

Motion: Councilor DeJardin moved, seconded by Councilor Devlin to suspend Council rules requiring resolutions introduced at Council level to be referred to committee.

Vote: The eleven councilors present voted in favor of the motion. Councilor Van Bergen was absent.

The motion carried.

Motion: Councilor McFarland moved, seconded by Councilor Buchanan to adopt Resolution No. 90-1342.

Councilor McFarland introduced the resolution. She said that she supported the resolution and that she felt passage of Ballot Measure #5 was not in the best interest of the District's cities and counties.

Vote: The eleven councilors present voted in favor of the motion. Councilor Van Bergen was absent for the vote.

The motion carried.

The Presiding Officer recessed the Council and convened the Contract Review Board for consideration of Resolution No. 90-1328 was for the purpose of authorizing an exemption for additional work at the Metro Washington Park Zoo Rain Forest Exhibit.

7.3 Resolution No. 90-1328, For the Purpose of Authorizing an Exemption from Requirements of Metro Code Section 2.04.054(a) for Amendment No. 10 to the Contract with GSA Partnership, P.C. to Perform Additional Design Services for the Africa Rain Forest Exhibit

Motion: Councilor Gardner moved, seconded by Councilor Devlin to adopt Resolution No. 90-1328.

Councilor Gardner presented the Zoo Committee report which was contained in the agenda packet. He noted that the resolution would authorize $30,000 for soil analysis by GSA. He said that GSA had a partnership with L.R. Squier & Associates on this project and that additional soil testing, fill determination and contracting methods to be done by L.R Squire & Associates would require a contract amendment of approximately $10,000.

Vote: All twelve councilors were present and voted in favor of the motion.

The motion carried.

Resolution No. 90-1328 was adopted unanimously by the Metro Contract Review Board. The Presiding Officer adjourned the Contract Review Board and reconvened the Council.

8. COUNCILOR COMMUNICATIONS & COMMITTEE REPORTS

8.1 Tri-Met Merger

Councilor Gardner said that the consultant had issued a draft report. Meetings with legislators were scheduled and ongoing.

8.2 Intergovernmental Relations Committee Report

Councilor Gardner announced that the Intergovernmental Relations Committee had released a RLIS Marketing Services.

There was no other business, and the meeting was adjourned at 7:20 p.m.

Respectfully submitted,

Gwen Ware-Barrett

Gwen Ware-Barrett
Clerk of the Council

MINUTES OF THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

November 8, 1990
Regular Meeting

COUNCILORS PRESENT: Tanya Collier (Presiding Officer), Gary Hansen (Deputy Presiding Officer), Lawrence Bauer, Roger Buchanan, Tom DeJardin, Richard Devlin, Jim Gardner, David Saucy, Jr., and George Van Bergen

COUNCILORS ABSENT: David Knowles, Ruth McFarland and Judy Wyers

Presiding Officer Collier called the meeting to order at 6:45 p.m. and announced that Resolution No. 90-1354 had been added to the agenda and that Ordinance No. 90-371 had been removed from the agenda.

3. INTRODUCTIONS

None.

4. CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS

Ms. Teace Adams, Columbia River Region Inter-League Organization (CRRILO), reminded Councilors of CRRILO-sponsored reception November 29.

5. EXECUTIVE OFFICER COMMUNICATIONS

None.

6. ORDINANCES, FIRST READINGS

6.1 Ordinance No. 90-368, For the Purpose of Amending Ordinance No. 88-268B Adopting the Regional Solid Waste Management Plan to Incorporate the Special Waste Chapter

The Clerk read the ordinance by title only for a first time. The Presiding Officer referred the ordinance to the Solid Waste Committee.

6.2 Ordinance No. 90-371, An Ordinance Adopting a Final Order and Denying the Petition for Locational Adjustment in Contested Case No. 87-3: Blazer Homes, Inc.

The Presiding Officer announced that Ordinance No. 90-371 had been removed from the agenda to be replaced by Order No. 90-23, which would be considered at the November 29 Council meeting.

6.3 Ordinance No. 90-372, For the Purpose of Amending Metro Code Chapter 5.02 Establishing Tonnage Based Solid Waste Disposal Rates at Metro Facilities

The Clerk read the ordinance by title only for a first time. The Presiding Officer referred the ordinance to the Solid Waste Committee.

7. ORDINANCES, SECOND READINGS

7.1 Ordinance No. 90-365, For the Purpose of Amending Metro Code Section 2.06 to Update the Investment Policy

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that Ordinance No. 90-365 was first read before the Council on October 25 and referred to the Finance Committee. The Finance Committee held a public hearing on the ordinance on November 1 and recommended the Council adopt the ordinance.

Motion: Councilor Van Bergen moved, seconded by Councilor Devlin to adopt Ordinance No. 90-365.

Councilor Van Bergen presented the Finance Committee's report. He said that the ordinance clarified the District's fiscal policies on investments. Councilor DeJardin complimented staff and said that the Committee unanimously supported the ordinance.

The public hearing was opened and closed. No testimony was offered.

Vote: A roll call vote was taken. The nine councilors present voted in favor of the motion. Councilors Knowles, McFarland and Wyers were absent.

The motion carried unanimously.

8. RESOLUTIONS

The Presiding Officer convened the Contract Review Board.

8.1 Resolution No. 90-1332, For the Purpose of Authorizing an Exemption to the Requirements to Solicit Competitive Proposals for Amendment No. 9 to the Contract with SCS Engineers, Inc. that Provides Additional Design and Construction Management Services for the Metro South Station Modifications

Motion: Councilor DeJardin moved, seconded by Councilor Devlin to adopt Resolution No. 90-1332.

Councilor DeJardin presented the Solid Waste Committee's report. Councilor DeJardin said that the contract amendment would provide for a part-time on-site construction manager to coordinate and expedite construction at the Metro South Station. He said that the amendment also provided for design work which had been unanticipated at the time the contract was awarded. Councilor DeJardin said that the Solid Waste Committee recommended the Council adopt the resolution.

Vote: The nine councilors present voted in favor of the motion. Councilors Knowles, McFarland and Wyers were absent.

The motion carried unanimously.

8.2 Resolution No. 90-1340, For the Purpose of Authorizing an Exemption to Metro Code Chapter 2.04.044, Competitive Bidding Procedures and Authorizing a Sole Source Contract with Information Systems, Inc. for Consulting Services for Weight Systems Software at Solid Waste Disposal Facilities

Motion: Councilor DeJardin moved, seconded by Councilor Saucy, Jr. to adopt Resolution No. 90-1340.

Councilor DeJardin presented the Solid Waste Committee's report. Councilor DeJardin said that Metro's contract with Information Systems for weighing equipment at solid waste facilities had expired. Councilor De Jardin said that the equipment was specialized and patented. He said that since there was no other qualified vendor for the patented equipment, the Committee had recommended that a sole source contract be awarded to Information Systems.

Vote: The nine councilors present voted in favor of the motion. Councilors Knowles, McFarland and Wyers were absent.

The motion carried unanimously.

Resolution No. 90-1354, For the Purpose of Approving a Contract with McCullough Leasing to Lease Vehicles

Motion: Councilor Devlin moved, seconded by Councilor DeJardin to suspend the Council's rules requiring resolutions introduced at the Council level to be referred to a committee. In order that Res. No. 90-1354 could be considered by the council as a whole

Vote: The nine councilors present voted in favor of the motion. Councilors Knowles, McFarland and Wyers were absent.

The motion carried.

Motion: Councilor Devlin moved, seconded by Councilor DeJardin to adopt Resolution No. 90-1354.

Vote: The nine councilors present voted in favor of the motion. Councilors Knowles, McFarland and Wyers were absent.

The motion carried.

Councilor Devlin said that the Council had adopted Resolution No. 90-1306A authorizing the executive officer to release bid documents for lease five vehicles and subsequent execution of a contract provided that the contract did not exceed $58,500 and conformed in all material aspects with the one approved by Council. Councilor Devlin said that circumstances had changed necessitating six vehicles. He said that the cost of six vehicles was less than the amount budgeted for five vehicles.

9. COUNCILOR COMMUNICATIONS AND COMMITTEE REPORTS

9.1 Tri-Met Merger

Councilor Gardner reported that public hearings would be scheduled. Tom Walsh urged the Council to focus on funding for the Westside Light Rail project and to avoid actions that could jeopardize the ballot measure efforts.

Other Councilor Communications and Committee Reports:

Councilor Bauer requested a workshop on the effects of Ballot Measure #5. Council staff was directed to provide informational materials and consider a workshop.

Councilor Devlin reported that he had received correspondence regarding developing policies on complimentary tickets at Metro ERC facilities and would pursue a discussion on the policies during the budget cycle.

Councilor Van Bergen requested that vendor files for Browning & Ferris and Oregon Waste Systems be annotated to include information regarding claims filed with the Bureau of Labor and Industry for failure to pay the prevailing wage rate.

Councilor DeJardin announced that an Earthquake Preparedness workshop would be held at the Zoo on November 21.

Councilors were advised to return comments regarding the centralization/decentralization study to Casey Short by November 13.

There was no other business, and the meeting was adjourned at 7:30 p.m.

Respectfully submitted,

Gwen Ware-Barrett

Gwen Ware-Barrett
Clerk of the Council

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MINUTES OF THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

November 29, 1991
Regular Meeting

Councilors Present: Tanya Collier (Presiding Officer), Gary Hansen (Deputy Presiding Officer), Lawrence Bauer, Roger Buchanan, Tom DeJardin, Richard Devlin, Jim Gardner, Ruth McFarland, David Saucy, Jr., George Van Bergen and Judy Wyers

Councilors Absent: David Knowles

Presiding Officer Collier called the meeting to order at 5:30 p.m.

1. INTRODUCTIONS

None.

2. CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS

None.

3. EXECUTIVE OFFICER COMMUNICATIONS

None.

4. CONSENT AGENDA

The Presiding Officer announced the Consent Agenda:

4.1 Resolution No. 90-1341, For the Purpose of Changing the Term of Membership of the Solid Waste Rate Review Advisory Committee from a Calendar Year to a Fiscal Year Basis

Motion: Councilor DeJardin moved, seconded by Councilor Saucy, Jr. to adopt the Consent Agenda.

Vote: The seven councilors present voted aye. Councilors Devlin, Hansen, Knowles, McFarland and Wyers were absent for the vote.

The motion carried unanimously.

5. ORDINANCES, FIRST READING

5.1 Ordinance No. 90-370, An Ordinance Amending Ordinance No. 90-340A Revising the FY 1990-91 Budget and Appropriations Schedule for the Purpose of Adopting a Supplemental Budget, Creating the Smith and Bybee Lakes Trust Fund and Authorizing an Interfund Loan

The Clerk read the ordinance for a first time be title only. The Presiding Officer announced that Ordinance No. 90-370 had been referred to the Finance Committee.

5.2 Ordinance No. 90-373, Amending Ordinance No. 90-340A Revising the Fiscal Year 1990-91 Budget and Appropriation Schedule for the Purpose of Allocating $10,000 From General Fund Contingency to Support Arts Plan 2000

The Clerk read the ordinance for a first time by title only. The Presiding Officer announced that Ordinance No. 90-373 had been referred to the Finance Committee.

5.3 Ordinance No. 90-374, Amending Ordinance No. 90-340A Revising the FY 1990-91 Budget and Appropriations Schedule for the Purpose of Enhancing Computer Acquisitions in the Transportation Department and Providing an RLIS Marketing Consultant

The Clerk read the ordinance for a first time by title only. The Presiding Officer announced that Ordinance No. 90-374 had been referred to the Finance Committee.

5.4 Ordinance No. 90-375, Amending Ordinance No. 90-340A Revising the FY 1990-91 Budget and Appropriations Schedule for the Purpose of Enhancing the Parks and Natural Areas Program of the Planning and Development Department

The Clerk read the ordinance for a first time by title only. The Presiding Officer announced that Ordinance No. 90-375 had been referred to the Finance Committee.

6. ORDINANCES, SECOND READINGS

6.1 Ordinance No. 90-369, Establishing an Office of Government Relations to Provide Government Relations Services to the Metropolitan Service District

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that Ordinance No. 90-369 had been first read before the Council on October 25 and referred to the Intergovernmental Relations Committee. The Committee held a public hearing on the ordinance on November 13 and recommended the Council adopt the ordinance.

Motion: Councilor McFarland moved, seconded by Councilor Gardner to adopt Ordinance No. 90-369.

Councilor McFarland presented the Intergovernmental Relations Committee's report. Councilor McFarland explained that the

ordinance would establish a government relations office that would provide services to the Council, Executive Officer and Metro commissions. She said that the Government Relations Manager would be appointed by the Executive Officer, subject to Council confirmation and could be removed from the position by either the Executive Officer or Council. Councilor McFarland pointed out that the ordinance provided that the Government Relations Manager could advocate for Metro as a whole with the Council and Executive's agreement. However, if either party was opposed to an issue or measure, the Government Relations Manager could not advocate on behalf of either party.

The public hearing was opened and closed; no testimony was offered.

Vote: A roll call vote was taken. Councilor Knowles was absent; the other eleven councilors present all voted in favor of the motion.

The motion carried unanimously.

6.2 Ordinance No. 90-368, For the Purpose of Amending Ordinance No. 88-268B Adopting the Regional Solid Waste Management Plan to Incorporate the Special Waste Chapter

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that Ordinance No. 90-368 had been first read before the Council on November 8 and referred to the Solid Waste Committee. The Committee held a public hearing on the ordinance on November 20 and recommended the Council adopt the ordinance.

Motion: Councilor Saucy, Jr. moved, seconded by Councilor DeJardin to adopt Ordinance No. 90-368.

Councilor Saucy, Jr. presented the Solid Waste Committee's report. Councilor Saucy, Jr. said that the ordinance set guidelines for handling and disposing of special waste. He said that the ordinance provisions complied with DEQ requirements.

The public hearing was opened and closed, no testimony was offered.

Vote: A roll call vote was taken. Councilor Knowles was absent. The other eleven councilors present all voted in favor of the motion.

The motion carried unanimously.

6.3 Ordinance No. 90-372, For the Purpose of Amending Metro Code Chapter 5.02 Establishing Tonnage Based Solid Waste Disposal Rates at Metro Facilities

The Clerk read the ordinance for a second time by title only. The Presiding Officer announced that Ordinance No. 90-372 had been first read before the Council on November 8 and referred to the Solid Waste Committee. The Committee held a public hearing on the ordinance on November 20 and recommended the Council adopt the ordinance.

Motion: Councilor Wyers moved, seconded by DeJardin to adopt Ordinance No. 90-372.

Councilor Wyers presented the Solid Waste Committee's report. She said that the ordinance would adopt tonnage-based disposal rates effective January, 1991. She said that staff anticipated an additional $180,000 revenue would be generated.

The public hearing was opened. George Van Bergen, Milwaukie, OR, testified about his experience with the transfer station as a private citizen. He said that as a self-hauler he source separates his recyclables and that in the past Metro's policy was to discount self-haulers who source separated their recyclables. Councilor Van Bergen said that on a recent occasion, he was not allowed that discount. He said that when he questioned the gatehouse attendant, he was told that there was a flat fee regardless of source separation. He said that he contacted Metro staff and requested a written response which he had not yet received. Councilor Van Bergen said that he felt that the ordinance discriminated against self-haulers and did not encourage recycling.

No other testimony was offered. The public hearing was closed.

Councilor Hansen said that on occasion he had been quoted different prices for the same size and type loads. He said that he felt that the tonnage base was fairer than a flat fee.

Vote: A roll call vote was taken. Councilor Van Bergen voted nay, and Councilor Knowles was absent. The other ten councilors present all voted in favor of the motion.

The motion carried.

RESOLUTIONS

7.1 Resolution No. 90-1347, For the Purpose of Approving a Fiscal Year 1990-91 Supplemental Budget and Transmitting the

Approved Budget to the Tax Supervising and Conservation Commission

Motion: Councilor Van Bergen moved, seconded by Councilor DeJardin to adopt Resolution No. 90-1347.

Councilor Van Bergen presented the Finance Committee's report and recommendations. He said that statute required Metro's supplemental budget be approved by the Tax Supervising and Conservation Commission (TSCC). He said that the Finance Committee had thoroughly reviewed the Executive's supplemental budget proposal and recommended the Council approve the supplemental budget and transmit it to the TSCC.

Vote: Ten councilors voted aye. Councilors Knowles and Wyers were absent for the vote.

The motion carried.

7.2 Resolution No. 90-1343, Approving an Intergovernmental Agreement with the Intergovernmental Resource Center for Bi-State Committee Staff Support

Motion: Councilor Bauer moved, seconded by Councilor Devlin to adopt Resolution No. 90-1343.

Councilor Bauer presented the Intergovernmental Relations Committee's report and recommendations. He said that the current fiscal year budget approved an expenditure of $6,000 for Bi-State staff support and that the resolution would allocate those funds. He pointed out that due to staff shortage at Metro, the Intergovernmental Resource Center (IRC) staff had been relied upon heavily to coordinate Bi-State activities. The agreement would fund Metro's share of IRC previous staff support expenditures and appropriate the remaining funds for the fiscal year.

Vote: The eleven councilors present voted aye. Councilor Knowles was absent.

The motion carried.

7.3 Resolution No. 90-1352, Approving the Recommendations of the Bi-State Policy Advisory Committee Regarding Air Quality Protection Measures

Motion: Councilor Bauer moved, seconded by Councilor Saucy, Jr. to adopt Resolution No. 90-1352.

Councilor Bauer introduced the resolution. Councilor Bauer said that the Bi-State Policy Advisory Committee had unanimously agreed that there existed a need to standardize air quality regulations in the Metro/Clark County region. He said that the Bi-State Committee had recommended that in instances where regulations were inconsistent, the regulations and enforcement be upgraded to conform to the more stringent requirement. He said that specific legislation would be introduced to both state legislatures.

Vote: The ten councilors present voted aye. Councilors Knowles and Buchanan were absent for the vote.

The motion carried.

7.4 Resolution No. 90-1353, Supporting Legislative Concepts and Transmitting Legislative Proposals to the 1991 Legislative Session

Motion: Councilor Devlin moved, seconded by Councilor Hansen to adopt Resolution No. 90-1353.

Councilor Devlin presented the Intergovernmental Relations Committee's report and recommendations. Councilor Devlin said that the resolution would transmit a combination of housekeeping measures, draft legislation for the passport license program, light rail funding and concept statements on other issues. Councilor Devlin pointed out that the resolution's concept statements advanced concepts, but did not necessarily indicate commitment to support specific legislation that may be developed.

Councilor Gardner asked that the record reflect that he felt it inappropriate to forward at this time any draft legislation regarding health benefits for Metro councilors. He said that with the establishment of a charter commission, he felt health benefits and compensation would be appropriate issues for the charter commission to address.

Councilor Devlin said that he would not at this time support legislation establishing health benefits for councilors. He said that he felt that compensation for councilors should benefit each councilor equally and that in this case, he did not feel it did. He also noted that the Solid Waste Committee had considered and supported the draft solid waste legislation.

Councilor Wyers said that she felt that councilors should be afforded the same health benefits as Metro staff. She said that she felt that the issue should be carried forth. Councilor Bauer said that he supported Councilor Wyers' position on health care.

Councilor Saucy, Jr. said that he felt that health benefits should be addressed. However, he said that he did not feel that this legislative session was the correct timing.

Vote: The eleven councilors present voted aye. Councilor Knowles was absent.

The motion carried.

7.5 Resolution No. 90-1329A, For the Purpose of Closing St. Johns Landfill as a General Purpose Landfill but Continuing to Accept Limited Types of Solid Waste for a Limited Time to Ensure Proper Closure

Motion: Councilor DeJardin moved, seconded by Councilor McFarland to adopt Resolution No. 90-1329A.

Councilor DeJardin presented the Solid Waste Committee's report and recommendations. He said that the St. Johns Landfill would be closed as a general purpose landfill in February, 1991. He said after closure, final contours per DEQ requirements would have to be achieved. Councilor DeJardin said that the resolution would continue St. Johns' ability to serve as a limited purpose landfill until 1994. He said that by allowing the Landfill to accept limited waste, the waste could be used as fill to achieve final contours, thereby, saving the District purchasing fill. He also noted that extending the closure date would generate additional enhancement funds for the community.

Councilor DeJardin said that the Solid Waste Committee held a public hearing on the resolution during which representatives of limited purpose landfills and the materials recovery industry expressed concern that Metro may be unfairly competing with them. Councilor DeJardin said that after explanation, the representatives were satisfied.

Vote: The eleven councilors present voted aye. Councilor Knowles was absent.

The motion carried.

7.6 Resolution No. 90-1337, For the Purpose of Establishing Incentives that Encourage Greater Waste Reduction and Recycling

Councilor Wyers presented the Solid Waste Committee's report and recommendations. Councilor Wyers said that she had three areas of concern regarding the resolution: processors who are recycling 50-75 percent of high grade paper, haulers who are collecting cardboard from commercial customers. She said there

were other refinements that could be made in the resolution and that she would like to meet again with the groups affected.

Motion: Councilor Wyers moved, seconded by Councilor Van Bergen to refer the resolution back to the Solid Waste Committee for amendments.

Councilor DeJardin said that he would support the resolution although he felt that the Committee had adequate hearing on the matter. Councilor Devlin said that he would support the resolution and asked the Committee to examine drop off of recyclables outside the weigh stations. Councilor Bauer urged the Committee to use a broad description for building debris. He noted that building materials represented a significant potential for recycling. Councilor Gardner said that he felt that the issue was important enough that it should receive further scrutiny if desired.

Vote: The eleven councilors present voted aye. Councilor Knowles was absent.

The motion carried.

7.7 Resolution No. 90-1345, For the Purpose of Authorizing Issuance of a Request for Bids for Marion County Waste Transport Services and Entering Into a Contract with the Low Responsible, Responsive Bidder

Motion: Councilor DeJardin moved, seconded by Councilor Devlin to adopt Resolution No. 90-1345.

Councilor DeJardin said that Metro's contract for Marion County waste transport services would expire January 31, 1991. Councilor Van Bergen asked what effect the agreement with Marion County would have on Metro's commitment to send 90 percent of the region's waste going to a general purpose landfill to the Columbia Ridge Landfill. General Counsel Dan Cooper said that Metro's agreement with Oregon Waste Systems for the Columbia Ridge Landfill specifically excluded incinerator ash.

Vote: The nine councilors present voted aye. Councilor Buchanan, Knowles and Collier were absent.

The motion carried.

7.8 Resolution No. 90-1355, For the Purpose of Approving an Intergovernmental Agreement with the City of Oregon City Providing for the Payment of a $.50 per Ton Mitigation and Enhancement Fee

Motion: Councilor DeJardin moved, seconded by Councilor Devlin to adopt Resolution No. 90-1355.

Councilor DeJardin said that Oregon City had been assuming a large share of the burden for the region's solid waste disposal system due to the fact that other facilities were not yet operating. He said that he felt that Oregon City had been very cooperative and understood that Metro would reduce the tonnage to 250,000 as soon as possible.

Mr. Jonathan Block, City of Oregon City staff and Mr. Mike Milke, Planning Commission Chair, presented a film on community projects that had been accomplished through use of enhancement monies. Councilor Van Bergen asked if the enhancement fees would be affected by the property tax limitation legislation recently enacted. General Counsel Cooper said that he would discuss the matter with Oregon City Counsel. Councilor Van Bergen said that he would like to assure that legislation recently enacted would not negatively affect the City's tax authority in light of Metro's allocation of enhancement funds. taxes.

Vote: The nine councilors present voted aye. Councilor Bauer, Knowles and Wyers were absent.

The motion carried.

8. COUNCILOR COMMUNICATIONS AND COMMITTEE REPORTS

8.1 Tri-Met Merger

The report was given by Councilor Gardner. He said that the Tri-Met Merger Subcommittee recommended that merger study be suspended until after a full funding agreement on light rail was obtained from UMTA. He said that the Subcommittee also recommended that Metro exert energies to obtain the UMTA agreement and local share funding. Councilor Gardner said that the Subcommittee recommended that the Executive Director include in the next fiscal year's budget a work plan for a detailed study of merger issues. Councilor Gardner said that the Intergovernmental Relations Committee would introduce a resolution with those recommendations on December 13.

Presiding Officer Collier said that she felt that all efforts should be made to preserve the "marriage" clause in the State statutes that allow a merger. The Presiding Officer requested that commitments to allowing merger be added to the resolutions from the Subcommittee.

8.2 Metro ERC Resolution Nos. 96, 97 and 98

Council Administrator Don Carlson said that Resolution No. 96 authorized Metro ERC staff to acquire a bank loan for approximately $1.2 million to acquire the "Hanna Property" for additional parking, Resolution No. 97 authorized a supplemental budget, and Resolution No. 98 established alcohol procedures at ERC facilities and Resolution No. 99 authorized signators for various bank accounts. No action was required. General Counsel Cooper was directed to respond to questions from councilors and the Convention and Visitor Facilities Committee regarding the Commission's authority to purchase and sell real property.

Councilor McFarland reported on a previous meeting regarding the Hanford Nuclear Plant storage tanks. She said that the Committee had received information regarding underground storage tanks that the Committee would be addressing. She said that in the future she felt that solutions to stability of radio-active waste would lie in storage and retrieval programs.

There was no other business, and the meeting was adjourned at 8:10 p.m.

Respectfully submitted,

Gwen Ware-Barrett

Gwen Ware-Barrett
Clerk of the Council

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MINUTES OF THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

April 25, 1991

Council Chamber

Councilors Present: Deputy Presiding Officer Jim Gardner, Larry Bauer, Roger Buchanan, Richard Devlin, Tom DeJardin, Sandi Hansen, David Knowles, Ruth McFarland, Susan McLain, George Van Bergen and Judy Wyers

Councilors Absent: Presiding Officer Tanya Collier

Also Present: Executive Officer Rena Cusma

Acting Presiding Officer Gardner called the regular meeting to order at 5:35 p.m.

1. INTRODUCTIONS

None.

2. CITIZEN COMMUNICATIONS TO THE COUNCIL ON NON-AGENDA ITEMS

None.

3. EXECUTIVE OFFICER COMMUNICATIONS

None.

4. CONSENT AGENDA

4.1 Minutes of March 14, 1991

4.2 Resolution No. 91-1435, For the Purpose of Endorsing the Establishment of an Institute of Portland Metropolitan Studies at Portland State University and Other Institutions of Higher Education in the Metropolitan Area

Motion: Councilor DeJardin moved, seconded by Councilor Buchanan, for adoption of the Consent Agenda items listed above.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and the Consent Agenda was adopted.

5. ORDINANCES, FIRST READINGS

5.1 Ordinance No. 91-396, An Ordinance Amending Ordinance No. 90-340A Revising the FY 1990-91 Budget and Appropriations Schedule for the Purpose of Funding Increased Expenses in the Insurance Fund

The Clerk read the ordinance for a first time by title only.

Acting Presiding Officer Gardner announced Ordinance No. 91-396 had been referred to the Finance Committee for consideration.

6. RESOLUTIONS

6.1 Resolution No. 91-1439A, Adding Items to Metro's Legislative Package

Main Motion: Councilor Devlin moved, seconded by Councilor DeJardin, for adoption of Resolution No. 91-1439A.

Councilor Devlin gave the Governmental Affairs Committee's report and recommendation. He said the Council had previously established its opposition to Senate Bill 706 and its support for House Bill 2136, but had not done so in resolution form. Councilor Devlin explained the Committee had previously voted to support SB 915 and HB 3331 proposed to ban the sale of laundry detergents containing phosphates, but said the resolution referred to conceptual support of those bills only to give Metro's representatives flexibility to support any bills that matched Metro's position on phosphate use. He said HB 3488, which directed state agencies not to discriminate against those who had tested positive for HIV or who had been diagnosed as having AIDS or AIDS-related complex, had been put on Metro's "monitor" list in Exhibit A. He said that policy would be addressed in Metro's personnel policies also.

Councilor Devlin discussed "Bills to Support" in Exhibit A. He said HB 2136's intent was to impose a tax on carbonated beverages to dedicate those proceeds to state parks, local governments and recreation, and to the Resource Conservation Trust Fund (RCTF), and noted the Council was on record in support of a funding mechanism for RCTF.

Councilor Devlin introduced the following amendments to Exhibit A of Resolution No. 91-1439A to be added to the "Monitor" list: SB 84; directs planning for rural community and urban fringe areas; SB 910, directs coordination of transportation and land use planning for metropolitan areas with population greater than one million; SB 1011, directs Land Conservation and Development

Commission (LCDC) to require local governments to insure commercial and residential zoning at density appropriate to maximum use of mass transit in the vicinity of mass transit stations; HB 3560, establishes commercial resource land and secondary land system, regulates growth of Urban Growth Boundary; and HB 3570, establishes commercial resource land and secondary land system, regulates growth of Metropolitan Service District Urban Growth Boundary.

Councilor Knowles disclosed a potential conflict of interest because he represented a client who was opposed to one of the bills listed in Exhibit A. He announced he would not participate in Council discussion of, or vote on, the resolution.

Motion to Amend: Councilor Devlin moved, seconded by Councilor Hansen, amend Resolution No. 91-1439A Exhibit A with the amendments listed in the previous paragraph.

Vote on Motion to Amend: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Knowles abstained from the vote. Councilor Collier was absent. The vote was unanimous and the motion to amend passed.

Vote on Main Motion as Amended: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Knowles abstained from the vote. The vote was unanimous and Resolution No. 91-1439A was adopted as amended.

6.2 Resolution No. 91-1423A, For the Purpose of Approving the Lease of Metro-Owned Property Located at the Junction of Southwest 209th Avenue and Tualatin Valley Highway in Aloha, Oregon

Main Motion: Councilor McLain moved, seconded by Councilor Buchanan, for adoption of Resolution No. 91-1423B.

Councilor McLain gave the Solid Waste Committee's report and recommendation. She said the Committee asked why staff wanted to lease rather than sell the property and were told Executive Officer Cusma preferred to lease in case the property was needed in the future for a solid waste facility. She said the Committee discussed penalties Metro could suffer if the lease was terminated for that and or other reasons and said the lease did not cover that aspect. Councilor McLain said the Committee amended the resolution to read (additional language underlined and deleted language bracketed) in the resolution third Whereas clause: "...within the [next three years] term of the lease

and;" and amended resolution Section Nos. 1 and 2. She said Section No. 3 new language stated: "...for use of the 8.26 acre Metro property, so long as the lease contains a provision for early termination which could allow possession by Metro with 90 days notice without penalties."

Councilor McLain said the Committee was comfortable with the resolution after amendment, but noted Todd Sadlow, Legal Counsel, had advised the Council Intel was not satisfied with the lease agreement. She referred to Mr. Sadlo's April 25 memo, "Resolution No. 91-1423B, Lease of Metro Property in Aloha, Oregon to Intel Corporation." She referred to Mr. Sadlo's suggested new language for Section No. 2: "...so long as the lease contains a provision for early termination which could allow possession by Metro after January 1, 1992, with 90 days notice without penalties." She said Intel wished to secure the lease until at least January 1, 1992. Staff had explained to the Committee that Intel planned to use the site for storage and as a staging area for construction on other sites.

Councilor Bauer objected to Lease Section No. 36 language which stated "If Lessor determines that the premises are needed for a transfer station, the Lessor may terminate this Lease, without penalty, by giving at least 90 days written notice..." He said the lease should not specify a transfer station and such language should be generic.

Motion to Amend Main Motion: Councilor Bauer moved, seconded by Councilor Buchanan, to amend Lease Section No. 36 to delete "transfer station" and insert generic language such as "as needed."

Vote on Motion to Amend Main Motion: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and the motion to amend passed.

Vote on Main Motion as Amended: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and Resolution No. 91-1423B was adopted as amended.

6.3 Resolution No. 91-1430, For the Purpose of Approving Amendment to the Personal Services Contract with David Evans and Associates to Expand the RLIS Map Extent to Include Rural Areas Adjacent to Urban Growth Boundary (UGB)

Motion: Councilor McLain moved, seconded by Councilor Devlin, for adoption of Resolution No. 91-1430.

Councilor McLain gave the Transportation & Planning Committee's report and recommendation. Councilor McLain referred the Council to a map printed in the agenda packet which illustrated the proposed expansion of the Regional Land Information System (RLIS) map extent. She said $10,000 of the $50,000 allocated for the contract would be spent in FY 1990-91 and $40,000 spent in FY 1991-92. She noted Councilor Van Bergen expressed concern at Committee about RLIS expansion and its direction. She said he had noted at Committee that the State of Oregon was also examining secondary lands and had stated Metro should reassess its activities with regard to secondary lands. She said the other Committee members believed RLIS would provide improved data if the 350 parcels were added to the map extent.

The Council discussed the resolution briefly. Councilor Van Bergen said the type of work the contract would perform impacted local jurisdictions and their planning function. Councilor McLain said the data gathered would assist the Council when making decisions on UGB issues.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and Resolution No. 91-1430 was adopted.

6.4 Resolution No. 91-1433, For the Purpose of Approving a Contract to Digitize Soil Surveys of Clackamas and Washington Counties

Motion: Councilor Bauer moved, seconded by Councilor Hansen, for adoption of Resolution No. 91-1433.

Councilor Bauer gave the Transportation & Planning Committee's report and recommendation. He said the resolution approved the release of an RFP to secure services for preparing Multnomah and Clackamas Counties' soil surveys for inclusion into RLIS. He said soil data gathered and entered would be compatible with Washington County data already entered. He said the contract was multi-year and Council review and approval was necessary. Councilor DeJardin asked how in depth the soils analysis would be. Councilor Bauer said data entered would cover permeability, drainage, surface water tables, rock outcroppings, and other factors related to development limitations, but said the data would cover geologic factors such as fault lines.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and Resolution No. 91-1433 was adopted.

6.5 Resolution No. 91-1436, For the Purpose of Approving Release of a Request for Proposals (RFP) for Personal Services to Enhance the Census Bureau TIGER Maps for Use in the Regional Land Information System

Main Motion: Councilor Devlin moved, seconded by Councilor DeJardin, for adoption of Resolution No. 91-1436.

Councilor Devlin gave the Transportation & Planning Committee's report and recommendation. Councilor Devlin said the resolution would authorize the release of an RFP to enhance the Census Bureau's TIGER street address mapping system for use on RLIS and was funded for $40,250 in FY 1990-91 and for $74,750 in FY 1991-92. He said the Committee's amended version was not before the Council for consideration and amended the resolution to match that recommended by the Committee.

Motion to Amend Main Motion: Councilor Devlin moved, seconded by Councilor Bauer, to amend Resolution No. 91-1436 as follows: Add to the end of the resolution title: "Waiving Council Approval of the Contract and Authorizing the Executive Officer to Approve the Contract;" and to additional language to Be It Resolved language: "...authorizes the Executive Officer to execute the final contract, subject to the final contract not substantially differing from the original RFP and not exceeding the budgeted funds for this project."

Vote on Motion to Amend Main Motion: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and the motion to amend passed.

Councilor Van Bergen said additional funding requests for maintenance of RLIS would continue as more layers were added to RLIS. He said all RLIS additions should be substantiated by staff. Councilor Bauer said most of the data entered into RLIS was permanent. He said geographical and soil information would not change. He said a consistent regional base map meant future savings. Councilor Van Bergen reiterated data would change.

Vote on Main Motion as Amended: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and Resolution No. 91-1436 was adopted as amended.

6.6 Resolution No. 91-1428, For the Purpose of Establishing Guidelines and Criteria for the Greenspaces Demonstration Grants Program to Restore and Enhance Urban Wetlands, Streams and Riparian Corridors

Motion: Councilor Devlin moved, seconded by Councilor Hansen, for adoption of Resolution No. 91-1428.

Councilor Devlin gave the Transportation & Planning Committee's report and recommendation. He said the Committee voted unanimously to adopt the resolution as amended. He noted Committee voted to expand membership on the selection Committee from two to three Councilors. He said the $200,000 grant program was part of a $537,000 grant from the U.S. Fish and Wildlife Service awarded to Metro in FY 1990-91 for the Metropolitan Greenspaces Program. He said the work funded would put in place the first component of the work program related to physical properties of the areas surveyed.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McFarland, McLain, Van Bergen and Wyers voted aye. Councilor Collier was absent. The vote was unanimous and Resolution No. 91-1428 was adopted.

6.7 Resolution No. 91-1422, For the Purpose of Endorsing Comments and Recommendations Regarding DEQ's Comprehensive Emissions Fee Proposal

Motion: Councilor Devlin moved, seconded by Councilor Wyers, for adoption of Resolution No. 91-1422.

Acting Presiding Officer Gardner asked Councilor Knowles, Joint Policy Advisory Committee on Transportation (JPACT) chair, to report on JPACT's consideration of the resolution. Councilor Knowles said Resolution No. 91-1422 was a follow-up resolution to Resolution No. 91-1388A adopted March 14, 1991 which endorsed broad principles related to HB 2175 currently before the State Legislature. He said HB 2175 endorsed a state-wide approach on air quality issues and problems. He said Resolution No. 91-1388A did not deal with vehicle emissions in the Portland metropolitan area. He said Resolution No. 91-1422 addressed those issues and suggested amendments to HB 2175. Councilor Knowles noted Exhibit

A had been amended and said the Transportation & Planning Committee amended the resolution to match it more closely to HB 2175. He said a new Section 9 to Exhibit A stated the Department of Environmental Quality (DEQ) should work with the Bi-State Policy Advisory Committee and JPACT to develop an air quality program for the Portland metropolitan area after implementation of HB 2175 and include an emissions fee proposal. Councilor Knowles said JPACT had recommended adoption of Resolution No. 91-1422.

Councilor Devlin gave the Transportation & Planning Committee's report and recommendation. He concurred with Councilor Knowles' JPACT report and said the resolution had undergone extensive review by JPACT and the Transportation Policy Advisory Committee (TPAC). He said the resolution was the Council's second effort related to HB 2175. He said the Council's first action had been to endorse the bill's concepts. Councilor Devlin discussed Transportation & Planning Committee amendments to Exhibit A. He said Exhibit A new Section No. 9 outlined a Portland metropolitan approach to developing fees and included Metro development of a joint study with DEQ; Section No. 9(2) provided for Metro, JPACT and Bi-State concurrence if DEQ initiated an emission fee-based program; Section Nos. 9(3) and (4) addressed Portland area fee revenues being used solely to mitigate auto emissions and a revenue management system developed as part of the DEQ/Metro study. He said Section No. 15 recommended a cooperative statewide approach to review air quality implications of the Emissions Fee Plan. He said Section No. 21 strengthened the requirement that 100 percent of fee revenues, after deduction of administrative costs, would be used to mitigate auto emission pollution. He said the amendments made were technical in nature and the resolution did not need to return to JPACT for final review.

The Council discussed Resolution No. 91-1422. Councilor McFarland asked how measures called for would be enforced. Andy Cotugno, Director of Transportation, explained what programs would be implemented. Councilor McFarland said she was not comfortable with the resolution and said it appeared funds would be raised to fund a commission which in turn would create more studies. Councilor Devlin referred to amended Exhibit A and said the issues were dependent on House adoption of HB 2175 and explained what programs the bill would create if adopted. Councilor Van Bergen said the actions called for meant the creation of a selective sales tax so that the Oregon Department of Transportation (ODOT) would obtain funds for lightrail development.

Councilor Knowles said HB 2175 would establish whether Oregon would take an emissions fee, or a regulatory, approach. He said most parties were in agreement that air quality was getting worse and said the resolution would put in place regional mechanisms to alleviate the situation. Councilor Devlin said it was necessary for the region to address clean air issues because of the federal Clean Air Act.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, Knowles, McLain and Wyers voted aye. Councilors McFarland and Van Bergen voted nay. Councilor Collier was absent. The vote was 9 to 2 in favor and Resolution No. 91-1422 was adopted.

6.8 Resolution No. 91-1432, For the Purpose of Ratifying the Bi-State Policy Advisory Committee Resolution 03-01-1991 Amending the Bi-State Policy Advisory Committee Bylaws

Motion: Councilor Bauer moved, seconded by Councilor Hansen, for adoption of Resolution No. 91-1432.

Councilor Bauer gave the Transportation & Planning Committee's report and recommendation. He said the resolution was a housekeeping measure and said current bylaws language on membership resulted in awkward situations when Washington's Intergovernmental Resource Center (IRC) representative and a major jurisdiction representative were the same person because the IRC Board was a council of governments forum and comprised of local jurisdictions' elected officials. He said the bylaws as amended would allow IRC to select alternate representatives if necessary and ensure IRC was fully represented when voting.

Vote: Councilors Bauer, Buchanan, Devlin, DeJardin, Gardner, Hansen, McFarland, Van Bergen and Wyers voted aye. Councilors Collier and Knowles were absent. The vote was unanimous and Resolution No. 91-1432 was adopted.

7. COUNCILOR COMMUNICATIONS AND COMMITTEE REPORTS

Councilor Bauer discussed current Council per diem reimbursement procedures. He noted some Councilors, such as Budget Committee members, attended more meetings on average than other Councilors and said those Councilors should be compensated if their per diem accounts had been depleted. The Council directed Council staff to research the issue.

Councilor Wyers discussed pending Solid Waste Committee legislation including Resolution No. 91-1437.

Councilor Van Bergen distributed the Proposed FY 1991-92 Budget and discussed the Budget Committee's process and recommendations (written comments filed with the record of this meeting). The Council as a whole discussed whether the Executive Officer could submit the budget at an earlier date in the future to ensure more time for the budget process.

Councilor Devlin noted the Council received two letters the date of this meeting from Far West Fibers and the Association of Oregon Recyclers (AOR) opposing Metro's support of HB 2136. He said the Governmental Affairs Committee would review HB 2136 again.

The Council discussed the Council retreat scheduled for April 27.

Acting Presiding Officer Gardner adjourned the meeting at 7:02 p.m.

Respectfully submitted,

Paulette Allen
Clerk of the Council

Meeting Date: July 11, 1991
Agenda Item No. 5.1

ORDINANCE NO. 91-413

STAFF REPORT

CONSIDERATION OF ORDINANCE NO. 91-413 FOR THE PURPOSE OF APPROVING AN INCREASE IN THE TRANSFER RATE FOR THE FOREST GROVE TRANSFER STATION

June 24, 1991 Presented by: Roosevelt Carter
Phil North

FACTUAL BACKGROUND AND ANALYSIS

Ambrose Calcagno, dba A. C. Trucking, filed a request for an increase in the transfer fee rate cap for the Forest Grove Transfer Station (FGTS). The present cap is $19.25 per ton. The requested cap is $22.75. The present cap was approved by a franchise amendment adopted by the Council on September 22, 1988.

The rate review committee met to consider the rate request under the provisions of Metro Code Section 5.01.180. The principal rationale for the rate increase request is: 1) revenues have not been adequate to provide a satisfactory rate of return on investment; 2) operating expenses balanced against revenues have resulted in a 1990 loss before taxes; 3) non-franchise profits are not deemed as significant as franchise revenues and expenses; and 4) use of the facility is market-based and haulers are free to use other disposal facilities if they so choose.

The components of the applicant's total tip fee at the facility are expected to be as follows:

FGTS - Transfer and transportation	$22.75
Riverbend Landfill*	20.82
Yamhill County Surcharge	4.80
Metro User Fee	13.00
DEQ fees	.50
City of Forest Grove Community Enhancement Fee	.50
TOTAL	$62.37

* Estimated

This total is contrasted with the tip fees at Metro Central Station, Metro South Station and the Metro-Riedel Compost Facility which will be $68.00 as of July 1, 1991.

The application, Mr. Calcagno presentation and accompanying written materials (See Attachment 1) note that the transfer and transport rate approval given in September of 1988 was only charged at the maximum $19.25 between the months of the January and June 1988. Competitive pressures held the rate below the authorized maximum.

The applicant has stated that the requested rate adjustment will result in a more equitable rate of return on investment. The

expected rate of return on investment at a transfer and transport rate of $22.75 will be 5.4 percent.

Presentations to the rate review committee were made by Ambrose Calcagno Jr. and his representatives. Staff recommended approval of the transfer fee increase. The committee members present unanimously concurred in the recommendation that the new transfer fee, rate cap be approved, based upon the financial representations and testimony of the applicant. Further, no haulers would be restrained from using alternative disposal sites if they can obtain a more competitive transfer and disposal charge.

In rate revision applications, the Metro Code provides that a public hearing shall be held before final approval of such rate by the Council. At the hearing, the applicant will be available to address such other issues and concerns that the Council may have as to the requested rate amendment.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 91-1472.

PEN:gbc
FCTS\STAF0628.RPT
June 28, 1991

ATER WYNNE
HEWITT
DODSON
& SKERRITT
ATTORNEYS AT LAW

ATTACHMENT 1

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April 22, 1991

Phil North
Metropolitan Service District
Portland, Oregon 97201

Re FOREST GROVE TRANSFER STATION
TRANSFER AND TRANSPORTATION FEES

Dear Mr. North:

Ambrose Calcagno, Jr. respectfully requests that the Metropolitan Service District authorize an increase in the transfer and transportation component of fees charged to commercial haulers by the Forest Grove Transfer Station, which facility is owned and operated by Mr. Calcagno dba AC Trucking.

In late 1988 METRO approved Mr. Calcagno's request for a $19.25 per ton transfer and transportation fee. Since then Mr. Calcagno has charged that fee for only the six months between January and June 1989. At all other times competitive pressures have held the fee to lower levels. Mr. Calcagno anticipates that, on July 1, 1991, increases pending at other transfer stations and disposal sites will allow increases to the fee charged by the Forest Grove Transfer Station. He requests that the maximum transfer and transportation fee be increased from $19.25 to $22.75 a ton effective that date.

The suggested rate would allow the transfer station to earn a 22.5 percent pre-tax operating return on assets. During 1990, when transfer and transportation fees averaged only $18.09 a ton, the transfer station earned an annualized pre-tax operating return of only eight percent. With that return on assets, the firm was unable to cover its interest expense and lost $50,059.

Revenue in 1990 was $3,413,000, nearly $210,000 less than the $3,621,000 required to generate a 20 percent operating return on assets. (See column 2 of the attached Schedule 1.) In 1991, revenue requirements will increase an additional $95,000,

of which $52,000 will cover increased expenses[1] and $43,000 will enable the firm to earn an extra 2.5 percentage points on its investment. (See column 3 of Schedule 1.) The resulting 22.5 percent return will help the firm make up for the shortfall suffered during the last 2.5 years.

A $22.75 rate passes both cost and market tests. It will yield a modest 5.4 percent pre-tax return on revenue. It will leave total disposal costs (transfer plus transport plus landfill) at Forest Grove in line with those elsewhere in the Metropolitan Service District. We urge its approval.

Thank you.

Sincerely,

Charles Marshall for
Ambrose Calcagno, Jr.

cc Ambrose Calcagno, Jr.

---

[1]For analytical and presentation purposes, we have assumed that disposal rates and fees will not increases. Accurate or not, the effect on transfer and transportation fees is negligible.

SCHEDULE 1

AC TRUCKING

OPERATING AND FINANCIAL DATA
1990 & 1991

	1990 ACTUAL	1990 PRO FORMA	1991 PRO FORMA
TONS RECEIVED	64,880	64,880	64,880
ASSETS EMPLOYED	$1,730,706	$1,730,706	$1,730,706
REVENUE	$3,412,805	$3,621,293	$3,716,362
MSD & dump fees	$2,209,439	$2,209,439	$2,209,439
Franchise fees (FG enhancement)	$29,689	$29,689	$29,689
Other	$1,036,024	$1,036,024	$1,087,825
OPERATING & ADMINISTRATIVE EXPENSES	$3,275,152	$3,275,152	$3,326,953
INCOME FROM OPERATIONS	$137,653	$346,141	$389,409
Misc income	$2,930	$2,930	$2,930
Interest expense	($190,642)	($190,642)	($190,642)
INCOME (LOSS) BEFORE TAXES	($50,059)	$158,429	$201,697
OPERATING RETURN ON ASSETS	8.0%	20.0%	22.5%
OPERATING RETURN ON REVENUE	4.0%	9.6%	10.5%
PRE-TAX RETURN ON ASSETS	-2.9%	9.2%	11.7%
PRE-TAX RETURN ON REVENUE	-1.5%	4.4%	5.4%
TRANSFER & TRANSPORT RATE PER TON	$18.09	$21.30	$22.77
OTHER DISPOSAL FEES PER TON	$34.51	$34.51	$34.51
TOTAL DISPOSAL RATE PER TON	$52.60	$55.82	$57.28

G O L D E N
M c R A E

April 19, 1991

Mr. Charles Marshall
222 S.W. Columbia, Suite 1800
Portland, OR 97201-6618

Dear Charles:

Enclosed are 1990 depreciation schedule and financial statements for AC Trucking. The financial statements include $34,154 of engineering costs which is included in transfer station and improvements that is not included in the depreciation schedule. These costs are for the expansion and since it has not been done I did not depreciate them.

If you have any questions, please call me.

Very truly yours,

Laurie

Laurie L. Golden

GOLDEN & McRAE, P.C. · CERTIFIED PUBLIC ACCOUNTANTS
[illegible] SW COURTNEY AVENUE, SUITE [illegible] · PORTLAND, OREGON
(503) 295-1003

AC TRUCKING ID No: Page: 1
1. Book Depreciation Report Preparer: llg
Depreciation Calculated from: 1/01/90 to: 12/31/90 Time: 01:52:55PM Date: 04/19/1991

Asset Class	Asset Number	Desc 1	Date Acquired	Salvage Value	Book Cost	Depr Meth	Bk Yr	Bk Mo	Book Depreciation Month	Book Depreciation YTD	Book Depreciation LTD	Net Book Value	Date Disposed
AMOR	23	PRE OPENING COSTS	08/01/85	0	7,205	1	5	0	0	841	7,085	120	
AMOR	24	LOAN FEES	03/24/87	0	16,603	1	5	0	277	3,321	12,453	4,150	
				0	23,808				277	4,162	19,538	4,270	
BUIL	13	CONST-SELCO	09/01/85	0	572,258	1	20	0	2,384	28,613	152,602	419,656	
BUIL	14	85 ENGINEERING COST	09/01/85	0	64,867	1	20	0	270	3,243	17,297	47,570	
BUIL	15	CONST & PROP TAX	09/01/85	0	47,066	1	20	0	196	2,353	12,550	34,516	
BUIL	16	KAMPS	09/01/85	0	834	1	20	0	4	42	223	611	
BUIL	17	ELECTRICAL OUTLETS	09/01/85	0	652	1	20	0	3	33	175	477	
BUIL	18	ENGINEERING PRE 85	09/01/85	0	38,214	1	20	0	159	1,911	10,191	28,023	
BUIL	19	TESTING & PERMITS	09/01/85	0	7,654	1	20	0	32	383	2,042	5,612	
BUIL	20	ROCK	09/01/85	0	68,320	1	20	0	285	3,416	18,219	50,101	
BUIL	21	ENGINEERING COSTS	01/01/87	0	28,910	1	18	0	134	1,606	6,424	22,486	
BUIL	22	BUILDING COSTS	01/01/87	0	941	1	18	0	4	52	208	733	
BUIL	8	GRAVEL & IVY	10/17/85	0	7,436	1	20	0	31	372	1,953	5,483	
				0	837,152				3,502	42,024	221,884	615,268	
L	12	REFUSE TRANSFER TRLR	11/20/87	0	45,265	1	7	0	539	6,466	20,476	24,789	
L	25	Crane	04/18/89	0	59,500	1	12	0	413	4,958	8,677	50,823	
L	28	2 STAR TRAILERS	07/25/89	0	105,000	1	10	0	875	10,500	15,750	89,250	
L	30	4 STORAGE BOXES	03/07/90	0	12,159	1	10	0	101	1,013	1,013	11,146	
L	32	2 STAR TRAILERS	01/01/90	0	85,224	1	10	0	710	8,522	8,522	76,702	
				0	307,148				2,638	31,459	54,438	252,710	
MACH	1	SCALE PRINTER	12/11/85	0	300	1	7	0	4	43	219	81	
MACH	2	CAMERA	04/16/85	0	354	1	7	0	4	51	293	61	
MACH	3	GATE WIRING	11/05/85	0	2,520	1	7	0	30	360	1,860	660	
MACH	6	GATES	12/31/86	0	1,665	1	5	0	28	333	1,621	44	
MACH	26	CRANE INSTALLATION	04/18/89	0	25,185	1	12	0	175	2,099	3,673	21,512	
MACH	31	2 RADIOS	04/05/90	0	3,900	1	5	0	65	585	585	3,315	
MACH	34	Cabinets	06/30/90	0	1,710	1	10	0	14	100	100	1,610	
				0	35,634				320	3,571	8,351	27,283	
V	4	TRACTOR	09/09/85	0	1,000	1	7	0	12	143	763	237	
V	5	57 MACK TRUCK	12/31/86	0	2,000	1	7	0	24	286	1,454	546	
V	7	TRACTOR	06/01/87	0	68,679	1	5	0	1,145	13,736	48,076	20,603	
V	9	STAR TRAILERS	03/14/85	0	101,389	1	10	0	845	10,139	59,144	42,245	
V	10	MACK TRAILERS	04/17/85	0	75,166	1	7	0	895	10,738	61,744	13,422	
V	11	84 TRACTOR/BACKHOE	07/10/85	0	43,260	1	7	0	515	6,180	32,960	10,300	
V	27	1989 MACK TRUCK	03/13/89	0	79,240	1	8	0	825	9,905	18,159	61,081	
V	29	3 STAR TRAILERS	08/17/90	0	185,022	1	10	0	1,542	7,709	7,709	177,313	
V	33	1990 MACK TRUCK	04/20/90	0	84,200	1	10	0	702	6,315	6,315	77,885	
				0	639,956				6,505	65,151	236,324	403,632	
GRAND TOTALS:				0	1,843,698				13,242	146,367	540,535	1,303,163	
LESS: DISPOSITIONS				0	0				0	0	0	0	
NET TOTALS:				0	1,843,698				13,242	146,367	540,535	1,303,163	

G O L D E N
M c R A E

Ambrose Calcagno, Jr.
AC Trucking

We have compiled the accompanying balance sheet of AC Trucking as of December 31, 1990 and 1989 and the related statements of operations and owner's deficiency and cash flows for the years then ended, in accordance with standards established by the American Institute of Certified Public Accountants.

A compilation is limited to presenting in the form of financial statements information that is the representation of management. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or any other form of assurance on them.

Golden & McRae

March 23, 1991

AC TRUCKING

FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 1990 AND 1989

CONTENTS

AC TRUCKING

BALANCE SHEET

DECEMBER 31, 1990 AND 1989

ASSETS

	1990	1989
Current assets:		
Cash	$ 16,995	$ 33,775
Accounts receivable, trade	354,893	220,295
Other receivables	21,500	27,700
Total current assets	393,388	281,770
Property and equipment: (Notes 2 & 3)		
Transfer station and improvements	871,306	872,337
Machinery and equipment	675,590	155,758
Equipment under capital leases	307,148	429,580
	1,854,044	1,457,675
Less accumulated depreciation and amortization	520,997	378,791
Net property and equipment	1,333,047	1,078,884
Other assets:		
Loan fees and opening costs net of accumulated amortization of $19,538 in 1990 and $15,376 in 1989	4,271	8,433
Deposits	-	12,359
Total other assets	4,721	20,792
Total assets	$1,730,706	$1,381,446

See Accountants' report and notes to financial statements.

AC TRUCKING

BALANCE SHEET

DECEMBER 31, 1990 AND 1989

LIABILITIES AND OWNER'S DEFICIENCY

	1990	1989
Current liabilities:		
Current portion of long-term debt (Note 2)	$ 80,331	$ 29,899
Current portion of obligations under capital leases (Note 3)	52,134	82,373
Accrued expenses	-	10,436
Due to affiliated companies (Note 5)	430,103	238,092
Total current liabilities	562,568	360,800
Long-term debt, less current portion (Note 2)	1,229,121	1,060,065
Obligations under capital leases, less current portion (Note 3)	181,639	153,144
Owner's deficiency	(242,622)	(192,563)
Total liabilities and owner's deficiency	$ 1,730,706	$ 1,381,446

See Accountants' report and notes to financial statements.

AC TRUCKING

STATEMENT OF OPERATIONS AND OWNER'S DEFICIENCY

YEARS ENDED DECEMBER 31, 1990 AND 1989

	1990	1989
Transfer station revenue	$ 3,412,805	$ 2,347,415
Operating expenses		
Salaries	188,846	190,920
Payroll taxes and benefits	77,788	54,620
MSD and Dump fees	2,209,439	1,226,230
Enhancement fees	29,689	-
Truck repair, gas and expense	115,624	135,179
Other operating expenses	57,933	57,140
Total operating expense	2,679,319	1,664,089
Administrative expenses		
Salaries	179,597	63,244
Payroll taxes and benefits	74,441	19,765
Data processing	12,033	18,173
Rent	51,700	78,217
Consulting	12,703	14,872
Depreciation and amortization	146,367	114,058
Office supplies	5,564	9,537
Insurance	30,993	31,735
Legal and accounting	26,482	15,297
Telephone and utilities	14,877	7,330
Taxes and licenses	13,661	16,156
Other administrative expense	27,415	48,384
Total administrative expense	595,833	436,768
Income from operations	137,653	246,558
Other income (expense)		
Miscellaneous income	2,930	13,845
Interest expense	(190,642)	(204,207)
Total other income (expense)	(187,712)	(190,362)
Net income (loss)	(50,059)	56,196
Owner's (deficiency), beginning of year	(192,563)	(144,287)
Owner's withdrawals	-	(104,472)
Owner's (deficiency), end of year	$(242,622)	$(192,563)

See Accountants' report and notes to financial statements.

AC TRUCKING

STATEMENT OF CASH FLOWS

YEARS ENDED DECEMBER 31, 1990 AND 1989

	1990	1989
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income (loss)	$ (50,059)	$ 56,196
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	146,367	114,058
(Increase) in trade accounts receivable	(134,598)	(121,260)
(Increase) decrease in other accounts receivable	6,200	(27,700)
Decrease in deposits	12,359	-
(Decrease) in trade accounts payable and accrued expense	(10,436)	(130,681)
Net cash (used) in operating activities	(30,167)	(109,387)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of equipment and building improvements	(29,763)	(109,113)
Net cash (used) in investing activities	(29,763)	(109,113)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from long-term debt	-	79,240
Repayment of long-term debt	(49,734)	(47,770)
Repayment of obligations under capital leases	(99,127)	(63,955)
Increase in cash due to affiliated companies	192,011	378,814
Withdrawals by owner	-	(104,472)
Net cash provided by financing activities	43,150	241,857
Increase (decrease) in cash	(16,780)	23,357
Cash, beginning of year	33,775	10,418
Cash, end of year	$ 16,995	$ 33,775

See Accountants' report and notes to financial statements.

AC TRUCKING

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 1990 AND 1989

1. Summary of significant accounting policies:

Property and equipment and depreciation and amortization:

Property and equipment are stated at cost. Depreciation and amortization are provided substantially on the straight-line method over the estimated useful lives of the related assets.

Loan fees and pre-opening costs:

Loan fees are being amortized using the straight-line method over the life of the loan. Pre-opening costs are being amortized using the straight-line method over five years.

2. Long-term debt:

	1990	1989
Collateralized by equipment: Note payable due in monthly installments of $10,718 including interest at 4.5% over the monthly average yield of 6-month certificates of deposit (12.75% at December 31, 1990), due March, 1992	$ 964,709	$ 981,942
Note payable due in monthly installments of $1,368 including interest at 12.5%, due September, 1992	26,570	38,816
Note payable due in monthly installments of $1,783 including interest at 12.5% due February, 1994	55,709	69,206
Notes payable due in monthly installments of $4,185 including interest at 12.7%, due September, 1995	178,287	-
Note payable due in monthly installments of $1,909 including interest at 12.85%, due April, 1995	75,828	-
Lien payable due in semi-annual installments of $1,044 plus interest at 10%, due November, 1994	8,349	-
	1,309,452	1,089,964
Current portion	80,331	29,899
	$1,229,121	$1,060,065

See Accountants' Report

2. Long-term debt (continued)

Principal payments due on long-term debt in each of the following years are as follows:

1990		$ 29,899
1991	$ 80,331	33,894
1992	1,039,848	1,003,057
1993	77,323	19,603
1994	68,774	3,511
1995	43,176	-
	$1,309,452	$1,089,964

3. Capital leases:

The Company has capitalized financing leases by recording the related asset and lease obligation on the accompanying balance sheet.

Capital leases included in equipment are as follows:

	1990	1989
Equipment under capital leases	$307,148	$429,580
Less accumulated amortization	54,438	149,770
	$252,710	$279,810

3. Capital leases (continued)

The Company is obligated for minimum rentals under capital leases of equipment expiring on various dates through 1995, as follows:

Years ending December 31,	1990	1989
1990		$ 112,677
1991	$ 90,901	58,804
1992	90,738	56,758
1993	84,228	46,528
1994	43,018	39,545
1995	1,505	-
	310,390	314,312
Less amount representing interest	76,617	78,795
Present value of net minimum lease payments	233,773	235,517
Less current portion	52,134	82,373
	$ 181,639	$ 153,144

The interest rate used for capitalizing leases varies from 12.6% to 18.35%.

4. Pension plan:

The Company's money-purchase pension plan covers regular full-time employees who meet prescribed service requirements. The Company accounts for pension expense by means of a formula based on employee compensation and makes annual contributions equal to the amount determined by the formula.

5. Related party transactions:

The Company rents its facilities on a month-to-month basis from the owner of the company and receives revenue from related companies.

The total revenues earned from related companies and rent paid to the owner for years ended December 31, 1990 and 1989 is as follows:

	1990	1989
Transfer station revenue	$1,546,414	$966,489
Facilities rent	$ 50,861	$ 78,171

The Company and six other companies are under the control of Ambrose Calcagno, Jr. Certain overhead expenses are shared among the companies and such transactions are accounted for using intercompany receivables and payables.

6. Supplemental disclosures of cash flow information:

The Company had noncash financing transactions relating to capital leases on new equipment of $97,383 and purchases of new equipment of $269,222 during the year ended December 31, 1990.

During 1990 interest paid is $190,642.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF APPROVING AN INCREASE IN THE TRANSFER RATE FOR THE FOREST GROVE TRANSFER STATION	))))	ORDINANCE NO. 91-413 Introduced by Rena Cusma, Executive Officer

WHEREAS, A. C. Trucking dba the Forest Grove Transfer Station, Solid Waste Franchise No. 4, has requested an increase in the maximum transfer rate presently authorized under its franchise agreement with Metro; and

WHEREAS, The present Forest Grove Transfer Station maximum transfer rate is $19.25 per ton under a franchise amendment adopted by the Council on September 22, 1988; and

WHEREAS, A. C. Trucking's current request is for an amendment to its franchise to permit a maximum transfer rate of up to $22.75 per ton; and

WHEREAS, The Rate Review Committee met and considered the rate increase request from A. C. Trucking; and

WHEREAS, The Rate Review Committee considers the request to increase the transfer rate cap for the Forest Grove Transfer Station to be reasonable, having taken into consideration the criteria under Metro Code Section 5.01.080 and financial information provided by the applicant; and

WHEREAS, Delay in implementing an increase in the transfer and transport fees would exacerbate the financial losses incurred by the applicant; and

WHEREAS, Senate Bill No. 299 and Metro Code Section 2.01.080(i) would result in a rate adjustment date significantly

later than the rate change occurring at Metro facilities on July 1, 1991 in the absence of declaring an emergency; and

WHEREAS, The losses to be incurred and the later rate adjustment date are appropriate grounds for declaration of an emergency; now, therefore,

The Council of the Metropolitan Service District Hereby Ordains,

1. That the increase in the transfer rate to $22.75 per ton for the Forest Grove Transfer Station operated by A. C. Trucking is hereby approved.

2. That the A.C. Trucking franchise agreement shall be amended as shown in Exhibit A attached to this Ordinance.

3. That pursuant to Metro Code Section 2.01.080(i), an emergency is declared to allow immediate implementation of the amended rates in order to allow the applicant to avoid additional financial losses and to allow the rate change to more closely parallel Metro facility rate changes and this Ordinance shall be in force and effect from its date of adoption.

4. That the new transfer rate cap shall be effective as of July ___, 1991.

ADOPTED by the Council of the Metropolitan Service District this _____ day of July, 1991.

_____
Tanya Collier, Presiding Officer

ATTEST:

_____
Clerk of the Council

PN:gbc
July 2, 1991
FCTS\SW91-413.ord

EXHIBIT A

SCHEDULE E

TRANSFER RATES

SE-1 The Franchise Holder shall collect a Transfer Fee, a Disposal Fee and a Metro Fee on each ton of waste delivered to the facility by commercial haulers for transfer. All wastes delivered shall be charged the same rates. The Franchise Holder shall maintain accounts on wastes received and amounts billed to each commercial hauler as required by Metro Code Section 5.01.130.

SE-2 In the event that the scales for weighing incoming waste cannot be used, tonnage rates are to be converted to yardage rates on the assumption that compacted waste as a density of 600 pounds per cubic yard and that non-compacted waste has a density of 250 pounds per cubic yard.

SE-3 Fees for disposal (including any fees assessed by local jurisdictions in which the disposal facility is located) and Metro Fees shall be collected by the Franchise Holder on all waste received and shall be paid to the disposal site or Metro as required. In calculating the total charges to be paid on each load or each account, the amount of the charge which is passed through to Metro or to the disposal site shall be itemized. Any changes in the amount of fees for disposal or in Metro Fees to be collected shall result in appropriate adjustments to the total charges collected.

SE-4 As set forth in SB-3, required User Fee and Regional Transfer Charges shall be paid to Metro. As allowed by Metro Code Section 5.02.050(d), the Franchise Holder may be exempted from collecting and paying the Regional Transfer Charge when a written authorization to do so has been issued by the Solid Waste Director.

SE-5 As of September 22, 1988, the Franchisee is authorized to charge a transfer fee of ~~$19.25~~ $22.75 per ton for mixed solid waste received from commercial haulers.

SE-6 As of September 22, 1988, the Franchise Holder is authorized to charge a Transfer Fee of $15.00 per load (up to three (3) cubic yards) for public self-haulers, provided however that if a self-hauler shall bring in one-half (½) cubic yard of recyclable material that the remaining portion of the load shall be charged at a rate not to exceed $5.00 per cubic yard ($5.00 minimum; $12.50 maximum for three (3) cubic yards). Any incremental cubic yards of mixed solid waste over three (3) cubic yards shall be charged at an incremental rate of $2.00 per cubic yard.

SE-7 Any uncovered loads delivered to the facility shall be charged double rates.

SE-8 Included in the fees referred to in SE-3 shall be a Community Enhancement Fee not to exceed $.50 per ton (less a set-off for real estate taxes paid to the City of Forest Grove) to be paid to the City of Forest Grove per an agreement to be established between Metro and the City of Forest Grove. The Franchisee shall receive thirty (30) days' notice of the effective date upon which to commence collecting this fee and paying it as directed by Metro.

SE- 9 The transfer fee shall not increase the amount set forth in SE-5 without a detailed rate request from the Franchisee and the approval of the Metro Council.

SE-10 The transfer fee may be adjusted so long as it remains below the amount set forth in SE-5 or the rate currently approved. The Franchisee must notify, in writing, the Solid Waste Director of his intent to adjust the transfer rate at least ten (10) days before he implements plans to adjust the rate. The adjusted transfer rate shall take effect if the Solid Waste Director has not notified, in writing, the Franchisee of his/her disapproval of the proposed adjustment prior to its scheduled effective date. Adjustments in the transfer fee shall not be requested more frequently than once every ninety (90) days. Customers of the Forest Grove Transfer Station shall be provided with sixty (60) days notice prior to any increases in the transfer fee. The purpose in allowing for an administrative adjustment in the approved rate is to allow the operator an opportunity to respond to market conditions and attract needed waste in a timely manner.

PEN:gey
FGTS\RATE.EXA
June 10, 1991

Meeting Date: July 11, 1991
Agenda Item No. 5.2

ORDINANCE NO. 91-414

STAFF REPORT

CONSIDERATION OF ORDINANCE NO. 91-414 AMENDING ORDINANCE NO. 91-390A REVISING THE FY 1991-92 BUDGET AND APPROPRIATIONS SCHEDULE FOR THE PURPOSE OF FUNDING MODIFICATIONS TO THE STRAP COMPUTER PROJECT

Date: July 2, 1991 Presented by: Keith Lawton
Roosevelt Carter

FACTUAL BACKGROUND AND ANALYSIS

During the FY 1991-92 budget deliberations, a coordinated computer proposal, known as the "STRAP Project", was presented to the Committee for consideration. At that time the budget numbers were preliminary estimates based on the best information available. It was anticipated that a majority of the project would be on a lease/purchase agreement with a portion of the project purchased. The amount to be purchased was budgeted in the Solid Waste Revenue Fund.

Since the adoption of the budget, proposals have been received for the project and are being evaluated. In addition, severe equipment problems are being experienced in the existing Solid Waste computer network. Of the $83,100 budget in Solid Waste for the STRAP project, $50,000 was dedicated to Recycling Information Center software and $33,100 to general Solid Waste Department needs. The general Solid Waste amount did not anticipate the problems existing with the current network. The current Solid Waste network is incapable of meeting the current demands of the department and is partly inoperative.

The preliminary evaluation of the STRAP proposals has indicated that leasing the entire project would provide the agency the purchasing power necessary to meet the demands. This includes replacing the existing Solid Waste network with up-to-date equipment. A detailed comparison of original estimated costs versus proposal costs will be presented at the Finance Committee.

This action requests the transfer of $83,100 from existing General Account, Capital Outlay appropriation in the Solid Waste Revenue Fund to Materials & Services, Capital Leases in the General Account. This action increases the overall STRAP project by $166,200 to be funded over two subsequent fiscal years.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Ordinance 91-414, transferring $83,100 from the Solid Waste General Account, Capital Outlay to Materials & Services for the STRAP project.

kr:ord91-92:strap:sr
July 2, 1991

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

AN ORDINANCE AMENDING ORDINANCE NO. 91-390A REVISING THE FY 1991-92 BUDGET AND APPROPRIATIONS SCHEDULE FOR THE PURPOSE OF FUNDING MODIFICATIONS FOR THE STRAP PROJECT	ORDINANCE NO. 91-414 Introduced by Rena Cusma, Executive Officer

WHEREAS, The Council of the Metropolitan Service District has reviewed and considered the need to transfer appropriations within the FY 1991-92 Budget; and

WHEREAS, The need for a transfer of appropriation has been justified; and

WHEREAS, Adequate funds exist for other identified needs; now, therefore,

THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT HEREBY ORDAINS:

That Ordinance No. 91-390A, Exhibit B, FY 1991-92 Budget, and Exhibit C, Schedule of Appropriations, are hereby amended as shown in the column titled "Revision" of Exhibits A and B to this Ordinance for the purpose of funding modifications to the STRAP project, transferring $83,100 from the Solid Waste General Account, Capital Outlay to Materials & Services.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1991.

_____
Tanya Collier, Presiding Officer

ATTEST:

_____
Clerk of the Council

kr:ord91-92:strap:ord
July 2, 1991

EXHIBIT A
ORDINANCE NO. 91-414

FISCAL YEAR 1991-92		CURRENT BUDGET		REVISION		PROPOSED BUDGET	
ACCT #	DESCRIPTION	FTE	AMOUNT	FTE	AMOUNT	FTE	AMOUNT
SOLID WASTE REVENUE FUND							
General Account							
	Materials & Services						
	BUDGET AND FINANCE						
525740	Capital Lease Payments-Furniture & Equipment		0		50,000		50,000
	WASTE REDUCTION						
525740	Capital Lease Payments-Furniture & Equipment		0		33,100		33,100
	ST. JOHNS LANDFILL						
524190	Misc. Professional Services		100,000		0		100,000
	Total Materials & Services		100,000		83,100		183,100
	Capital Outlay						
	BUDGET AND FINANCE						
571500	Purchases-Office Furniture & Equipment		70,000		(33,100)		36,900
	OPERATIONS						
571400	Purchases-Equipment & Vehicles		365,000				365,000
571500	Purchases-Office Furniture & Equipment		494,000				494,000
	WASTE REDUCTION						
571400	Purchaes-Equipment and Vehicles		17,000				17,000
571500	Purchases-Office Furniture & Equipment		50,000		(50,000)		0
	METRO SOUTH						
574130	Engineering Services		100,000				100,000
574510	Const. Work/Materials-Bldgs, Exhibits & Rel.		1,130,000				1,130,000
	ST. JOHNS LANDFILL						
571200	Improvements Other Than Building		50,000				50,000
574571	Const. Work/Materials-Final Cover & Imp.		353,880				353,880
	METRO NORTHWEST IMPROVEMENTS						
574130	Engineering Services		75,000				75,000
574520	Const. Work/Materials-Bldgs, Exhibits & Rel.		440,000				440,000
	Total Capital Outlay		3,144,880		(83,100)		3,061,780
	Total Requirements		3,244,880		0		3,244,880

EXHIBIT C
SCHEDULE OF APPROPRIATIONS
Ordinance No. 91-414

	CURRENT APPROPRIATION	REVISION	PROPOSED APPROPRIATION
SOLID WASTE REVENUE FUND			
Administration			
Personal Services	347,683	0	347,683
Materials & Services	75,673	0	75,673
Subtotal	423,356	0	423,356
Budget and Finance			
Personal Services	393,083	0	393,083
Materials & Services	179,720	0	179,720
Subtotal	572,803	0	572,803
Operations			
Personal Services	1,196,133	0	1,196,133
Materials & Services	43,878,534	0	43,878,534
Subtotal	45,074,667	0	45,074,667
Engineering and Analysis			
Personal Services	536,402	0	536,402
Materials & Services	257,125	0	257,125
Subtotal	793,527	0	793,527
Waste Reduction			
Personal Services	649,650	0	649,650
Materials & Services	3,254,796	0	3,254,796
Subtotal	3,904,446	0	3,904,446
Debt Service Account			
Debt Service	2,191,328	0	2,191,328
Subtotal	2,191,328	0	2,191,328
Landfill Closure Account			
Materials & Services	10,016,200	0	10,016,200
Subtotal	10,016,200	0	10,016,200
Construction Account			
Capital Outlay	3,525,000	0	3,525,000
Subtotal	3,525,000	0	3,525,000
Renewal & Replacement Account			
Capital Outlay	732,000	0	732,000
Subtotal	732,000	0	732,000

EXHIBIT C
SCHEDULE OF APPROPRIATIONS
Ordinance No. 91-414

	CURRENT APPROPRIATION	REVISION	PROPOSED APPROPRIATION
SOLID WASTE REVENUE FUND (continued)			
General Account			
Materials & Services	100,000	83,100	183,100
Capital Outlay	3,144,880	(83,100)	3,061,780
Subtotal	3,244,880	0	3,244,880
Master Project Account			
Debt Service	3,033,085	0	3,033,085
Subtotal	3,033,085	0	3,033,085
General Expense			
Interfund Transfers	17,742,748	0	17,742,748
Contingency	2,465,797	0	2,465,797
Subtotal	20,208,545	0	20,208,545
Unappropriated Balance	21,460,391	0	21,460,391
Total Solid Waste Revenue Fund Requirements	115,180,228	0	115,180,228

ALL OTHER APPROPRIATIONS REMAIN AS PREVIOUSLY ADOPTED

Meeting Date: July 11, 1991
Agenda Item No. 6.1

RESOLUTION NO. 91-1466

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: July 5, 1991

TO: Metro Council
Interested Persons

FROM: Paulette Allen, Clerk of the Council

RE: RESOLUTION NO. 91-1466

Only the Solid Waste Committee report, staff's report and Resolution No. 91-1466 have been printed in this agenda packet.. Due to the size of the document, Request for Proposals for Transportation and Disposal of Wastes Collected at Metro Permanent Household Hazardous Waste Collection Facilities, will be printed separately and will be distributed to Councilors in advance of, and available at, the Council meeting July 11. Any persons interested in obtaining a copy of the document before the meeting may contact the Clerk at ext. 206.

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1466, FOR THE PURPOSE OF AUTHORIZING AN EXEMPTION TO THE REQUIREMENT OF COMPETITIVE BIDDING AND AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS FROM HAZARDOUS WASTE TRANSPORTATION AND DISPOSAL CONTRACTORS TO TRANSPORT, RECYCLE, TREAT AND DISPOSE OF WASTES COLLECTED AT METRO'S PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES

Date: July 5, 1991 Presented by: Councilor Gardner

Committee Recommendation: At the July 2, 1991 meeting, the Committee voted 3-0 to recommend Council adoption of Resolution No. 91-1466. Voting in favor were Councilors DeJardin, Gardner and McFarland. Councilors McLain and Wyers were excused.

Committee Issues/Discussion: Sam Chandler, Solid Waste Facilities Manager, presented the staff report. He explained how the proposals for hazardous waste transportation and disposal will be evaluated: cost (50%), experience and qualifications (10%), recycling options (10%), ability to accept a variety of materials (10%), ability to respond quickly (10%), general compliance with the RFP (5%) and paperwork impact on Metro (5%). He said that a staff member from the waste reduction division will be part of the evaluation team because the Department hopes to find ways to reuse or recycle these materials.

In response to a question raised by Council staff, Mr. Chandler noted hazardous waste disposal at the composter will be handled as a pass through. He explained that some household hazardous waste will be coming to the composter, and it will be extracted and disposed. There will not be a drop-off depot. Metro exercises stringent oversight, and Riedel is required to discuss its disposal operations with Metro.

In response to Committee concerns about Metro's ability to obtain the lowest cost for these services at the composter, Solid Waste Director Bob Martin explained that Metro has the option of taking direct responsibility for transportation and disposal of hazardous waste and contracting separately if it appears advantageous to do so. Although this may be feasible in the future, the protocol for handling solid waste at the composter is still being developed, so the RFP covers only those facilities in which Metro can track the solid waste directly.

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

TO: Council Solid Waste Committee

FROM: Karla Forsythe, KLF Council Analyst

DATE: June 25, 1991

RE: Resolution No. 91-1466, Authorizing an Exemption to the Requirement of Competitive Bidding and Authorizing Issuance of a Request for Proposals From Hazardous Waste Transportation and Disposal Contractors to Transport, Recycle, Treat and Dispose of Wastes Collected at Metro's Permanent Household Hazardous Waste Collection Facilities

The Solid Waste Department is asking for authority to issue a request for proposals (RFP) to procure transportation and disposal services for household hazardous wastes from Metro South and Metro Central Transfer Stations.

Use of Request for Proposals rather than Competitive Bid Procedure

Under Metro Code Section 2.04.010 (m), a Request for Proposals process may be used only when the Contract Review Board has granted an exemption for that type of contract. The standards for granting an exemption are set out in ORS 279.015 (2) and (5), and in Metro Code Section 2.04.041(b). An exemption may be granted if the Board finds that the exemption will not encourage favoritism or substantially diminish competition for public contracts and that such exemption will result in substantial cost savings.

Findings in Resolution No. 91-1466 appear to support the exemption. The Board would be finding that the proposed process is unlikely to encourage favoritism or diminish competition, because the invitation to submit proposals will be publicly advertised. The Board would further find that the exemption will result in substantial cost savings, because proposers will be able to recommend procedures which may result in decreased costs, and cost will be primary factor in selection.

Authority to Issue Procurement Documents

This is a multi-year contract, designated as Type A on the FY 91-92 contracts list. Under Metro Code Section 2.04.033, the Council

must approve the procurement documents before they are released, and must also approve the contract.

Comments for Committee Consideration

1. In addition to the funds budgeted for hazardous waste transport and disposal at Metro Central and Metro South, the FY 91-92 budget includes $100,000 for hazardous material disposal at the Composter. When and how will this procurement be handled?

2. Committee members may wish to review Attachment 1 to the RFP, which is the proposed operations manual for household hazardous waste collection facilities. The manual provides a good overview of the way in which these facilities will operate.

c:. Sam Chandler
Jim Quinn

BEFORE THE METROPOLITAN SEVICE DISTRICT
CONTRACT REVIEW BOARD

FOR THE PURPOSE OF AUTHORIZING AN EXEMPTION TO THE REQUIREMENT OF COMPETITIVE BIDDING AND AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS FROM HAZARDOUS WASTE TRANSPORTATION AND DISPOSAL CONTRACTORS TO TRANSPORT, RECYCLE, TREAT AND DISPOSE OF WASTES COLLECTED AT METRO'S PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES	))))))))))	Resolution No. 91-1466 Introduced by Rena Cusma, Executive Officer

WHEREAS, The Metropolitan Service District is required to construct permanent facilities for the collection of household hazardous waste as per ORS 459.413, and is in the process of design and construction of two such facilities; and

WHEREAS, a hazardous waste transportation and disposal contractor will need to be selected to transport and properly dispose of the wastes collected at these facilities; and

WHEREAS, ORS 279.015 authorizes the exemption of certain contracts from the competitive bidding requirement; and

WHEREAS, Metro Code Section 2.04.010, as amended, requires an exemption for contracts obtained through a Request For Proposals (RFP) process; and

WHEREAS, Metro Code Section 2.04.041(c) authorizes, where appropriate, the use of alternative contracting and purchasing practices that take account of market realities and modern innovative contracting and purchasing methods which are consistent with the public policy of encouraging competition; and

WHEREAS, It is unlikely that exempting solicitation of household hazardous waste transportation and disposal services from

competitive bidding will encourage favoritism in the awarding of public contracts or substantially diminish competition for public contracts because: (1) a Request for Proposals process will be utilized; (2) the invitation to submit proposals will be advertised; and (3) Requests for Proposals will be sent to a variety of hazardous waste management firms; and

WHEREAS, The exemption will result in substantial cost savings to Metro because: (1) proposers will be allowed to recommend waste categorization procedures, waste disposal options, recycling alternatives, and other aspects of their services that result in decreased costs; and (2) cost will be a primary factor in the selection process; and

WHEREAS, The resolution was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now, therefore,

BE IT RESOLVED,

1. That the Council of the Metropolitan Service District hereby exempts the contract for hazardous waste transportation and disposal services at Metro's permanent household hazardous waste collection facilities from the competitive bid process and authorizes staff to use a Request for Proposals solicitation process.

2. That the the Council of the Metropolitan Service District approves issuance of the Request for Proposals for Transportation

and Disposal of Wastes Collected at Metro Permanent Household Hazardous Waste Collection Facilities, Exhibit "A".

ADOPTED by the Metropolitan Service District Contract Review Board this _____ day of _____, 1991.

_____
Tanya Collier, Presiding Officer

jg:jc
June 5, 1991
Sw911466.RES

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 91-1466, FOR THE PURPOSE OF AUTHORIZING AN EXEMPTION TO THE REQUIREMENT OF COMPETITIVE BIDDING AND AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS FROM HAZARDOUS WASTE TRANSPORTATION AND DISPOSAL CONTRACTORS TO TRANSPORT, RECYCLE, TREAT AND DISPOSE OF WASTES COLLECTED AT METRO'S PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES

Date: June 5, 1991 Presented by: Sam Chandler
Jim Quinn

PROPOSED ACTION

Approve Resolution 91-1466 to authorize the use of a request for proposals to procure household hazardous waste transportation and disposal services and to authorize issuance of the attached RFP (Exhibit A).

BACKGROUND

Oregon law requires that Metro establish permanent depots to receive household hazardous waste (ORS 459.413). Construction has started on a facility to be located at Metro South Transfer Station, and the design process is underway for a facility to be located at Metro Central Transfer Station.

Metro personnel will receive, sort, package and store all wastes collected at these facilities. A hazardous waste transportation and disposal contractor will be required to remove and properly dispose of the drummed wastes.

JUSTIFICATION FOR USING RFP PROCESS

Hazardous waste transportation and disposal firms often take widely differing approaches to categorization of hazardous wastes, and generally utilize differing disposal methods and facilities. Current household hazardous waste operations elsewhere require from as few as seven to as many as thirty-one different categories. Disposal options may range from in-house treatment and recycling methods available to some firms, to shipment across the country to certain specialized disposal facilities. Using the Request for Proposal process will allow candidate transportation and disposal contractors to propose categories and disposal options that result in lower costs to Metro, and which maximize waste reduction opportunities for the materials received.

Along with categorization and disposal options, other factors are likely to differ between different proposers. Some of these factors that are likely to result in lower costs include: type and capacity of trucks that the firm uses; frequency of waste pickups

and amount of notice required; types of materials accepted; the amount and complexity of work that Metro employees would be required to do in the of course sorting, packaging, and determination of unknowns; handling requirements for drums smaller than 55 gallons, which may be more economical for categories of materials received only occasionally; and amount and type of technical assistance that the firm could provide.

Other benefits also result from allowing the candidate transportation and disposal contractors to propose categories and disposal options. The request for proposal process was used for soliciting contractors for some of the household hazardous waste collection events held by Metro, and it was found that this process allowed Metro greater control over the disposition of materials received. It is desirable to exercise control over disposal because in this way Metro can select options that emphasize reclamation and recycling, and that utilize disposal facilities with good environmental records. This often has the additional benefit of reducing Metro's ultimate liability for disposed materials.

Because of the complex nature of hazardous waste transportation and disposal, and the cost savings and environmental benefits that will result, a Request for Proposals process is the most desirable approach to selecting the transportation and disposal contractor at Metro's permanent household hazardous waste facilities.

BUDGET IMPACT

The 1991-1992 budget has $400,000 budgeted for hazardous waste disposal at the Metro South household hazardous waste facility, and $400,000 budgeted for hazardous waste disposal at the Metro Central facility.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive officer recommends adoption of Resolution No. 91-1466.

jg:jc
June 5, 1991
STAF0605.RPT

Meeting Date: July 11, 1991
Agenda Item No. 6.2

RESOLUTION NO. 91-1479

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: July 5, 1991

TO: Metro Council
Interested Persons

FROM: Paulette Allen, Clerk of the Council PA

RE: RESOLUTION NO. 91-1479

The Governmental Affairs Committee will consider Resolution No. 91-1479 on July 11 before the Council meeting at 5:30.

BEFORE THE CONTRACT REVIEW BOARD
OF THE METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF WAIVING METRO CODE SECTIONS 2.04.053 AND 2.04.054 TO AUTHORIZE A CONTRACT WITH PRINCIPIA GRAPHICA FOR METRO PUBLIC INFORMATION AND IDENTIFICATION PROJECT	)	RESOLUTION NO. 91-1479 Introduced by Executive Officer Rena Cusma

WHEREAS, Council in FY 1990-91 authorized contract as is for $5,000 for initial research Phase I of Project; and

WHEREAS, Public Affairs conducted through RFP process for Phase I and Phase II in FY 1990-91; and

WHEREAS, Public Affairs received five proposals, interviewed four finalists and selected Principia Graphica as most qualified; and

WHEREAS, Principia Graphica has completed Phase I; and

WHEREAS, Council in FY 1991-92 Budget had authorized Phase II for $50,000 as "A" contract; and

WHEREAS, Public Affairs recommends contract with Principia Graphica for Phase II and that contract selection process used in FY 1990-91 should be affirmed as appropriate competitive process; now, therefore,

BE IT RESOLVED,

1. The Contract Review Board of the Metropolitan Service District finds the competitive process used in FY 1990-91 was consistent with Metro Code requirements for "A" contracts for Personal Services greater than $10,000; and

2. The Contract Review Board waives provision of Metro Code Sections 2.04.053 and 2.04.054 to authorize the Executive Officer to execute attached Agreement (Exhibit A) with Principia Graphica for an amount not to exceed $50,000 for Project.

ADOPTED by the Contract Review Board of the Metropolitan Service District this _____ of _____, 1991.

_____
Tanya Collier, Presiding Officer

Exhibit A

SCOPE OF WORK

The communication plan has two main goals:

1. To raise the level of awareness of Metro and its role in the region.

2. To streamline operations to improve Metro's ability to serve the region's constituents.

Project Objectives

- To develop clear public information, agency identification and strong presence in the community

- To maintain the individual identification of Metro facilities

- To organize and simplify design applications and production procedures

- To reduce overall production costs

- To design with regard to environmental concerns

- To plan for agency growth and the integration of new projects and departments

- To design for electronic communication

The project results will consist of the following:

1. The design of a set of identification/communication tools for Metro which will include, but not be limited to, a logo and/or logotype and color, typographic and paper standards.

2. The application of these tools in the design of Metro letterhead, business cards and envelopes.

3. Guidelines for the systematic application of agency identification on all Metro communication products.

Basic Services

The Contractor shall provide basic services for the project consisting of consultation, research, design, checking quality of implementation, and coordination of the project and its execution. In connection with performing basic services, the Contractor shall prepare and present materials to Metro that demonstrate or describe the Contractor's intentions and shall prepare various materials, such as artwork, drawings, and specifications, to enable the design to be printed, fabricated, installed, or otherwise implemented.

Implementation

The Contractor's services under this Agreement do not include Implementation such as printing, fabrication, and installation of the project design. Metro and Contractor agree that any such implementation shall be restricted to providing specifications, coordination, and quality-checking. The Contractor shall have no responsibility to the providers of such Implementation, and charges therefore shall be billed directly to Metro.

The Contractor will develop and expand on Phase I recommendations following the procedures outlined below.

Phase 1 – Research, analysis and recommendations – Complete

Phase 2 – Design development

A. Design conceptualization and development

Procedure

1. Input conference
1. Design conceptualization
2. Design exploration/concept rough development
3. Project management and coordination with vendors
4. Client presentation and review of preliminary program design

B. Design refinement

Procedure

1. Further exploration refinement and expansion of selected design directions
2. Client presentation of comprehensives, input and resolution conference
3. Project management and coordination with vendors

Phase 2 – Design implementation

C. The Contractor will provide consultation on implementation activities called for in the plan.

Procedure

1. Application of plan to camera-ready art and electronic templates
2. Client conferences
3. Project management and coordination with vendors

Exhibit B

SCHEDULE

A. Design conceptualization and development

Schedule: 6 months July 1 – December 30

B. Design refinement

Schedule: 3 months January 2–March 30

C. The Contractor will provide consultation on implementation activities called for in the plan

Schedule: 3 months April 1 – June 30

Metro reserves the right to adjust this schedule in the event there is a need to extend the approval and review process and to allow for changes in the scope or complexity of services from those contemplated by this Agreement.

The Contractor reserves the right to adjust the schedule in the event that Metro fails to meet agreed deadlines for submission of materials or granting approvals and to allow for changes in the scope or complexity of services from those contemplated by this Agreement.

Exhibit C

COMPENSATION

Maximum amount of compensation in Phase II will be $50,000. The Contractor shall submit progress reports upon completion of each section of the work as defined in the schedule (Exhibit B). The report shall describe work accomplished and include an itemized statement.

The Contractor will bill Metro 50 percent of the amount budgeted for each section at the outset of work for that section, and 50 percent upon completion as outlined below:

Payment schedule

A.	Design conceptualization and development	
	Initial payment	$12,500
	Payment upon completion of design conceptualization and development	$12,500
	Sub total:	**$25,000**
B.	Design refinement	
	Initial Payment	$10,000
	Payment upon completion of design refinement	$10,000
	Sub total:	**$20,000**
C.	Implementation	
	Initial payment	$ 2,500
	Payment upon completion of implementation	$ 2,500
	Sub total:	**$ 5,000**
	Total	**$50,000**

Payment will be made within 30 days after billing.

Supplementary Services/Reimbursable Expenses

Supplementary Services and materials will be purchased directly by Metro and will be subject to Metro procurement procedures and conditions. Funds to cover such expenses are allocated in the Metro budget independent of this contract.

The Supplementary Services and materials to be provided by Metro with respect to the project shall consist of: Implementation, typesetting, photostats, photoprints, photographs, film and processing, acetate color overlays, transfer proofs, presentation and artwork materials and local deliveries, including messengers.

Expenditures for Supplementary Services provided by Metro may not exceed $1,250.

The Contractor will provide for miscellaneous expenditures including, but not limited to, electrostatic (xerographic) copies, Fax and long-distance telephone charges and postage.

EXHIBIT D

CONTRACT CONDITIONS AND PROVISIONS

Revisions and Additions

1. A fixed fee or fee estimated not to exceed a specified amount is based upon the time estimated to complete the services specified in this Agreement during normal working hours. Any revisions or additions to the services described in this Agreement shall be billed as additional services not included in any fixed fee or estimated fee specified above.

Such additional services shall include, but shall not be limited to, changes in the extent of work, changes in the complexity of any elements of the project, and any changes made after approval has been given for a specific stage of design, documentation, or preparation of artwork.

The Contractor shall keep Metro informed of additional services that are required and shall request Metro's approval for any additional services which cause the total fees, exclusive of any surcharge for rush work, to exceed the fixed fees set forth in Exhibit C. In no event shall charges exceed the contract written amount unless Metro has given its prior approval.

Rush work

2. Metro shall pay a surcharge for any services requiring work to be performed outside of normal working hours by reason of unusual deadlines or as a consequence of Metro not meeting scheduled times for delivery of information, material, or approvals.

The surcharge for rush work shall be at the standard rates plus 50 percent.

Normal working hours for this project are as follows: 8 a.m. to 5 p.m. Monday through Friday, excluding holidays. No rush work will be authorized without prior written approval.

Implementation Budgets

3. Any budget figures or estimates for Implementation charges such as printing, fabrication, or installation are for planning purposes only. The Contractor shall use his or her best efforts to work within stated budgets but shall not be liable if such expenses exceed budgets.

Records

4. The Contractor shall maintain records of hours and reimbursable expenses and shall make records available to Metro for inspection on request.

Metro's Representative

5. Metro shall appoint a sole Representative with full authority to provide or obtain any necessary information and approvals that may be required by the Contractor. Metro's Representative shall be responsible for coordination of briefing, review, and the decision-making process with respect to persons and parties other than the Contractor and its sub-contractors. If changes are made after Metro' s representative has approved a design, Metro shall pay all fees and expenses arising from such changes as additional services.

Materials to be Provided by Metro

6. Metro shall provide accurate and complete information and materials to the Contractor and shall be responsible for the accuracy and completeness of all information and materials so provided. Metro guarantees that all materials supplied to the Contractor are owned by Metro or that Metro has all necessary rights in such materials to permit the Contractor to use them for the project.

6.1 Metro shall indemnify, defend, and hold the Contractor harmless from and against any claim, suit, damages and expense, including attorney's fees, arising from or out of any claim by any party that its rights have been or are being violated or infringed upon with respect to any materials provided by Metro.

6.2 All copy provided by Metro shall be in a form suitable for typesetting. Where photographs, illustrations, or other visual materials are provided by Metro, they shall be of professional quality and in a form suitable for reproduction without further preparation or alteration. Metro shall pay all fees and expenses arising from its provision of materials that do not meet such standards. The Contractor shall return all materials provided by Metro within 30 days after completion of the project and payment of amounts due.

Metro shall provide the following materials and services for the project:

Project coordination
Project scheduling
Design consultation/creative involvement
Design review and approval coordination
Copy editing
Reference materials – samples of letterhead, publications, etc.
Supplementary services as described in Exhibit C
Implementation coordination as described in Exhibit A

Logo Search

7. Metro shall perform a logo search to insure completed logo design does not represent an infringement of copyright laws. Search will be performed after the completion of the design prior to implementation.

Liability of Contractor

8. The Contractor shall take reasonable precautions to safeguard original or other materials provided by Metro. The Contractor shall, however, not be liable for any damage to, or loss of any material provided by Metro, including artwork, photographs, or manuscripts, other than or on account of willful neglect or gross negligence of the Contractor.

8.1 The Contractor shall make good faith effort to insure originality of all materials and designs produced for Metro. In the event any infringement claim is brought against Metro, arising out of Contractor's failure to exercise due care in preparing materials or designs for Metro's use, Contractor shall revise materials and designs so that they do not constitute an infringement but will not otherwise be held liable, unless Contractor was grossly negligent or intentionally copied a protected work or design.

Approval of Typesetting and Final Artwork

9. Metro shall proofread and approve all final type before the production of artwork. The signature of Metro's Representative shall be conclusive as to the approval of all artwork, drawings and other items prior to their release for printing, fabrication, or installation.

Rights

10. All services provided by the Contractor under this Agreement shall be for the exclusive use of Metro other than for the promotional use of the Contractor. Upon payment of all fees and expenses, all rights for all approved final designs created by the Contractor for this project shall be granted to Metro.

Ownership

11. All drawings, artwork, specifications, and other visual presentation materials are the property of Metro.

11.1. All preliminary concepts and visual presentations produced by the Contractor remain the property of the Contractor and may not be used by Metro without the written permission of the Contractor.

Third Party Contracts

12. The Contractor may contract with others to provide creative services such as photography and illustration. Metro agrees to be bound by any terms and conditions, including required credits, with respect to reproduction of such material as may be imposed on the Contractor by such third parties but only to the extent such conditions are not inconsistent with this agreement.

Code of Ethics

13. The Contractor's services shall be performed in accordance with the AIGA Code of Ethics and Professional Conduct for Graphic Designers.

Credit

14. The Contractor shall not have the right to include a credit line on the completed logo design nor on basic applications where the logo is used for the purpose of identifying Metro. Basic applications include, but are not limited to, the following: letterhead, business cards, envelopes, signs, forms, flags, uniforms, and publications and other communication products not designed by the Contractor.

The Contractor shall have the right to include a credit line on publications or other communication products designed by the Contractor for Metro as an extension of this project, such as a guidelines manual, provided both Metro and the Contractor agree the credit line is applicable.

Where applicable, the Contractor's credit line shall read as follows: Principia Graphica.

Metro shall not, without written approval, use the contractor's name for promotional or any other purposes with respect to these designs.

Samples

15. Metro shall provide the contractor with samples of each printed design. Such samples shall be representative of the highest quality of work produced. The Contractor shall have the right to use such photographs for publication, exhibition, or other promotional purposes.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 91-1479, FOR THE PURPOSE OF AWARDING A MULTI-YEAR CONTRACT TO COMPLETE PHASE II OF THE METRO PUBLIC INFORMATION AND IDENTIFICATION PROJECT.

Date: May 29, 1991 Presented by: Vickie Rocker

Requested Action: Approval of multi-year contract with Principia Graphica for the completion of Phase II of the Metro Public Information and Identification Project.

FACTUAL BACKGROUND AND ANALYSIS

The services of the graphic design firm, Principia Graphica, are required to complete the design and implementation of a Metro-wide public information and identification system. The project has two main goals: 1) to raise the level of awareness of Metro and its role in the region; and, 2) to streamline operations to improve our ability to serve our constituents. The contractor will design a set of communication tools – logo, color and typographic standards – and guidelines for the systematic application of agency identification on all Metro communication products.

Request for Proposal Process

- A Request for Proposals was issued by Metro on September 14,1990. Five proposals were received.

- A four-member screening committee comprised of Metro staff from the Public Affairs and Executive Departments and Metro ERC facilities evaluated proposals according to the criteria outlined in the proposal. Four high-scoring candidates were interviewed.

- A four-member interview panel comprised of Metro staff from the Public Affairs and Executive departments and Metro ERC facilities evaluated the candidates based on their presentations.

- Principia Graphica was selected by the evaluation committee.

• Phase I of the contact was awarded to Principia Graphica for $5,000 on October 18, 1990. The successful completion of Phase I was a requirement for award of Phase II of the contract.

• Principia Graphica has successfully completed Phase I of the contract.

STAFF RECOMMENDATION

Based upon the performance of Principia Graphica on Phase I of the contract, staff recommends award of the Phase II, multi-year contract to Principia Graphica.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 91-1479

Contract No. 901-940

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT dated this 1 day of July 1991, is between the METROPOLITAN SERVICE DISTRICT, a municipal corporation, hereinafter referred to as "METRO," whose address is 2000 S.W. First Avenue, Portland, OR 97201-5398, and Principia Graphica, hereinafter referred to as "CONTRACTOR," whose address is 2812 N.W. Thurman, Portland, OR 97210, for the period of July 1, 1991, through June 30, 1992, and for any extensions thereafter pursuant to written agreement of both parties.

W I T N E S S E T H :

WHEREAS, This Agreement is exclusively for Personal Services;

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

CONTRACTOR AGREES:

1. To perform the services and deliver to METRO the materials described in the Scope of Work attached hereto;

2. To provide all services and materials in a competent and professional manner in accordance with the Scope of Work;

3. All applicable provisions of ORS chapters 187 and 279, and all other terms and conditions necessary to be inserted into public contracts in the State of Oregon, are hereby

incorporated as if such provision were a part of this Agreement, including but not limited to ORS 279.310 to 279.320. Specifically, it is a condition of this contract that Contractor and all employers working under this this Agreement are subject employers that will comply with ORS 656.017 as required by Oregon Laws 1989, ch 684.

4. To maintain records relating to the Scope of work on a generally recognized accounting basis and to make said records available to METRO at mutually convenient times;

5. To indemnify and hold METRO, its agents and employees harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, and for any claims or disputes involving subcontractors;

6. To comply with any other "Contract Provisions" attached hereto as so labeled; and

7. CONTRACTOR shall be an independent contractor for all purposes, shall be entitled to no compensation other than the compensation provided for in the Agreement. CONTRACTOR hereby certifies that it is the direct responsibility employer as provided in ORS 656.407 or a contributing employer as provided in ORS 656.411. In the event CONTRACTOR is to perform the services described in this Agreement without the assistance of others, CONTRACTOR hereby agrees to file a joint declaration with METRO

to the effect that CONTRACTOR services are those of an independent contractor as provided under Oregon Laws 1979, ch 864.

METRO AGREES:

1. To pay CONTRACTOR for services performed and materials delivered in the maximum sum of Fifty Thousand AND 0 /100THS ($ 50,000) DOLLARS and in the manner and at the time designated in the Scope of Work; and

2. To provide full information regarding its requirements for the Scope of Work.

BOTH PARTIES AGREE:

1. That METRO may terminate this Agreement upon giving CONTRACTOR five (5) days written notice without waiving any claims or remedies it may have against CONTRACTOR;

2. That, in the event of termination, METRO shall pay CONTRACTOR for services performed and materials delivered prior to the date of termination; but shall not be liable for indirect or consequential damages;

3. That, in the event of any litigation concerning this Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs, including fees and costs on appeal to an appellate court;

4. That this Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any condition, be assigned or transferred by either party; and

5. That this Agreement may be amended only by the written agreement of both parties.

CONTRACTOR NAME	METROPOLITAN SERVICE DISTRICT
By: _____	By: _____
Date: _____	Date: _____

APPROVED AS TO FORM:

By: _____

Date: _____

AMH:jp
PERSONAL.FOR
1/31/91

GRANT/CONTRACT SUMMARY

METRO METROPOLITAN SERVICE DISTRICT

GRANT/CONTRACT NO. 901-940 BUDGET CODE NO. 610 05000 524130 00000

FUND: General DEPARTMENT: Public Affairs (IF MORE THAN ONE) — — — —

SOURCE CODE (IF REVENUE) — — — — —

INSTRUCTIONS

1. OBTAIN GRANT/CONTRACT NUMBER FROM CONTRACTS MANAGER. CONTRACT NUMBER SHOULD APPEAR ON THE SUMMARY FORM AND ALL COPIES OF THE CONTRACT.
2. COMPLETE SUMMARY FORM.
3. IF CONTRACT IS —
   - A. SOLE SOURCE, ATTACH MEMO DETAILING JUSTIFICATION.
   - B. UNDER $2,500, ATTACH MEMO DETAILING NEED FOR CONTRACT AND CONTRACTOR'S CAPABILITIES, BIDS, ETC.
   - C. OVER $2,500, ATTACH QUOTES, EVAL. FORM, NOTIFICATION OF REJECTION, ETC.
   - D. OVER $50,000, ATTACH AGENDA MANAGEMENT SUMMARY FROM COUNCIL PACKET, BIDS, RFP, ETC.
4. PROVIDE PACKET TO CONTRACTS MANAGER FOR PROCESSING

---

1. PURPOSE OF GRANT/CONTRACT Design consultant fee for Metro Public Information and Identification Project

2. TYPE OF EXPENSE ☐ PERSONAL SERVICES ☐ LABOR AND MATERIALS ☐ PROCUREMENT ☐ PASS THROUGH AGREEMENT ☐ INTER-GOVERNMENTAL AGREEMENT ☐ CONSTRUCTION ☐ OTHER

   OR

   TYPE OF REVENUE ☐ GRANT ☐ CONTRACT ☐ OTHER

3. TYPE OF ACTION ☐ CHANGE IN COST ☐ CHANGE IN WORK SCOPE ☐ CHANGE IN TIMING ☐ NEW CONTRACT

4. PARTIES Metropolitan Service District and Principia Graphica

5. EFFECTIVE DATE July 1, 1991 TERMINATION DATE June 30, 1992
   (THIS IS A CHANGE FROM _____)

6. EXTENT OF TOTAL COMMITTMENT:

ORIGINAL/NEW	$	50,000
PREV. AMEND		
THIS AMEND		
TOTAL	$	50,000

7. BUDGET INFORMATION

   A. AMOUNT OF GRANT/CONTRACT TO BE SPENT IN FISCAL YEAR 198-8 $ 50,000

   B. BUDGET LINE ITEM NAME Promotion/Public Relations Services AMOUNT APPROPRIATED FOR CONTRACT $ 50,000

   C. ESTIMATED TOTAL LINE ITEM APPROPRIATION REMAINING AS OF June 30 ,1991 $ 0

8. SUMMARY OF BIDS OR QUOTES (PLEASE INDICATE IF A MINORITY BUSINESS ENTERPRISE)

SUBMITTED BY	AMOUNT	MBE
Principia Graphica	$ 45,000 - 62,000	☐
Bailey Warner Group	$ 45,000 - 61,000	☐
Engram Design	$ 47,450 - 56,525	☐

9. NUMBER AND LOCATION OF ORIGINALS One set on file with Contracts Division/Public Affai

Council
7/11/91
2.A

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF EXPRESSING APPRECIATION TO JESSICA P. MARLITT FOR SERVICES RENDERED TO THE METROPOLITAN SERVICE DISTRICT	)))))	RESOLUTION NO. 91-1480 Introduced by Presiding Officer Tanya Collier

WHEREAS, Jessica P. Marlitt served as a Council Analyst from June 22, 1988, to July 12,1991; and

WHEREAS, Ms. Marlitt provided professional staff assistance to the following Council Standing Committees:

Convention, Zoo and Visitor Facilities -- 7/89 to 12/89;
Intergovernmental Relations --7/89 to 12/90;
Zoo -- 1/90 to 12/90;
Convention and Visitor Facilities -- 1/90 to 10/90;
Transportation and Planning -- 2/91 to 7/91;

WHEREAS, Ms. Marlitt also provided professional staff assistance to the Bi-State Committee, the Finance Committee and the Metro Council during her tenure;

WHEREAS, Ms. Marlitt's combination of intellectual, analytical, and communication skills, along with her outstanding ability to develop good working relationships with others and her high ethical standards have helped define the position of Council Analyst and have established an exemplary performance standard for the position;

WHEREAS, Ms. Marlitt has recently decided to continue her service to this community through the immediate education and care of Joseph Marlitt, an endeavor equally worthy of her time, talents and energy; now, therefore,

BE IT RESOLVED,

1. That the Council of the Metropolitan Service District expresses its appreciation to Jessica P. Marlitt for the excellent services she provided to the District.

2. That the Council wishes Jessica good health, happiness and success in her future endeavors.

ADOPTED by the Council of the Metropolitan Service District this 11th day of July, 1991.

Tanya Collier, Presiding Officer

ATTEST:

Clerk of the Council

Council 7/11/91

DRAFT 7

MEMORIAL COLISEUM - OUTLINE

Findings - Current Operations

(Accepted by Metro Public Policy Advisory Committee for Regional Convention, Trade, Performing Arts, and Spectator Facilities, June 24, 1991)

1. The Memorial Coliseum arena was built in 1960. Although it is over 30 years old, its basic structure is sound. Its seating capacity is 12,884 for basketball and can be expanded to 13,000 seats for other events. More than 2000 on-site parking spaces are available. Within a year it will be the smallest arena in the NBA. It is too small to meet NHL floor size requirements. Some concerts pass Portland by primarily because of date unavailability but also, in some cases, due to the Coliseum's small seating capacity. The Coliseum lacks modern loading dock and press facilities. Standards for modern arenas are no longer spartan, but provide much greater comfort in terms of seating, luxury seating, concession facilities and other services. Such amenities are now expected for NBA events as well as some concerts and touring events. However, many rock concerts neither require nor expect such amenities.

2. The Coliseum arena has usually generated a positive cash flow, permitting the Coliseum to add cash to the overall fund balance. Listed below is the experience of the past four fiscal years and a projection for the 1990/91 fiscal year including the cash flow before capital expenditures, the amount of capital expenditures, and the resulting total cash flow:

Fiscal Year	Cash Flow (before capital outlays)	minus	Capital Outlays	=	Cash Flow
1986/87	$1,577,000		$350,000		$1,227,000
1987/88	1,164,000		642,000		522,000
1988/89	931,000		873,000		58,000
1989/90	588,000		978,000		[390,000]
1990/91 est.	1,300,000		300,000		1,000,000

The most consistently profitable events are concerts, family entertainment, sports events other than NBA and hockey, and "other arena events". Profits and losses are summarized below for the past four fiscal years:

Fiscal Year	NBA	Hockey	Concerts	Family Entertainment
1986/87	[$103,331]	$20,716	$296,599	$259,258
1987/88	[132,256]	[105,818]	215,247	208,774
1988/89	[73,921]	[17,254]	160,869	173,480
1989/90	[96,885]	[82,939]	184,798	211,248

3. If competition from a new arena did not exist, the Coliseum would continue to generate substantial revenue. However, as the building continues to age, needs for capital improvements increase. This is particularly true if the building continues to operate for more than ten years from now. Assuming continued operation of the Coliseum for the next 20 years, approximately $6 million would be needed for capital expenditures over the next ten years. This amount assumes money for replacement and renewal only, not enhancements to the building.

4. Coliseum profits accumulated over the years go into a reserve fund. This fund has been used to cover operating losses at the Coliseum Exhibition and Meeting Space, PCPA and the Stadium. The fund is being drawn down at a rapid rate. One consideration of this is the high cost of administering the Coliseum and other facilities. Without taking into consideration the loss of funds during construction of a new arena, it is estimated that at the end of fiscal year _____ the reserve fund would be exhausted and a deficit of approximately _____ would exist.

5. The Coliseum complex provides 100,000 square feet of exhibit space as well as meeting rooms. These facilities service the mid-budget consumer and trade shows and represent a special market niche for certain regional shows that is not served elsewhere. For 1991, 69 events are booked ranging from professional exams to trade and consumer shows. The Portland area will lack adequate exhibit space for mid-budget shows if the Coliseum space is lost due to construction of a new arena and when the 28,000 square feet of exhibit space in Montgomery Park is converted to offices. The financial performance has been variable realizing a profit in 1986/87, but losing money in subsequent years. In 1989/90 it lost $105,000. Based on an additional 20-year building life, capital improvements of approximately $700,000 are needed for replacement and renewal of the Coliseum's exhibit halls over the next ten years. Marketing resources for these facilities are limited and it is conceivable that an investment in marketing could enhance profitability.

6. The arena is needed to attract large conventions which have large plenary sessions. This has been difficult because there are few available dates during the NBA season. To date, out of 82 events booked at the OCC, four will use the Coliseum arena. It is likely more conventions with large plenary sessions will be booked once there is a headquarters hotel. Currently, there is a lack of lodging space for very large conventions.

7. Expansion of the Coliseum arena has been studied in the past. While some seats could be added, new columns to support the expansion would be required. The Blazers have not proposed expanding the Coliseum.

Findings - Impact of a New Arena

1. Construction of a new arena is currently targeted to begin in 1992. During construction, the arena could lose as much as $1 million annually. This estimate is based on the following assumptions: a) preliminary conceptual drawings which show a 60% loss in parking spaces beginning the day construction starts, b) closure of the exhibit halls during construction, and c) a 25% loss in revenue through a combination of lower attendance at events and fewer events during construction. Construction could be phased in to mitigate this estimated loss. Any loss of revenues will contribute to and accelerate the depletion of the reserve fund.

2. If a new arena is built, consideration may have to be made for different uses for the Coliseum. The Coliseum is structurally sound. The outside "box" is structurally separate from the inside which would facilitate renovation to another use. The cost of either renovation or demolition will be several million dollars. — 2

3. The Coliseum is a war memorial. Although this presents no legal barriers to renovation or demolition, it is an important consideration. The memorial plaques are located outside between the arena and exhibit halls. The Blazers' plans for a new arena indicate they would "enhance" the memorial in some way.

4. Conceptual designs indicate that the exhibition space may be eliminated for the new arena leaving an unmet need for trade and consumer shows. This need will be exacerbated by the elimination of mid-budget exhibit space at Montgomery Park by the end of 1991. Replacement of this exhibit space may be needed to meet demand for mid-budget trade and consumer shows.

PDC
PORTLAND
DEVELOPMENT
COMMISSION

Council
7/11/91
#7

July 9, 1991

MEDIA ADVISORY

PUBLIC OBJECTIVES AND GUIDELINES TO GOVERN CONSIDERATION OF TRAIL BLAZER PROPOSAL WILL BE ARENA TASK FORCE TOPIC JULY 15

The Arena Task Force will decide July 15 on a final draft of the public objectives and guidelines for determining its recommendations on a new arena the Portland Trail Blazers have proposed to build on public property adjacent to Memorial Coliseum.

The objectives and guidelines adopted by the Task Force are to be used by the Blazers in preparing a formal proposal to be presented to the Task Force at its meeting September 6.

At its July 15 meeting, the Task Force will consider the staff-prepared draft being released today. The staff draft proposes the following list of public objectives be adhered to in the proposed arena development:

- Provide a high quality facility at minimum long-term public cost;
- Provide a diversity of quality events at affordable prices;
- Maintain an arena capability that does not require an on-going, public operating subsidy;
- Secure a long-term commitment from the Trail Blazers to remain in Portland;
- Maximize the region's ability to attract large regional and national conventions;
- Enhance the regional economy by creating jobs and adding value to the property tax rolls;
- Enhance redevelopment of inner North/Northeast Portland;
- Ensure coordinated operations between the new arena and other public facilities.
- Ensure that the public receives a reasonable return on its investment;

—more—

1120 S.W. Fifth Avenue
Suite 1100
Portland, OR 97204
(503) 823-3200
Fax (503) 823-3368

Guidelines laid out by staff in the interim report specify what is deemed acceptable, desirable or required to meet the public objectives. Four different categories of guidelines are proposed, which address the building program, site design, operations and financial/development. In total, 36 guidelines are being recommended for Task Force consideration. Among them are:

- Provide a top-quality, consumer-oriented facility;
- Provide basketball seating for a minimum of 18,000 to assure long-term availability of seats;
- Retain the Memorial Coliseum as a complementary arena to attract more events and larger conventions to Portland;
- Preserve the real estate asset value of the Coliseum site for the public by leasing the land for the new arena;
- Arrange a balanced offering of entertainment, sports, cultural and educational opportunities for a diverse range of community groups and interests;
- Design seating plan, floor layout and equipment necessary to serve a National Hockey League franchise;
- Site plan should create a civic campus, integrating and enhancing the marketability and operations of the new arena, Coliseum, Convention Center and planned Headquarters Hotel;
- Enhance the Willamette River as the focal point for views, public activities and development;
- Develop site plan on basis of transit as a priority access mode; provide for routing and station locations of a future north light rail extension;
- Commitment by Blazers to best efforts to achieve Portland Development Commission's currently adopted Emerging Small Business and targeted-hire goals as part of effort to promote revitalization of North/Northeast Portland;
- Integrate parking in a manner attractive and complementary to the site and that accommodates multiple purposes and events;
- Assume responsibility for any added operating costs caused by the new arena;
- Commitment by Blazers to a long-term lease to play in the new arena, notwithstanding sale or transfer of the team or arena.

—more—

The Arena Task Force, after reviewing the staff's draft, will adopt a final set of objectives and guidelines. The July 15 session will be the Task Force's fourth meeting. All of the group's meetings are being aired on Portland Cable Access television to encourage community involvement.

Written testimony from the general public is being solicited by the Task Force during a public review period running through July 26. The public input will be reflected, if necessary, in an addendum and further specifications to the Task Force's public objectives and guidelines. The addendum will be forwarded to the Blazers by August 1 so they can incorporate a response in their September 6 proposal. [The public process schedule is attached.]

In September the Task Force will hold a public hearing to take further public testimony before it makes its final recommendation to the Metropolitan Service District and the Portland City Council for formal action. Metro and the City Council created the Task Force to develop a process by which to evaluate the Blazers proposal and to ensure the public interest would be served. The 15-member group, chaired by Robert Ridgley, includes private citizens and elected officials. The Portland Development Commission and Metro are staffing the Task Force.

[Attachments]

###

For more information, contact:
Harry Lenhart, PDC, 823-3296

PUBLIC OBJECTIVES FOR A NEW ARENA

- ❑ High quality facility at minimum public cost
- ❑ Diversity of events at affordable prices
- ❑ No public operating subsidy
- ❑ Long-term Blazer commitment to remain in Portland
- ❑ More large regional/national conventions
- ❑ New jobs and added value on the tax rolls
- ❑ Enhance North/Northeast redevelopment
- ❑ Coordinate operations with other public facilities
- ❑ Reasonable return on public investment

GUIDELINES FOR BLAZERS TO FOLLOW

- Construct top-quality consumer-oriented facility
- Provide basketball seating for no less than 18,000
- Design for future NHL hockey
- Retain Memorial Coliseum as complimentary arena
- Create a civic campus
- Improve traffic, transit & pedestrian access
- Provide for cooperative operations
- Assume responsibility for added operating costs
- Propose long-term land lease

PUBLIC PROCESS

- **JULY 15:** ATF preliminary adoption of objectives & guidelines
- **JULY 26:** Public testimony deadline
- **AUG. 1:** Addendum to objectives & guidelines (if necessary)
- **SEPT. 6:** ATF hears formal Blazer proposal
- **TBA:** Public hearing on Blazer proposal
- **SEPT. 16:** ATF evaluates proposal
- **SEPT. 24:** ATF finalizes recommendations
- **TBA:** Formal actions by city & METRO

Council
7/11/91

STAFF REPORT

Agenda Item No. 7

Meeting Date: July 9, 1991

CONSIDERATION OF RESOLUTION 91-1478 FOR THE PURPOSES OF AUTHORIZING EXECUTION OF A SALE AGREEMENT FOR THE ACQUISITION OF THE SEARS FACILITY EXCLUDING THE ADJACENT PARKING GARAGE AND FOR THE PREPARATION OF AN RFP FOR THE RENOVATION OF THE SEARS FACILITY.

Date: July 1, 1991

Presented by: Neil Saling

FACTUAL BACKGROUND AND ANALYSIS

At its October 11, 1990 meeting, the Metro Council approved Resolution No. 90-1338 authorizing the Executive Officer to execute a sale agreement for the Sears facility and the adjacent parking structure. The sale agreement provided for a due diligence period during which Metro employed various consultants to study the suitability of the Sears facility as the new Metro headquarters location. Upon the conclusion of the initial 67 day due diligence period, three areas of potential risk were identified. These were: (1) excess space to be leased at Sears and Metro Center; (2) uncertain financing climate and (3) higher than anticipated project costs. Staff recommended extending the due diligence period.

By Resolution No. 90-1357, the Council authorized the amendment of the sale agreement by extending the due diligence period until April 30, 1991. The purpose of the extension was to allow time to more fully review the potential risks and to allow a more informed decision. A final report, made to the Relocation Task Force on March 22, 1991, indicated that progress had been made in two of three areas of concern. Specifically, significant advances had been made in regards to the pre-leasing activity at both Sears and at Metro Center and the financial market had become more stable. However, project costs had not been lowered significantly.

The Relocation Task Force determined that the estimated project costs were too great to justify continuing with the proposed development scheme and allowed the April 30, 1991 deadline of the sale agreement to lapse.

An unsolicited proposal has recently identified a potential development scheme which would reduce the project costs significantly. The modified development scheme would re-configure the lower two levels of the Sears

facility for parking and would sever the adjacent garage from the transaction via an independent purchase option. This scheme allows for adequate parking capacity (approximately 220 spaces) for Metro's needs within the Sears building itself without relying on parking availability in the adjacent garage. The upper two levels of approximately 76,000 square feet would be renovated for Metro's office requirements, allowing for approximately 15,000 square feet of future expansion space on those floors. In the event long range future expansion required more than the immediately available 15,000 square feet, Grand Avenue level parking could be displaced to accommodate the added requirements. It is anticipated that this displacement of Grand Avenue parking could be done in two blocks of 30,000 square feet each as required. A commitment to replace this Grand Avenue parking with parking in the adjacent garage could be negotiated with the property owner.

Staff has estimated project costs of the modified development scheme (excluding the garage) to approximate $14.5 to $15.2 million. Furniture, fixtures and equipment (FFE) costs have not been included. These project costs equate to an initial square foot rate of approximately $16.50 when a ramping of costs is employed to mirror the projected cost of living increases. This effective rate, although somewhat higher than the approximately $15 per square foot current rate occasioned at Metro Center, is significantly reduced from the projected $21 to $22 per square foot rates under the initial Sears development scenario.

Based on significantly reduced project costs, project staff have renegotiated a sale agreement with the owner, Pacific Development, Inc. (PDI). A Letter of Intent which outlines the conceptual provisions of the sale agreement has been executed by the Executive Officer and is attached as Enclosure 1. The primary distinctions from the initial sale agreement are (1) the deposit requirement, (2) the hazardous waste cap, and the (3) garage purchase option. The sale agreement is structured to allow for initiation of a competitive RFP process for the building renovation prior to the scheduled closing in November 1991.

The deposit requirement would necessitate the payment of $250,000 by Metro upon execution of the sale agreement which would be non-refundable except if PDI terminates the agreement. In the event the sale is closed, the $250,000 deposit would be applied to the purchase price of $2,550,000. The previous sale agreement did not require a non-refundable deposit of this magnitude.

The hazardous waste cap requires PDI to pay for all hazardous waste remediation up to $250,000. Metro has the option to pay for any costs above the $250,000 cap. The previous agreement required PDI to remove all hazardous waste at their expense without any reference to a dollar cap. The firm of Dames & Moore estimates that the cost of removal of known

hazardous materials (underground storage tanks and asbestos) is approximately this amount.

The garage purchase element provides for six 6-month options beginning in October 1991 at an option price of $50,000 per option. The purchase price of the garage begins at $2,600,000 and escalates at 5% per six-month period. The sum of the initial garage purchase price ($2.6 million excluding option price of $50,000) and the Sears building ($2.55 million) purchase price are equal to the previous sale agreement combined purchase price of $5,150,000.

The Relocation Task Force previously recommended the renegotiation of a suitable purchase option with PDI which includes an independent element for the garage facility and the simultaneous preparation by Metro staff of an RFP for the renovation services. It is intended that the sales agreement would not be finally closed until such time as a satisfactory proposal for renovation was received.

RECOMMENDATION:

The Executive Officer and the Relocation Task Force recommend approval of Resolution No. 91-1478 by the Metro Council.

ENCLOSURE 1

THE MADDEN COMPANY
Commercial Real Estate Services

June 26, 1991

Mr. William C. Scott
President, Pacific Development, Inc.
825 NE Multnomah, Suite 1275
Portland, Oregon 97232

COPY

RE: Response to Sears Building/Garage letter, dated 6/19/91

Dear Bill:

Thank you very much for your timely response regarding Metro's potential acquisition of the Sears Building/Garage. The following points clarify and delete items which are necessary for Metro to consider the purchase.

OPTION 1: SEARS BUILDING AND LAND $ 2,550,000

Close:
$250,000 non-refundable cash in escrow on or before July 31, 1991. ~~All contingencies shall be removed by Metro by September 31, 1991.~~ Balance in cash closing on or before ~~December~~ October 15, 1991.

Hazardous Waste:
Pacific Development, Inc. will remove all hazardous materials. Should projected hazardous waste removal direct costs exceed $250,000, Pacific Development, Inc. reserves the right to terminate offer, unless Metro is willing to cover direct costs above $250,000.

Parking:
Commencing upon occupancy (anticipated on or before 12/92), Metro has the right to lease up to 100 stalls in the adjacent garage facility for use during normal business hours.

Additional Parking Capacity:
In addition, Pacific Development, Inc. will commit the majority of the Sears Garage capacity during non-business hours for District events, subject to conditions to be negotiated. Such conditions include Pacific Development, Inc. management of the facility (until Metro purchase) and receipt of profits from said non-business hour use. ~~Pacific Development, Inc. will pay to Metro 25% of the net proceeds form such non-business hour use.~~

Grand Avenue Replacement Parking Requirement:
Upon commencement of construction to remodel the Grand Avenue level of the Sears Building for office occupancy, Metro shall have the option to lease an additional 100 parking stalls on a "use or lose" basis under the same terms and conditions as the initial 100 stalls.

KOIN Center
222 S.W. Columbia
Suite 204
Portland, Oregon
97201-6602
Fax: 503.227.2447
Office: 503.221.2900

Monthly Parking Rates:

Through out the term of the parking agreement prior to Metro purchase, the initial garage rate for Metro shall be $56.00/stall/month, subject to increases annually to the then fair market, capped at 8% for any given year. For purposes of setting fair market, Jan 1, 1992 rental rates are $56.00/stall/month. The Cap rate herein shall remain in effect throughout initial 36 month term.

Term of Parking Agreement:

Initial term of 36 months, commencing upon Metro's occupancy of the Sears Building (anticipated 12/92), subject to early termination by Metro acquisition.

Parking Renewal Option:

Should Metro not exercise the option to purchase Option 2 listed below, the initial term shall be extended by 7 years. Three (3) additional consecutive five (5) year renewal options shall be offered at the then current fair market monthly parking rates for a total parking commitment term of 25 years. This renewal option includes the initial 100 stalls and the subsequent additional stalls of 100, with a total of 200 stalls.

OPTION 2: GARAGE FACILITY

Close:

Metro shall have six (6), six (6)-month options to purchase the Sears Garage commencing ~~September~~ 15, 1991. Purchase price shall be as indicated in your letter dated June 19, 1991. Each 6-month option period commencing ~~September~~ 15, 1991 shall require the payment of $50,000 option fee payable prior to the option. ~~The first two option periods from December 15, 1991 to December 14, 1992 shall be free (without option deposit), assuming that Metro closes on the Sears Building~~. All accumulated totals of these option fee shall be deducted from purchase price at closing. Purchase price as per June 19, 1991 Pacific Development, Inc. letter.

State Parking Requirement:

Metro will assume the State Office Building parking obligation upon acquisition of the garage not to exceed 356 stalls on a "use or lose" basis, with an initial parking charge of $51.00 or $56.00 per stall, depending on management.

Hazardous Waste:

Pacific Development, Inc. shall complete all hazardous, waste removal prior to closing, including all underground tanks, at Pacific Development, Inc.'s

expense. Should projected hazardous waste removal exceed $250,000, Pacific Development, Inc. reserves the right to terminate the offer unless Metro is going to cover additional costs.

Interim Space Requirement:
An interim use requirement cannot be a consideration in this acquisition.

This proposal is subject to approval by Pacific Development, Inc. Board of Directors and Metro Council. Metro Council is expected to act by July ~~12~~ 26, 1991. Prior to the Board and Council's approval, no other offer for sale or lease will be made by either party.

I am hopeful that the clarifications and deletions in this letter will be met favorably by Pacific Development, Inc. and that the next action will be to document the agreement between the parties and prepare for the respective Board Council meetings. Please let me know your response as soon as possible.

As an indication of good faith between the parties each shall endorse this proposal in the appropriate area below.

Best regards,

6-26-91

Mark R. Madden
President

MM/mm
cc: Mr. Brad Pihas, Senior Associate, CB Commercial
Mr. Kirk Taylor, Vice President, CB Commercial

Concept ~~in agreement~~ as of 26 June 91 by _____
Metro

~~Concept in agreement as of~~ _____ by _____
Pacific Development, Inc.

The foregoing, subject to changes or clarifications on the attached addendum, is agreeable in (Property)

B

COPY

ADDENDUM

The following terms are hereby added to and incorporated within the letter dated June 26, 1991 with respect to the acquisition of the Sears property by Metro:

1. Owner. The owner/seller of the Sears property is Pacific Development (Property), Inc.

2. Sale Documentation. A Commercial-Industrial Sale Agreement and Receipt for Earnest Money form incorporating the terms and conditions of the letter, in form mutually acceptable to the parties, will be prepared and executed not later than July 31, 1991.

3. State Parking Obligation. If Metro purchases the Sears Garage, Seller and Pacific Development, Inc. ("PDI") will cooperate in efforts to obtain a new parking agreement directly between the State of Oregon ("State") and Metro, in replacement of the existing Parking Supply Agreement between PDI and State. If State requires that the parties assign the existing Agreement, Metro will assume PDI's obligations and PDI will be released from liability.

4. OCC Transportation Capital Improvements. The Property will be conveyed subject to the Oregon Convention Center Transportation Capital Improvements LID and assessments thereunder, if any.

5. Hazardous Waste. Seller is responsible for performing or paying for any remediation of hazardous waste on the Property which a mutually approved environmental consultant may identify (within 90 days after execution of this letter) and recommend to be remedied, as such remediation is required by applicable environmental laws. The scope of testing and the timing and nature of remediation work will be mutually approved by the parties before closing. Seller may elect to decommission underground tanks in place. The parties will approve before closing, based on the testing and bids obtained by Seller, a specific scope of work and charge to Seller for any such remediation work. The remediation work may be performed after closing in connection with Metro's demolition and improvement for Metro's use. Seller's obligation is subject to the right to terminate (in Seller's sole discretion) if estimated remediation costs exceed $250,000, except however Metro may elect to pay for costs above $250,000 and close the purchase of the Property. The cost of testing will be shared equally by the parties (whether or not the transaction closes).

June 27, 1991

The deposit shall be refunded to Purchaser if the transaction terminates pursuant to the foregoing.

COPY

6. Garage Purchase. Metro cannot purchase the Sears Garage unless Metro closes the purchase of the Sears Building and land.

7. Additional Parking Capacity. The parties will negotiate a parking availability agreement for non-business hour use, with reasonable compensation to Metro (~~the formula and terms to be mutually approved~~) for business directed to the Sears garage by Metro. Metro will actively promote use of the facility.

8. Nature of Parking Rights. All parking rights of Metro under this letter are on a "use or lose" basis.

AGREED to, subject to necessary Council and board approval, as of the date(s) shown below.

SELLER:

PACIFIC DEVELOPMENT (PROPERTY), INC.

By: _____
William C. Scott,
President

Dated: June 27, 1991

METRO:

METROPOLITAN SERVICE DISTRICT

By: _____

Dated: June 27, 1991

The undersigned agrees to assign its Parking Supply Agreement or cooperate in pursuing the creation of a direct agreement between State and Metro concerning parking obligations, as described in paragraph 3 above.

PACIFIC DEVELOPMENT, INC.

By: _____
William C. Scott,
President

Dated: June 27, 1991

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AUTHORIZING THE EXECUTION OF A SALE AGREEMENT FOR THE ACQUISITION OF THE SEARS FACILITY	))))	RESOLUTION NO. 91-1478 Introduced by Rena Cusma, Executive Officer

WHEREAS, in October 1990 the Council of the Metropolitan Service District approved Resolution No. 90-1338 which authorized the execution of a sale agreement for the acquisition of the Sears facility as the site for Metro's administrative offices; and

WHEREAS, Resolution No. 1338 provided for a due diligence period which conditioned the closing of the sale agreement by a determination by Metro of the suitability of the Sears facility as the Metro headquarters facility; and

WHEREAS, upon completion of the extended due diligence efforts, Metro's Relocation Task Force informed the owners of the Sears facility that the study had shown that the Sears facility, including the adjacent garage, was not economically suitable and allowed the initial sale agreement to lapse; and

WHEREAS, the owners of the Sears facility have responded with a proposal which would now permit economically acceptable development of the Sears facility, excluding the adjacent garage, as the Metro headquarters building; and

WHEREAS, the Executive Officer has reviewed the proposal and recommends the execution of a sale agreement, attached as Exhibit A, which provides for the closing of the sale of the Sears facility upon the satisfactory receipt by Metro of proposals to renovate the Sears building into Metro headquarters and for an independent series of options to purchase the adjacent garage facility; and

WHEREAS, Metro staff commenced the preparation of an RFP for the renovation of the Sears building and expect to file with the Council the completed RFP by mid-August 1991.

BE IT RESOLVED, that the Council of the Metropolitan Service District hereby authorizes the Executive Officer to execute the the attached sale agreement and promissory note for the acquisition of the Sears facility and authorizes the Executive Officer to direct the preparation of an RFP for the renovation of the Sears Facility.

ADOPTED by the Council of the Metropolitan Service District this ___ day of July, 1991.

Tanya Collier
Presiding Officer

EXHIBIT A

(to be furnished)

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: July 3, 1991

TO: Regional Facilities Committee

FROM: Casey Short, Council Analyst CS

RE: Analysis of Resolution No. 91-1478, Purchase of the Sears Building for Development as Metro Headquarters

Resolution No. 91-1478 would authorize execution of a sales agreement and payment of $250,000 in earnest money to Pacific Development, Inc. (PDI) for Metro's purchase of the Sears Building. It would also authorize preparation of a Request For Proposals for renovation of the building, with the intention of awarding a contract for renovation and completing the sales agreement by mid-October, 1991. This memo is the Council staff's analysis of the proposal.

BACKGROUND

In May, 1990 a Building Relocation Task Force was formed to investigate alternatives for housing Metro's administrative offices. The Task Force, consisting of Presiding Officer Collier, Councilors DeJardin and Bauer, Executive Officer Cusma, and staff members, agreed to a set of Objectives and Criteria (Attachment A) that included a preference for siting a Metro Headquarters facility near the Oregon Convention Center on Portland's east side. The Task Force received comparative information on 22 potential sites, selected seven of these for further investigation, and chose the Sears building as the facility that most closely met the objectives and criteria. (It should be noted that the information gathered in this process was obtained on an informal basis, not on the basis of actual proposals.)

Council approved Resolution No. 90-1338 in September 1990, authorizing a sales agreement for acquisition of the Sears facility, and directing the staff to perform due diligence activities to determine the suitability and affordability of the facility. $65,000 was allocated for the due diligence activities. The due diligence period was to last until December 17, 1990, but was extended to April 30, 1991 under the provisions of Resolution No. 90-1357A and with the agreement of Pacific Development. Council subsequently approved Resolution No. 91-1393 in February 1991, authorizing an additional $85,000 for due diligence work.

Staff and consultants presented a report to the Building Relocation Task Force in March, 1991. That report estimated the cost of the project to be approximately $26 million. The conclusion was that the Sears project was not affordable and staff recommended Metro inform PDI that we would not be pursuing the project any further. The Task Force concurred with the recommendation.

CURRENT STATUS

The current proposal is a modification of one submitted by H. Naito Properties. The original Naito proposal called for the Naito company to buy and renovate the Sears building, and sell it to Metro. Legal counsel advised that this proposal was not legal because the renovation would have to be publicly bid. The revised proposal calls for Metro to buy the building from PDI and issue an RFP for the renovation.

Based on the Naito proposal, staff estimates the total cost of the building project to be in the neighborhood of $15-16 million. The principal differences between the latest proposal and the original proposal that was deemed too expensive are that the current proposal includes only an option on the parking structure rather than its purchase; development of only the upper two floors as office space and the lower two floors as parking; and consequent absence of surplus space that the original proposal would have required Metro to lease, generally at a loss.

Usable space in the top two floors of the Sears building will be approximately 76,000 square feet. Metro uses 34,000 square feet in its current location, and the space plan prepared as part of the due diligence process outlined needs for 67,000 square feet. (The 34,000 figure is low, given the planned move of the Transportation Department to occupy 6,000+ square feet of nearby space.)

ISSUES

There seems to be consensus that Metro's current office space is inadequate and we should move to larger quarters. Expansion in any form will cost the departments more money - this includes not only the occupants of Metro Center but also the satellite departments such as MERC and the Zoo who will pay higher transfers. If we accept the need to expand to roughly double our current space, there are a few issues to resolve before going forward on the Sears project.

1. Is the Sears facility clearly the best alternative for a new Metro headquarters?

This issue breaks down into several separate issues. First is the simple question of geography. The May 31, 1990 Objectives and Criteria to which the Task Force agreed establish a clear preference for an eastside Portland location near the Convention Center. These criteria have not been formally reviewed nor adopted by the Council, yet have served as a basis for work done to date in investigating alternatives. Is it the Council's conclusion that the siting criteria are appropriate, and that an inner eastside location is preferable? Would such a location be preferable if another site were identified that was less expensive, in a central location such as the central business district?

Second, is it Council's conclusion that the Sears facility should be considered at the exclusion of any other proposals? Following the expiration of the due diligence period and the decision to drop Sears from consideration (at least temporarily), staff was approached about the possibility of considering other proposals for developing a Metro headquarters facility on the west side. The focus of Metro's efforts for the past several months has been exclusively on the Sears facility - are we ignoring the potential of a more attractive offer by limiting our research to that facility? Do we want to open the process now to evaluate our options before making a final decision?

Third is the question of renovation versus new construction. A strong argument has been made in favor of renovating Sears in order to bring activity to the Lloyd District in a building that has stood vacant for several years. The value to the area of restoring that building cannot be denied. New construction, however, was estimated to be considerably cheaper than the first Sears proposal and would likely be of comparable or lower cost than the current proposal. If Metro could build a new facility at less cost that the Sears renovation, would the prudent expenditure of public dollars be as compelling an argument in favor of new construction as restoring the Sears building is in favor of renovation?

The questions surrounding the proposal to buy and renovate the Sears building can be distilled into one basic question: Has our research clearly identified the Sears facility as the best alternative for Metro? The proposal before you addresses Metro's current space needs, and provides the capacity for future expansion. It does not, however, clearly demonstrate that purchase and renovation of that facility is the best available opportunity: it may be, but in the absence of a full analysis of

other alternatives, the Council cannot be certain. Your policy decision is to determine whether to commit to the Sears alternative as an acceptable - or even preferable - solution to Metro's space problems, or take action necessary to find what can be demonstrated to be the best solution. If the Council determines that the process should be expanded, one approach would be to issue an RFP to meet the agency's needs as defined by the Council.

2. Is the Sears Building affordable?

In the analysis leading to rejection of the original Sears proposal, information was generated showing the proposal's financial impact on Metro's departments. Comparable information is not included with the materials submitted for committee review. Is such information available? If so, what are the effects on the departments? In a broader sense, what criteria are used to determine affordability, and does this proposal meet those criteria?

3. Regardless of the option chosen, how should the debt service be structured?

Attachment B shows two alternatives for structuring debt service. Finance staff is recommending the "ramped debt service" alternative, which would be lower cost (both in total and per square foot) in the first five years but higher in the out years. Debt service payments under this alternative would begin at approximately $800,000 and increase at roughly a 4% rate each year, reaching a level of $1.9 million in year 24. (Estimated net annual costs for debt service, operations, capital and contingency would correspondingly range from $1.1 million to $2.9 million.) The flat debt service alternative would have constant debt service payments each year, at an estimated level of $1.125 million. (Total annual costs under this alternative range from $1.4 million to $2.1 million.)

Total debt service payments under the ramped approach are estimated at $34.2 million, with a net present value of $13.7 million. Under the flat approach the total debt service is estimated at $28.1 million, with a net present value of $12.8 million.

The argument for ramped debt service is that it is cheaper in the early years, and increases with inflation; Metro's costs per square foot would remain comparable with estimated market costs. Early year costs are an issue for Metro's departments, because they will be absorbing significantly higher costs in any case due to the increase in space: even under this alternative,

the costs will jump in the first year from $645,000 (91-92 budget) to $1.1 million. The down side to this alternative is the long range cost. Under the more typical flat rate alternative, which is similar to a fixed-rate home mortgage, total costs are lower, passing the break-even point in total expenditures in year 14.

The policy question here is how does the Council want to structure the building payments? The ramped alternative provides an easier entry into the building, but at the cost of higher payments over the course of the financing agreement. The flat rate alternative represents lower overall costs, but imposes a serious financial strain on the operations of the District at the outset, which is exacerbated by the current financial problems at MERC and the Zoo.

4. What assurances or contingencies are proposed for leasing the space at the current Metro Center?

In the deliberations surrounding the first Sears proposal, there was a good deal of discussion regarding the alternatives for sub-leasing the space at 2000 SW First. Our lease runs to 1996, and the proposed date of moving to Sears is December 1992. Arrangements need to be made to find tenants for this building, preferably with PDI's assistance as a way to facilitate the sale of their property. If no arrangements have been made, estimates of the increased costs required to uphold our lease agreement should be included in the projections of the early year costs.

5. Why are the operating costs for the Sears Building projected to be lower than those for Metro's current building?

The FY 91-92 budget for Metro Center in the Building Management Fund is $685,483. If we subtract from that the lease payment ($290,760) and property taxes ($16,600) the resulting budget for operations is $378,123, including $40,000 for capital.

The Finance Department has prepared a space cost analysis that includes an estimate of Operating Costs for the Sears Building. That operating cost estimate is $240,657, plus $25,000 in capital and $13,283 in contingency, for a total operating budget of $278,940. Why are the operating costs so much lower for the Sears Building, especially for a building that is considerably larger than the current Metro Center?

Attachment A

METRO CENTER RELOCATION TASK FORCE
OBJECTIVES AND CRITERIA

May 31, 1990

A. Establish a stronger regional identity for Metro.

- Location preferably near the Convention Center site.
- Quality of space appropriate for government offices.
- Easily accessible from all parts of the region.

B. Support public policies promoting eastside development.

- Promote redevelopment sparked by the Oregon Convention Center.

C. Serve as an environmentally and socially concerned model office.

- Location on or near mass transit routes.
- Complete recycling facilities.
- Attention to health considerations (e.g., lighting, HVAC, noise, etc.).
- Day care facilities.
- Energy efficient building.
- Fitness facilities (showers and workout areas).
- Fully handicapped accessible.

D. Provide adequate space and parking to meet current and future needs.

- Provide opportunity for sharing offices with Metro ERC.
- Provide overflow parking for the Oregon Convention Center.
- Provide free parking for Metro visitors.
- Provide contiguous space on preferably two floors, maximum three.
- Provide option to expand space.
- Provide a minimum 50,000 sq. ft. of office, meeting and storage space for immediate needs.
- Provide up to 45,000 sq. ft. of office, meeting and storage space for long-term needs.
- Provide for Metro ownership.

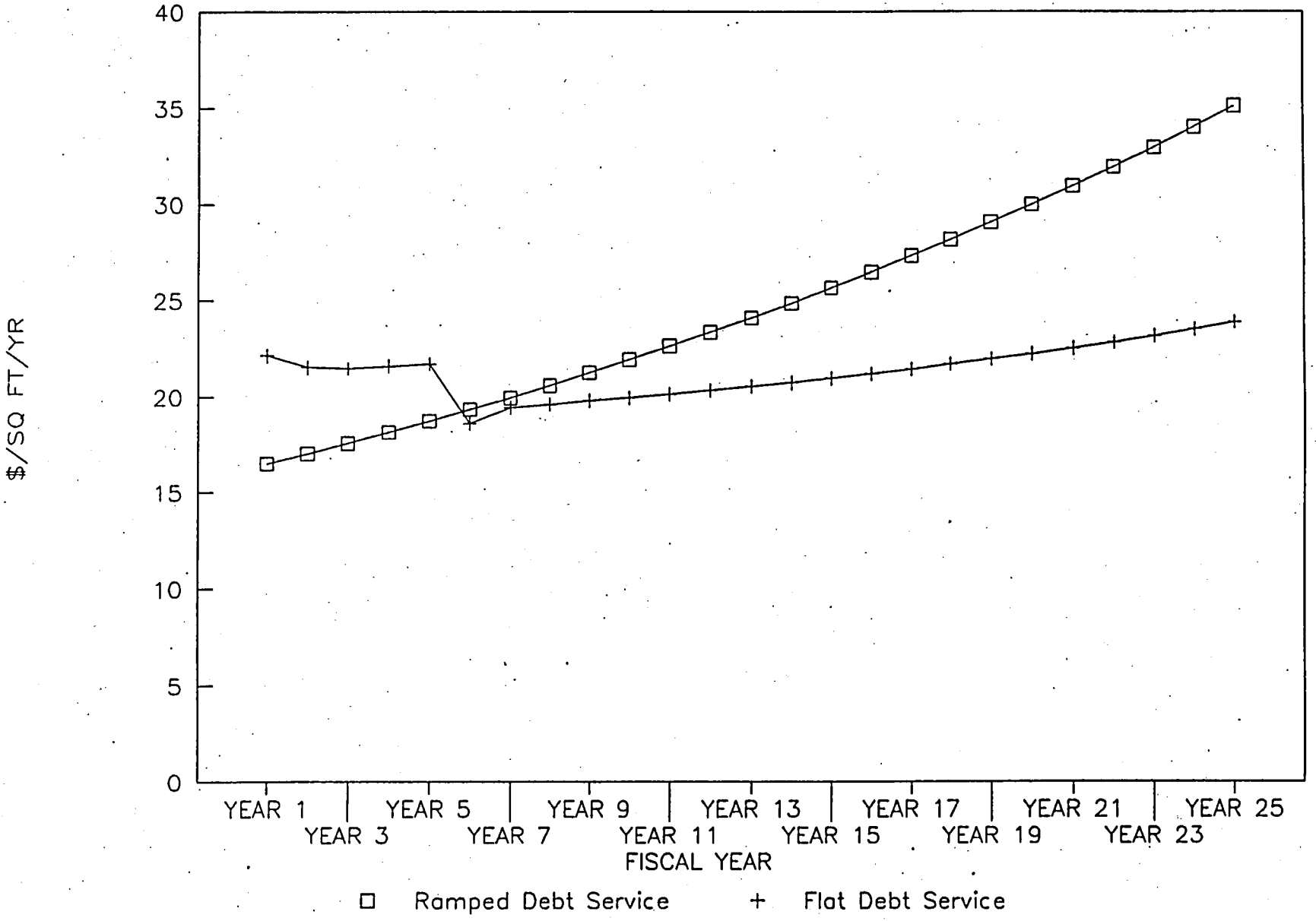
E. Minimize the disruption and cost impacts of an office move.

- Package must address Metro's lease obligations at current location.
- Costs similar to Metro Center at about $12.00 per sq. ft.

1154

COST FOR BUILDING SPACE

USING TOP TWO FLOORS OF SEARS BUILDING



Attachment B

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: July 5, 1991

TO: Neil Saling

FROM: Casey Short cs

RE: Resolution No. 91-1478 - Sears Agreement

I have several questions to ask regarding the proposal to purchase the Sears facility, for which Resolution No. 91-1478 would commit $250,000 in non-refundable earnest money. Some of these are included in my July 3 memo to the Regional Facilities Committee, but there are others that I did not have time to include in that memo. Please do what you can to be prepared to discuss the questions in both memos at the July 9 committee meeting.

Questions from the Staff Report

1. What is the breakdown of costs used to arrive at the estimated project costs of $14.5 to $15.2 million?

2. What is included in the $16.50 per square foot rate cited in the staff report? Does it include the semi-annual $50,000 option payment for the garage? If the annual cost calculation included these option payments and operating costs which were equal to our current (Metro Center) operating costs, how would these affect the rate per square foot?

3. Please clarify the garage purchase element referred to on page 3. As I understand it, the escalating purchase price for the garage would translate to the following effective purchase prices for each six month period (please confirm accuracy):

10/15/91 - 4/14/92:	$2,600,000
4/15/92 - 10/14/92:	$2,730,000
10/15/92 - 4/14/93:	$2,866,500
4/15/93 - 10/14/93:	$3,009,825
10/15/93 - 4/14/94:	$3,160,286
4/15/94 - 10/14/94:	$3,318,300

Regarding the $50,000 semi-annual option fee, is any of this money refundable if Metro decides not to buy the parking garage? What will be the Council's role in determining whether to continue the option payments, buy the garage, or terminate the option - will Council authorization be required every six months?

Questions from the Letter of Intent

Option 1: Sears Building and Land $2,550,000

4. Close: Why was the date for payment of the $2.3 million balance moved from December 15 to October 15?

5. Hazardous Waste: This section needs further clarification. What are "direct" costs for removing any hazardous waste, and what are "indirect" costs? If the costs exceed $250,000, what are Metro's alternatives? If PDI terminates the offer because the direct costs of removing the waste exceed $250,000, will Metro's earnest money be refunded? Is the $250,000 ceiling for the entire facility - including the garage - or is there a $250,000 ceiling for each part of the facility? At what point would Metro have to make a final decision whether to cover direct costs above $250,000: when costs exceeded that amount (even though final costs were not yet known); when the final costs had been determined; when an estimate is made; or at some other time? Who defines "hazardous waste" or "hazardous materials?" (Both are used in the letter.)

6. Parking: My reading of the parking agreement leads me to the following understanding (please confirm or correct):

Metro will construct some 220 stalls in the main building as part of the building renovation. In addition, Metro may lease up to 100 stalls in the garage at any time following our occupancy of the building. (The rate shall begin at $56/month/stall, with a 10% annual limit on rate increases for 3 years.) If Metro does not buy the garage, we may lease up to 100 stalls for an additional 7 years, with three five-year options. If we remodel the Grand Ave. parking area, we may add another 100 stalls in the garage at the same monthly rate.

How would the parking rate for the 7-year extension be determined? Would the stalls in the garage be used for employee parking, visitor parking, or other? Would Metro receive revenue from this parking? Who would set the rate for the end user, and how would that rate be determined?

Option 2: Garage Facility

7. State Parking Requirement: Please explain why there is a variance of $5 per stall, "depending on management."

8. Supplemental Questions: How many parking stalls are in the garage? What is PDI's arrangement with the State for parking? What are the revenue projections for the garage? Is Metro expected to make money on the garage if purchased?

Questions from the Addendum

9. State Parking Obligation: Please explain the nature of the obligation, and Metro's potential obligations, liabilities, and revenues under the arrangement.

10. OCC Transportation Capital Improvements: What is the cost of assuming the applicable portion of the LID (annual cost and term)? Have those costs been included in the estimate of annual costs for the facility?

11. Hazardous Waste: PDI "may elect to decommission underground tanks in place." Will Metro have any binding voice in this decision? Why will Metro share the cost of environmental testing, if for any reason other than to ensure the objectivity of the tests? How much is such testing estimated to cost?

Please clarify the statement, "The parties will approve before closing, based on the testing and bids obtained by Seller, a specific scope of work and charge to Seller for any such remediation work" (emphasis added). Does this effectively limit PDI's obligation to pay for the complete remediation work? What happens if there is more remediation required than was originally anticipated - who is responsible to pay for it, and what are Metro's options?

Does the handwritten amendment, "The deposit shall be refunded to Purchaser if the transaction terminates pursuant to the foregoing" refer to the $250,000 earnest money?

Other Questions

12. Do you anticipate MERC moving its offices to the Sears facility? If so, what will be the cost to MERC, and how will the vacated office space at the Convention Center be used? How would costs to Metro's other departments be affected with MERC in or out of the Sears facility? In any case, has the matter been presented to/discussed with the MERC Commission?

13. At the June 7 meeting of the Building Relocation Task Force, there was mention of Metro contributing to a "gateway" project which would mark entrance to the Lloyd district. There is no mention of this in the materials submitted. What is the status of this, and what would the cost be?

14. How is the project proposed to be financed? Will any adjustments to the 91-92 budget be required, and if so, what will they be?

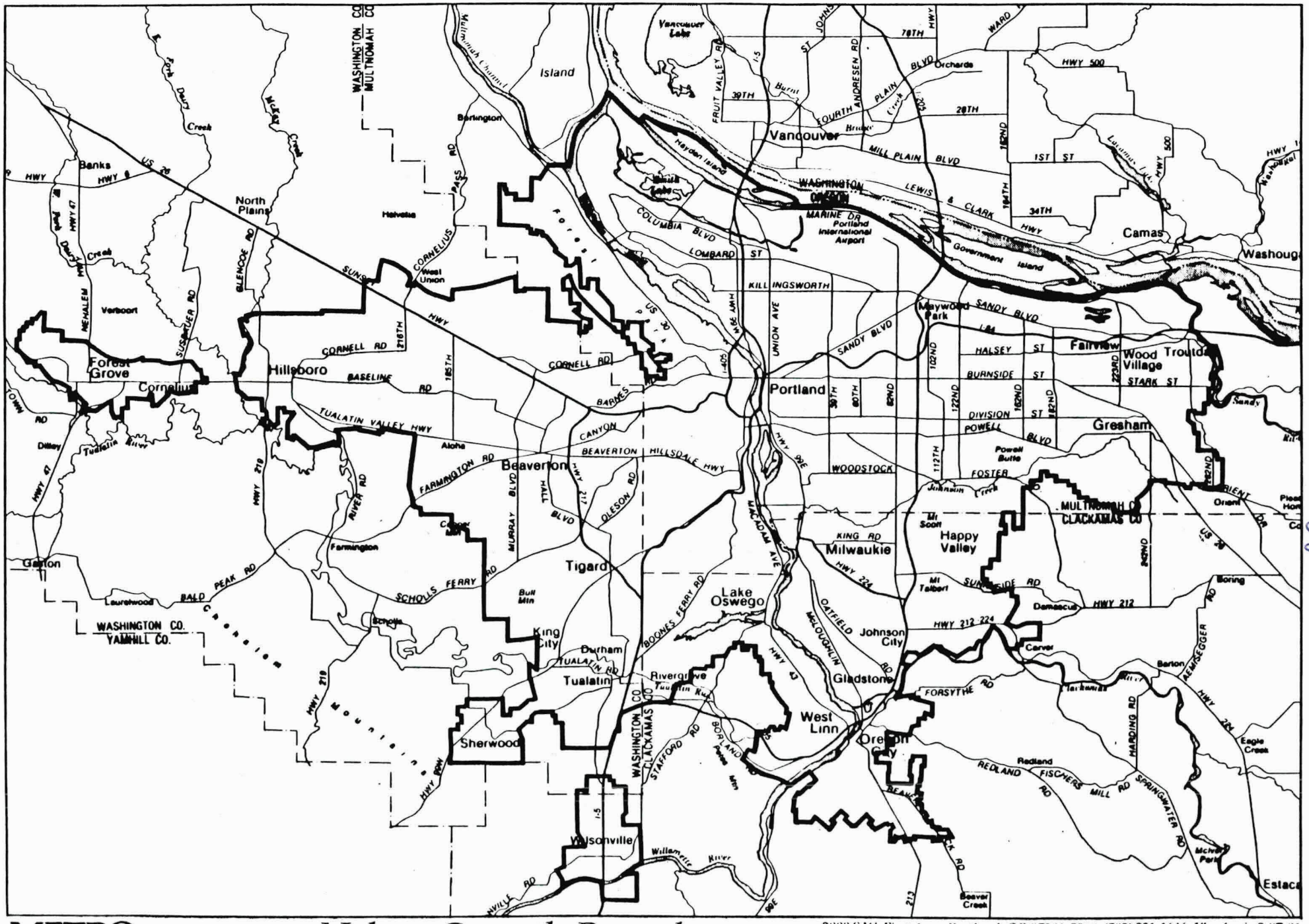
15. Is it possible to provide drawings of the proposed renovation for the committee and Council?

16. After renovation, what will be the building's capacity to withstand an earthquake?

17. Earlier discussions of the proposal included provision for a day care center. Is this included in the latest plan?

18. Have we received appraisals of the Sears building and land, and the parking garage? If so, how do they relate to the $2,550,000 and $2,600,000 prices for the facilities?

cc: Metro Council
Executive Officer
Don Carlson
Berit Stevenson
Jennifer Sims

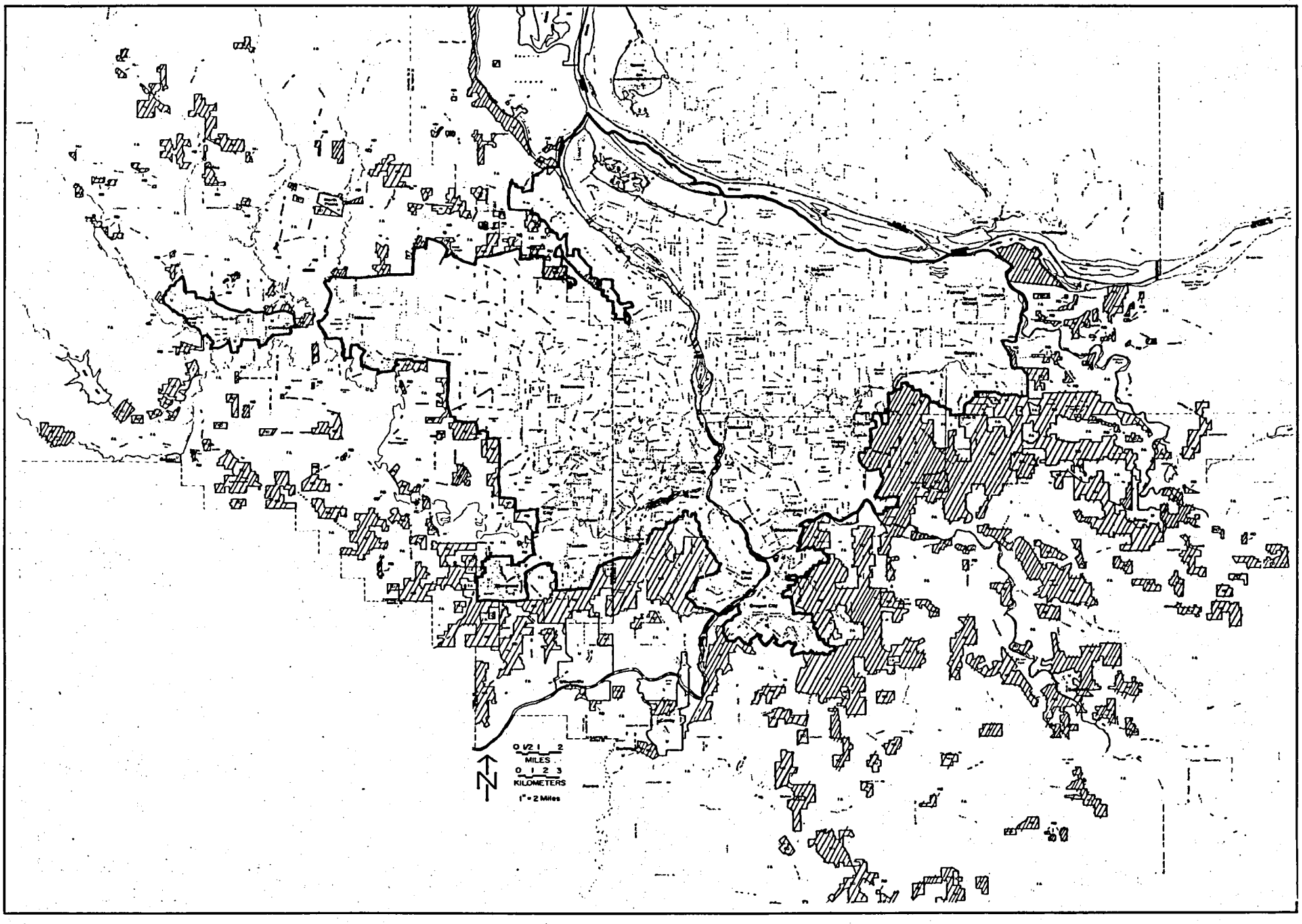


METRO

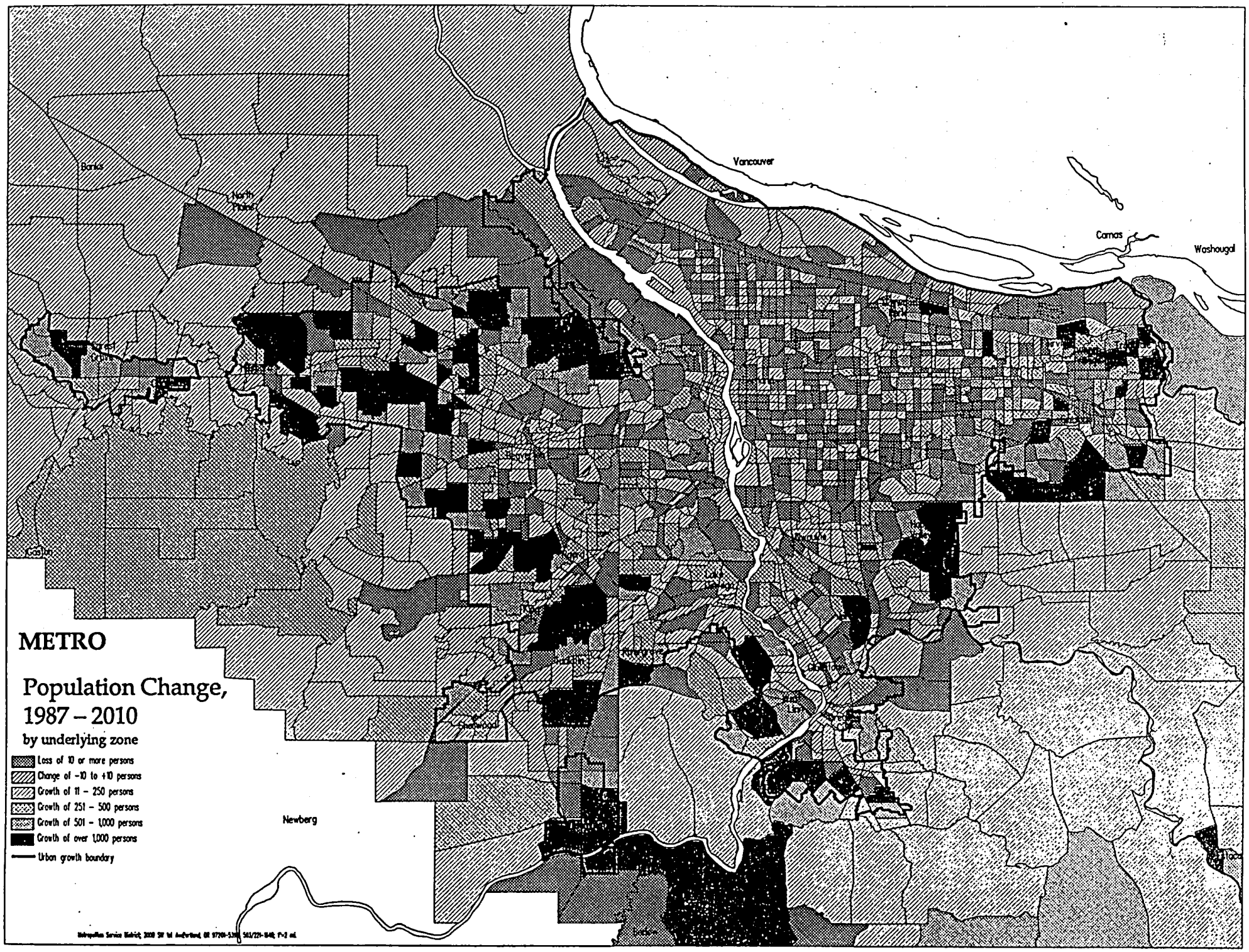
Urban Growth Boundary

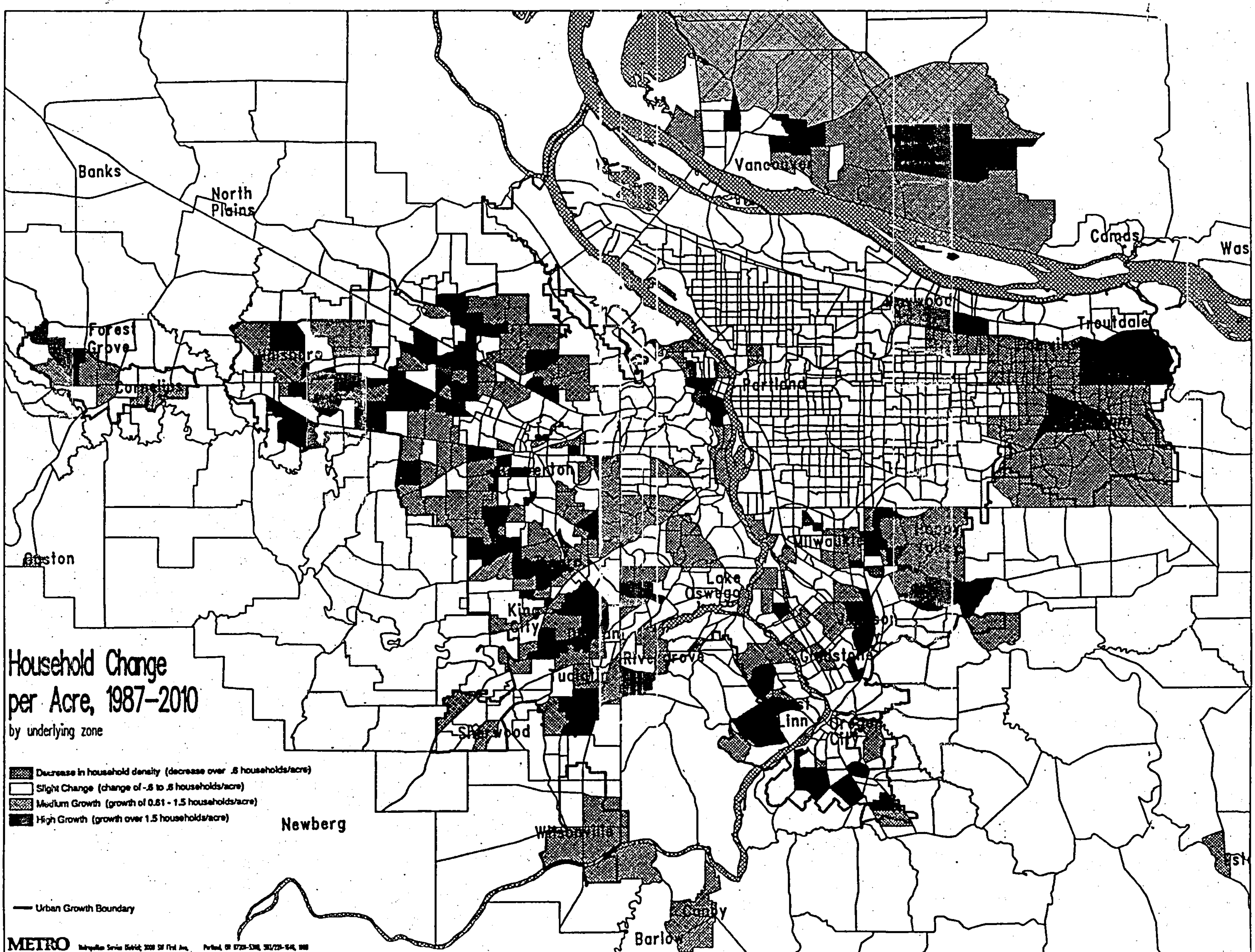
2000 S.W. First Ave., Portland, OR 97201-5398, (503) 221-1646, 1" = 4 mi., 3-87-01

3.1 Ruggo CUS Council 6/7/91

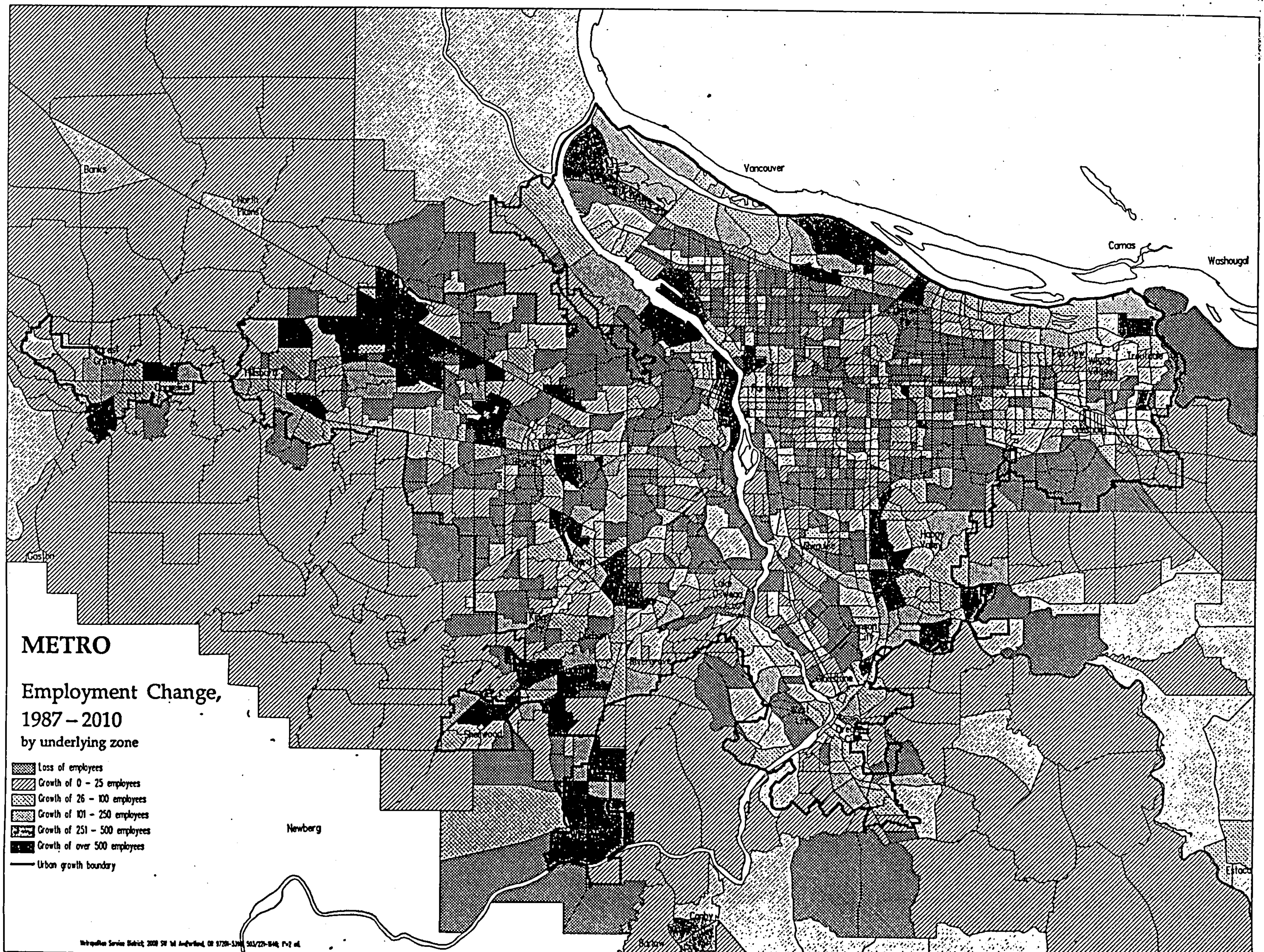


METRO Lands Excepted From Goals 3 and 4


Vancouver
Camas
Washougal
Banks
North Plains
Gaston
Newberg
Sherwood
Lafayette
METRO
Population Change,
1987 – 2010
by underlying zone
Loss of 10 or more persons
Change of -10 to +10 persons
Growth of 11 – 250 persons
Growth of 251 – 500 persons
Growth of 501 – 1,000 persons
Growth of over 1,000 persons
Urban growth boundary



Household Change per Acre, 1987-2010
by underlying zone
Decrease in household density (decrease over .6 households/acre)
Slight Change (change of -.6 to .6 households/acre)
Medium Growth (growth of 0.61 - 1.5 households/acre)
High Growth (growth over 1.5 households/acre)
Urban Growth Boundary
METRO
Banks
North Plains
Vancouver
Camas
Troutdale
Forest Grove
Cornelius
Portland
Lake Oswego
King City
Sherwood
Newberg
Canby
Barlow


METRO
Employment Change, 1987 – 2010
by underlying zone
Loss of employees
Growth of 0 - 25 employees
Growth of 26 - 100 employees
Growth of 101 - 250 employees
Growth of 251 - 500 employees
Growth of over 500 employees
Urban growth boundary
Vancouver
Camas
Washougal
Banks
North Plains
Gaston
Newberg
Sherwood
Canby
Barlow

Urban Growth Management

Planning and Development Department, Metropolitan Service District

1 Urban growth boundary

What is an urban growth boundary?

An urban growth boundary (UGB) marks the separation between rural and urban land in a metropolitan area. It is a planning "tool" used in Oregon to focus the efforts of cities, counties and urban service providers. The boundary is used to provide an adequate supply of zoned urban land with services (such as roads, sewers, water lines and street lights) to accommodate growth expected during a 20-year period. By providing land for urban development within the boundary, rural lands can be protected from urban sprawl.

The Metropolitan Service District manages the regional urban growth boundary that addresses the urban land needs of the Portland metropolitan area. Its objectives are to plan and promote the efficient use of urban land, to improve the efficiency of public facilities and services, and to preserve prime farm and forest lands outside the boundary. Future additions to the boundary must be based on a demonstrated need for more urban land.

How did the urban growth boundary originate?

In 1966, the communities of this region joined together to consider a number of possibilities for future urban growth. The product of that effort was the start of a regional planning program in 1971. Two years later, Oregon's statewide planning goals were adopted, mandating the creation of urban growth boundaries around the state.

The Columbia Region Association of Governments (CRAG), Metro's predecessor, engaged in a complete planning process and proposed an urban growth boundary for the region in 1977.

When Metro was created in 1979, it inherited the boundary planning effort. A year later, the Land Conservation and Development Commission approved the boundary as consistent with statewide planning goals.

Planning the location for the boundary involved more than simply drawing a line on a map. It had to accommodate the plans and growth projections of three counties, 24 cities and more than 60 special service districts. It was based on a projection of the need for urban land in the year 2000. It also had to address the land development plans of individual property owners.

Who is responsible for the boundary?

Metro has the statutory responsibility for managing the region's urban growth boundary. Several specific land-use planning powers were granted by the state legislature including:

- Coordinate between regional and local comprehensive plans and adopt a regional urban growth boundary

- Review and require consistency of local comprehensive plans with statewide and regional planning goals

- Planning for activities of metropolitan significance, including (but not limited to) transportation, water quality, air quality and solid waste.

Metro does not engage in comprehensive planning, such as that done by cities and counties. However, Metro depends on local comprehensive plans to implement all regional plans, including the urban growth boundary.

continues

Can the urban growth boundary be changed?

Yes. It was not intended to be a static boundary. Metro uses two methods for amending the boundary. The first is a locational adjustment, intended for amendments of less than 50 acres and typically less than 10. The urban growth boundary is more than 200 miles long and encompasses some 223,000 acres, more than 350 square miles. The locational adjustment process was created to make minor technical amendments to the boundary when it could be demonstrated that already planned urban development could happen faster, better (more efficiently), while still preserving prime farm and forest lands outside of the boundary.

The second process is called a major amendment and is intended to be used for amendments of 50 acres or more. A major amendment must meet all the requirements of the statewide planning goals that govern urban growth boundaries and their amendment. In particular, parties proposing a major amendment must show that there is a need for additional urban land because population or employment growth is much different than originally expected, or meeting the employment, housing and livability needs of the urban population requires a change in the land base. Once a demonstration of need has been made, the precise location for the amendment must be shown to be superior to others. Finally, it must be shown that amending the boundary is the best way to address the identified needs of the urban population.

The boundary has changed very little since it was created. Since 1979, 2,515 acres have been added to the urban growth boundary through the amendment process, an increase of about 1.3 percent in the total urban area of the region.

How can I learn more?

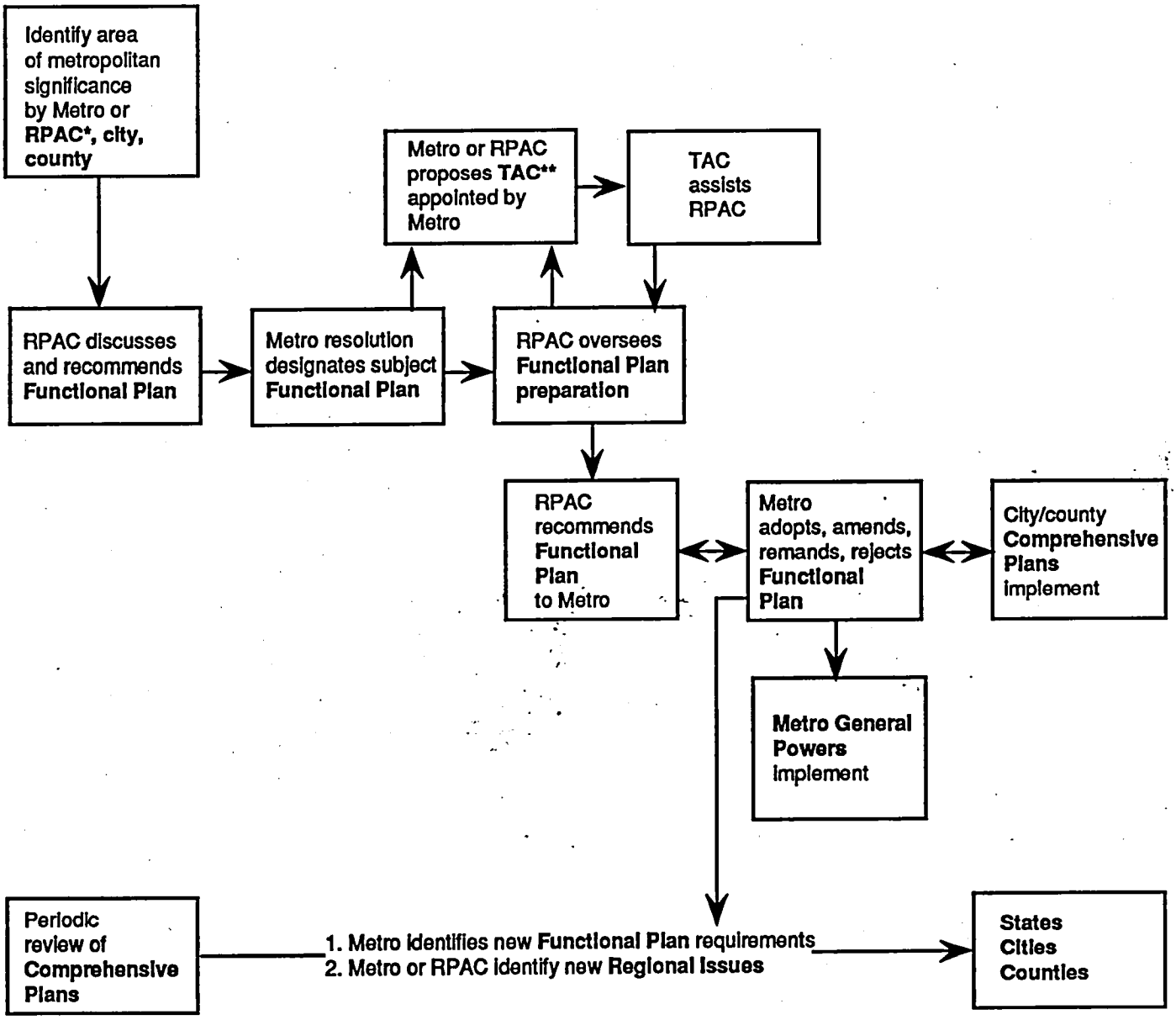
For more information about the urban growth boundary, contact Ethan Seltzer, land use coordinator, at 220-1537.

METRO
2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

August, 1989

Council
3.1
6/27/91

Regional Urban Growth Goals and Objectives
Goal I - Functional Plan Process

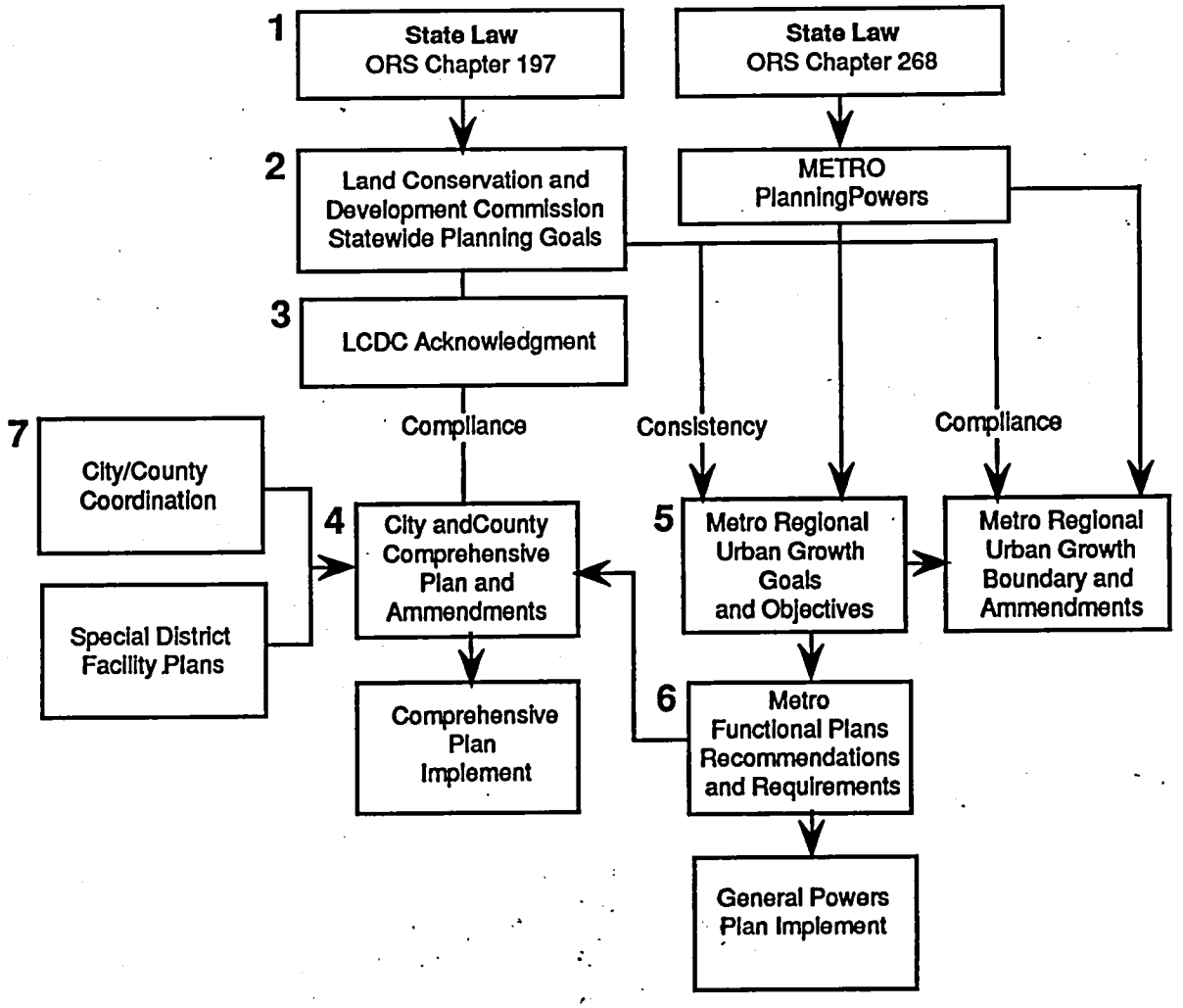


*RPAC - Regional Policy Advisory Committee
**TAC - Technical Advisory Committee

91253

Council
3.1
6/27/91

Statewide Land-Use Planning Laws



1 State laws preempt city, county, Metro home rule enactments that conflict with state land-use laws.

2 LCDC interprets and administers state land-use law in goals and rulemaking.

3 LCDC acknowledges city and county conprehensive plans and Metro's urban growth boundary for compliance with statewide land-use goals. Metro's Regional Urban Growth Goals and Objectives may be acknowledged for consistency with goals.

4 Metro's urban growth boundary is an acknowledged comprehensive plan provision of the area's city and county comprehensive plans.

5 Metro's Regional Urban Growth Goals ands Objectives must be consistent with statewide goals and functional plans must be consistent with the RUGGOs.

6 City and county comprehensive plans receive functional plan recommendations as input that usually leads to conforming comprehensive plan amendments. These can become requirements by subsequent Metro Council action.

7 City and county coordination agreements and special district plans are input into each other's comprehensive plans, usually leading to conforming comprehensive plans.

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3.1 Council 6/27/91

SEATTLE

Too Much of a Good Thing?

Above: "Mountain bike" police in Seattle arrest a drug suspect. Cocaine dealers have also discovered the city.

Opposite: Mount Rainier and the Puget Sound form the backdrop for Seattle's skyline. The size and height of downtown buildings have been limited by voters.

BY JON BOWERMASTER

A FERRYBOAT WHISTLE SINGS OFF NEARBY ELLIOTT Bay and a warm rain dances off the awning that covers the sidewalk espresso stand — one of a multitude that line the wide, spotless avenues of downtown Seattle. The streets are packed with people on the way to work in the gleaming skyscrapers that tower above Puget Sound or shop in the fashionable indoor malls that are the heart of the new downtown. The affluent crowd shuffling past is young, sharply dressed, upwardly mobile: for every briefcase, there's a backpack; for every pin stripe, a pair of blue jeans. Everyone looks fit and prosperous. The whole scene is an advertisement for the good life. I feel like I've stumbled onto the set of a credit-card commercial.

Over the last decade Seattle has gained a reputation as the adopted home of America's hip and young, but it was popular even before that; in the last 20 years there have been roughly three waves of immigration. The first began at the height of the 60's and featured Birkenstock-wearing, guru-following, back-to-earth peaceniks lured by the town's frontier charm and boundless natural beauty. Many came without jobs, opting for "quality of life" over career track. But as word of Seattle's laid-back pace and affordability got out (and as magazines insisted on labeling it the nation's "most livable city"), the migration swelled. During the late 1980's a quarter of a million people moved to this corner of the Northwest.

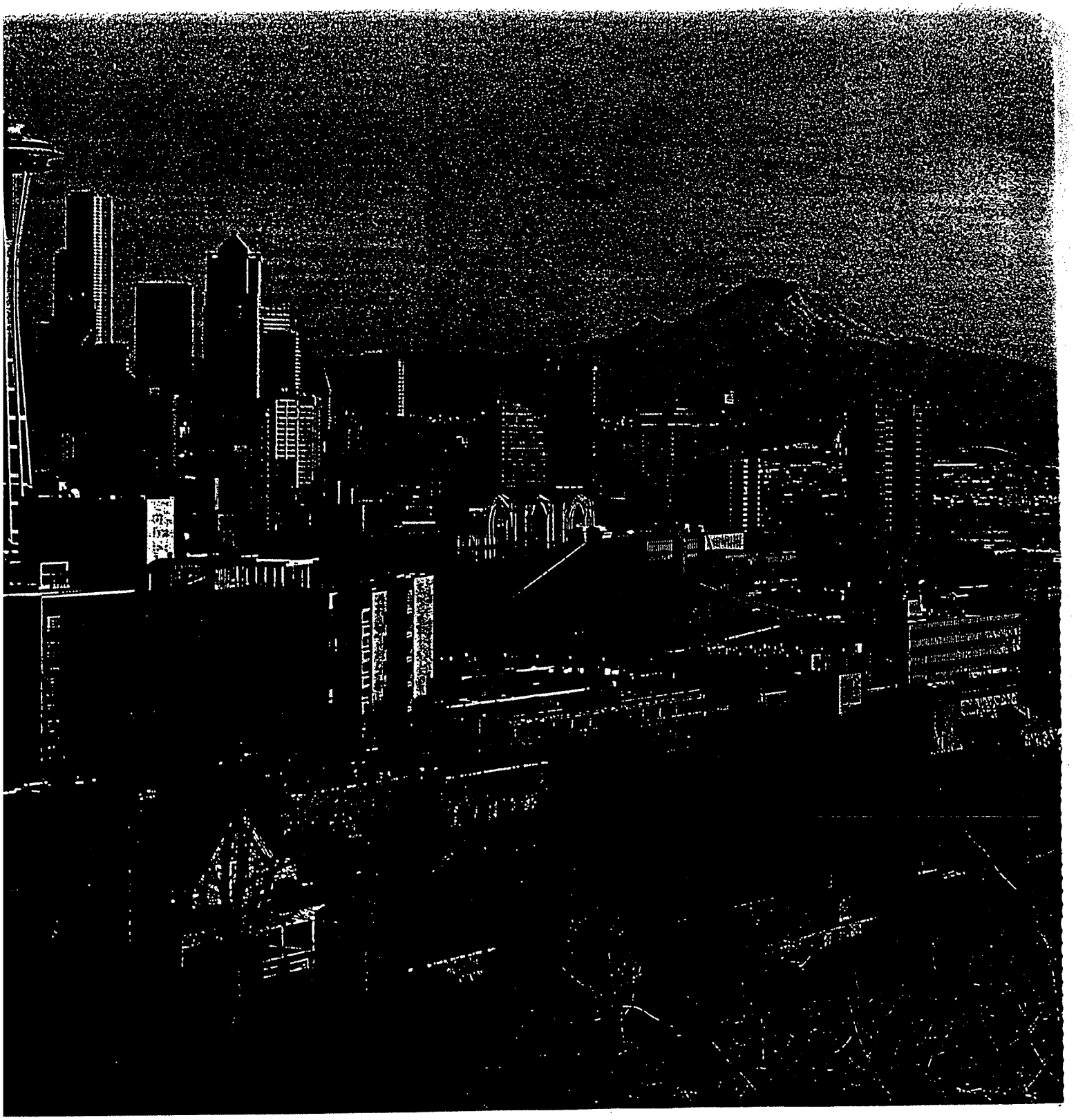
The second wave of newcomers was richer and better-educated than the first and represented more the Saab-driving, home-buying, conspicuous-consumption class. They came from the East Coast, the upper Midwest and California, burned out on big cities, attracted by Seattle's proximity to the great outdoors, its "big city" art and culture scene and flourishing computer software and import-export industries.

But the good word could hardly be confined to the yuppie pipeline. As the newcomers sprawled beyond the city's limits, their developments of town houses and split-levels swallowing farmlands and threatening to climb the nearby Cascade Mountains, they were joined by a third wave of paradise seekers. These were as likely to be of Hispanic or Asian origin as white, from Saigon as from Boston. Refugees from Vietnam, Laos, Cambodia, Thailand; laid-off factory workers from the Rust Belt; disillusioned Sun Belters; the underemployed and unemployed from around the nation — like their predecessors, they came to Seattle because they'd heard it was a "better place."

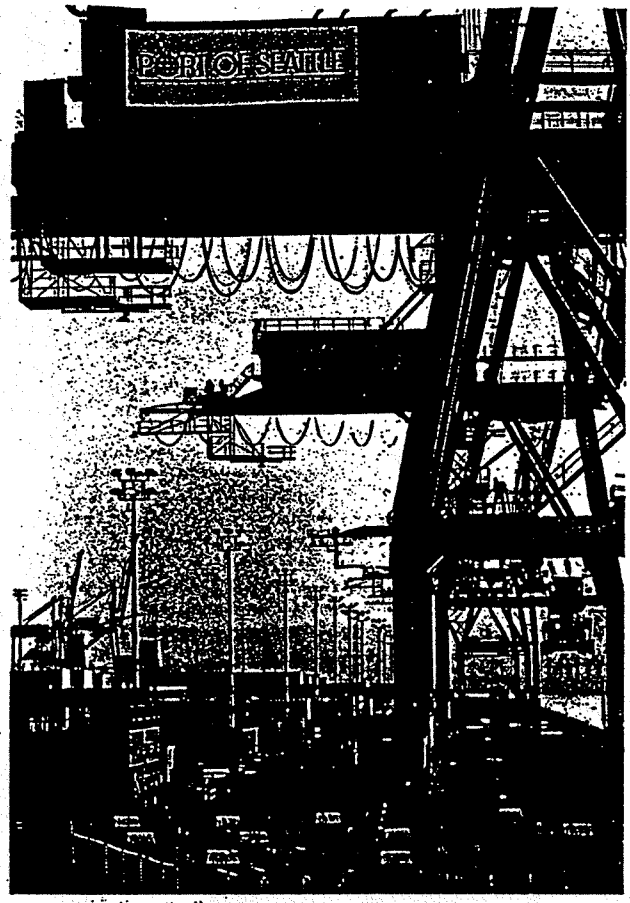
In numbers, this last wave may have been less dramatic than the others, but there are plenty of representatives around. At an outdoor cafe, a black man in his early 30's — neatly dressed in a white shirt, blue slacks and bow tie — sits down and asks to borrow the sports pages. After a perfunctory swapping of scores, he introduces himself as Derrick Thomas and explains that he's lived in Seattle for just a month. A 13-year veteran of Chrysler in Detroit, he had just joined his wife and three sons, who preceded him two months earlier.

While it was lack of work that encouraged Thomas to search out a new home (he was laid off last January from his $15.65-an-hour assembly-line job), it was a quest for more basic security that finally lured him to Seattle. In recent years, he tells me, he had taken to wearing a bulletproof vest in his car when he drove to work through some of Detroit's worst neighborhoods; his eldest son, now 13, had been taunted at school by classmates waving wads of money they'd made selling crack; a friend's 15-year-old daughter was shot and killed while she sat on a neighbor's stoop.

In Seattle things improved immediately. Thomas's kids are doing better in school, his wife is working part-time, he's got an application in with Boeing, the area's biggest employer. There have been sacrifices, though. The best job he could find is busing tables in a cafeteria for just over minimum wage. Until recently, it was costing him more to live here, too. Thomas paid $350 a



The notion of the 'livable' city has drawn waves of migration to this Northwestern hub. It's becoming a victim of its own appeal.



Right: The thriving Port of Seattle benefits from its proximity to the countries of the Pacific Rim.

Below: Diners at Il Bistro, an upscale restaurant in the Pike Place Market — a typical byproduct of Seattle's booming economy.

America's hottest city; in the 70's it was Denver. Eventually both were sullied — the former by a skyrocketing cost of living, the latter by an economy tied to the vagaries of the oil industry. The hip moved on. In the 80's, Seattle became *the* place to be.

It's not hard to see why. From the bow of one of the city-financed ferries that deliver commuters across Elliott Bay, the skyline of Seattle shimmers and sparkles in the first light of day. Twenty-strong, the new buildings jut into the sky, their mirrored facades reflecting the snowcapped peak of Mount Rainier and the Puget Sound. Anchored to the north by the Space Needle, to the south by a crane-littered port where ships load and unload containers filled with everything from doorknobs to prefab buildings, the city sits poised on a thin isthmus between the bay and Lake Washington. Its waterfront is rimmed with a string of picturesque clam and oyster saloons; above them whirs a six-lane highway, bringing scores of commuters into downtown. Within easy reach are old-growth forests, glaciers, wild ocean beaches, national parks and Canada. Theaters, galleries, symphony, opera and ballet are first-rate and well attended; the downtown streets are lined with public art, from poetry carved in the sidewalks and engravings on manhole covers to sculptures by Henry Moore and Alexander Calder. Seattle spends more on arts per capita than nearly any other city in the nation.

Seattlites have always been proud of their image as a kind of last frontier. In the 60's, a strong economy nourished that pride. Boeing, the region's largest employer, with 104,000 workers and an annual payroll of $4 billion, was flourishing; the Seattle-Tacoma port had emerged as a center for Pacific Rim trade; the high-tech industry, dominated by the giant Microsoft and with 350 other software companies, was in a boom phase. While other downtowns withered, Seattle's prospered.

All this good word swelled the region's statistics. The population grew by 18 percent in the last decade (the national figure was only 9); unemployment is now at a 22-year low (3.4 percent). Demand drove the housing market wild: last year the average selling price of a house in Seattle was 40 percent higher than the year before, and it was not unusual for anxious buyers to line up three and four deep and make offers on the stoop.

People liked Seattle for its small-town, big-city mix and lack of pretension. Many came to start families. In a recent poll the most common reply to the question "What Is Your Favorite Place to Unwind After Work?" (asked by the Seattle Weekly) was "Home." Migration to Seattle was so intense in the last few years that it became virtually impossible to rent a U-Haul to the area; trucks and vans were getting stuck here. No one was leaving.

That nothing lasts is nowhere more conspicuous than in the United States. As the 90's dawned, Seattle — and its booming suburbs and exurbs — was beginning to pay the price for its good press. That price is easily measured: the rising cost of living is making it harder for the middle class to live within the city limits, and there is an emerging clash between rich and poor. Tolerance, moderation, the small-town virtues that attracted people, are in shorter supply. Seattle is no longer a quaint frontier town but a booming metropolis teetering precariously on the brink of becoming something it did not particularly seek to become: a big urban city, with all the advantages and headaches that accompany that designation.

Must the growth of a city inevitably lead to decay? That seems to be the pattern in this country, in "livable city" after "livable city." We populate our urban areas to the point of degradation, then abandon them. Our cities, like so many other products of contemporary life, are disposable. The advance of technology, the change from a manufacturing to a service and information-based economy and the accumulation of private wealth have made it possible for people and commerce to settle pretty much where they please. And settle we do — over and over and over. The average American moves 11 times in a lifetime; nearly one-fifth of the population relocates each year. How long can this search for a "better place" continue before we have trashed them all?

street in a rundown neighborhood, until he found an apartment in a low-income housing project. Unlike earlier newcomers to Seattle, Thomas did not come for the natural beauty that abounds but because the city has a reputation as a safe place — and because it has jobs. "It's peaceful here, everybody seems to be nice," says Thomas, drawing a last puff on a cigarette. "I think we made the right move."

THE UNITED STATES WAS FOUNDED ON THE NOTION that there must be a "better place" over the horizon. In the 1990's, we're still on the lookout for an American mecca. In the 60's, San Francisco (the Paris of the West) was reputed to be

TAKE A STROLL THROUGH OCCIDENTAL PARK, A BRICK-and-tree-lined commons just off First Avenue downtown. Homeless men loiter there; many curl up at night in the doorways of the hip coffee shops along First Avenue. Panhandlers energetically hustle the tourists, and crack dealers have made the corners around the well-known Pike Place Market their domain. Recent acts of gay-bashing have shaken the sanctity of downtown neighborhoods; racial attacks have unnerved city high schools. The school system is faced with large classes and an ineffective bureaucracy. Courts are overcrowded; plans for a

new county jail are in the offing. Local businesses — among them Weyerhauser, Boeing, major banks and airlines — have recently announced layoffs. "It's a healthy economy, but it has plateaued," says Jim Hubert, editor of the Seattle-Everett Real Estate Research Report.

Seattle, more than most cities, is wary of outsiders. The relatively low housing prices of the mid-1980's attracted many equity-rich Californians, who sold their $750,000 homes in places like Orange County and bought similar houses here for a third of the price. Others bought inexpensive houses with good views and then tore them down and built neo-mansions in their place, raising tax assessments throughout the neighborhood. (Though the real-estate and home-construction boom abruptly ended in the past six months, the price of a home in neighborhoods like Queen Anne and Capitol Hill runs as high as half a million dollars.) Aggravating anti-outsider sentiment was the disclosure a few months ago that the Pike Place Market is actually owned by a Manhattan-based property management firm. Nor does it sit well that the city's professional baseball team, the Mariners, is owned by a businessman from Indianapolis, its football team by a California developer.

These days it is popular for Seattlites — both old and new — to blame their problems on this influx of newcomers. The biggest gripes are traffic congestion, air pollution, crime and the high cost of living. Voters proved they were against the "Manhattanization" of Seattle's skyline when in 1989 they forcefully ratified a cap on the height and size of downtown buildings. A growing faction has adopted the hostile rallying cry: "Have a Nice Day — Somewhere Else."

Perhaps the worst result of Seattle's uncontrolled growth in the last few years is the effect it's having on the pristine environment that drew so many people to the Northwest in the first place. In the past the city was a leader in urban environmental policies: Seattle has one of the highest garbage collection rates in the nation in order to afford the best recycling program; 82 percent of the city's residents participate in curbside recycling. In November 1989, 70 percent of King County voters agreed to tax themselves a total of $117

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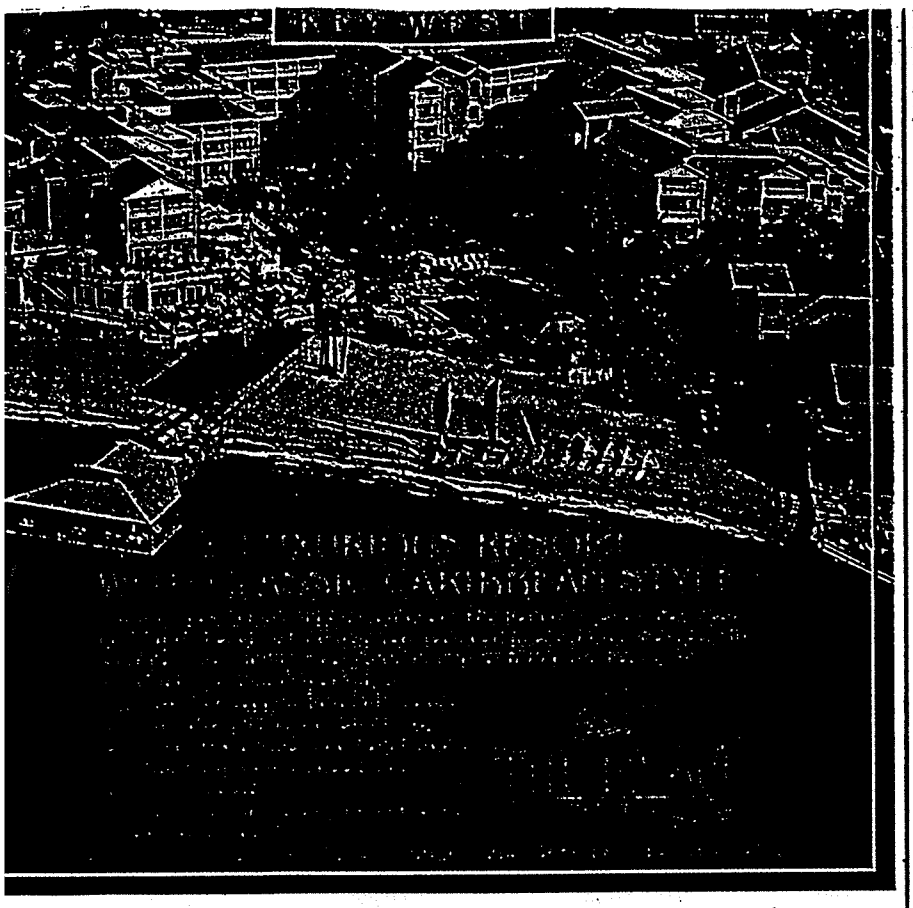

SEATTLE

Continued from Page 28

million so that the county could buy 3,000 acres of open space and 70 miles of trails.

Now that "forever wild" posture appears to be wilting. A statewide initiative on the ballot last November would have provided $160 million to help communities enact and enforce growth controls and zoning laws. The complex proposal was defeated 3 to 1, losing in every one of the state's 39 counties. The opposition was well financed; it spent $1.5 million raised from developers, real-estate agencies, Boeing, Weyerhauser and others. But the defeat is seen as a signal that even pro-environmentalists are beginning to check their pocketbooks before voting.

Yet now more than ever the Seattle area needs environmental consciousness: its landfills will soon be full. (As a temporary solution, the city has hired Waste Management Inc. to haul its 400,000 tons of annual garbage to a cash-poor county in Oregon, beginning next April.) According to the state departments of Ecology and Health, 40 percent of Washington's recreational beaches are "seriously threatened by pollution." Traffic congestion around Seattle is so bad that on many summer days a haze clouds Mount Rainier from view. Every day the city is becoming more and more like the Southern California megalopolis it so detests.

Seattle's growth is limited by its physical boundaries, but the region continues to expand. The population of the surrounding three-county area grew by 21 percent in the 1980's, to an estimated 2.5 million, with another 200,000 people expected by 1995. Dairylands and truck farms are being replaced by strip malls and warehouses, surrounded by tract homes on cul-de-sacs. Laurie McCutcheon, a local demographer who has spent the last few years studying population shifts for some of Seattle's biggest firms, isn't convinced that government leaders are prepared to deal with this growth. "In the early part of the decade, Seattle dominated the county," she says, "but today the growth in the suburban cities is dwarfing it, and the whole balance of power is shifting. We are fighting tooth and nail over governance issues, like 'Should the county take over all government — city, suburban, transportation, sewer and water?' "

David Bricklin, an environmental lawyer who headed the Initiative 547 drive, is even more skeptical. "When I moved here there were four tall buildings downtown," says Bricklin, a native of Philadelphia. "There was not a rush-hour traffic jam; now there are traffic jams any time of day or night, weekday or weekend. It took me an hour and a half to get from downtown to the airport the other day, in the middle of the afternoon. It is typically a 20-minute drive."

The problem is lack of foresight, he says. "We have virtually no mass transit — no rail, no segregated bus ways. We are just now trying to develop a plan for mass transit from Seattle out into the suburbs, but that's a decade away at best."

Bricklin maintains that things are not as bleak as the 3-to-1 defeat of 547 indicates, but he still despairs: "Am I optimistic about Seattle's future? No, I don't think so."

FROM HIS OFFICE 12 stories above Fourth Avenue, first-term Mayor Norm Rice looks out on the skyscrapers that block the once clear view of the Puget Sound. Building more of them, he says, is not on his agenda. Mayor Rice understands that if he wants to govern a truly "great" city, expanding Seattle's diversity — of economy, ethnicity and race — is essential. It won't be easy, but Rice insists he is optimistic about Seattle's future. At the recent "urban summit" in New York, presided over by Mayor David N. Dinkins and attended by 35 big-city mayors, he appeared downright smug. A lot of mayors are struggling to save their cities; Rice is worrying about how to preserve his.

"Every major urban city is a magnet," he says, tugging at the knot of his tie and propping his feet on a glass-topped table. "Some people come in hope, some to hide. Some succeed, others fail. But as the number of people coming to Seattle who are unable to climb the ladder of success grows, they and their problems begin to consume your whole sense of what you want to do as a city."

The explosive growth of the last three years has been "great," Rice admits, "but I

PHOTOGRAPHS BY ROBERT LYONS FOR THE NEW YORK TIMES

Mayor Norm Rice would like Seattlites to dig in and face their problems rather than move on.

ink it is possible for us to verspill ourselves." He also dmits that he welcomes a lowdown in the economy and ising housing prices: both ill slow the numbers moving to Seattle and give the ity time to figure out how to ccommodate the population hat is already taxing existing facilities and services.

One of Mayor Rice's biggest challenges will be convincing Seattlites to stay and ight rather than head for the ext mecca — or the suburbs. It used to be that when hings like schools got bad the niddle class would flee — to a place like Seattle," he says. But now all cities face the ame problems. There is no better place' to escape to. People have to stick around nd get involved if they want o save their schools and heir neighborhoods."

Preparing the city for an increase in Asian, black and Hispanic minorities is also near he top of the Mayor's list. Seventy-five percent of Seattle's opulation of 512,000 is white. Rice, who is black, knows that Seattle must be successfully ntegrated if it is to make the ransition from a "livable" city o an "international" city (as neighboring Vancouver has done so successfully). "Our biggest balancing act now is hat we don't want a city that's all white Anglo-Saxon Protestant. Seattle deserves a multicultural, multi-ethnic population."

AT A SMALL TABLE IN the Phnom Penh Noodle House, across the street from a sprawling Asian restaurant-grocery store-pharmacy-gift shop called Uwajimaya, I share a bowl of noodles with Lin Nouen, an 18-year-old Cambodian who has lived in Seattle just one month. Smiling broadly, he repeats how glad he is to be here. When he first moved to the States — thanks to a sponsor in Austin, Minn. — he'd been disillusioned. It was too cold, and there were too few Asians. He kept hearing that Seattle was the place to be, and he arranged a "transfer." Today, dressed in the uniform of a typical high-school junior — stone-washed jeans and high-top sneakers — he says it is better here than he ever expected. "In one month I make more friends than I made in eight in Minnesota."

Outside the window, Asians of all ages, armed with shopping bags and bus schedules, pop in and out of markets that line the streets, their shelves laden with seaweed, noodles, exotic fruits and sake. This neighborhood is called the International District: there are Filipino clothiers, Laotian-run bars, Chinese, Japanese and Vietnamese newspapers, Asian welfare agencies, Korean movies and a Cambodian hair salon. Asians are Seattle's most visible import — their population increased 16 percent between 1985 and 1988.

Lin says he is already investigating the job market. He hears there are $7-an-hour jobs at a clothes manufacturing shop and is considering quitting school to take one. "Already I like Seattle, very much," he says. "I think I may stay here, maybe all my life." He has sent word to family members — scattered through Cambodia, Thailand and Laos — that this is a good place.

Less than a mile from the International District, another kind of trade featuring another kind of immigrant flourishes as dusk settles over the port city. From near-downtown apartments and dilapidated wood-frame houses in the Rainier Valley neighborhood come street hustlers, crack dealers, whores and gang boys, eager to begin their day while the commuters are heading home. Up and down Pine and Pike streets, from Capitol Hill to the Alaskan Way viaduct, clusters of young toughs — of a variety of ethnic groups — gather on street corners. They hassle passers-by and peddle their illicit wares to drivers who cruise slowly by.

Police have been battling this "invasion" for several years, ever since Seattle became a favorite stopping-off point for gang members — Crips and Bloods — from Southern California. They came for the wide-open drug market, traveling straight up the Interstate 5 corridor that stretches from Los Angeles to Vancouver. Teen-age prostitution was already a problem downtown, and soon crack houses proliferated.

Then last summer a new explosion of cocaine dealers surfaced on the corners near the Pike Place Market. Patrols were beefed up; more of Seattle's first-in-the-nation mountain-bike cops were deployed. Mayor Rice and the City Council armed the police with a controversial new drug-trafficking and loitering ordinance that enabled them to arrest anyone observed selling drugs on the basis of "conspicuous actions," even when no contraband is found. "I worry when I see gangs hurting people on our streets, when I see gangs fighting in our parks," says the Mayor, "but the biggest issue facing us right now is the fine line between being 'tough on crime' and harassment. We have yet to come to grips with it."

The apartment of the novelist Tom Robbins looks out over this troubled neighborhood (known as "the Blade" because it is "on the edge"). From his window he can see signs of all the changes that the recent boom years have wrought on his adopted home (he moved here from Richmond, Va., in 1962): traffic jams, smog, street punks, skyscrapers. "In many ways this place was wilder 20 years ago," Robbins says. "The difference is, while it has always been easy to get beat up on these streets, 20 years ago you didn't worry about getting killed."

Now 54, the cult storyteller divides his time between Seattle and a house near the sound, an hour outside town. "The changes are all a matter of perspective," he says. "People who come here now rave about the place — but I know that 15, 20 years ago Seattle really was paradise. For those of us who were here then, we do see the place today in much darker hues." He pauses and looks out on the neon-lit street below. "But I could live anywhere in the world, and I choose to live in Seattle."

UNLIKE MOST AMERICAN cities, Seattle enjoys a strong economy despite recessionary rumblings. Boeing appears to be on an unstoppable roll: profits for the year will exceed $1 billion and the company has a backlog of orders for nearly 2,000 jets, worth over $90 billion, enough to keep it busy through 1995.

"The only wild card in our

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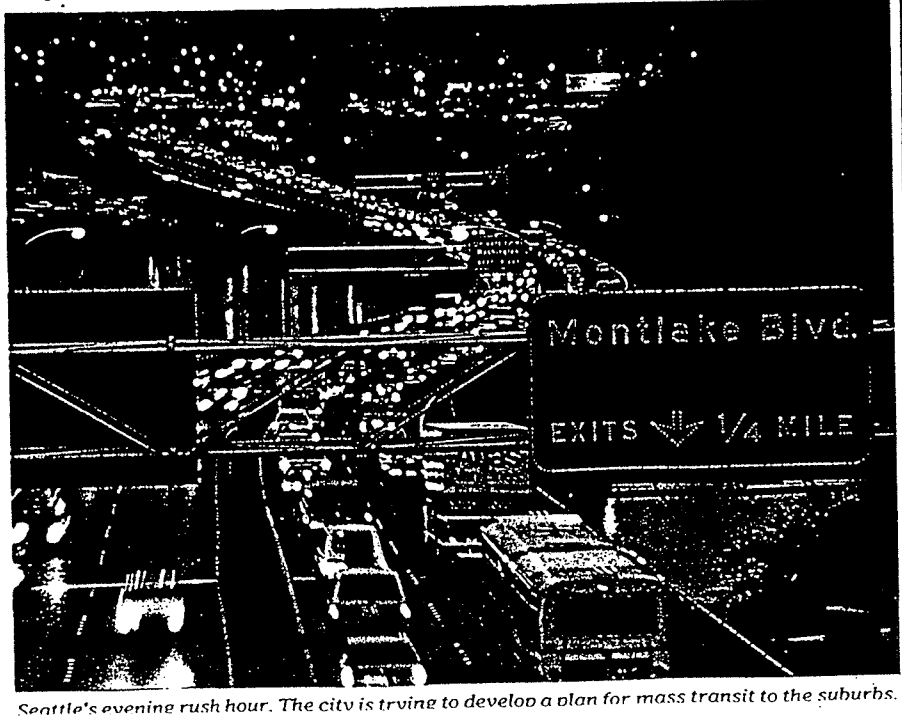

Seattle's evening rush hour. The city is trying to develop a plan for mass transit to the suburbs.

SEATTLE

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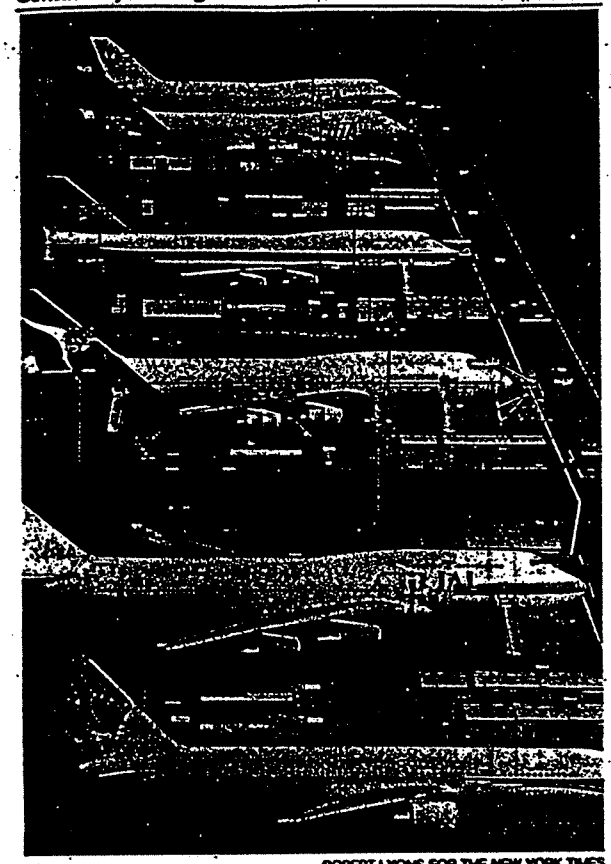


ROBERT LYONS FOR THE NEW YORK TIMES

Airplanes ready for delivery at a Boeing plant north of Seattle. The largest employer in the region, Boeing has a backlog of orders for almost 2,000 jets, worth more than $90 billion.

future is what goes on in the Middle East," says Craig Martin, a spokesman for Boeing. "We can't predict exactly what the results would be if there is some kind of economic upheaval as a result. Barring a major shooting war, our outlook is pretty positive." Just before Christmas the company's Seattle office handed out holiday bonuses equal to 5 percent of each employee's salary — a total of $253 million.

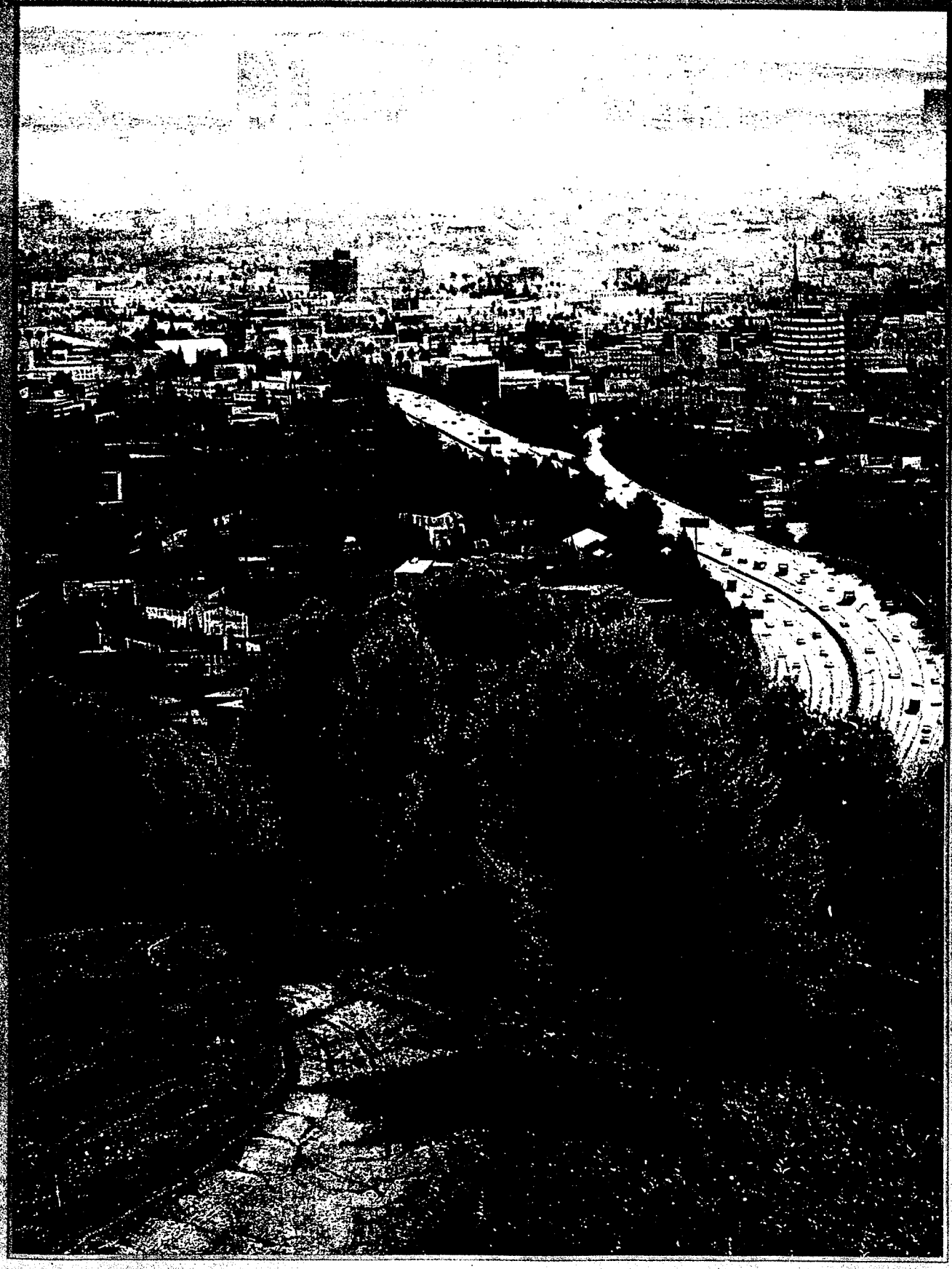
But Seattle's strongest economic card in coming years may be its proximity to the Pacific Rim. Closer by ship and air to Asian markets than any California city, the Port of Seattle is thriving: international air freight was up 8 percent last year; more than a million containers of cargo passed through the docks. It is also home to the $3 billion-a-year North Pacific fishing fleet. At a time when many big cities are cinching their belts, Seattle is expanding.

Shortly after this new decade began, David Brewster, publisher of the Seattle Weekly, gave warning about the obstacles that faced his adopted hometown (he came here from New Jersey in 1965): "The highest drama is to fashion a lasting marriage ... to have vitality along with grace, hustle along with humaneness. Few American cities have managed to combine these qualities without toppling into gigantism or heartlessness." That is still Seattle's challenge, but it won't be easy to achieve, especially given Americans' penchant for moving on instead of digging in.

Some of the more restless already have their bags packed. I met a fellow one afternoon outside the Osho Suravi Meditation Center (he'd moved here from Milwaukee five years earlier), and he explained why he would soon be heading for, in his words, "greener pastures." Greener? Really? "Seattle, for all its beauty, is just too big, too dirty, too congested. Don't tell anyone, but I know where the next mecca is," he whispered conspiratorially. "Burlington, Vermont." ■

WINTER 1990

THE WILSON QUARTERLY



AMERICA'S NEW CITIES • WORLD'S END • EUROPE 1992 • BOORSTIN

America's New City

Something new is appearing on the American landscape. Architects, planners, and others have given it a variety of names—spread city, slurb, exurb, edge city, sprawl. The profusion of vaguely ominous names is only one sign of our deep uncertainty about what this new thing is. Is it merely the old suburb swollen beyond all proportion? Or are we seeing the distinction between city and suburb gradually being erased? Historian Robert Fishman believes that a "new city," utterly without precedent, is arising. If its opportunities are recognized, he argues, Americans' long quest to combine the amenities of technological civilization with the pleasures of natural surroundings may at last be rewarded. If they are not, the failure will blight the landscape of America—and the lives of Americans—for generations to come.

Megalopolis Unbound

by Robert Fishman

Jim and Delores Bach live in a redwood contemporary in West Nyack, N.Y., about 25 miles north of Manhattan. Twenty years ago, their cul de sac was an apple orchard, and today two gnarled old trees on the front lawn still hold up their fruit to the early autumn sun.

This morning, two of the Bach children will board buses to school and Delores will drive young Alex to a day-care center in nearby Nanuet. Then she will drive 20 minutes down the Garden State Parkway to her job at a medical laboratory in Montvale, N.J. Her husband, meanwhile, will be on the New York State Thruway, headed east over the Hudson River on the Tappan Zee Bridge to his job with IBM in Westchester County.

A decade ago, Delores Bach could not have imagined finding such a good job so close to home. She stayed home with the children and Jim commuted to midtown Manhattan. But since the 1970s, northern New Jersey and New York's Westchester County—the very county whose genteel "bedroom communities" the writer John Cheever lived in and wrote about for the *New Yorker*—have become carpeted with office complexes and stores. West Nyack and other towns in Rockland County have filled up with families who can't afford Westchester's stratospheric home prices. Others are moving even farther to the northwest, to Orange County. Now, the Tappan Zee, built as part of the interstate highway system 35 years ago to link New York City with Albany and other distant upstate areas, is jammed every rush hour. In fact, Jim Bach's trip will take about an hour, longer than his old 50-minute commute by express bus to Manhattan.

The Bachs still make it a point to get to Manhattan once every six months or so for a day at the museum with the kids or a night out at the theater. They still subscribe to the *New York Times*. But they have friends who have not been to "the City," as

it is called, in 10 years. Why bother? They can get good jobs nearby, buy anything they could possibly desire at one of a dozen convenient malls, attend a college, get fine medical care or legal advice—virtually anything they could want is within a one-hour radius. All they have to do is get in the car and drive.

The Bachs are fictional, but West Nyack is a real place—one of literally hundreds of former suburbs around the nation which, without anybody quite realizing it, have detached themselves from the big city and coalesced into "new cities." They lack skyscrapers, subways, and other symbolic structures of the central city, but they have acquired almost all of its functions.

"The big city," Frank Lloyd Wright announced prophetically in 1923, "is no longer modern." Although his forecast of a new age of urban decentralization was ignored by his contemporaries, we can now see that Wright and a few other thinkers of his day understood the fragility of the great behemoth—the centralized industrial metropolis—which then seemed to embody and define the modernity of the 20th century.

These capital cities of America's industrial revolution, with New York and Chicago at their head, were built to last. Their very form, as captured during the 1920s in the famous diagrams by Robert E. Park and Ernest W. Burgess of the Chicago School of sociology, seemed to possess a logic that was permanent. At the core was the "central business district," with its skyscraper symbols of local wealth, power, and sophistication; surrounding the core was the factory zone, the dense region of reinforced concrete factories and crowded workers' housing; and finally, a small ring of affluent middle-class suburbs occupied the outskirts. These were the triumphant American cities, electric with opportunity and excitement, and as late as the 1920s they were steadily draining the countryside of its population.

But modernism is a process of constant upheaval and self-destruction. Just when the centralized metropolis was at its zenith, powerful social and economic forces were combining to create an irresistible movement toward decentralization, tearing asunder the logic that had sustained the big city and distributing its prized functions over whole regions. The urban history of the last half-century is a record of this process.

Superficially, the process might be called "the rise of the suburb." The term "suburb," however, inevitably suggests the affluent and restricted "bedroom communities" that first took shape around the turn of the century in New York's Scarsdale, the North Shore of Chicago, and other locales on the edge of the 19th-century metropolis. These genteel retreats from urban life established the model of the single-family house on its own landscaped grounds as the ideal middle-class residence, just as they established the roles of commuter and housewife as social models for upper-middle-class men and women. But Scarsdale and its kind were limited zones of privilege that strictly banned almost all industry and commerce and excluded not only the working class but even the majority of the

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less-affluent middle class. The traditional suburb therefore remained an elite enclave, completely dependent on the central city for jobs and essential services.

Since 1945, however, the relationship between the urban core and the suburban periphery has undergone a startling transformation—especially during the past two decades. Where suburbia was once an exclusive refuge for a small elite, U.S. Census figures show that 45 percent of the American population is now "suburban," up from only 23 percent in 1950. Allowing for anomalies in the Census Bureau's methods, it is almost certain that a majority of Americans live in the suburbs. About one third remain in the central cities. Even more dramatic has been the exodus of commerce and industry from the cities. By 1980, 38 percent of the nation's workers commuted to their jobs from suburb-to-suburb, while only half as many made the stereotypical suburb-to-city trek.

A fateful choice: Before the triumph of "automobility" a half-century ago, it was possible to travel hundreds of miles, well into the countryside, on trolleys such as this one in Moss Point, Miss.

Manufacturing has led the charge from the cities; the industrial park, as it is so bucolically dubbed, has displaced the old urban factory district as the headquarters of American manufacturing. Commerce has also joined the exodus. Where suburbanites once had little choice but to travel to downtown stores for most of their clothing and household goods, suburban shopping malls and stores now ring up the majority of the nation's retail sales.

During the last two decades, the urban peripheries have even outpaced the cores in that last bastion of downtown economic clout, office employment. More than 57 percent of the nation's office space is now located outside the central cities. And the landscaped office parks and research centers that dot the outlying highways and interstates have become the home of the most advanced high-technology laboratories and factories, the national centers of business creativity and growth. *Inc.* magazine, which tracks the nation's emerging industries, reported in a survey earlier this year that "growth is in the 'edge cities.'" Topping its list of "hot spots" were such unlikely locales as Manchester-Nashua, New Hampshire; West Palm Beach, Florida; and Raleigh-Durham, North Carolina.

The complex economy of the former suburbs has now reached a critical mass, as specialized service enterprises of every kind, from hospitals equipped with the latest CAT scanners to gourmet restaurants to corporate law firms, have established themselves on the fringes. In all of these ways, the peripheries have replaced the urban cores as the heartlands of our civilization. These multi-functional late-20th-century "suburbs" can no longer be comprehended in the terms of the old bedroom communities. They have become a new kind of city.

The "new city of the 20th century" is not some fantastic city of towers out of Fritz Lang's celluloid *Metropolis* (1926) or the visionary architect Paoli

Soleri's honeycombed Arcology. (Soleri's plan for a new city in the Arizona desert captivated futurists during the 1960s; the stunted model city that resulted is now a bizarre tourist attraction.) It is, rather, the familiar decentralized world of highways and tract houses, shopping malls, and office parks that Americans have built for themselves since 1945. As exemplified by such areas as the Silicon Valley in northern California, Route 128 outside Boston, the Route One corridor between Princeton and New Brunswick, New Jersey, Du Page County west of Chicago, the Route 285 area north of Atlanta, the northern Virginia district that surrounds Tysons Corner, or the immense region that stretches along the southern California coast from Los Angeles to San Diego, the new city includes the most dynamic elements in our national economy. It flourishes in the rocky soil of New Hampshire, the broad prairies beyond Minneapolis, the rainy shores of Puget Sound and the desert outside Tucson. From coast to coast, the symbol of this new city is not the jagged skyscraper skyline of the 1920s metropolis but the network of superhighways as seen from the air, crowded in all directions, uniting a whole region into a vast super-city.

Familiar as we all are with the features of the new city, most of us do not recognize how radically it departs from the cities of old. The most obvious difference is scale. The basic unit of the new city is not the street measured in blocks but the "growth corridor" stretching 50 to 100 miles. Where the leading metropolises of the early 20th century—New York, London, or Berlin—covered perhaps 100 square miles, the new city routinely encompasses two to three *thousand* square miles. Within such "urban regions," each element is correspondingly enlarged. "Planned unit developments" of cluster-housing are as large as townships; office parks are set amid hundreds of acres of landscaped grounds; and malls dwarf some of the downtowns they have replaced.

These massive units, moreover, are arrayed along the beltways and "growth corridors" in seemingly random order, without the strict distinctions between residential, commercial, and industrial zones that shaped the old city. A subdivision of $300,000 single-family houses outside Denver may sit next to a telecommunications research-and-production complex, and a new mall filled with boutiques once found only on the great shopping streets of Europe may—and indeed *does*—rise amid Midwestern corn fields.

The new city, furthermore, lacks what gave shape and meaning to every urban form of the past: a dominant single core and definable boundaries. At most, it contains a multitude of partial centers, or "edge cities," more-or-less unified clusters of malls, office developments, and entertainment complexes that rise where major highways cross or converge. As *Washington Post* writer Joel Garreau has observed, Tysons Corner, perhaps the largest American edge city, boasts more office space than downtown Miami, yet it remains only one of 13 edge cities—including Rockville-Gaithersburg, Maryland, and Rosslyn-Balston, Virginia—in the Washington, D.C. region.

Even some old downtowns have been reduced to "first among equals" among the edge cities of their regions. Atlanta has one of the most rapidly growing downtowns in the country. Yet between 1978 and 1983—the years of its accelerated growth—the downtown's share of regional office space shrank from 34 percent to 26 percent. Midtown Manhattan is the greatest of all American downtowns, but northern New Jersey now has more office space.

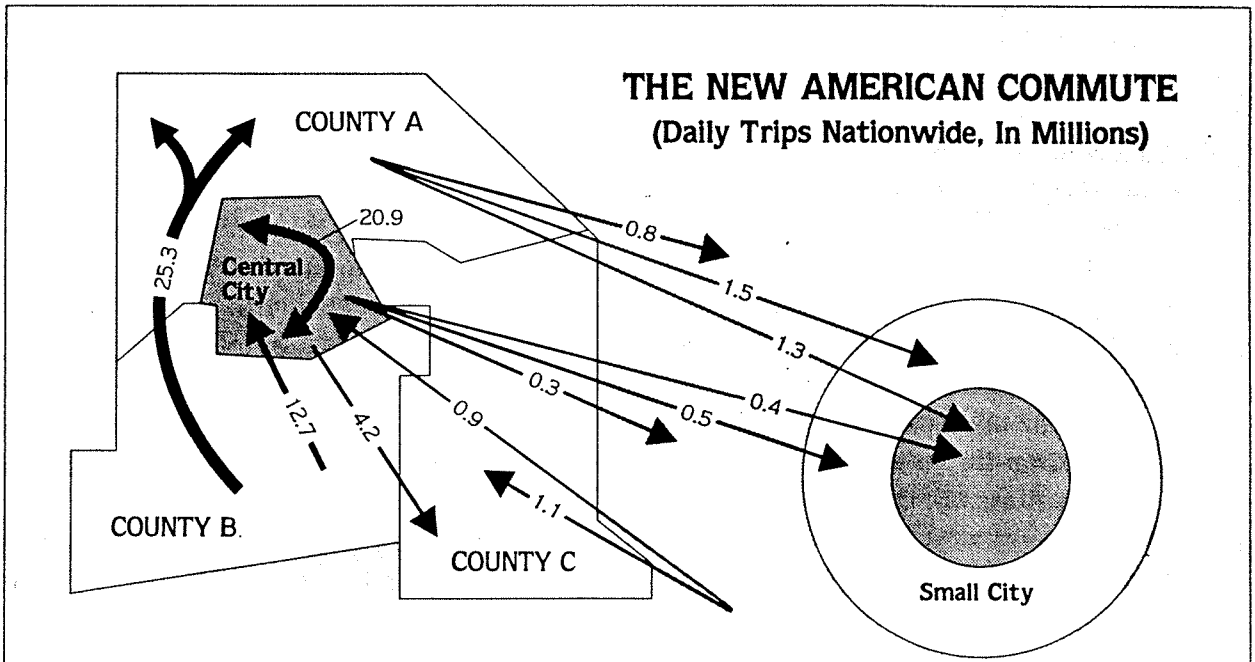
If no one can find the center of the new

city, its borders are even more elusive.

Low-density development tends to gain an inevitable momentum, as each extension of a region's housing and economy into previously rural areas becomes the base for further expansion. When one successful area begins to fill up, land values and taxes rise explosively, pushing the less affluent even farther out. During the past two decades, as Manhattan's "back offices" moved 30 miles west into northern New Jersey along interstates 78 and 80, new subdivisions and town-house communities began sprouting 40 miles farther west along these growth corridors in the Pocono Mountains of eastern Pennsylvania. "By the time we left [New Jersey]," one new resident of eastern Pennsylvania told the *New York Times*, "there were handyman specials for $150,000 you wouldn't put your dog in." Now such formerly depressed and relatively inexpensive areas as Pennsylvania's Lehigh Valley are gaining population, attracting high-tech industries and office employment, and thus stimulating further dispersion.

Baltimore and Washington, D.C., once separated by mile after mile of farms and forests, are now joined by an agglomeration of office parks, shopping strips, and housing. Census Bureau officials have given up attempting to draw a statistical boundary between the two metropolitan areas and have proposed combining them into a single consolidated region for statistical purposes. Indeed, as the automobile gives rise to a complex pattern of multi-directional travel that largely by-passes the old central cities, the very concept of "center" and "periphery" becomes obsolete.

Although a few prophets like Wright foresaw the downfall of the old city, no one imagined the form of the new. Instead, it was built up piecemeal, as a result of millions of uncoordinated decisions made by housing developers, shopping-mall operators, corporate executives,



Source: *Commuting in America*, published by the Eno Foundation for Transportation, Inc., Westport, CT, Copyright © 1987.

The diagram represents a day in the life of America's commuters in 1980. Suburb-to-suburb commuting is growing rapidly; it accounts for twice as many trips as suburb-to-city travel.

highway engineers and, not least, the millions of Americans who saved and sacrificed to buy single-family homes in the expanding suburbs. The new city's construction has been so rapid and so unforeseen that we lack even a commonly-accepted name for what we have created. Or, rather, we have too many names: exurb, spread city, urban village, megalopolis, outtown, sprawl, slurb, the burbs, nonplace urban field, polynucleated city, and (my own coinage) technoburb.

Not urban, not rural, not suburban, but possessing elements of all three, the new city eludes all the conventional terminology of the urban planner and the historian. Yet it is too important to be left in conceptual limbo. The success or failure of the new city will affect the quality of life of the majority of Americans well into the 21st century. In a few scattered locales today, one can discern the promise of a decentralized city that fulfills its residents' basic hopes for comfortable homes in sylvan settings with easy access to good schools, good jobs, and recreational facilities of many kinds. More ambitiously, one might hope for a decentralized civilization that finally overcomes the old antithesis of city and countryside, that fulfills in daily life the profound cultural need for an environment that combines the machine and nature in a new unity.

But the dangers of the new city are perhaps more obvious than the promise. The immense speed and scale of development across the nation threaten to annihilate the natural environment of entire regions, leaving the tranquility and natural beauty that Americans seek in the new city perpetually retreating another 10 exits down the interstate. The movement of urban functions to an environment never designed for them has produced the anomaly of urban-style crowding and congestion in a decentralized setting. Through greed and ignorance we could destroy the very things that inspired the new city and build instead a degenerate urban form that is too congested to be efficient, too chaotic to be beautiful, and too dispersed to possess the diversity and vitality of a great city.

The new city is still under construction. Like all new urban types, its early form is necessarily raw and chaotic. The real test of the new city as a carrier of civilization will come when the first flush of hectic building slows down and efforts to redesign and reconstruct begin, as they have in the old downtowns today. But before we can improve the new urban world we are building we need to understand it.

Perhaps the best way to grasp the innovations of the new city is to contrast it with the older metropolis. Lewis Mumford (b. 1895), 20th-century America's greatest urbanist and one of our most clear-sighted prophets of decentralization, expressed this contrast succinctly in his classic work of 1938, *The Culture of Cities*. There he defined "the metropolis of old" as "a single center" that becomes "the focal point of all regional advantages." In the new decentralized city, however, "the whole region becomes open for settlement."

The centralized industrial metropolis that flourished during the 19th and early 20th centuries was the last in a series of urban forms that go back ultimately to Ur and Babylon in the ancient Middle East. At its heart, the traditional city was an attempt to solve the problem of slow and expensive transportation by concentrating people and resources at a single point. Occasionally, this meant locating the city where trade

routes crossed or local markets could be established. More often it favored riverside and seaside locations that lent themselves to the construction of a port.

The coming of the railroads during the 19th century amplified the natural advantages of cities like New York and Chicago and transformed them into national centers. Toward the end of the century, as major trunk rail lines were supplemented by similarly converging networks of streetcar and subway lines, the characteristic pattern of the great metropolis emerged: a city formed by its transportation system into a centralized pattern of a hub and spokes. As Mumford argued, such a pattern necessarily concentrated "regional advantages" at the hub and placed all other locations in the region at a disadvantage. A familiar urban ecology emerged, composed of concentric rings with the central business district at the core, the factory zone, and then the suburban ring.

Moralists regarded these crowded "monster metropolises" with horror, but concentration worked. The clustering of office buildings in a central business district multiplied the opportunities for face-to-face communication and the exchange of vital information, opportunities which gave the big-city businessman a significant advantage over his small-town counterparts. Similarly, the subways and trolleys that delivered people from around the region to a

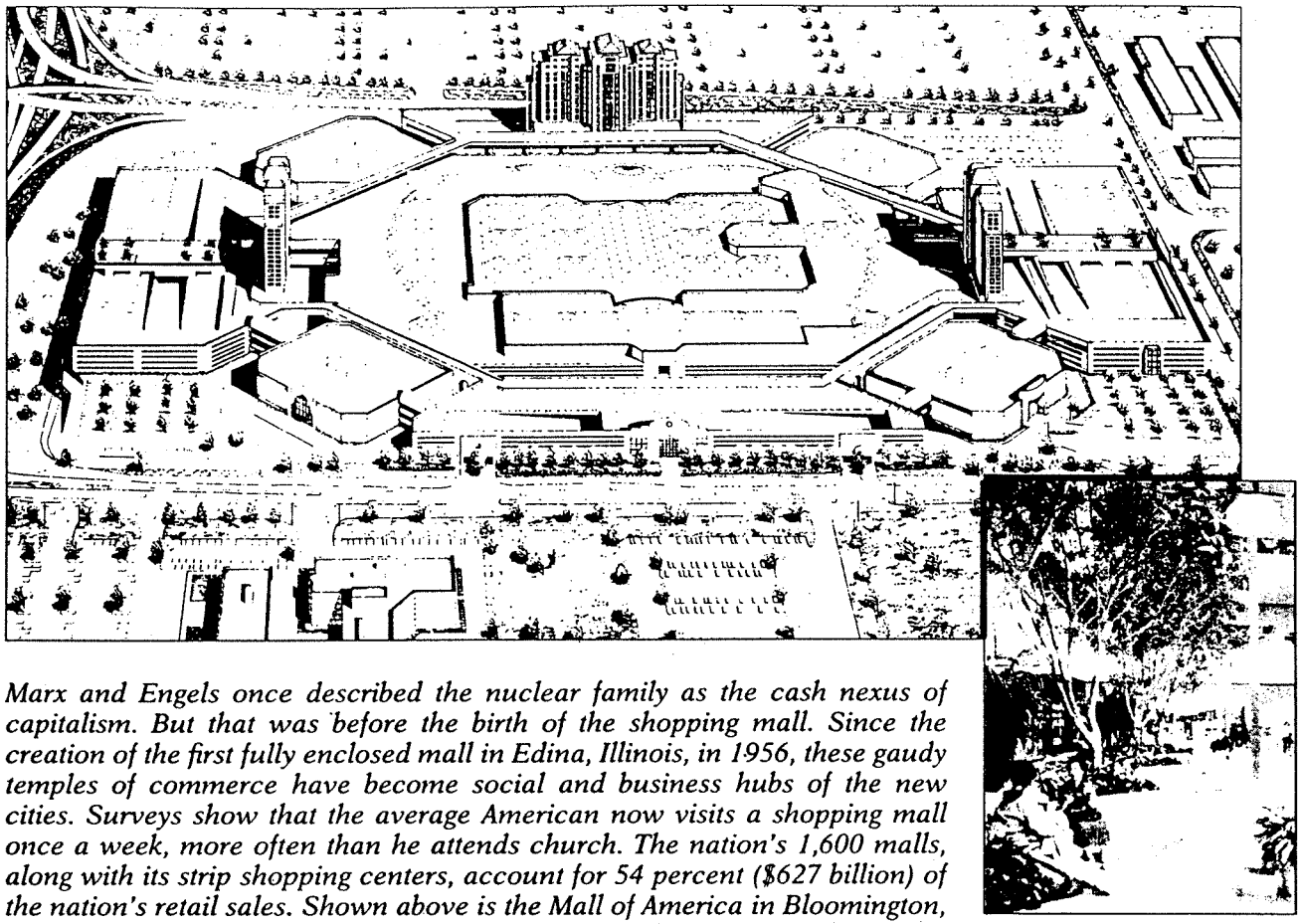
WHY PLANNING MATTERS

The shape of the city not only reflects its citizens' values and preferences, Lewis Mumford wrote in The City in History *(1961), it also helps form them.*

When cities were first founded, an old Egyptian scribe tells us, the mission of the founder was to "put the gods in their shrines." The task of the coming city is not essentially different: its mission is to put the highest concerns of man at the center of all his activities: to unite the scattered fragments of the human personality, turning artificially dismembered men—bureaucrats, specialists, 'experts,' depersonalized agents—into complete human beings, repairing the damage that has been done by vocational separation, by tribalisms and nationalisms, by the absence of organic partnerships and ideal purposes.

Before modern man can gain control over the forces that now threaten his very existence, he must resume possession of himself. This sets the chief mission for the city of the future: that of creating a visible regional and civic structure, designed to make man at home with his deeper self and his larger world, attached to images of human nurture and love.

We must now conceive the city, accordingly, not primarily as a place of business or government, but as an essential organ for expressing and actualizing the new human personality—that of 'One World Man.' The old separation of man and nature, of townsman and countryman, of Greek and barbarian, of citizen and foreigner, can no longer be maintained: for communication, the entire planet is becoming a village; and as a result, the smallest neighborhood or precinct must be planned as a working model of the larger world. Now it is not the will of a single deified ruler, but the individual and corporate will of its citizens, aiming at self-knowledge, self-government, and self-actualization, that must be embodied in the city. Not industry but education will be the center of their activities; and every process and function will be evaluated and approved just to the extent that it furthers human development, whilst the city itself provides a vivid theater for the spontaneous encounters and challenges and embraces of daily life.



Marx and Engels once described the nuclear family as the cash nexus of capitalism. But that was before the birth of the shopping mall. Since the creation of the first fully enclosed mall in Edina, Illinois, in 1956, these gaudy temples of commerce have become social and business hubs of the new cities. Surveys show that the average American now visits a shopping mall once a week, more often than he attends church. The nation's 1,600 malls, along with its strip shopping centers, account for 54 percent ($627 billion) of the nation's retail sales. Shown above is the Mall of America in Bloomington, Minnesota, which will be the nation's largest mall when it opens in 1992. In addition to the usual array of shops and department stores, its 96 acres of floor space will host a variety of amusements, including a seven-acre Camp Snoopy theme park under glass. The contemporary mall may be a demented hybrid of the bazaar, the circus, and the television game show, but it has also become (inset) the center of entertainment and community life in many new cities where no downtown has ever existed. Senior citizens gather in them, families stroll through them, and, under the watchful eyes of security guards, adolescents cavort in them.

single downtown created the dense mass of patrons that made possible such urban institutions as department stores, vaudeville houses, movie palaces and concert halls, museums, sports stadiums, and big-city newspapers.

The complex tangles of branch rail lines that served the factory zone gave enterprises located there a significant advantage over those anywhere else in the region. The factory zone was also the home of a large skilled and unskilled workforce which only those enterprises within the zone could tap. By the 1890s it thus became the natural environment for all manufacturing firms attempting to become national enterprises.

Perhaps the group best served by metropolitan concentration was the middle-class suburban elite, for they enjoyed all the economic benefits of the great city while living in a quiet, leafy-green, smoke-free environment at its edge.

By the 1920s the centralized industrial city had reached its zenith; at the time, only a few lonely prophets noticed that a series of separate and uncoordinated technological innovations were converging to undermine the special advantages of the central city. As Mumford suggested, these innovations all had in common the replacement

of networks of communication that focused advantages on the core with networks that distributed them equally over a region.

The great model of such a network was the road system. Although early highway engineers attempted to design major roads on the hub-and-spokes model of the railroads, automobile owners soon discovered that the radical innovation of the roads was to open up to settlement areas remote from rail lines. In a rail-dominated metropolis, most people in cities or suburbs lived no farther than a 15-minute walk from a train or trolley stop; with an automobile, people found that they could fill in the empty spaces between the spokes of the regional rail system without condemning themselves to a kind of exile.

The effect of trucking on industrial location was nearly as dramatic. First used extensively during the 1920s, trucks made it possible for factory owners to leave the crowded streets of the industrial zone for cheaper land on the periphery without sacrificing timely pickups and deliveries from other firms that remained in the city.

Not surprisingly, it was in Los Angeles that these possibilities were first recognized. As late as 1925 Los Angeles was a relatively centralized city organized around a lively and prosperous downtown served by a highly-efficient system of public transportation. The big red streetcars of the Pacific Electric system traveled over more than 1,000 miles of track connecting the downtown to even the most remote parts of what was then a vast region of farms and citrus groves. But when downtown traffic reached intolerable levels during the mid-1920s the city was presented with two opposing visions of its future: expand public transportation, or, as the Automobile Club of Southern California proposed, create a massive new grid of roads.

In the debate among the city's civic and business leaders, the issue was put with surprising clarity. Improving public transportation would save the downtown, but it would limit residential development to the narrow rail corridors of the Pacific Electric System. Los Angeles would thus come to resemble eastern cities of the time, with most people living in multi-family dwellings close to public transportation. A new road system, by contrast, might doom the downtown but it would put virtually every acre of land in the 900 square miles of the Los Angeles region within a few blocks of a major road. That would open the whole region to low-density settlement.

Since many of the Los Angeles elite were heavily involved in real-estate speculation, it was never much of a contest. Without hesitation, they chose to sacrifice the downtown and persuaded the citizenry to go along. "Business is pointing the way out of the intolerable congestion situation in our downtown areas," the influential Los Angeles City Club declared in a 1926 report. "Branch banks are going out to the people, factories are seeking outside locations . . . and some of our retail merchants are building, or have established branch stores in outlying sections." In a referendum that year, voters overwhelmingly approved a massive bond issue for new road construction and rejected a modest proposal to improve the streetcar system.

By the mid-1930s, both the Los Angeles downtown and the public transportation system that sustained it were already deteriorating, as the city established what was then a unique pattern of settlement. The downtown was supplanted by many smaller automobile-based centers like the "Miracle Mile" along Wilshire Boulevard (built, like most of the city's other major streets, with funds from the 1926 bond issue), while the movie studios, the new aircraft factories, and other industry scattered throughout the region. Los Ange-

DISPATCHES FROM THE NEW CITY

Howard County, Md.—Ah, springtime in exurbia! Newcomers may detect it in that first whiff of honeysuckle or mesquite barbecue smoke, wafting over from the neighbor's yard.

But in western Howard County, where working farms still exist amid the three-acre "farmettes" and upscale subdivisions, there remains an earthier harbinger of the season: the first withering blast from a freshly manured field.

"It's country perfume," cracked Todd Taylor, a local lawyer and county resident.

But the new folks don't always see it that way. Last year, neighbors from the new subdivision down the road panicked when a dairy farmer scooped out his winter accumulation of cow manure—an annual ritual—and spread it on a field.

"They called the police department, the Howard County Health Department, and the EPA," recalled William F. Kirkwood III, president of the Howard County Farm Bureau.

"They wanted to know what was that terrible smell."

—*The Washington Post* (April 5, 1989)

"Are you aware that this is now considered part of the Greater New York Metropolitan area?"

Raritan Township, N.J.—The drastic remaking of this old farm town has changed what it means to be a volunteer.

In 1957, the volunteers built the township's first fire truck, scrounging parts from junk. The chassis came from an old oil tanker, the water pump was donated and the engine was pulled from a wrecked Mercury. Art Lentini, a mechanic, John Carberry, a lawyer, and Bill Worthington, a farmer, organized everybody. Cleaning all the parts, welding them together and then painting the rig took a year.

But now that inspired country camaraderie has vanished along with most of the dairy and egg farmers who gave Raritan Township its identity for decades.

Volunteerism today, such as it is, is represented by a trickle of new residents willing to join town boards. In 1987, 13 people offered to serve out of about 15,000 residents. Most come to government with either a gripe or a wish-list as the rural community is reshaped into a white-collar suburb in the hills 60 miles west of Manhattan . . . .

No newcomers, though, are joining the fire department, once Raritan's social hub, or the rescue squad. Volunteers are their lifeblood, but as in suburbs everywhere, their membership is stagnant.

—*The New York Times* (Jan. 4, 1988)

Gwinnett County, Ga.—Many of the county's schools look like trailer parks, with mobile homes serving as makeshift classrooms alongside school buildings. New children arrive in Gwinnett at the rate of 90 each Monday. The county says it needs to build a new classroom every Monday, Wednesday and Friday just to keep from getting any further behind . . . .

The Five Forks Middle School assigns old-timers as buddies to the newcomers to counsel them to smile a lot and make eye contact. Counselors are ever-watchful. "It is very important that they have a sense of place," says Greg Brigman. "We are trying to make each student's world smaller so the kids have [an] anchor—a group to go around in orbit with."

Meanwhile the school is searching for its own comfortable orbit. Its principal, Michael O'Neal, has posted welcome signs at the perimeter of his school's territory in hopes of drumming up some sense of community identity that might, in turn, promote community support for the school.

—*The Wall Street Journal* (March 26 & 27, 1987)

Los Angeles, Cal.—Already, mountains more than 60 miles from the city's center are being leveled to build thousands of new houses to make greater Los Angeles even bigger. And futurists expect that Los Angeles, the symbol of urban sprawl, will become denser, stacked atop itself.

—*The Wall Street Journal* (June 12, 1989)

les thus established an alternate, decentralized form for the American city based on the automobile and the single-family house.

As Los Angeles demonstrated, transportation was the crucial innovation. But roads and autos could not have achieved their full revolutionary impact without the creation of several other important new networks of decentralization: electricity, telecommunications, mass-market retailing, and new modes of corporate management.

Consider electricity. Until the coming of "giant power" (i.e. regional electricity networks) during the 1920s, utility service rarely extended beyond the metropolis. Thereafter, far-flung homeowners and industry enjoyed the same access to reliable electrical power as those at the core.

The telephone network was the harbinger of the great series of inventions—radio, television, computers, fax machines—that increasingly substituted electronic for face-to-face communication, thus reducing the need for meetings and informal contacts downtown.

The 1920s also saw the fruition of new techniques of mass production, which flooded the nation with consumer goods. This new plenty created the possibility of multiplying the number of retail outlets, thus breaking the monopoly of the great downtown stores. No longer would suburbanites have to go "downtown" to enjoy a wide selection of goods.

Meanwhile, corporate managers had developed techniques (and bureaucracies) that allowed them to supervise a variety of plants at one time, all of them from a great distance. Factories were freed to locate far from the cities, where land and labor were cheaper.

These new networks undermined the functional underpinnings of metropolitan centralization. But the new city might have emerged slowly and partially if it had not found an unexpected ally: the American government.

In Europe, governments fearful of losing precious farm land to the encroaching cities have severely restricted decentralization wherever they could. As early as 1938 the British government prohibited London and the other large British cities from expanding beyond their existing boundaries. A decade later it created permanent "greenbelts" of farm and park land around the cities, including an impressive five-mile wide Metropolitan Greenbelt which still rings London. (Paris, on the other hand, is ringed by a Red Belt, so called because its working-class residents consistently vote Communist. This reflects another unique quality of European development: The affluent middle class generally prefers urban to suburban living.) In the United States, however, Washington, as well as state and local governments, indefatigably promoted expansion. Government "planning" was largely unconscious and unintended, but that did not lessen its effects. Between 1930 and 1960, state intervention in four different arenas profoundly affected the shape of the nation's cities:

- *Housing.* Although the American preference for single-family suburban houses was well-established by the 1920s, it took the New Deal's Federal Housing Administration (1934) to reform the nation's rickety system of mortgage finance and, ultimately, put the American dream house within reach of millions of citizens. As historian Kenneth Jackson has shown, FHA regulations also funneled mortgage money to newly built suburbs, considered good credit risks, while virtually starving the cities of residential construction loans.
- *Defense Industries.* During World War II, the new factories built to manufacture synthetics, alloys, aircraft, and other products under the auspices of the Defense Plants Corporation were rarely located in the central cities. For example, Nassau

County, Long Island, future site of the archetypal postwar suburb of Levittown, became the East Coast's center for aircraft production during the war, as Grumman, Republic, and other manufacturers opened plants there. Unlike the old urban factories, they were built on a single level on great tracts of land, in accordance with new ideas of industrial efficiency. Almost overnight these new factories gave the metropolitan peripheries and decentralized sunbelt cities a substantial industrial base on which they could build during the postwar period.

• *Highway Construction.* From the beginning, highways were regarded as a public responsibility, entitled to subsidies with tax dollars, while the rail system was not. Rail freight (and often mass transit as well) remained under the control of private corporations. After 1920, the owners were increasingly unable or unwilling to improve their services to attract customers. Highway engineers presided over one of the most massive construction efforts in history, culminating after 1958 in the 44,000 miles of the federal interstate highway system built at a cost of $108 billion. While these Main Streets of the emerging new cities flourished, the rail lines that served the downtowns stagnated or declined.

• *Local Government.* After the turn of the century, city after city failed to annex its suburbs because of suburban resistance. As a result, cities lost the tax base of the most prosperous and rapidly expanding areas of the region. And since zoning in the American system is essentially a matter of local control, the power to regulate new development passed to the hundreds of suburban governments, which had little interest in restraining growth to create a balanced metropolitan region. Developers learned they could play one small local planning board off another, escaping all control. As the developer Sam Lefrak observed, "There is no zoning: only deals."

Relieved of the task of delivering the full range of services required by a great city, suburbs could tailor public spending to the specific needs of their constituents. With surprising speed, suburban public school systems developed into formidable enterprises, soon rivaling and then surpassing the once-dominant big-city schools.

Without anybody intending for it to happen, all of these seemingly unrelated forces converged to generate enormous momentum behind the great tide of decentralization that washed over the American metropolis after 1945. The tide has continued relentlessly, through booms and recessions, under Democratic and Republican administrations, until the old industrial city became, if not an extinct species, at least a highly endangered one.

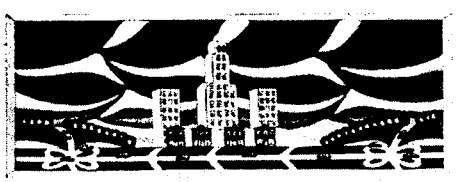
The first significant sign was a drop in population. Between 1950 and 1960, all of the large, established cities lost people. Boston, the worst case, shrank by 13 percent, while its suburbs gained 17 percent. New York and Chicago lost less than two percent each, but their suburbs gained over 70 percent. To these blows were added shrinkage of the industrial base. Between 1947 and 1967, the 16 largest and oldest central cities lost an average of 34,000 manufacturing jobs each, while their suburbs gained an average of 87,000. This trend continued through the 1970s, as the cities suffered the elimination of from 25 percent (Minneapolis) to 40 percent (Philadelphia) of the manufacturing jobs that remained.

Building on their growing base of population and jobs, suburban entrepreneurs during the 1950s and 1960s began transforming the new city into a self-sufficient world. "We don't go downtown anymore," became the new city's motto. Shopping centers displaced downtown department stores; small merchants

and repairmen deserted Main Street for stores "along the highway" or folded up shop under the competitive pressure of the growing national chain stores. Even cardiologists and corporate lawyers moved their offices closer to their customers.

By the 1970s and 1980s, the new city found itself at the top of a whole range of national and even international trends. The movement from snowbelt to sunbelt meant a shift toward urban areas that had been "born decentralized" and organized on new-city principles. The new city, moreover, moved quickly to dominance in the most rapidly expanding sections of the industrial economy—electronics, chemicals, pharmaceuticals, and aircraft—leaving the old city with such sunset industries as textiles, iron and steel, and automobiles.

Finally, during the 1970s, the new city successfully challenged the old downtowns in the last area of their supremacy, office employment. The "office park" became the locale of choice for many businesses, new and old. Jaded New Yorkers looked on in stunned disbelief as one major corporation after another pulled up stakes and departed for former commuter towns like Stamford, Connecticut, or more distant sunbelt locations. By the 1980s, even social scientists could not ignore the fact that the whole terminology of "suburb" and "central city," deriving from the era of the industrial metropolis, had become obsolete. As Mumford had predicted, the single center had lost its dominance.



But are the sprawling regions *cities*? Judged by the standards of the centralized metropolis, the answer is no. As I have suggested, this "city" lacks any definable borders, a center or a periphery, or a clear distinction between residential, industrial, and commercial zones. Instead, shopping malls, research and production facilities, and corporate headquarters all seem scattered amid a chaos of subdivisions, apartment complexes, and condominiums. It is easy to understand why urban planners and social scientists trained in the clear functional logic of the centralized metropolis can see only disorder in these "nonplace urban fields," or why ordinary people use the word "sprawl" to describe their own neighborhoods.

Nevertheless, I believe that the new city has a characteristic structure—one that departs radically not only from the old metropolis but from all cities of the past.

To grasp this structure we must return to the prophetic insights of Frank Lloyd Wright. From the 1920s until his death in 1959, Wright was preoccupied with his plan for an ideal decentralized American city which he called Broadacres. Although many elements of the plan were openly utopian—he wished, for example, to ensure that every American would have access to at least an acre of land so that all could reap the economic and psychological benefits that he associated with part-time farming—Wright also had a remarkable insight into the highway-based world that was developing around him. Above all he understood the consequences of a city based on a grid of highways rather than the hub-and-spokes of the older city. Instead of a single privileged center, there would be a multitude of crossings, no one of which could assume priority. And the grid would be boundless by its very nature, capable of unlimited extension in all directions.

Such a grid, as it indeed developed, did not allow for the emergence of an "imperial" metropolis to monopolize the life of a region. For Wright, this meant that the fam-

ily home would be freed from its fealty to the city and allowed to emerge as the real center of American life. As he put it, "The true center, (the only centralization allowable) in Usonian democracy, is the individual Usonian house." (Usonia was Wright's name for the United States).

In the plans for Broadacres—a city he said would be "everywhere or nowhere"—Wright foresaw what I believe to be the essential element in the structure of the new city: a megalopolis based on *time* rather than space.

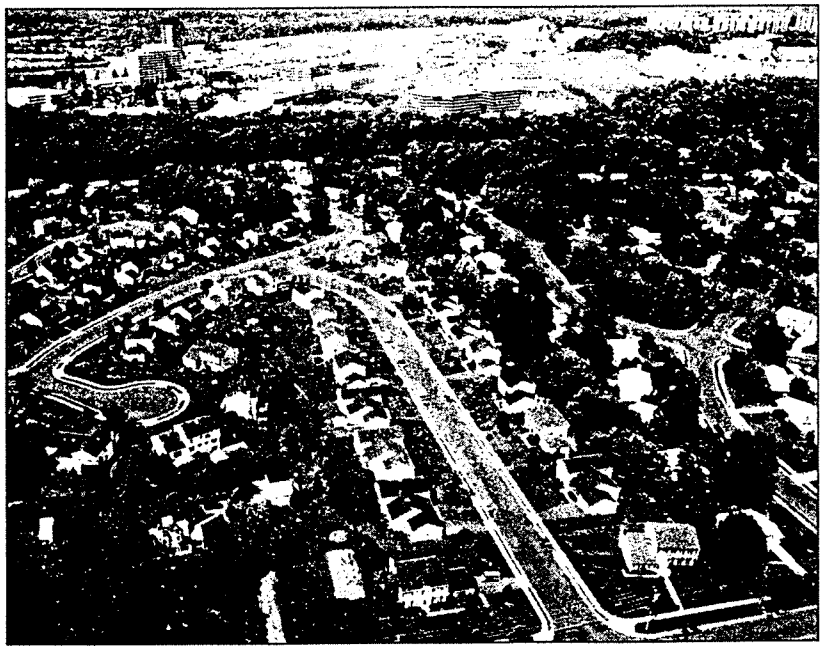
Even the largest of the old "big cities" had a firm identity in space. The big city had a center as its basic point of orientation—the Loop, Times Square—and also a boundary. Starting from the center, sooner or later one reached the edge of the city.

In the new city, however, there is no single center. Instead, as Wright suggested, each family home has become the central point for its members. Families create their own "cities" out of the destinations they can reach (usually travelling by car) in a reasonable length of time. Indeed, distance in the new cities is generally measured in terms of time rather than blocks or miles. The supermarket is 10 minutes away. The nearest shopping mall is 30 minutes in another direction, and one's job 40 minutes away by yet another route. *The pattern formed by these destinations represents "the city" for that particular family or individual.* The more varied one's destinations, the richer and more diverse is one's personal "city." The new city is a city *à la carte.*

It can be seen as composed of three overlapping networks, representing the three basic categories of destinations that define each person's city. These are the household network; the network of consumption; and the network of production.

The household network is composed of places that are part of family and personal life. For a typical household of two parents and two children, this network is necessarily oriented around childrearing—and it keeps parents scurrying frantically in station wagons and minivans from one place to another. Its set of destinations include the homes of the children's playmates (which may be down the street or scattered around a county), the daycare center, the schools, a church or synagogue, community centers, and the homes of the parents' friends. Although this network is generally more localized than the other two, it is almost always wider than the traditional urban neighborhood.

The two-parent family with children is the arche-



"Don't Fairfax Loudon!" says a bumper-sticker in suburban Loudon County, Virginia. Fairfax County is the home of Tysons Corner (above), a prime example of the new city gone awry.

typical new-city household, but, especially since 1970, the new city has made a place for others. For single or divorced people, single parents, young childless couples or older "empty nest" couples, widows and widowers, the new city offers a measure of familiarity and security that many find lacking in the central city. Its housing is increasingly diverse. No longer confined to single-family homes, it now includes apartment towers, town homes and condominiums, and various kinds of retirement housing, from golf-oriented communities to nursing homes. There are more places to socialize. The same mall that caters essentially to families on weekends and evenings may also serve as an informal community center for older people in the morning, while its bars and restaurants play host to a lively singles scene after the stores close.

The network of consumption—Mallopolis, in economist James Millar's phrase—comprises essentially the shopping centers and malls which, as Wright predicted, have located themselves at the strategic crossroads of the highway system. It also includes movie theaters, restaurants, health clubs, playing fields and other recreational facilities, and perhaps a second home 30 to 100 miles away.

Although this network serves much the same function as the old downtown, it is scattered, and each consumer is free to work out his particular set of preferences from the vast menu of offerings presented by Mallopolis.

Finally, there is the network of production. It includes the place of employment of one or both spouses. It also includes the suppliers—from computer-chip manufacturers to janitorial services—which these enterprises rely upon. Information comes instantaneously from around the world while raw materials, spare parts, and other necessities are trucked in from the firms that cluster along nearby highways.

This network minimizes the traditional distinction between the white-collar world of administration and the blue-collar world of production. Both functions co-exist in virtually every "executive office park." Its most successful enterprises are those where research and development and specialized techniques of production are intimately intertwined: pharmaceuticals, for example, or electronics. Conversely, its most routinized labor can be found in the so-called "back-offices," data-processing centers that perform tasks once done at a downtown corporate headquarters.

Each of these networks has its own spatial logic. For example, primary schools are distributed around the region in response to the school-age population; shopping malls reflect population density, wealth, and the road system; large firms locate where their workers and their suppliers can easily reach them. But because the networks overlap, the pattern on the ground is one of juxtaposition and interpenetration. Instead of the logical division of functions of the old metropolis, one finds a post-modern, post-urban collage.

In some places, a particularly active locale like Tysons Corner, in Fairfax County, Virginia, may draw together elements from different networks—shopping malls and offices—to form an approximation of an old downtown. But the logic of the new city generally confounds that kind of concentration. Such areas immediately become points of especially bad traffic congestion, denying the ready access that is a hallmark of the new city. (It may be poetic justice that the leaders of the American Automobile Association, patron saint of the suburban motorist, have become so frustrated by the bumper-to-bumper traffic in the area around Tysons Corner that they have decided to move AAA headquarters to the relatively open roads of Orlando, Florida.) Tysons Corner is an exception. In general,

FURTHER DISPATCHES FROM THE NEW CITY

Detroit, Mich.—The distinction between "city" and "suburb" makes no sense here. Actually, Detroit is more like Los Angeles than New York: It's a city stuck in a Cuisinart, then poured out, into a big shallow pan. You'll find people living, working, shopping all over the place. The Old City just doesn't have the concentration of functions that make it the undisputed centerpiece.

Indeed, like Los Angeles but for different reasons, Detroit has evolved several separate "centers." Not downtowns exactly, but these concentrations of jobs and people now rival the old riverside "downtown." While [Mayor Coleman] Young's people scramble for political construction handouts, or pay off developers in concessions to build on their turf, Southfield and Troy-Birmingham enjoy a boom of privately financed building.

—*The Detroit News* (August 5, 1987)

Some companies [in suburban office parks] have tried to compensate for the isolation by using consultants more .... One executive summed it up in a word. What, I asked him, gesturing to the empty visitor's parking lot, did they do about visitors? "We hire them," he said.

—*City: Rediscovering the Center* (1989) by William H. Whyte

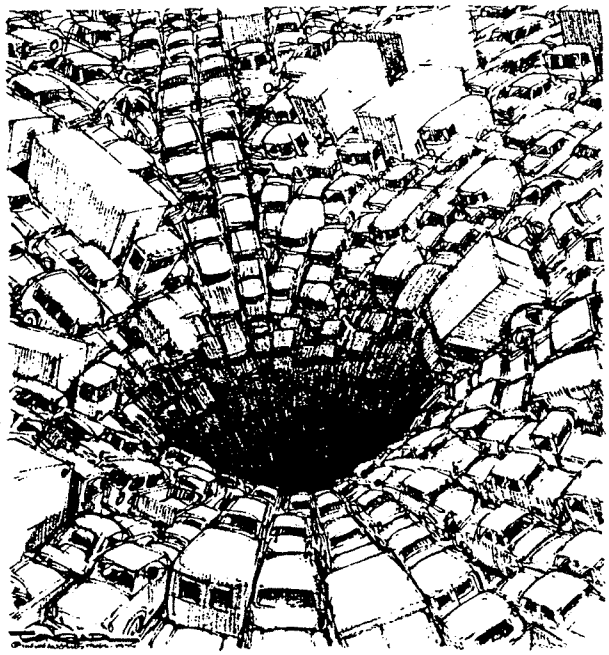
Schaumburg, Ill.—It's a cliche heard time and again in the suburban zoning... battles and cries for the preservation of open space: "We don't want to be another Schaumburg!"

[I]t's jealousy, pure jealousy, responds Thomas C. Koenig, director of planning for the Village of Schaumburg. "Most communities wish they had our problems."

By "problems" he means 45,000 local jobs, a population that has grown to 64,000 from 130 in 32 years, no municipal property tax levies, a top-notch police department, its own cultural center and many more amenities.

—*The Chicago Tribune* (July 26, 1988)

Pick your metropolitan area, from Boston to Hartford to New York to Washington, and now across the South and Midwest and in California, and you run into some severe labor shortages. The same alarming mismatch appears: Low-skill, entry-level jobs go begging in the suburbs, while in center cities jobless rates remain alarmingly high—up to 30 percent or worse for black teenagers....



CALIFORNIA SYNDROME

Some employers' solution is to carry inner-city workers out to suburban work sites—by public or private transportation—as work locations crop up farther from mass-transit lines. McDonald's, in suburban Westchester County, New York and Connecticut, buses in workers from the Bronx. Vans go out 26 miles to Dulles Airport from depressed Washington neighborhoods....

The special vans—derisively labeled "slave vans"—can serve some workers, some places. But they mask gut problems.... How many people will be anxious to forsake welfare for $4- or $5-an-hour jobs with long commutes and high bus fares?

— *The Los Angeles Times* (Aug. 14, 1988)

Miami, Fl.—Miami's miserable experience with Metrorail—also called "Metrofail" and "the train to nowhere"—could spell the end of any major new fixed-rail transit systems. Daily ridership at last count was about 36,000, less than 20 percent of the projected 202,000. Not only does Miami's system spring from the old hub-and-spokes mentality but it calls on many riders to use two or three modes of transit to reach their destination.... Says University of Miami Prof. Ira Sheskin: "I figured out pretty quickly I could drive my car in half the time and I could park at a meter for 5 hours for about $2."

—*U.S. News & World Report* (Sept. 7, 1987)

the new city allows and requires each citizen to make connections among the three networks—to make a city—on his own. The new city has no center or boundary because it does not need them.

Women have been a not-so-hidden force behind the new city's economic success. Since 1957, the proportion of married women aged 27 to 54 with jobs has grown from 33 percent to 68 percent. More than half of all women with children aged three years or younger are now employed outside the home. Much of the economic life of the new city, especially with its concentration on retail trade and back-office data processing, would be impossible without these new workers. Indeed, the presence of employment opportunities so close to home—convenient, with decent pay and flexible schedules—is surely responsible for part of the remarkable influx of married women into the work force (although the plentiful supply of workers could just as easily be said to have attracted employers). The outcome is more than a little ironic, considering the fact that the bedroom suburb had originally been designed to separate women from the corruptions of the world of work.

The new city thus decisively breaks with the older suburban pattern that restricted married middle-class women with children to a life of neighborhood-oriented domesticity. Women still work closer to home than men do, and they still bear most of the responsibility for childcare and housekeeping, but, in contrast to the old metropolis, the economic and spatial structure of the new city tends to equalize gender roles.

Indeed, one can argue that the new city has largely been built on the earnings of two-income families and thus reflects their needs more closely than did either the urban core or the traditional bedroom suburb. One large housing developer, Scarborough Corporation of Marlton, New Jersey, found that 72 percent of its customers during the mid-1980s were two-income couples, compared to less than 30 percent a decade earlier. Accordingly, the firm redesigned some of its houses, substituting a "study-office" for the "sewing room," scaling down the formal living room and enlarging the family room, providing more pantry space to cut down on trips to the supermarket, and selecting building materials to minimize maintenance.

In other ways, both trivial and important, the new city has responded to the changing character of families with more flexibility than critics of "the suburbs" are willing to admit. Encouraged by women's groups and planning boards, some developers have set aside space for day-care centers in new office complexes. There are extended school days for "latch-key" children and, during the summer, recreation programs. And only in the new city can one find the extensive array of Pizza Huts, Sizzler's, Denny's, and other inexpensive "family-style" restaurants which, though they may not delight Julia Child, are many a parent's salvation at the end of a hard day at the office.

When Frank Lloyd Wright envisioned Broadacre City, he failed to consider the role of the old centralized industrial cities in the new world of the future. He simply assumed that the old cities would disappear once the conditions that had created them were gone. The reality has not been so simple. Just as the industrial metropolis grew up around the older mercantile city, so the new city of our time has surrounded the

old metropolis. What was once the sole center is now one point of concentration among many.

In general, the skyscraper cores of the central cities have adapted to this change and prospered. Even a decentralized region needs a "headquarters," a place of high status and high rents where the movers-and-shakers can rub shoulders and meet for power lunches. By contrast, the old factory zones have not found a function in the new environment. As a result, the central city has reverted to what it was before industrialization: a site for high-level administration and luxury consumption, where some of the wealthiest members of society live in close proximity to many of the poorest.

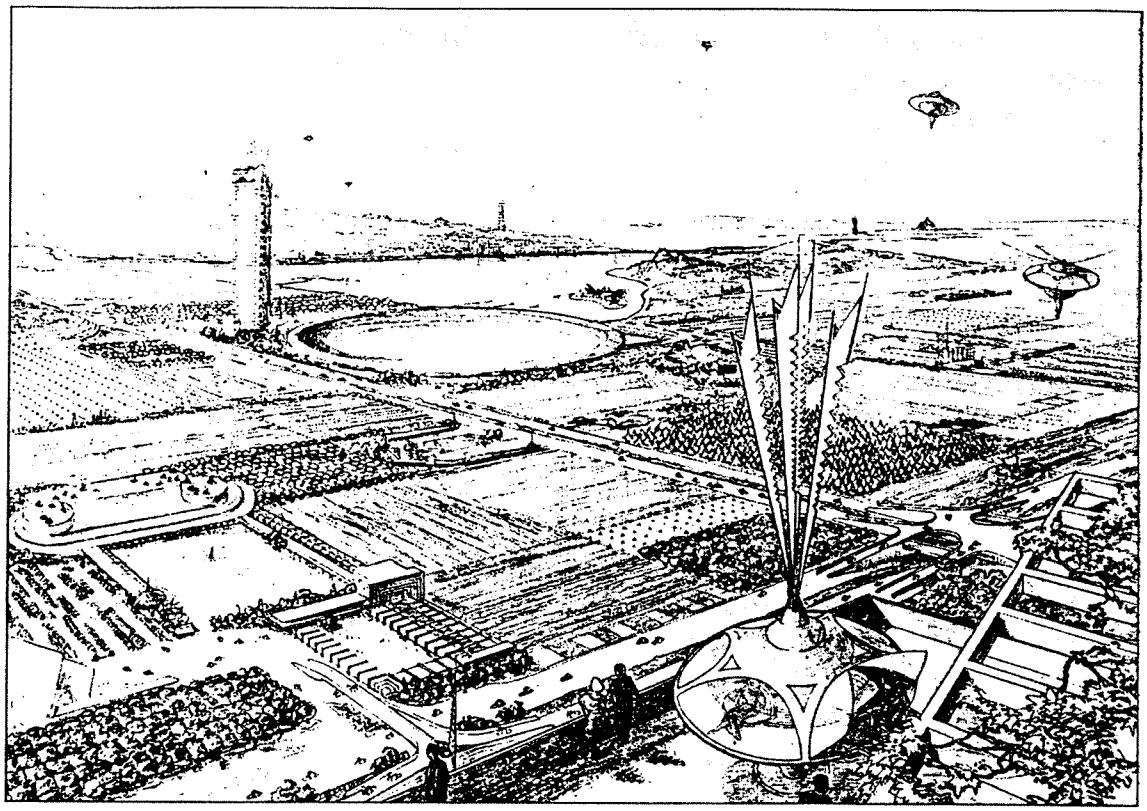
The recent boom in downtown office construction should not conceal the fact that downtown prosperity rests on a much narrower base than it did in its heyday during the 1920s. Most of the retail trade has fled to the malls; the grand old movie palaces and many of the nightspots are gone. Only the expansion of corporate headquarters, law firms, banks and investment houses, advertising agencies, and other corporate and governmental services has kept the downtown towers filled, and even in these fields there have been major leakages of back-office employment to the new city. Nevertheless, this employment base has enabled most core areas to retain an array of specialized shops, restaurants, and cultural activities unequalled in their region. This in turn encourages both the gentrification of surrounding residential neighborhoods and the "renaissance" of the core as a tourist and convention center.

Yet only blocks away from a thriving core like Baltimore's Inner Harbor one can usually find extensive poverty, decay, de-industrialization, and abandonment that stretches out to encompass the old factory zone. The factory zones have found no new role. Their working-class populations have largely followed the factories to the new city, leaving a supply of cheap, old housing which has attracted poor black, Hispanic, and other minority migrants with no other place to go. If the industrial city in its prime brought people together with jobs, cheap housing in the inner city now lures the jobless to those areas where employment prospects are dimmest. The old factory zone is thus doubly disadvantaged: The jobless have moved in, the jobs out.

Public transportation retains its traditional focus on the core, but the inner-city population generally lacks the education to compete for the high-level jobs that are available there. By contrast, the new city usually has an abundance of entry-level jobs, many of them already going begging as the supply of women and students seeking jobs diminishes. Unfortunately, residents of the new city have generally resisted attempts to build low-income housing in middle-class areas and have discouraged public transportation links. They want to keep the new city's expanding tax base for themselves and to avoid any direct fiscal responsibility for the urban poor. The new city has thus walled itself off from the problems of the inner city in a way that the Social Darwinists of the 19th century could only envy.

If the majority of Americans have voted with their feet (or rather, with their cars) for the new city, we need not conclude that this new environment has been successful, whether judged by the standards of previous cities or even on its own terms.

Comparing the new city with the old metropolis, we can see that the new city has yet to evolve anything comparable to the balance of community and diversity that the metropolis achieved. The urban neighborhood at its best gave a sense of rooted identity that the dispersed "household network" of the new city lacks. The



A sketch from Frank Lloyd Wright's plan for Broadacre City. A roadside market and cultural center are in the foreground, with the county seat in the tower beyond. Wright's skills as a writer were inversely related to his genius as an architect and planner, as this excerpt from The Living City *(1958) suggests: "Imagine man-units so arranged and integrated that every citizen may choose any form of production, distribution, self-improvement, enjoyment, within the radius of, say, 10 to 40 minutes of his own home—all now available to him by means of private car or plane, helicopter or some other form of fast public conveyance . . . .*

"When every man, woman, and child may be born to put his feet on his own acres and every unborn child finds his acre waiting for him when he is born—then democracy will have been realized. By way of education made organic, life organic and organic architecture become the greatest servants of modern man. Great architects will surely then develop creative buildings not only in harmony with greenery and ground but in intimate patterns of the personal lives of individual owners."

downtowns provided a counterpoint of diversity, a neon-lit world where high and low culture met, all just a streetcar ride away. By comparison, even the most elaborate mall pales.

Of course, many residents of the new city were attracted there precisely because they were uncomfortable with both the community and diversity of the old. They wanted to escape from the neighborhood to a "community of limited liability," and they found the cultural and social mix of downtown more threatening than exciting. The new city represents the sum of these choices, but we should beware of accepting the architecture critic Ada Louise Huxtable's snooty judgment of the new city as "slurb" embodying "cliché conformity as far as the eye can see." The new city is rapidly becoming more diverse than the stereotypical suburb of old.

Beyond the inevitable distinctions be-

tween more and less affluent residential districts, the new city has begun to generate "communities of shared concerns" formed around areas of special historic, architectural, or environmental value. A neglected town bypassed by the malls and highways attracts homebuyers who want to restore the old houses and merchants who seek to revive its Main Street. An isolated area near a state park attracts those who are willing to sacrifice convenience for access to an unspoiled landscape.

Inevitably, the central city will continue to shelter the dominant institutions of high culture—museums, concert halls, and theaters—but in our electronic age these institutions no longer monopolize that culture. As the French novelist and cultural critic André Malraux wrote in his *Voices of Silence* (1950), there exists a "museum without walls"—a world of high-quality prints, photographs, art books, and other images which are available outside the museums or the galleries. In the age of the compact disc and the VCR, we have concert halls, opera houses, theaters, and movie palaces without walls. The new city is still a cultural satellite of the old, but the electronic decentralization of high culture and the growing vitality of the new city could soon give it an independent cultural base to rival past civilizations.

The most fervent self-criticism coming from the new city has not, however, focused on the lack of art galleries or symphony orchestras. It comes from those who fear that the very success of the new city is destroying the freedom of movement and access to nature that were its original attraction. As new malls and subdivisions eat up acre after acre of land, and as highways clog with traffic, the danger arises that the three networks of communication that comprise the city may break down. Too often the new city seems to be an environment as out of control as the old metropolis. The machine of growth is yet again gaining the upper hand over any human purpose. The early residents of the new city worried little about regulating growth because there was still a seemingly endless supply of open land. Now that it is disappearing, the residents of the new city must finally face the consequences of get-and-grab development.

Once again we must turn for wisdom to the great prophets of decentralization, especially Frank Lloyd Wright. Wright believed that the guiding principle of the new city must be the harmonization of development with a respect for the land in the interest of creating a beautiful and civilized landscape. "Architecture and acreage will be seen together as landscape—as was the best antique architecture—and will become more essential to each other," he wrote. As his Broadacre City plans and drawings show, he largely ruled out large buildings or even high-rise structures. His plans show the same juxtapositions of housing, shopping, and industry that exist in the new city today. But they depict a world in which these are integrated into open space through the preservation of farmland, the creation of parks, and the extensive use of landscaping around buildings.

For Wright, an "organic" landscape meant more than creating beautiful vistas. It was the social effort to integrate the potentially disruptive effects of the machine in the service of a higher purpose. Wright, however, gave little practical thought to how this might be achieved. In one of his books he vaguely suggested that each county in Broadacres would have a "County Architect" with dictatorial powers to regulate the environment.

Lacking such a figure in reality, the new city must now undertake the difficult task of moving democratically from its virtually

unplanned pell-mell growth to planning with a concern for balanced growth. In New Jersey, a public opinion poll taken in connection with the proposed "State Development and Redevelopment Plan" shows that, by a margin of five to one, the residents of the highly-developed Garden State prefer less growth even at the cost of less economic development. Half agreed that controls on development should be "extremely strict," and 25 percent more said regulation should be "very strict."

The ever-present threat of a veto by the state legislature as the plan develops into final form (scheduled for late 1990) shows that these sentiments are still far from determining policy. The New Jersey Plan, however, includes certain proposals that will have to figure into any effective land-use control program in the new city. Limited areas of the state are designated as growth corridors, while development is discouraged in still-rural areas. Scenic or historic sites that give identity to a region are strictly earmarked for preservation. Wherever possible, building is to be channeled back into Newark, Paterson, and other depressed cities. In a creative adaptation of the urban concept of saving historic buildings by selling the air rights to build above them, New Jersey's farmers are allowed to sell the "development rights" to their farms to entrepreneurs who can apply them as credits toward denser development in other areas where new construction is permitted. The farmers are thus allowed to tap the equity in their land without abandoning it to the bulldozer.

Preserving and enhancing the common landscape might become the issue on which the people of the new cities finally come together as communities. Not even Wright's County Architect could accomplish such a task unaided. It will be a slow effort of drafting regulations and making them stick; of patient upgrading of older construction to newer standards, and drawing together the privatized beauties of individual sites into a unified framework. Fifty years ago Lewis Mumford defined his ideal decentralized community as the "biotechnic city," the place where nature and the machine exist in harmony. He saw the coming age of decentralization as a great opportunity to embody the civilizing virtues of the great cities of the past in a new and democratic form. The last half century has not been kind to utopian expectations, but the promise of a new civilization in a new city need not be lost.

AMERICA'S NEW CITY

America's big cities, Lewis Mumford declared in 1938, represent "a general miscarriage and defeat of civilized effort."

In **The Culture of Cities** (Greenwood, rev. ed. 1981), the polymath social philosopher and prophet of decentralization inaugurated a debate over the nature of cities that has continued to the present day. Mumford was no partisan of the suburb—like virtually all intellectuals, he was appalled by it. His ideal was the medieval city, which he argued had been unjustly maligned.

Our images of plague-ridden city dwellers clad in filthy rags come from a later era, Mumford argued. He insisted that life in the medieval city was generally healthy and fulfilling, rich in architectural beauty and civic life. Most important to him was the openness to nature that the cities' "clustered" housing made possible. "Gardens and orchards, sometimes fields and pastures, existed within the city," he wrote, as if scenting the moist earth from the far remove of his own New York apartment.

But Mumford held that the medieval city was perverted during the 15th century by the centralization of political power and the invention of the cannon. The need for massive fortifications made it too costly to found new cities, forcing the residents of old ones to live in ever more crowded and unpleasant circumstances. The forces of politics and "technics" were thus unleashed, a dynamic which Mumford traced in *Culture* and in his later, more comprehensive work, **The City in History** (Harcourt, 1961). City and suburb, he argued, would culminate in what he referred to as Megalopolis, Tyrannopolis, and Nekropolis.

Like others before him, notably the English city planner Ebenezer Howard, Mumford advocated a radical reorganization of the landscape—the creation of innumerable small "garden cities" of 30,000 souls or so, modeled on the medieval city. No mere dreamer, he managed, along with like-minded planners in the Regional Planning Association of America, to secure private financing during the 1920s to build just such a city in Radburn, New Jersey. As Daniel Schaffer notes with regret in **Garden Cities for America: The Radburn Experience** (Temple Univ., 1982), the Great Depression struck before Radburn could be completed. Today, that fragment of Mumford's vision is a unique island "surrounded by the endless expanse of northern New Jersey's suburbs."

During the Depression, many veterans of the Radburn effort wound up in the New Deal's Resettlement Administration. There, as Paul Conklin writes in **Tomorrow A New World: The New Deal Community Program** (Da Capo, rev. ed. 1976), they planned to build 50 "greenbelt" towns at various sites around the country. But the plan foundered on Congressional opposition to the "socialistic" scheme. Only three new towns were built: Greenbelt, Md.; Greenhills, Ohio; and Greendale, Wis. Like Radburn, they have since been swallowed up by encroaching suburbs. Yet Mumford's ideas were later put into practice in places like Irvine, California, and are routinely incorporated in many less ambitious housing projects being built today throughout the country.

Mumford's influence was felt in less benign ways as well, according to Jane Jacobs. In **The Death and Life of Great American Cities** (Random, 1961), she rather unfairly lumped Mumford together with the Swiss-born architect Le Corbusier and other modernist urban planners, and blamed them for inspiring the disastrous urban renewal efforts of the late 1940s and '50s. The Decentrists, as she called them, were anti-city. (The garden cities they advocated, Jacobs sneered, were "really very nice towns if you were docile and had no plans of your own.") Yet, Jacobs lamented, their ideas became orthodoxy, not only among planners and architects but also in Congress, state legislatures, city halls, and in the banks and government agencies that provide most of the nation's mortgage dollars.

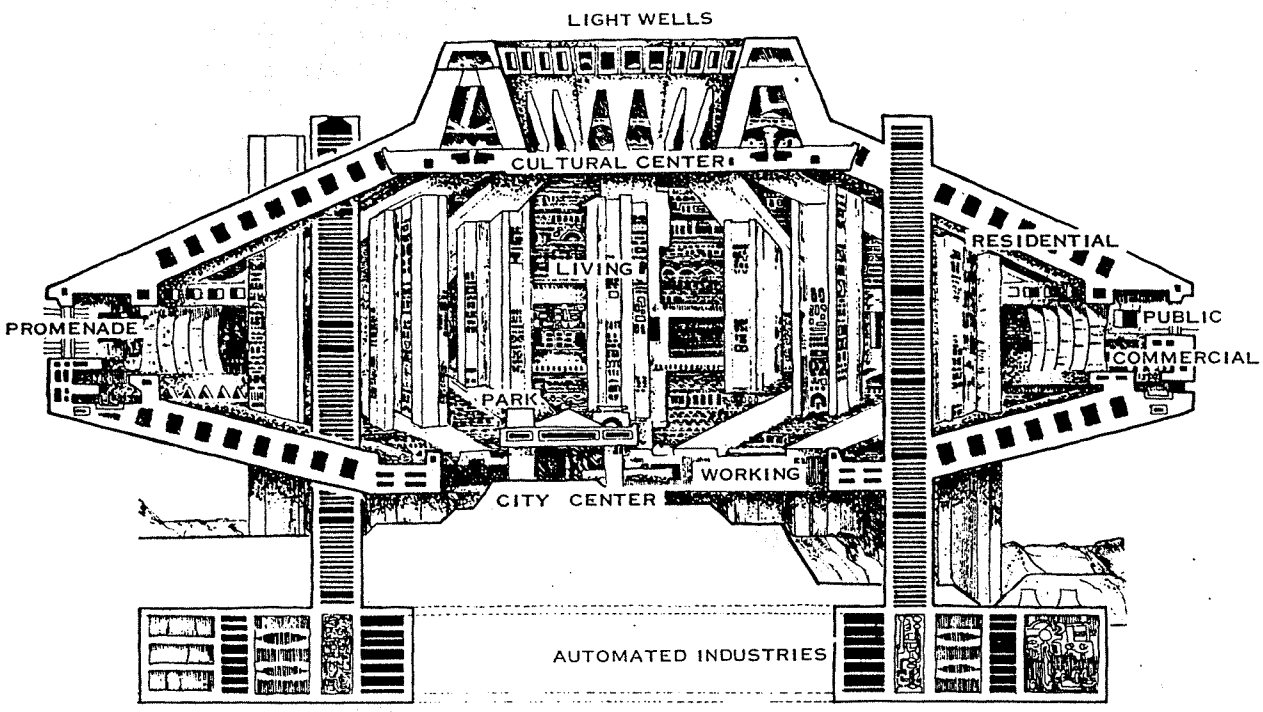
Adapted to the realities of the nation's existing cities, Jacobs argued, the Decentrists's anti-urban principles led to the replacement of poor but lively urban neighborhoods with monolithic apartment tower projects designed to keep the home separate from the hectic city streets. Jacobs, a passionate advocate of city

life, said that was all wrong. She proceeded to dissect in fascinating detail the characteristics of successful urban neighborhoods. She favored more of everything that she accused the Decentrists of disliking: more density, more activity, more intensity.

Only in America (and possibly Britain) would she get much argument. As Kenneth T. Jackson of Columbia University notes in **Crabgrass Frontier: The Suburbanization of America** (Oxford Univ., 1985), Europeans (and others) are astonished by the American preference for suburban life. In some European cities, suburbs simply do not exist, thanks in part to forceful government planning. "The outer boundaries of Copenhagen, Moscow, Cologne, and Vienna abruptly terminate with apartment buildings, and a 20-minute train ride will take one well into the countryside," says Jackson. In the sprawling "megacities" of Latin America and Africa, the outlying areas frequently lack running water, sewers, and police and fire protection.

As Jackson observes, there was nothing inevitable about the American pattern of suburban development. Over the years, suburban growth has been built around several different forms of transportation, beginning with the ferry and horse-drawn omnibus, each with its own characteristic pattern of residential settlement. The railroad created exclusive suburbs (along Philadelphia's Main Line, for example), the trolley fostered leafy middle-class suburbs, and the streetcar mostly served working-class neighborhoods close to the city center.

The trolley system in particular was vast and inexpensive, recalls Harvard historian of landscape architecture John Stilgoe in his wistful, evocative **Metropolitan Corridor** (Yale Univ., 1983). In 1904, newlyweds Clinton and Louisa Lucas, seized with "trolley mania," managed to make their 500-mile honeymoon trip from Del-



A city of the future by Paolo Soleri (1969).

aware to Maine almost exclusively by trolley, with a bagful of nickels and only a few brief interludes of railroad travel. Sam Bass Warner's **Streetcar Suburbs: The Process of Growth in Boston** (Harvard Univ., 1969) remains the classic work on the effects of that form of transportation.

By the 1920s, however, the romance was over. "Most people," Jackson writes, "agreed with New York Mayor Fiorello LaGuardia that the automobile represented the best of modern civilization while the trolley was simply an old-fashioned obstacle to progress." Who could have guessed that Americans would so quickly

use their new Fords and Chevies to follow "progress" to the suburbs?

Why this American romance with the suburb? The usual answer is our legacy of Jeffersonian anti-urban sentiment. But in **Bourgeois Utopias: The Rise and Fall of Suburbia** (Basic, 1987), Robert Fishman traces its origins to British ideas about home and family. He says that the three Americans most responsible for popularizing the suburban ideal during the mid-19th century—writer Catherine Beecher and architects Andrew Jackson Downing and Calvert Vaux—were deeply influenced by such English Evangelicals as William Wilberforce (1759–1833). The Evangelicals, writes Fishman, laid the foundation of Victorianism and, not coincidentally, also founded the prototypical suburb in Clapham, south of London. The suburb was meant to remove the nuclear family from urban vices—crime, taverns, dance halls, the petty corruptions of the workaday world—and to provide a haven where women, the "faithful repositories of the religious principle," as Wilberforce wrote, could tend to the moral and spiritual well-being of their children and husbands. Clapham and other towns like it became the model for the first American suburbs, such as New Jersey's Llewellyn Park (1857).

But for nearly a century, the suburb was as distant from the average American's experience as Palm Springs or Martha's Vineyard are today. The great geographical contest for people and preeminence was between city and country, a clash played out through populism at the ballot box and in the cultural politics of books such as Sherwood Anderson's portrait of small town grotesques, **Winesburg, Ohio** (1919). Not until 1920 did the U.S. Census Bureau certify the city's victory in the battle for bodies, if not souls.

It was not long before the suburb replaced the countryside as the city's prime competitor. No sooner had the first moving vans from the Bronx arrived in Levittown, it seemed, than urban intellectuals began publishing furious indictments of the alleged sterility of life in the subdivisions. Among them were David Riesman's **The Lonely Crowd: A Study of the Changing American** (1950) and William H. Whyte's **The Organization Man** (1956). Exceeding all others in vitriol, Betty Friedan's **The Feminine Mystique** (1963), assailed the "domestic ideology" propagated by Wilberforce and his intellectual successors.

Still the exodus to suburbia continued. As Carl Abbot of Old Dominion University observes in his survey of **The New Urban America: Metropolitan Growth and Politics in Sunbelt Cities** (Univ. of N.C., rev. ed. 1987), the big city's demographic reign over American life lasted a brief half century. In 1970, the U.S. Census Bureau announced that suburbanites accounted for 37 percent of the U.S. population, city dwellers only 31 percent.

Beginning with Kevin Phillips's premature celebration of **The Emerging Republican Majority** (Anchor, 1970), political analysts have generally pronounced the population shift to the suburbs and the decentralized cities of the Sunbelt a conservative trend, though few have shared Phillips's satisfaction with it. Dissent of another kind was heard from neoconservative writer and editor Irving Kristol, who argued in **On the Democratic Idea in America** (Harper, 1972) that television and mass higher education were transforming all of America into an "urban civilization." The nation could do without the philistinism of provincial America, he said, but he worried about how it would fare without the ballast of the heartland's agrarian notions of piety and virtue.

Another line of argument concerns the fate of the poor in America's new geographic dispensation. Thus William Julius Wilson, a University of Chicago sociologist, argues in **The Truly Disadvantaged** (Univ. of Chicago, 1987) that the shift of people and jobs to the new cities is partly responsible for the growing isolation of inner-city ghettos and the creation of an urban underclass.

All of these books, from Mumford's to Wilson's, remind the reader that where and how Americans choose to live are not just matters of economics or convenience. Each step—from countryside, to city, to suburb, to "new city"—has involved an argument over what values we as a nation hold dear, a redefinition of what we call "the American way of life."

EDITOR'S NOTE: Many of the titles in this essay were suggested by Robert Fishman.

Anthony Downs

Salem -- 3/26/1991

GROWTH MANAGEMENT AND THE DOMINANT VISION OF METRO AREA GROWTH

Salem, Oregon -- Governors' Conference on Growth Management

I. It is a challenge to address this complex subject in just 45 minutes.

II. For the past few decades, one major vision about the future of our metropolitan areas has become totally dominant in the public mind and in public policies. This vision is held by the vast majority of American households, and by almost all suburban local government politicians and other officials. It has four parts.

A. The first part is nearly universal ownership of detached, single-family housing by all households as part of "the American dream." Over 90% of all households aspire to this outcome. This means relatively low density housing.

B. The second part involves ownership and use of a personal private automobile by nearly every adult. Every American wants to be able to leap into a private car and drive without congestion to any destination in under 30 minutes.

C. The third part involves workplaces. They are visualized as attractive low-rise office or industrial buildings, located in well-landscaped park settings, with free parking immediately adjacent to every structure.

D. A fourth part of this vision concerns governance. Americans want to live in small communities with strong local self-government controlling local land use, public schools, and other key elements affecting neighborhood life.

E. All these elements seem fully acceptable to most Americans. Together, they comprise "the American dream" of suburban living in our society. In fact, U.S. suburban growth in the past 40 years has mostly achieved this vision.

III. But that success increasingly reveals that the vision has five major flaws.

A. First, it generates low-density settlement that consumes an immense amount of vacant land, and also requires massive movements in private cars. Hence achieving the vision generates a lot of air pollution, energy consumption, and -- most frustrating -- traffic congestion. It also absorbs open space.

1. Traffic congestion is not caused mainly by growth itself, but by changes in the behavior of people who are already present. They are driving more cars farther than in the past. That is shown by the huge increases in total vehicle population in the U.S. compared to the increases in human population: about 5.0 million to 2.3 million per year since 1983.

2. However, the persons who hold this vision do not realize that it is their own ideals that cause the outcomes they hate. Instead, they try to blame those results on other things, especially high-density settlements or commercial nodes. This follows the natural human tendency to scapegoat.

B. The second major flaw is that this vision contains only relatively high-cost housing, which a large fraction of the population cannot afford. Hence the vision really leaves out low- and moderate-income households altogether. As suburban areas have grown larger, this omission has become untenable.

1. Of the 88.4 million U.S. units occupied in 1985, 66.8% were single-family detached or attached units. So the dominant vision altogether omits about one-third of U.S. households altogether who live in multi-family units, including the vast majority of low-income households.

2. As the total size of suburban areas has expanded, the ability of the suburbs to rely on older in-city areas to house poor people has been diminished. Those older areas have become farther and farther away from the action, and the total number of low- and moderate-income households has increased.

C. The third major flaw is that this vision provides no means for making key decisions that involve conflicts between the welfare of society as a whole and that of geographically small parts of society. Since government powers are fragmented into localities, no one has the interest of the entire metro area at heart politically or emotionally. Most governance becomes totally parochial.

1. The result is paralysis in dealing with LULUs, because of the NIMBY syndrome. Yet no modern society can possible exist without LULUs, such as highways, airports, jails, drug rehabilitation centers, incinerators, etc.

2. Moreover, because of the single-family bias in this vision, many high-density developments -- especially housing -- become LULUs -- and therefore cannot be built. Low and moderate-income households are also LULUs from the viewpoint of the better-off ones who can afford single-family homes.

D. A fourth flaw in this vision is that it does not create any political consensus about who should pay for the costs of creating the new infrastructures -- roads, water and sewer systems, schools, parks, etc. -- necessary to accommodate additional growth. Yet further growth cannot be halted altogether, partly because there are no regional methods of coordinating anti-growth policies. Hence stopping growth in one part of an area shifts it to others.

1. Every group wants to shift the costs of added infrastructure cost onto others. But only existing residents vote, so they shift it onto newcomers who are just arriving through use of various impact fees, exactions, etc.

E. A fifth flaw in this vision is that it does not compel those persons who generate certain social costs pursuing key goals to pay for those costs.

1. It does not compel those who cause traffic congestion to pay the marginal costs of their actions, because we do not charge people for entering roads during peak hours. Hence each commuter has a strong incentive to add to congestion, with no offsetting cost other than the resulting delays.

F. The result has been the emergence of great social inconsistencies between the dominant vision and several outcomes it generates. These negative outcomes are (1) traffic and other congestion, (2) environmental degradation, (3) absorption of much vacant land better left as open space, (4) high costs of new infrastructure, (5) an inability to create needed region-serving amenities, and (6) no way to provide housing affordable to many households.

G. Continuing urban growth patterns based upon the dominant vision will aggravate all these negative results. That would undermine the quality of life that we intended to create by pursuing our key goals in the first place. Fortunately for Oregon, you have realized this likely result, and acted to avoid it.

IV. These negative results cannot be changed unless we change our vision of how our metropolitan areas ought to develop, since they result from the very success of our attaining that vision. This means solving these problems requires persuading Americans to modify some of their most cherished personal goals or behavior patterns. This will require major leadership in changing personal values.

A. Examples of behavior to change include segregating single-family homes from multi-family homes, driving to work alone, entering freeways at any time of the day without charge, and enjoying free parking spaces at work.

B. Except in extraordinary cases, I do not believe that leadership in changing these values will come primarily from elected officials. In a democracy, they are essentially followers, not opinion makers. Therefore, such leadership must normally come from key private sector actors, including business and labor.

1. Oregon has been an extraordinary case, because the original leadership for your land-use planning process came from a former governor, supported by state legislators.

C. You Oregonians deserve not only congratulations from the rest of the nation, but thanks for providing us with an excellent and pioneering example of how to achieve rational growth management. Many other states -- such as Washington -- are now looking to Oregon for ideas about how to design their own policies.

V. What we need now is formulation and articulation of a new vision of future metropolitan areas that overcomes the contradictions within the dominant vision. I will very briefly set forth some criteria for such a new vision.

A. First, <u>future growth must contain major areas of at least moderately-high-density development, especially of housing</u>, but also of workplaces. This is necessary to reduce the cost of more housing, and to cut down on travel.

1. This requires a complete reversal of most people's thinking about density. Right now, they blame congestion on <u>high</u> density nodes or clusters, because those areas have higher <u>local</u> congestion. But <u>overall</u> congestion is worsened by preventing high density, because low density spreads people out.

2. Unfortunately, the densities necessary to make really intensive use of public transit feasible are immensely higher than those we are now creating.

B. Second, <u>our new vision must encourage people to live nearer to where they work</u>. Yet formal policies of trying to balance the number of jobs and housing units in each sub-portion of a metropolitan area are not likely to work well.

1. A better approach combines <u>urban growth boundaries</u> plus <u>high-density clusters</u>. Both these tactics limit the outward expansion of additional growth. You have successfully achieved both these results in the Portland area, though less so in some smaller areas. These two tactics also <u>preserve open space around metropolitan areas</u>, which has been one of the central goals of planning in Oregon since the beginning.

2. However, growth boundaries are much easier to use in areas that not growing rapidly than in areas experiencing fast population increases. In the latter, it is hard to accommodate all new population by <u>recentralizing</u> rather than <u>peripheral expansion</u>, because existing residents resist the big increases in average densities required.

C. Third, <u>our new vision must contain governance structures that combine a lot of local authority within a framework that compels local governments to act responsibly to meet area-wide needs</u>. That means a comprehensive planning framework imposed by state governments, with certain region-affecting decisions pushed up to regional or state levels to avoid complete paralysis.

However, actual local planning should be done by local governments, within requirements set forth by the state, and with review and approval by the state.

1. You have developed this structure more effectively than anyone else.

D. Fourth, <u>the new vision should compel individuals who generate social costs to pay for those costs, so as to motivate them to reduce such behavior</u>. In particular, it should compel people who generate traffic congestion and air pollution to bear costs directly related to such behavior.

1. The biggest cause of traffic congestion is persons commuting one per car. We could instantly cut traffic in half by more strongly motivating people to share rides by raising the costs of solo driving. But we have avoided doing this because of our egalitarian desire not to favor the wealthy.

2. The truth is that <u>neither congestion nor any other ills I have described is bad enough to motivate most people to change their individualistic habits</u>. They still prefer these ills to changing key goals and behavior. Their problems are bad enough to generate an immense amount of complaining, but not bad enough to get them to change the habits causing those problems. That is why most states have not adopted anything like your approaches.

VI. Can such an alternative version of future growth really be achieved? I don't know. However, I can identify several basic strategy elements that might be tried as means of achieving such a vision. You have already adopted several of them.

A. The key goals of these strategy elements are (1) minimizing traffic congestion, (2) increasing residential densities, (3) preserving open space on the edges of urban areas, (4) creating more low-priced housing for low- and moderate-income households, (5) financing adequate infrastructure to accommodate new growth, and (6) permitting the location of key LULUs.

1. I will <u>not</u> discuss two strategies: trying to stop growth altogether, which is neither possible nor constitutional, and just building more and more roads and other infrastructures, which is covered by the others I discuss.

B. The first strategy element is <u>raising the costs of driving -- especially commuting solo</u>. This is not politically popular, and therefore it has not been tried anywhere to any great degree. But it would help both in reducing congestion and raising densities. Among the tactics involved could be the following, mainly at the state level:

1. Raising gasoline taxes, vehicle property taxes, and licenses very high would create incentives for less driving. It would also increase the revenues available for financing infrastructures. But Congress believes Americans do not want to pay more to drive. We refused even to consider raising gasoline taxes while sending troops to the Middle East to protect our oil supplies. We would rather sacrifice our military forces than pay higher gas prices!

2. Charging high fees for entering freeways during peak hours. This has been advocated by economists for decades, but rejected by politicians. However, I believe congestion is getting bad enough in Southern California for them to start seriously considering at least trial demonstrations there.

3. Encouraging multi-passenger commuting with HOV lanes on freeways and by charging high tolls to single-passenger commuters.

4. Prohibiting employers from offering free employee parking, or at least ending the deductibility of the costs involved as business expenses. But expenses for van pools should remain deductible.

5. Even if you adopted all these tactics, that would not end traffic congestion altogether, because it cannot be totally eliminated. So you had better learn to like traffic jams. Get yourself an air-conditioned car with a stereo radio, a tape deck, a telephone, and a fax machine, and commute with someone you are really attracted to! Then its an adjunct to your leisure.

C. The second strategic element is increasing residential densities in both new and existing developments. This goal is closely related to preserving open space on the edges of built-up areas, since higher density in close can preserve vacant land out farther. These goals are served by these tactics:

1. Require each metropolitan area to draw up an "urban growth boundary" and provide key services only within it. Oregon has done this for years.

   a. Have very high property taxes on vacant land within the boundary, but very low property taxes on vacant land outside the boundary.

   b. Require that much of the land within the boundary be developed at densities higher than the present average. Give zoning density bonuses for developments within the boundaries. Your urban growth boundaries appear to have raised densities, yet new building has not reached your density targets. You need to prohibit single-family homes in areas zoned multi-family, establish minimum densities in single-family zoning areas, and prohibit large-lot units in areas with small-lot target densities.

   c. Prohibit residential or commercial developments outside urban growth boundaries, or charge very high extra fees on such developments. You have tried this, but it has not worked in all your urban areas.

2. This tactic limits development rights of owners of land outside the boundaries. This angers rural landowners far from big cities who want to create retirement or recreational housing areas, as in Southern and Eastern Oregon.

   1) However, it might be possible to permit them to sell development rights to owners of property within urban growth boundaries, thereby raising densities there. Or rural areas could be permitted some development far from urban boundaries with reasonable regulations.

3. Reduce property-tax levels for residential areas built to relatively high densities, or use tax abatements for this purpose. This could be done in both new-growth and older redevelopment areas.

4. These tactics are not likely to achieve high enough densities either to make major use of public transit economically feasible or to greatly reduce total travel generated by new residential and other areas.

D. The third strategic element is encouraging construction of more low-priced housing for low- and moderate-income households. This is difficult because it requires major housing subsidies. But I do not believe state governments can extensively finance such subsidies, because they involve income redistribution. That should primarily be financed by the federal government, because economic competition limits each state's ability to tax the non-poor to aid the poor.

But several tactics can be used:

1. Require "inclusionary zoning" so that every home builder must provide a certain fraction of new units for low- and moderate-income households, and in return will receive some density bonuses. Inclusionary zoning works only if there is enough exclusionary zoning to create strong market demand for the higher-priced housing in each project that supports the lower-priced.

   a. Also, such zoning will work only if the "affordable" units are not re-sold to more affluent households. So you must have a follow-on system to be sure they remain occupied by low- and moderate-income households.

2. Require that every community zone at least some minimal percentage of its land for high-density multi-family housing, and that some fraction of that be held available for "affordable" housing. You have achieved relatively high fractions of new multi-family housing -- over 50% -- in many areas. But getting "affordable" housing built on such land is very difficult.

3. Create a state-level zoning override ordinance. It permits builders seeking to create "affordable" housing to appeal rejections from local zoning bodies to a state agency that can override such local opposition. The state of Massachusetts has such a law, and has created 20,000 low-income units.

   a. Couple this with a requirement that each community create an "affordable housing plan" covering its "fair share" of such units.

4. Create a housing trust fund to subsidize "affordable" units. Fund it with a transfer tax on the sale of all existing single-family homes, since owners of such homes are the beneficiaries of rising home prices. Also use a "linkage" fee on all commercial property built in each area.

5. Create a state housing plan that assigns to every community a "target" number of units of "affordable" housing that constitutes its "fair share." This target is to be proposed initially by either the community or the state, but finally reviewed and approved by a state body.

F. The final strategic element is essential to all the others; it is raising adequate funding to pay for the infrastructure to cope with future growth. In many states, the citizens are not willing to bear the costs of achieving the benefits they want, and their politicians don't have the guts to go ahead and do it anyway. Up to now, Oregon has led the way in courageous development of land-use planning. Do you have the added courage to fund what you need?

V. It is time to conclude my analysis. States with considerable growth like Oregon are confronted with two basic dilemmas.

A. First, their fast-growth communities must cope with growth that most existing residents don't really want. But such growth cannot be stopped because Americans do not want to restrict their ability to move wherever they want to go. After all, we are a nation almost entirely composed of immigrants.

   1. This fact creates problems insoluble within the vision of how metropolitan areas should grow that has dominated development over the last 40 years.

   2. There is no guarantee that these problems can be solve within any vision of future development. Some -- such as congestion -- are probably insoluble.

B. Second, many slow-growing communities need and want additional growth for its economic benefits. Hence they want policies just the opposite of those sought by people living in fast-growing communities. The current recession reinforces pro-growth attitudes and weakens anti-growth ones. A will reverse this outcome. But it will not remove the conflict between these two views.

C. However, I believe you in Oregon have made a magnificent start on coping with all these issues. You have done so more successfully than any other part of the nation. If you continue to support your basic approach, and make marginal changes in it, you can manage your future growth effectively. And you can keep on exhibiting leadership that inspires the rest of the nation. I hope my comments will encourage you to maintain that outstanding example.

Discovered, at Edge of Known Civilization, the Sub-Suburb

By DIRK JOHNSON

CASTLE ROCK, Colo.

ABOUT an hour's drive south of downtown Denver, the suburban glass office towers along Interstate 25 finally give way to green pastures, naked hillsides and a distant view of Pike's Peak. The local cattle, stretched out comfortably in fields along the road, mark time by watching the passing automobiles. From these peaceful acres, the noisy metropolis seems a world away.

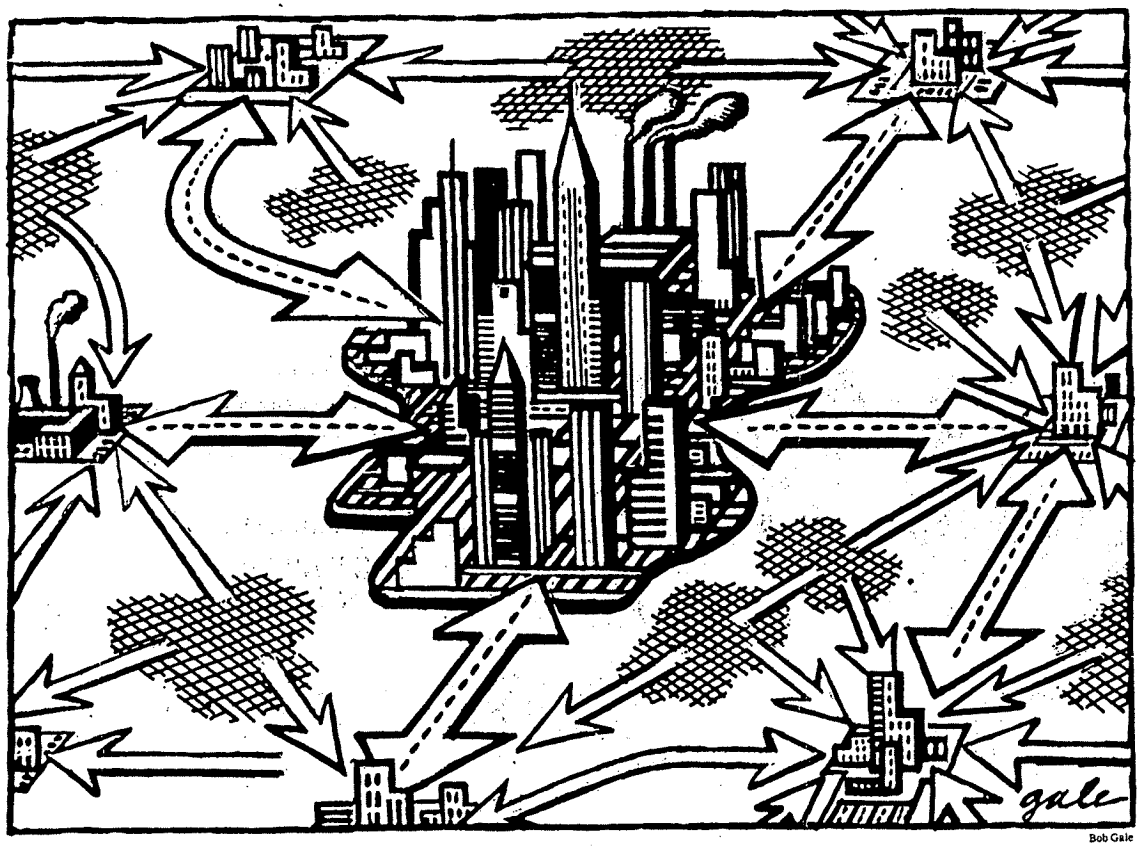
But suddenly, around the next bend in the road, there are several clusters of expensive new homes, hundreds of them, along with some golf courses and recreation buildings. Is this a suburb? A small town?

By whatever name, new residential communities in places like Douglas County are growing as fast as a prairie fire. Since 1980, the county's population has jumped by 140 percent, faster than all but Flagler County in northern Florida.

The growth of these rural regions is made possible by the burgeoning job base in the suburbs. Towns like Castle Rock, too far from the urban sprawl to be considered a suburb, yet too suburban-like to be considered a traditional small town, could almost be considered suburbs of suburbs.

"The growth of places like this, whatever you want to call them, is one of the larger demographic stories of the past decade," said Carl Haub, a demographer for the Population Reference Bureau in Washington. "The concept of suburban is almost becoming outmoded, since they have become such large employment centers. And that has allowed people to push farther out into the rural regions."

Just as demographers have not quite gotten around to naming the phenomenon, they have not quantified it either. Many residents of outlying counties continue to work in big cities an hour or more away, in the traditional suburban commuter pattern. But more and more are finding suitable employment in the suburbs themselves, and this is the group at the heart of the new growth pattern.



Bob Gale

Urban Jobs, Rural Lives

People can live in the small towns of Orange County in New York, for example, and commute to jobs in White Plains or other towns in suburban Westchester County, where employment has jumped 16 percent in the last decade. In Chicago's western suburbs, the explosion of high-paying jobs means that a pin-striped worker can retreat to a farmhouse in rural DeKalb County. And the growth of jobs in Denver's south suburbs means that an employee can be saddling a horse in Castle Rock 45 minutes after shutting off the computer terminal at work.

Some demographers have come up with a fitting, if rather unwieldy name for these growing regions: Nonmetropolitan adjacent counties. In other words, they are the rural counties just beyond the metropolitan ring.

According to a study by the Department of Agriculture, rural counties that border metropolitan regions grew twice as fast in the 1980's as did more distant counties.

From the perspective of people who live there, these are places that offer the best of both rural and metropolitan worlds. Evan McCullom, for example, earns a good salary at the Martin Marietta Company's gleaming office building in the Denver suburb of Littleton, just 30 minutes away from the country home in Castle Rock where his three boys are growing up in a small-town atmosphere.

"My boys can roll down the hills, ride their bikes anywhere," said Mr. McCullom. "You see red foxes and elk in the neighborhood. My wife, Jeanne, knows the people in the stores in town by name, and they know hers. We're not a suburb. And yet, we're close enough to the metropolitan area to take advantage of it."

The newcomers to these towns have more money and schooling than the old guard, and different views on town government.

By their presence, of course, the newcomers change the fabric of the small town. And at some point, after enough people have discovered such a rural region, it ceases to be rural. It becomes suburban, part of the ever expanding metropolitan ring.

"It's the small town, Mayberry-like atmosphere which attracts people in the first place," said Steve Boand, the mayor of Castle Rock, himself a relative newcomer. "The great challenge is to manage the growth in a way that we don't lose that feel."

Mr. Boand and his family live at the old Scott Ranch property, now called The Woodlands subdivision, where about 200 houses have been erected on land where cattle grazed only a few years ago.

In general, the newcomers to these small towns have more money and schooling than the old guard. They often have different ideas about the way local government should be run, or the kinds of classes that local schools should offer.

"The newcomers will transform these areas as soon as they arrive," said Mr. Haub. "It's not really small-town life that people want. They don't really want a mom-and-pop general store. They want the kind of selection they're used to. And they don't want the rural-type schools. They want schools that will get their kids into Harvard or Yale."

At a Crossroads

In recent years, as corporate centers have sprouted like cornstalks from the rich black earth an hour west of Chicago, sleepy little suburbs like Naperville have become boomtowns. And now the countryside west of the suburbs is dotted by fancy subdivisions with three-car garages just a stone's throw from old wood farmhouses.

The school district in Burlington, Ill., a crossroads in the cornfields about a half-hour northwest of Naperville, now gets children from both kinds of homes. And their parents, some of whom don suits and drive to offices in Naperville while others wear overalls and head for the south 40, do not always agree about the style of education.

When it came time to build a new high school, the newcomers wanted the school to have a swimming pool, something considered by most suburban districts as an essential. The longtime residents of Burlington, meanwhile, said they had gotten along just fine without a pool for many generations. They considered such frills to be hifalutin. The new school, to be opened in the fall, will do without a swimming pool.

But the changing curriculum at Burlington reflects what is happening in this region. Classes like animal husbandry and clubs like the Future Farmers of America are part of the past. The school has added classes in computer technology and the German language.

"You have different sets of values," said Rich Perry, the principal at Burlington Elementary School, who recalls the days when many of the children took days off from the classroom to help with the harvest.

"It's not that one is better than the other, just different," he added. "And those differences sometimes mean a conflict."

Policy Implications of Recent Behavioral Research in Transportation Demand Management

Martin Wachs

Transportation planners are increasingly adopting policies aimed at changing travel choices made by citizens. Rather than trying to solve transportation problems by building highways and transit routes, transportation demand management relies on incentives and disincentives to promote carpooling, vanpooling, transit use, and changed work hours. These approaches attempt to accommodate travel demand by more efficiently utilizing existing facilities. Although many argue that transportation behavior cannot be changed, this review demonstrates that many years of behavioral science research on travel show otherwise. Commuters respond to differences in travel time and travel cost and to changes in work hours and other attributes of travel in systematic ways that are quite predictable. As a consequence, travel demand management is a promising approach to regional transportation planning.

American attitudes toward transportation planning have recently undergone significant change. For three decades after the end of World War II, public policy emphasized the construction of new highway and transit facilities in order to remove the backlog of needs resulting from the combined effects of depression, a war economy, continued urban growth, and accelerating automobile ownership. For the most part, a consensus existed among transportation policymakers that their primary goal was to accommodate growth by constructing facilities that would have adequate capacity to handle future demand. It was understood that land-use patterns and economic development were the sources of traffic, yet there was general agreement that transportation policy should aim to accommodate forecasted land-use and economic growth rather than to institute regulations to control traffic.

The views of transportation policymakers have been changing under pressure from increasing growth and traffic congestion, coupled with growing limits on transportation budgets and increasing opposition to highway construction by environmental coalitions and community groups. Now, policymakers frequently argue that "we can't build our way out of our problems" and that attempts to accommodate growth solely by increasing transportation system capacity impose greater costs on communities than are warranted by their benefits. In the seventies, this shift in emphasis gave rise to "transportation system management," the augmentation of capacity through low-capital-cost approaches such as traffic signal synchronization and reserved lanes for high-occupancy vehicles. In the early eighties, "transportation demand management" was also emphasized, including efforts to promote ride sharing and transit use by workers through a variety of subsidy and incentive programs. This growing movement toward management rather than facility construction has gained momentum in the late eighties. In addition to transportation system management and demand management, efforts are increasing to change land-use policy and to spatially redirect residential and economic growth to control traffic at its source.

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Los Angeles is the region that for many epitomizes the historical reliance on the construction of new facilities to accommodate growing travel demand. Yet the current Regional Mobility Plan (Southern California Association of Governments 1989) and Regional Air Quality Management Plan (South Coast Air Quality Management District 1989) both give unprecedented emphasis to strategies that encourage the reduction of single-occupant automobile commuting through increased reliance on public transit, vanpools, carpools, telecommuting, changed work hours, and land-use changes to encourage greater jobs-housing balance. While about 7 percent of the region's trips are currently made on public transit, these plans project a goal of about 19 percent transit utilization by the year 2010, in addition to major increases in carpooling and vanpooling. There is reason to question our ability to achieve a change of this enormous magnitude.

CAN WE CHANGE TRAVEL BEHAVIOR?

Many are skeptical about the prospects for achieving substantial behavior change in travel patterns. Consumer behavior shows a very strong and steadily growing preference for the automobile in America. The National Personal Transportation Studies, based on national samples of several thousand households, showed that the proportion of households not owning automobiles dropped steadily from 20.6 percent in 1969 to 15.3 percent in 1977, to 13.5 percent in 1983, the most recent survey year. During the same period, the proportion of households owning three or more vehicles rose from 4.6 percent in 1969 to 15.6 percent in 1977 and to 19.3 percent in 1983 (U.S. Department of Transportation 1986). And annual rates of automobile use are growing among those who own cars. Enormous public subsidies to new transit systems have proven cost-ineffective, and transit continues to lose ground to the automobile despite major public expenditures (Wachs 1989). Americans made 3.6 percent of their trips on public transit in 1969, and that share declined to 3.0 percent in 1977, and to only 2.6 percent by 1983 (Dole 1987).

Underlying transportation policy-making in the coming decades is the critical assumption that we have the ability to change people's travel behavior. *Will people accept alternatives to the singly occupied automobile, especially for their trips to work, and for other peak-hour travel as well?* It is said that Americans have developed life-styles that are dependent upon driving to meet many needs. Urban form has adjusted to universal automobile ownership and use. At this time, many think that perhaps very little can be done to reverse this trend. Yet public policy is increasingly relying on such changes to lessen congestion while meeting future demands for travel at reasonable levels of public expenditure.

CONTRIBUTIONS OF TRANSPORTATION RESEARCH

Over 30 years, transportation researchers have produced many studies that give partial answers to this critical question. This article provides an overview of selected findings from behavioral science examinations of travel in order to arrive at useful insights for policymakers. Many of the relevant studies involved sophisticated mathematical models of interest primarily to travel demand researchers whose reports would rarely be read by public policymakers. Other insights are derived from careful comparisons that have been made of travel patterns before and after some systematic change has been instituted—such as the opening of a new facility or the imposition of a new fare structure. The literature contains a wealth of knowledge that bears upon the critical question being posed here, but that knowledge is sometimes available in technical jargon and complex mathematical expressions. The purpose of this review is to simplify and generalize for application to policy, and not to debate the finer points of behavioral science research or statistical significance levels.

Researchers and decisionmakers bring particular ideological commitments or frameworks of belief to their understandings of travel behavior. Some, for example, believe that people always behave rationally, and that when travelers are given choices they will behave by maximizing their personal utility. This view is particularly prevalent among researchers who have studied economics. Others believe that an understanding based upon the notion that the traveler is a rational, economic person is always incomplete. Those trained in psychology or sociology often claim that travel decisions reflect wants, needs, attitudes, and beliefs that go far beyond economic rationality. Some, for example, believe that travel behavior can be better explained by learning theory than by economic theory. In preparing this review, I have been willing to accept the validity of any premises underlying systematic behavioral research, as long as the research has had an empirical component. I have presumed that the results of behavior and attitudinal investigations were useful when they included actual studies of real people regardless of the philosophical position that motivated the study. Public policymakers need to make decisions today, and those are best served by real data from actual experience. They cannot wait for the resolution of debates between theorists espousing competing concepts of human nature. Incidentally, it is interesting to note that findings from behavioral experiments in transportation have often produced similar results even though researchers initiated them on the basis of different premises about human nature.

I believe that the collected body of behavioral research in transportation is unequivocal. It shows that travel behavior does vary greatly with the conditions of

choice that confront travelers, and that very different policies can elicit very different choices. Pucher (1988), for example, has compared travel behavior in eleven European countries and Canada with travel patterns in the United States. Many of the countries were characterized by standards of living that are as high as or higher than that of American cities, yet transit use, bicycling, and walking were far more common for journeys of all types, and there was less reliance on the automobile. Pucher attributes the differences in habits among the countries, not to cultural differences or to learned tastes or preferences, but to substantial differences in their transportation, taxation, and land-use policies. Typically, countries having very high gasoline taxes and automobile excise taxes, providing much less subsidy to roads, and having much less subsidized parking show much lower use of the automobile. Land-use planning is also an important factor in Pucher's results. Zoning to discourage low-density, single-family communities, provision of appropriate pedestrian and bicycle facilities, and the building of relatively few access-controlled highways all give rise to travel patterns that differ greatly from American patterns.

In the United States, automobile, gasoline, and parking prices are extraordinarily low, and driving is encouraged by many explicit and implicit subsidies. An extensive highway network has been built to encourage urban decentralization and convenient auto use. Although transit subsidies have grown enormously since 1964, the level of public transit declined substantially prior to that date and has not nearly recovered, and our transit subsidies, while expensive, are by themselves simply insufficient to counter the cumulative effects of enormous subsidies that have long been provided and continue to be provided to the automobile system.

It is now well known that in Los Angeles during the 1984 Olympic Games, daily traffic volumes were about 15 percent above the daily traffic volumes normally experienced during the summer months, yet congestion was well below normal and travel speeds were faster than usual. Though traffic volumes were high, trips were redistributed in time and space for the duration of the Olympic Games. Most observers believe that we lack the institutional mechanisms and the political will to change behavior permanently as we did during the brief Olympics period, but the experience of those 10 days clearly illustrated that, under the right set of circumstances, people do adjust their travel behavior in response to changed conditions (Giuliano 1988).

In part, the question about the ability of policy to influence travel choices can be answered by looking closely at past American policy choices. They favored urban decentralization and ubiquitous automobile access and produced an automobile-dependent travel pattern. This leads clearly to the conclusion that policy does influence travel choices. Different policies in the future can shift travel patterns more toward transit use, carpooling, vanpooling, and cycling. This cannot be done, however, unless some politically difficult decisions are made. It is not likely that we can encourage huge shifts toward transit use while maintaining current policies that encourage auto use. If we wish to change travel patterns in the future, we must change the policies we have pursued for 50 years or more. The question is not whether travelers will respond to public policy, for the evidence is clear that they will. Rather, a review of the literature leaves us with a far more important question. Will transportation policymakers be sufficiently bold to adopt the policies that research results unequivocally tell us can change travel behavior?

In the next several sections I review many studies that provide compelling evidence about the likely effects of policies affecting travel cost and time, comfort, convenience, and safety. All show that people can be convinced to change their travel patterns quite dramatically in response to changes in conditions affecting their choices. After that, I address what the literature reveals about consistencies and inconsistencies between attitudes and preferences stated by travelers and the behavior that we observe when their travel choice situations are actually changed.

Changing Travel Behavior by Changing Travel Costs

On numerous occasions, I have heard public policymakers argue that most people will drive to work no matter what the cost and that most people who have a choice will avoid public transit no matter what the price of using the different modes. On the other hand, I have heard economists argue that we can completely solve the urban congestion problem by pricing—using peak/off-peak pricing differentials and congestion tolls. The truth must lie somewhere between these extreme views, and there is by now a great deal of literature to shed light on this question.

The demand for travel by any mode is not fixed, but it is like the demand for other commodities—steak dinners, shoes, or television sets. As the price for any of these falls, we wish to consume more of that commodity; as the price rises, we wish to consume less of it. So it is, in general, with travel.

It is important to note, however, that a large number of studies have obtained consistent results regarding the extent to which most commuters or automobile drivers actually estimate the costs of their trips. For the most part, travelers rarely enumerate the total cost of owning and operating an automobile, nor do they attempt to estimate the true total cost of a particular trip, no matter how regularly they make it (Louviere et al. 1981; Johnson 1975; Adiv 1980). It appears that the capital costs of purchasing a car, insuring it, and maintaining it are

borne by travelers regardless of any particular trip. Thus, while these factors enter into automobile ownership decisions, they are typically ignored in daily decisions about trip making. On the other hand, what some call "out-of-pocket costs," the costs of gasoline, parking, tolls, and transit fares, are considered quite explicitly in daily travel decision-making. Changes in these costs do indeed seem to have strong influences on travel decision-making. By weighing out-of-pocket costs much more heavily than capital costs, commuters appear to be acting consistently with economic theory, which views the cost of acquiring an automobile as a "sunk cost" not influencing daily travel decision-making.

Many studies of commuters' willingness to carpool have shown that commuters consider the out-of-pocket costs of carpooling versus driving alone to be among the two or three most important factors influencing the choice between those modes, the others being travel time and convenience (Berry 1975; C.J. Olson Market Research 1985; Harrison and Lung 1985; Gelb and Donnelly 1985a, 1985b). For example, it has been shown repeatedly that commuters are more willing to endure the delays and inconveniences of carpooling if they are making longer trips rather than shorter ones. The reason for this is that the dollar cost savings are great enough only on longer trips to compensate for the drawbacks of ride sharing.

The influence of cost savings on travel choices is perhaps most dramatically demonstrated in studies that have examined the cost of parking. It is well established that as many as 90 percent of American workers receive free parking at the workplace, a subsidy that constitutes a great encouragement to drive to work alone (Shoup and Pickrell 1980). Consequently, when parking charges are introduced, dramatic changes in mode choice are observed (Willson et al. 1989). In a study of parking in Los Angeles Civic Center, 72 percent of county employees (who parked free at county expense) drove to work alone, while only 40 percent of comparable federal employees (who paid to park) drove to work alone (Francis and Groninga 1969). In Century City, Shoup and Pickrell (1980) found that, among workers whose parking was available free, 92 percent drove to work alone, 85 percent of those whose parking was partly subsidized commuted in singly occupied vehicles, and only 75 percent of those who bore the full cost of parking commuted to work as solo drivers. In another study of the employees of Commuter Computer, the regional ride-sharing agency, Surber et al. (1984) found that 42 percent of the company's employees drove to work when the company paid the monthly parking fee for solo drivers, but when the company ended the practice of paying for parking at work, the proportion of workers driving alone dropped to 8 percent. When free parking was available, average automobile occupancy was 1.2 persons, and after free parking was eliminated it jumped to 1.8. In another recent experiment at a large insurance company at Warner Center, when free parking was eliminated and a fee of thirty dollars per month instituted, the share of solo drivers fell from 90 percent to 46 percent (Willson et al. 1989). In each of these cases, the mode shift achieved by a monthly market-rate fee for parking exceeded the mode shift that would be expected from any new rail construction project in the region. Higgins (1990) surveyed over one hundred transportation demand management programs at suburban mixed-use activity centers. He concluded that a common dimension among the most successful programs was that all of them incorporated parking management, usually involving an increase in the cost of employee parking. On the other hand, the vast majority of the programs had little or no effect on commuting behavior, and virtually all of those that were ineffectual left subsidized employee parking benefits intact. This must leave transportation policymakers with the clear impression that the price of travel is a significant lever available to use in achieving changes in consumer behavior.

Variations in transit fares have also shown that transit ridership is quite sensitive to the price of service. Normally, however, changes in transit fares have had less dramatic effects than the imposition of major parking fees of thirty or forty dollars. Dozens of transit fare changes have been monitored, and we know with reasonable certainty that changes in transit fares have elasticities in the range of –0.3 to –0.4. This means that a 1 percent change in transit fares leads to a change in ridership of 0.3 percent to 0.4 percent in the opposite direction (a rise in transit fare leads to a decline in ridership; a decline in fare leads to a rise in ridership). Massive fare changes, or outright elimination of fares have been known in certain instances to bring about much larger, though often highly localized, changes in ridership. In Auburn, New York, elimination of a twenty-five-cent transit fare led to a jump in monthly patronage from eighteen thousand to eighty-eight thousand. In Seattle, Washington, elimination of fares within a special downtown transit-free district resulted in an estimated threefold increase in intra-central business district (CBD) trips, while in Portland, Oregon, the creation of a fare-free zone is regarded as the major cause of a ninefold increase in ridership within that specific zone (Barton-Aschman and Associates, Inc. 1981).

The energy crises of the seventies also provided an opportunity to observe the effects of changes in transportation prices on traveler behavior. During the two energy crises, prices of gasoline rose precipitously, while supplies became limited and long waits at gas pumps were typical. It is difficult, therefore, to attribute observed changes in travel behavior to price changes alone, for many analysts believe that the limited supply of gasoline was the more influential factor. Nevertheless,

the joint effects of price changes and supply limitations were clear. First, there were substantial declines in driving, with nonessential trips, vacations, and social-recreational travel declining much more than work trips and personal business. In addition, consumers shifted toward smaller, more fuel-efficient cars when they bought new vehicles, and many accelerated their schedule of vehicle replacement. Finally, much more "trip chaining" (the combining of trips for multiple purposes) was observed as consumers tried to adopt more efficient movement patterns while accomplishing all of their household needs (Neveu 1977; Hartgen et al. 1983). Changes of mode, however, were less dramatic than those that are measured when substantial increases are instituted in parking fees (Peskin 1980). That finding is not surprising, considering that the typical twenty-mile round-trip between home and work might consume one gallon of gasoline, on average. Thus even a fifty-cent per gallon increase in the price of fuel during the energy crisis constituted a lesser cost increase than a daily parking fee of several dollars.

Changing Travel Behavior by Changing Travel Time

Many studies, conducted over three decades, show that travel time is one of the most critical variables affecting travelers' choices of modes, routes, and departure time. Thus travel-time advantages can be used in the design of policies intended to bring about changes in travel behavior (Fulton 1988). Studies of traveler attitudes and behavior, however, repeatedly demonstrate that commuters' reactions to travel time are quite complex and go far beyond the mere consideration of total elapsed travel time measured in minutes. Rather, attitudinal studies show repeatedly that perceptions of the importance of travel time depend on travel-time reliability, or the day-to-day variation in travel time, as well as the typical travel time for a particular trip. Arriving on time at an intended destination is often seen by travelers as more important than minimizing travel time. This is understandably important in work trips, but it proves to be significant in nonwork trips as well.

When attitudinal surveys were conducted among riders of the Shirley Highway express-bus-on-freeway project in the Washington, D.C., area, it was noted that, among express bus riders who had previously commuted by automobile, travel-time savings were the most frequently cited reason for switching to the bus (in comparison with other factors such as cost, congestion levels, and comfort). However, when specifically rating attributes of the bus services that were of great importance to them, 90 percent of the bus users cited the reliability of the schedules, while only 29 percent cited a five-minute savings in average travel time (Wachs 1976).

In addition to the consistent finding that travel-time reliability is more important than elapsed travel time per se, surveys of travelers' attitudes and behavior also demonstrate that time spent in walking, waiting, looking for a parking space, or transferring modes is more onerous than time spent moving between one's origin and destination. A variety of studies, conducted in different environments, involving different trip purposes and different modes, have shown that people psychologically weight "out-of-vehicle time" somewhere between two and three times as heavily as they weight "line haul" time or moving time in their travel decisions. In simpler terms, a minute spent waiting at a bus stop, walking to or from a bus stop, looking for a parking space, or waiting on a line influences travel choices between two and three times as much as a minute spent moving on a vehicle between an origin and destination (Wachs 1976; Domencich and McFadden 1975). Because the automobile is superior to most ride-sharing and public transit modes in minimizing out-of-vehicle time, this finding helps explain the widespread preference expressed for commuting by automobile (Adiv 1980).

Many modern transportation strategies are designed to encourage commuting by modes other than the automobile by eliciting particular responses to commuters' travel-time preferences. For example, high-occupancy vehicle (HOV) lanes are intended to provide an advantage to carpools, vanpools, and buses by allowing them to bypass congestion on the adjacent mixed-flow lanes. Often, the greatest advantage of HOV lanes is the improvement they provide in travel-time reliability. They may, on average, save travelers several minutes in overall travel time, but in addition they may enable HOV riders to bypass episodes of congestion that make travel time less predictable on a day-to-day basis (Giuliano 1989).

Buses, vanpools, and carpools often require much more waiting time, "terminal time," or "passenger collection time" at each end of the trip than the single-occupant automobile. If congestion is not heavy on a freeway, or if the trip being made is relatively short, only a small travel-time gain can be obtained from HOV lanes, which might not be sufficient to offset the travel-time disbenefits of the high-occupancy vehicle modes. It is critical to design HOV programs to maximize travel-time reliability and to minimize waiting times, which are weighted by commuters more heavily than moving times. Priority parking locations for vanpools and carpools is one approach that has been widely adopted. The provision of HOV bypass lanes at congested freeway ramps, and of exclusive lanes for HOV vehicles on local streets in downtown areas, could be equally as important as the provision of HOV lanes directly on freeways, because of the heavier weight travelers give in decision-making to travel-time delays at the trip ends (Barton-Aschman and Associates, Inc. 1981). It is widely recognized that some workers prefer to leave home very early in order to avoid congestion on the way to work, even though that decision

may mean that they arrive at work an hour or more before the official starting time. Others remain at their desks long after the official closing time in order to avoid traffic congestion on the way home (Fulton 1988). This well-known phenomenon has led over the past decade to official programs of work-hour variation in an effort to influence traffic congestion. Staggered work hours; flexible work hours; four-day, 40-hour weeks; and a variety of related work-time variations are now well-established components of transportation system management.

Such programs have proven dramatically effective in some settings, with reductions in peak period congestion as high as 20 percent or more in some applications (Barton-Aschman and Associates, Inc. 1981). The benefits of these programs, however, are often quite localized. For example, congestion reductions may be quite dramatic on a particular arterial street or at a freeway off-ramp near a major employment site, but the reductions are "dissipated" within a half-mile or more from the employment site, since with increasing distance from the site the proportion of the traffic stream affected by any such program drops rapidly. Changes in work hours have been used to manage flows of passengers at overcrowded bus stops and rail transit stations quite effectively.

While some employees and employers have resisted work-hour changes, the majority of research reports on attitudinal responses to these programs have shown positive reactions. In many instances, changes in work hours facilitate carpooling, vanpooling, or transit use, since flexible hours allow workers to adjust their hours to travel options. On the other hand, it has been noted occasionally that work-hour changes may push starting and ending times toward periods of sparse transit service, and in such cases the opposite effect on ride sharing has sometimes been noted (Safavian and McLean 1975; O'Malley and Selinger 1973; Port Authority of New York and New Jersey 1975; Harrison et al. 1979; Tannir and Hartgen 1975).

Safety, Comfort, and Convenience of Travel Modes

Applications of behavioral science to transportation planning give greatest emphasis to travel time and travel cost as the characteristics of travel modes most likely to influence choices made by commuters. Behavioral science research has, however, addressed other aspects of travel modes that might also affect travelers' choices of modes, routes, and times of travel. In general, the findings support the conclusion that travel costs and times are the dominant factors, but in certain circumstances other variables can also become very important.

Travel modes differ with respect to comfort, convenience, privacy, safety, security, and other factors as well as travel time and cost. Under most circumstances travelers are aware of the differences between modes with respect to these factors, but weigh them less heavily than travel time and cost in decision-making. Travelers implicitly assume that automobiles, buses, and subways are relatively safe from accidents, and in general the accident rates per passenger mile indicate that this is a reasonable assumption. On occasion, however, a rash of accidents on a particular rail line, bus system, or highway segment heightens awareness of safety, and commuters for a time may rate safety as being of paramount importance (Wachs 1976). Similarly, travelers expect to be safe from crime while using public transit, or while walking to or from their parked vehicles. In most circumstances the probability of being the victim of a crime when traveling is so low that it is not even considered when arriving at a choice of travel mode. On the other hand, crime rates have become so high on certain bus routes, at particular transit stops, or in the New York and Chicago subways, that some travelers have suddenly reported that safety has become their primary concern when making travel decisions (Levine and Wachs 1985). Planners must be attentive to the particular circumstances in which unexpectedly high levels of exposure to danger can render ineffective their efforts to alter travel behavior through programs affecting travel time and cost.

There is ample evidence that travelers do not expect transit vehicles to provide them with the many amenities they might find in a personal automobile. Attitudinal studies over three decades have shown that plush interiors, extremely smooth rides, and the ability to listen to stereophonic sound are hardly significant in travel decisions. Among the comfort variables that have been tested in attitude studies and marketing experiments, climate control (air conditioning and heating) and exposure to rain, snow, or the hot sun have typically been found to be much more important than other comfort and convenience variables. These should routinely be taken into consideration in the design of transportation vehicles and terminals. Somewhat less important than climate and temperature control is space for packages. Women have more often than men indicated that their choice of travel mode has been significantly affected by the absence on transit vehicles of appropriate space for shopping bags, strollers, and baby paraphernalia (Wachs 1976; Wekerle 1980, 1984).

RELATIONSHIPS AMONG ATTITUDES, BEHAVIOR, AND SITUATIONAL VARIABLES

What are the best predictors of travel behavior? Which socioeconomic characteristics of travel are most likely to be accurate predictors of preferences and of travel behavior? These are questions that have preoccupied behavioral researchers in transportation for several decades. While answers to these questions are still debated by experts, certain patterns are by now well understood.

Some researchers believe that attitudes of travelers—statements of preference or behavioral intent—can provide important information in the prediction of travel behavior. One of the best ways to discover whether people will behave in a particular fashion might be, quite simply, to ask them about their preferences. Many researchers, following this line of reasoning, have tried to build mathematical models that predict travel behavior on the basis of stated preferences in attitude surveys. Others have insisted that attitudes—sometimes called "conceived preferences"—provide very poor predictors of actual behavior and have preferred to build predictive models solely on the basis of "manifest preferences," or behavior that is directly monitored.

It is now clear that relationships between attitudes or preferences on the one hand, and choices or behavior on the other are quite complex (Charles River Associates 1978). Although a great deal can be learned about behavior by studying attitudes, stated preferences in general cannot be taken directly as effective predictors of travel behavior. This is because constraints on travelers have a great effect on their ability to act in accordance with their preferences. For example, while many citizens might respond in a survey that they "would use a rail transit system if it were built," researchers find, not surprisingly, that the stated preference is a better predictor of behavior among those who reside within a few blocks of a station than it is for those who reside miles away from a station. This comes about, in large part, because it is difficult to ask attitudinal questions that are sufficiently specific and precise to capture the conditions that might limit the choices of individual travelers. The respondent might honestly express a preference to use the subway, without thinking of limited spatial or temporal access, and later decide not to use the system because these constraints exist (Hartgen 1974; Tischer and Phillips 1979; Tardiff 1977).

Another complication arises because we do not completely understand the mechanism by which attitudes and behavior are causally linked with one another in travelers' minds. We do not know whether people adjust their behavior to make it consistent with their preferences, or whether people are equally likely to adjust their preferences to make them consistent with their behavior. In actuality, people probably do both simultaneously. If we observe that people using the bus are more favorable to it than are people who drive to work, we may be tempted to conclude that commuters are more likely to ride the bus when they are favorable to its characteristics. This may be partly true, but, on the other hand, some research has applied the theory of cognitive dissonance to travel behavior. Using this theory it can be shown that people who do not have cars—and thus *must* use transit—actually adjust their attitudes to their behavior, becoming more favorable toward transit so that their attitudes will be more in balance with the choices they must make. Relationships between attitudes and travel behavior become even more complicated because we often observe that personal characteristics—including gender, income, age, level of education, and ethnicity—are correlated with both attitudes and travel behavior. Differences between men and women or between poor and affluent people may be learned products of our culture. They may also merely reflect the fact that some people have more power and control more resources, and therefore may have greater opportunity to behave in accordance with their preferences, while others may be less able to act in accordance with their preferences because of economic or social constraints.

Because of the enormous complexity in the relationships among attitudes, behavior, and social and economic constraints, it proves useful to employ a technique called "market segmentation," which is widely used in the field of marketing. When people are grouped by socioeconomic and demographic characteristics, and by constraints (such as whether there is transit service in their neighborhood or whether they own a car), the structure of the relationship between their attitudes and behavior becomes clearer, and attitudes and behavior seem more easily explained on the basis of one another (Dobson and Tischer 1976; Dobson and Nicolaidis 1974).

The complexity of the relationship among attitudes, travel behavior, and socioeconomic conditions must be appreciated by decisionmakers, who should not be discouraged when overly simplistic statements about citizens' preferences prove inconsistent with observed behavior. While a great deal of ambiguity remains in this interesting area of behavioral science research, detailed study of attitudes and behavior by experienced researchers familiar with the literature can yield useful insights for policy-making.

TRANSPORTATION DEMAND ANALYSIS CAPABILITIES AND FUTURE REQUIREMENTS

The state of the art in travel demand analysis is quite advanced. Mathematical models available for forecasting travel demand and for simulating choices by travelers are more advanced than the tools of analysis available to planners in virtually every other sector. This is the legacy of more than 30 years of research on travel demand forecasting that was relatively well endowed by the federal government and that attracted the interest of a large group of competent academics and technical experts in consulting firms and government agencies. Most of the interest in travel demand modeling was spurred by a sustained national program of new facility construction lasting over 40 years. In the sixties and seventies, there was widespread consensus in the United States that the national system of highways had to be vastly improved. Mathematical modeling for travel demand analysis em-

phasized improving our ability to make choices between large capital investments in different corridors, and evaluating highway projects of different capacities and operating characteristics. In the seventies and eighties, as the national highway program was completed, attention slowly shifted toward new capital investments in public transit, and again choice models played a central role in policy-making, with emphasis shifting toward models that were more effective at predicting mode choice. Travel demand analysis techniques were perfected in support of highway and transit facility construction, and the national system of highways and urban rail systems were actually planned using these techniques (Transportation Research Board 1984). Modeling approaches were strengthened both by the expenditure of resources on their improvement and by the opportunity to evaluate their performance retrospectively by observing human behavior with respect to the systems that had been planned using those methods.

The late eighties and nineties are characterized by declining resources for the construction of new facilities and increasing commitment to managing our way out of our problems rather than building our way out of them. Declining funding for new facilities is also resulting in declining funding for research on travel demand analysis techniques and for planning studies that might employ these techniques. While demand analysis techniques were strengthened in an era of expansion of the physical plant of transportation systems, the techniques themselves are quite generalizable to the analysis of other types of choices faced by travelers as the emphasis in transportation planning shifts toward systems and travel demand management and away from facility construction. Despite the applicability of travel demand analysis techniques to demand management, most demand management programs are today based on very little analysis, and there are few applications of existing methods for the analysis of travel behavior. Few data bases are being developed that would allow applications of widely available travel demand forecasting techniques to such demand management strategies as variations in the pricing of auto travel combined with the provision of alternatives such as vanpools, flexible work hours, and telecommuting. A far smaller proportion of transportation budgets are today being spent on demand analysis studies in anticipation of policy-making than was the case a decade ago. I have tried to show in this article that insights from travel demand analysis are quite applicable to current policy-making, and I believe much more attention to data collection, case studies, and model adaptation is warranted.

We understand a great deal about the relative weights given by travelers to such variables as travel time and cost, and quite a bit about the relationships among travel choices, attitudes, and behavior. Much of this understanding was developed during the decades between 1960 and 1980, while in recent years the progress of this field has slowed as funding for the pursuit of these topics in universities and research institutes decreases. On the other hand, the growing emphasis in transportation planning upon travel demand management provides new opportunities to apply these research findings to transportation policy in ways not always envisioned when many of the seminal studies were conducted. This literature review will, it is hoped, contribute to a greater understanding on the part of transportation policymakers of the contributions that can be made to their work by the results of behavior science research.

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Winning Over the Street People

Traffic engineering standards are under attack from all sides.

By William Fulton

James Ray now says he's happy about everything except the trees in the street. Ray is a traffic engineer with the Sacramento County (California) public works department, and last year he spent several months wrestling with architect Peter Calthorpe's prize-winning Laguna West project, a "neotraditional" suburban development that tries to deemphasize the car. (See "The First Pedestrian Pocket," December 1989.) Calthorpe's design uses the trees to separate driving lanes from parking lanes and create a leafy canopy over the street.

When Calthorpe's plan came in the door, it had dozens of features that violated the county's traffic engineering standards, leading to a series of knock-down fights between the designers and the engineers. Such fights are becoming more and more common around the country as neotraditional designs hit the pavement. They conflict with accepted traffic engineering standards—and, in fact, often challenge the underlying principles on which modern traffic engineering is based.

Still, Calthorpe's team and the county engineers knocked off the conflicts one by one, increasing a turning radius here and there, pulling out on-street parking near intersections, adding a few stop signs—until the only conflict left was over the trees. The trees ultimately won out—and the project is now under construction. "I had a hundred reasons why I thought it was a bad idea," says Ray. But it was only the trees that really bothered him.

Hit from all sides

Overall, the Sacramento compromise is pretty remarkable considering the way traffic engineers are getting knocked around these days. The stepped-up interest in neotraditionalism has architects, planners, and even developers challenging such long-held principles as the superiority of off-street parking, the disdain for grid street patterns, and the goal of free-flowing traffic. More broadly, the traffic jams that afflict most suburbs have led politicians, citizens, environmentalists, and even some traffic engineers to question whether those principles have served us well.

Chief among the critics is Andres Duany, the Miami-based guru of neotraditional planning, who is punching out grid street patterns in new communities across the country. Duany regularly pokes fun at traffic engineering in his lively speeches, calling it a degenerate profession. "Six Germans could drive abreast on an American two-lane highway," he quips.

Confrontations between planners and traffic engineers are taking place across the country. In Loudoun County, Virginia, for example, the state transportation department permitted a Duany-designed project to go forward with roads that don't meet state standards—but only if the roads remained private, at least for the time being. And near Orlando, planners in the tiny city of Oviedo are preparing to do battle with state traffic engineers over a neotraditional traffic plan that unclogs arteries by dispersing traffic more evenly on a grid system, deliberately creating substandard conditions (i.e., congestion) as a result.

Among the questioners, too, are developers, who must bear the cost of building roads. They're asking why residential streets that carry almost no traffic must be 40 feet wide and piled high with asphalt. "The width of streets is sometimes greater than the lots," says Denver planning consultant David Jensen. "The engineers who continue to promote them don't realize that the consumer has changed."

Even more skeptical are the environmentalists, who are trying to reduce overall dependence on the car. A federal judge recently halted all highway construction in the San Francisco Bay Area when the Sierra Club sued under the federal Clean Air Act, claiming that transportation officials don't consider the growth-inducing impact of wider highways. "The primary issue in the case is the dogma [of the California Department of Transportation] that providing additional highway capacity relieves congestion and benefits air quality," says William Curtiss, a lawyer with the Sierra Club Legal Defense Fund in San Francisco.

Even within the Institute for Transportation Engineers, calls for updated standards are mounting. Although the recommended subdivision street guidelines haven't changed much, a 1989 ITE publication, *Residential Street Design and Traffic Control,* suggested that subdivision standards should emphasize slower speeds as well as free-flowing traffic. "ITE was getting a lot of complaints that their road standards were overgenerous," says Elizabeth Deakin, a planning professor at the University of California, Berkeley, who coauthored the book. "This book talks about the values inherent in good residential street design that matches the land use, something we seem to have forgotten." (The 152-page book is available from APA's Planners Bookstore; $51 for APA members, $54 for others.)

A newly established ITE technical committee on neotraditional planning will survey the traffic engineering consequences of neotraditional projects and may even suggest special standards for such situations. "There are some very good things in traditional neighborhood designs, and we as traffic engineers have to make sure we do not obstruct them," says committee chair Frank Spielberg, a traffic consultant with SG Associates in Virginia.

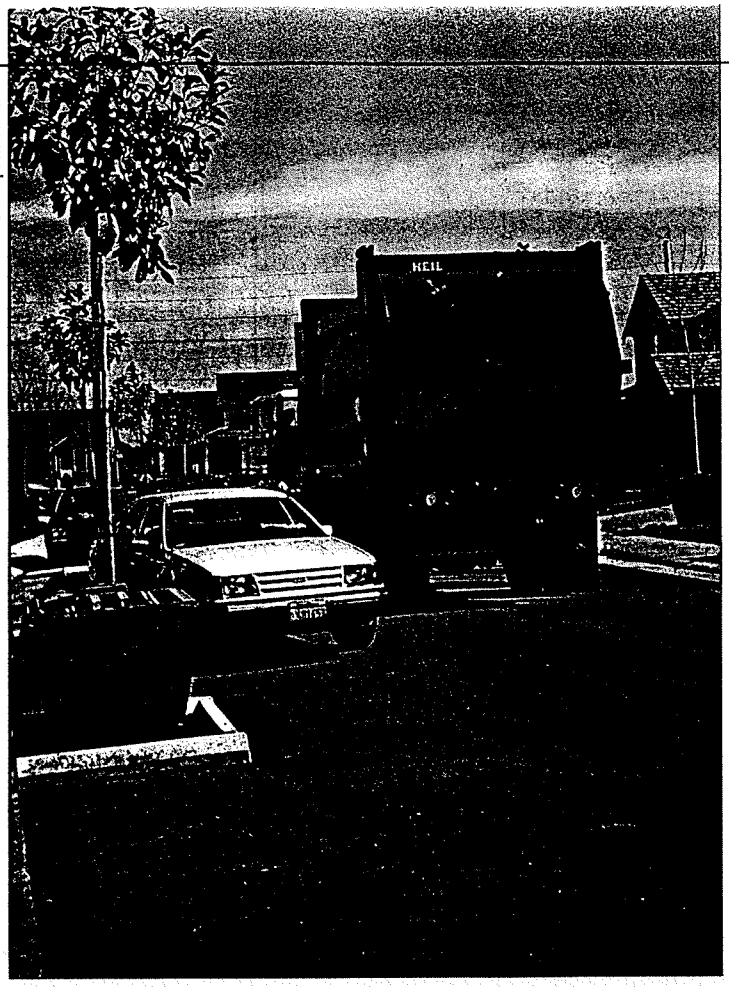
Reigning theology

Some of the ideas being presented as new and better by the neotraditionalists seem like a step backward to many old-line traffic engineers. As Loudoun County, Virginia, planning director Milton Herd, AICP, explains, "It's a philosophical question of how you want streets to fit into the fabric of the community."

A key publication is ITE's *Recommended Guidelines for Subdivision Streets* (1984; 17 pp.; $24.50 for APA members from APA's Planners Bookstore, $26.50 for others). It says traffic engineering at the subdivision level should be driven by four considerations: safety, efficiency of service, livability, and economy. Critics of conventional traffic engineering contend that the profession has been driven by a desire to achieve the first two goals—at the expense of the last two.

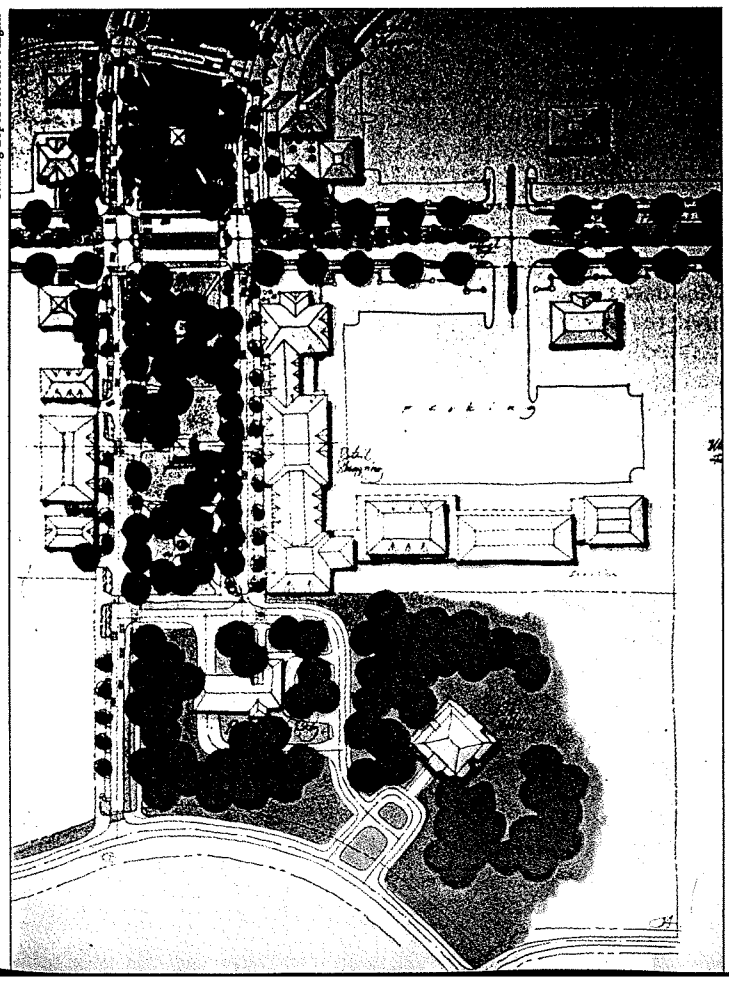
For the most part, says Gordon Shaw, AICP, a Denver-based consultant, who is both a planner and an engineer, and a member of the ITE technical committee, traffic engineers are responding to popular demands for safety. "They've heard forever and ever what residents want—they want no traffic on their street, they want their three-year-old to be able to ride a tricycle in the street." Sometimes, the goals of safety and traffic flow contradict each other, Shaw suggests, as when new subdivisions are built with broad streets that encourage high speeds even though they are not supposed to carry much traffic.

If there's a high priest of conventional traffic engineering, it's Paul Box, a Chicago-area consultant who wrote ITE's first subdivision street standards in the 1960s



Calthorpe Associates

To convince Sacramento County officials that their plan would work, Calthorpe Associates rented large, potted trees and installed them on a conventional subdivision street. The garbage truck was brought in to show that there was plenty of room to maneuver.



Glatting Lopez Kercher Anglin

The old and the new: The plan for a 145-acre town center for Oviedo, Florida, features narrow streets, a tight grid, and on-street parking. But streets at the southern edge, site of the new city hall, are integrated into the conventional pattern of neighboring development.

and has presided over several revisions since.

To Box, the car is "the most efficient carrier of people when you're dealing with relatively low densities of development," and suburban office centers are "a great step" because they reduce the traffic load on central business districts. He insists that traffic generation rates—the number of trips produced by a house or an office building or a shopping center—haven't changed much in 20 years.

Box dismisses most neotraditional planning ideas as impractical and unsafe. So when he saw Andres Duany's now-famous sketch comparing the layout of a typical suburban neighborhood with the layout of a "neotraditional" neighborhood, it didn't take him long to respond. "I think the guy that did that was an utter idiot," he said in an interview.

In a long letter to the *ITE Journal*, Box fired away at the Duany sketch. (See "Repent, Ye Sinners, Repent," August 1989.) Placing the shopping mall near residential neighborhoods, a basic tenet of neotraditional design, is "utterly ludicrous," he wrote, and chopping the mall into a shopping district interspersed with streets is "extremely poor design because pedestrians may have to cross these busy roadways to get from one shop to another." The 20-foot street width called for by Duany would be "a step backward," said Box, because it would greatly inhibit turning movements of garbage trucks and emergency vehicles.

Box does not completely dismiss all aspects of neotraditional planning. Like many other traffic engineers, he says a basic grid system can eliminate confusion about addresses, so long as it is broken up to discourage through traffic, and he also likes the idea of alleys. Overall, however, there is no doubt where he stands on the neotraditional idea of orienting communities around pedestrians, bicyclists, and transit users, rather than automobiles. "It reminds me of restaurants that put the damned door out by the major street and you have to walk halfway around the damned building to get to the door. Ninety-nine percent of the people come by car. Why not put the door where they can get at it?"

On-street vs. off-street

In the war between neotraditional planners and conventional traffic engineers, the neighborhood street is the ultimate battleground. For engineers like Box, on-street parking is a major safety hazard—especially to children who might suddenly dart from behind a parked car into the

street. "There's a tremendous body of literature, a good part of which I wrote, that says parked cars along any type of street are a definite hazard," says Box. "I firmly believe that every single-family home should be provided with two fully accessible parking spaces."

In contrast, neotraditional planners say on-street parking is vital to generate street life and to provide a buffer between pedestrians and moving traffic. Some unconventional thinkers such as Elizabeth Deakin even argue that on-street parking makes neighborhoods safer (because more people will be watching the street) and provides a sound buffer for moving traffic.

Box, of course, believes that this line of reasoning is nonsense. Of parked cars as pedestrian buffers, he says: "That's the first time I've ever heard that subject raised in my entire life, and I've been a traffic engineer for over 40 years. It's really a matter of chance whether there are cars parked on the street or not."

Many neotraditionalists come close to admitting that when it comes to safety and parked cars, they are, well, boxed in. Most won't buck the conventional wisdom that danger is a possibility, and they won't guarantee that nobody will get run over when there are parked cars around. "I don't have anything to counter that except to say that you try to design streets to reduce speeds," says California engineer Steven Gordon, who works with neotraditional architect Peter Calthorpe.

Indeed, neotraditionalists talk a great deal about low speeds, speed bumps, stop signs, and other traffic barriers that will reduce the likelihood of a high-speed collision with the proverbial darting child. Adds Florida consultant Walter Kulash: "All the children are indoors playing Nintendo anyway."

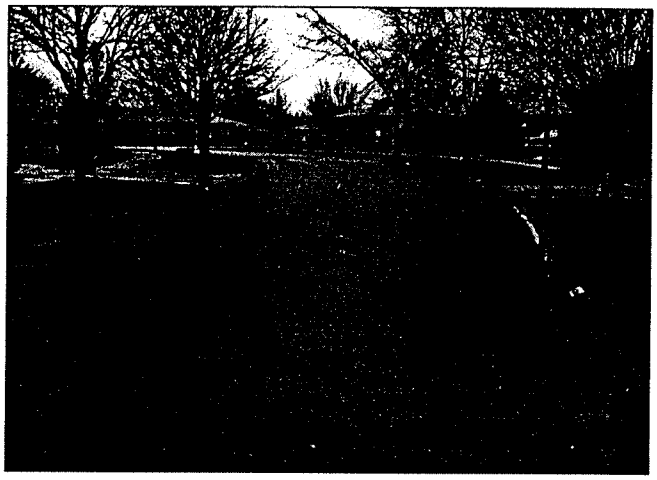
Critics of Box and other conventional traffic engineers say they can't see beyond the car counts to the broader interest of the community at large. Duany, for instance, likes to tell of a traffic engineer friend of his who is excited about a particular intersection because "we're pumping 450 cars an hour through that baby." Adds Duany, "That's all traffic engineers are concerned with—pumping cars through babies."

But even those traffic engineers who have embraced neotraditional concepts say that planners and developers must share the blame. "The typical traffic engineer is attempting to deal with the traffic that's been generated by bad land planning," says Richard Chellman, a New Hampshire civil engineer who often works with Duany. "As a result they become single-minded within their own area of expertise and focus. If all you tell me is that outside my black box somewhere you have 4,200 cars an hour coming, I have to deal with 4,200 cars. Most people in the profession today know nothing else."

The proof

Since Duany put neotraditional ideas on the planning agenda in the late 1980s, a few heretics have emerged in the traffic engineering profession. These people believe that neotraditional street patterns create better communities; they also think that they can hold their own on pure traffic engineering terms.

In Florida, the Orlando consulting firm of Glatting Lopez Kercher Anglin—which has been working on the neotraditional traffic plan for Oviedo—ran a computer simulation comparing traffic capacity in a neotraditional community and a conventional subdivision. The simulation assumed that the neotraditional neighborhood would generate the same number of vehicle trips, even though Duany and others always argue that total trips would decrease.

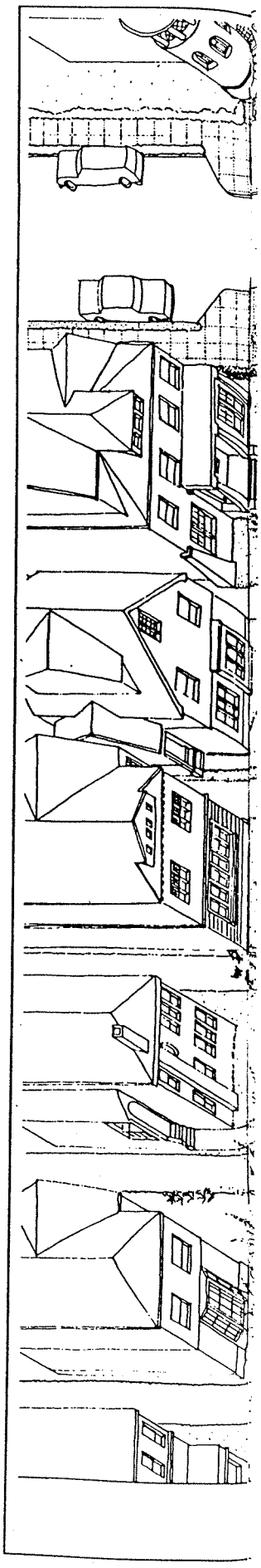


Courtesy Paul Box

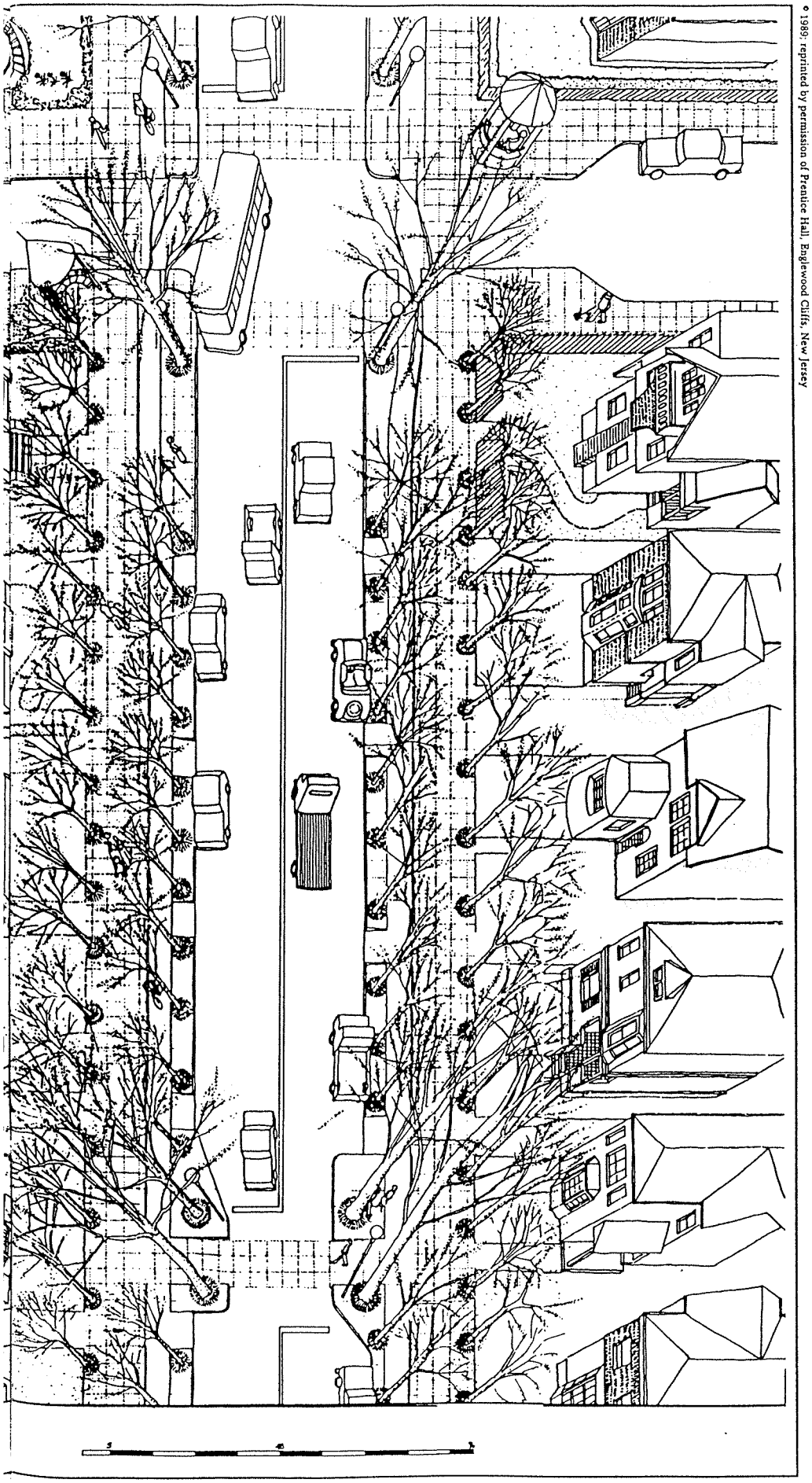
Asked to show us an ideal street, engineer Paul Box nominated his own, in a Chicago suburb.

The results showed that the neotraditional neighborhood generated 12 percent fewer vehicle miles traveled overall and 25 percent fewer on arterial streets. Local streets—which under conventional traffic engineering principles are supposed to stay virtually free of all auto traffic—received almost 40 percent of all traffic in the neotraditional neighborhood. Although travel speeds were lower, actual travel times were similar, since distances were shorter.

"For the exact same amount of travel, a traditional neighborhood network will outperform a conventional subdivision network," says Walter Kulash, one of the authors of the study. "We established to our complete satisfaction that there's no efficiency of scale in large roads; in fact, there's a deficiency of scale. Three two-



Even the engineers are coming around. Widened sidewalks and rows of street trees are suggested as ways of slowing traffic in **Residential Street Design and Traffic Control,** *the 1989 publication of the Institute for Traffic Engineers. The drawing at right is from the book.*



lane roads yield more traffic capacity than one six-lane road. You can't turn any more vehicles at a large intersection than you can at a small one."

Kulash insists that a neotraditional street plan improves the quality of life even for people who don't get out of their cars. "Even if you are no less auto-dependent, a traditional neighborhood can greatly improve your standard of auto travel," he says. "In conventional traffic engineering, every auto trip is forced up the local-to-collector-to-arterial hierarchy, and your community experience is shattered every time you go up that ladder."

Kulash acknowledges that the results are preliminary and traffic engineers are likely to be skeptical until they see similar results in projects that have already been built. And while the Glatting Lopez study praises the traffic management virtues of a neotraditional system, the authors admit that safety results are "inconclusive."

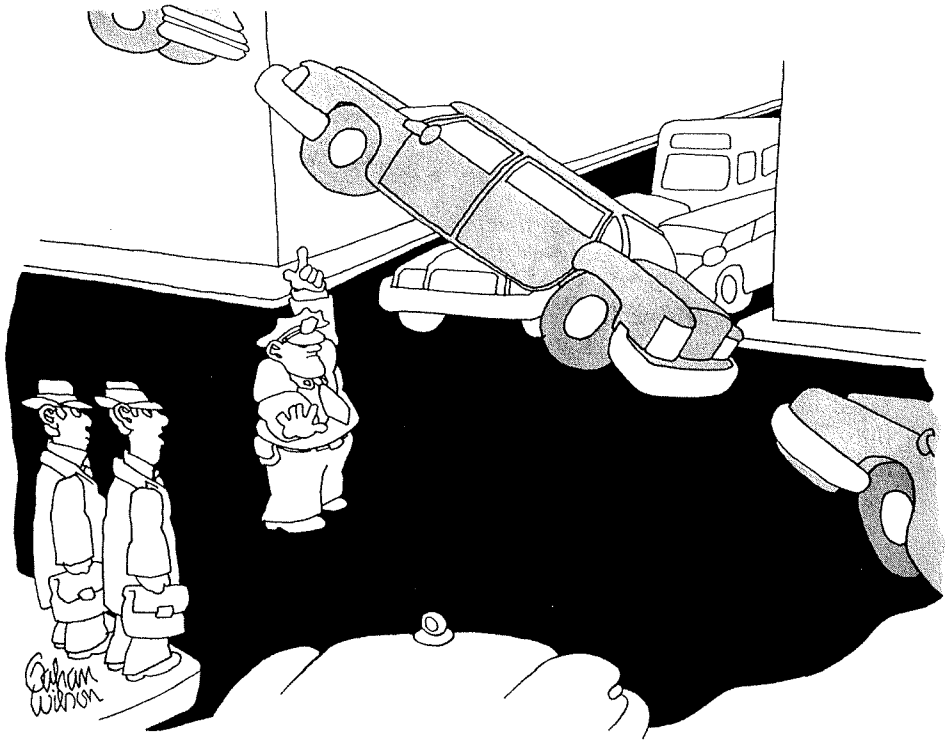
Still, the Glatting Lopez study may be an important reference for the ITE technical committee. Despite the widespread publicity about neotraditional towns in planning, architecture, and development publications, the concept remains virtually unknown within the traffic engineering profession. The ITE committee's first task is to bring traffic engineers face to face with neotraditional ideas.

Perhaps the first opportunity for this kind of contact comes this month at a joint ITE/American Society of Civil Engineers conference in New Jersey, where Duany will present his slide show and then debate ITE executive director Thomas Brahms. It will be Duany's first high-profile appearance before traffic engineers.

"What we are trying to accomplish is simply to educate traffic engineers as to what the heck traditional neighborhoods are, what to expect when a policy board says, we want our next development to be a traditional neighborhood," says Eva Lerner-Lam, the New Jersey engineer who organized the session. "I don't feel that people like Duany and Calthorpe have done as much as they could have done to communicate to the traffic engineering community."

Nevertheless, Lerner-Lam and her colleagues on the technical committee believe that traffic engineers will respond to Duany the same way planners have—with an intuitive feeling that he is right, even if it contradicts their training and experience.

William Fulton is a contributing editor of *Planning*.



"Innovative stuff!"

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REVISED REGIONAL URBAN GROWTH GOALS AND OBJECTIVES

APRIL 23, 1991

CONTENTS

INTRODUCTION

The Regional Urban Growth Goals and Objectives (RUGGO) have been developed to:

a) respond to the direction given to Metro by the legislature through ORS ch 268.380 to develop land use goals and objectives for the region which would replace those adopted by the Columbia Region Association of Governments;

b) provide a policy framework for guiding Metro's regional planning program, principally its development of functional plans and management of the region's urban growth boundary; and

c) provide a process for coordinating planning in the metropolitan area to maintain metropolitan livability.

The RUGGO's are envisioned not as a final plan for the region, but as a starting point for developing a more focused vision for the future growth and development of the Portland area. Hence, the RUGGO's are the building blocks with which the local governments, citizens, and other interests can begin to develop a shared view of the future.

This document begins with the broad outlines of that vision. There are two principal goals, the first dealing with the planning process and the second outlining substantive concerns related to urban form. The "subgoals" (in Goal II) and objectives clarify the goals. The planning activities reflect priority actions that need to be taken at a later date to refine and clarify the goals and objectives further.

BACKGROUND STATEMENT

Planning for and managing the effects of urban growth in this metropolitan region involves 24 cities, three counties, and more than 130 special service districts and school districts, including Metro. In addition, the State of Oregon, Tri-Met, the Port of Portland, and the Boundary Commission all make decisions which affect and respond to regional urban growth. Each of these jurisdictions and agencies has specific duties and powers which apply directly to the tasks of urban growth management.

However, the issues of metropolitan growth are complex and interrelated. Consequently, the planning and growth management activities of many jurisdictions are both affected by and directly affect the actions of other jurisdictions in the region. In this region, as in others throughout the country, coordination of planning and management activities is a central issue for urban growth management.

Nonetheless, few models exist for coordinating growth management efforts in a metropolitan region. Further, although the legislature charged Metro with certain coordinating responsibilities, and gave it powers to accomplish that coordination, a participatory and cooperative structure for responding to that charge has never been stated.

As urban growth in the region generates issues requiring a multijurisdictional response, a "blueprint" for regional planning and coordination is critically needed. Although most would agree that there is a need for coordination, there is a wide range of opinion regarding how regional planning to address issues of regional significance should occur, and under what circumstances Metro should exercise its coordination powers.

Goal I addresses this coordination issue in the region for the first time by providing the process that Metro will use to address areas and activities of metropolitan significance. The process is intended to be responsive to the challenges of urban growth while respecting the powers and responsibilities of a wide range of interests, jurisdictions, and agencies.

Goal II recognizes that this region is changing as growth occurs, and that change is challenging our assumptions about how urban growth will affect quality of life. For example:

-- overall, the number of vehicle miles travelled in the region has been increasing at a rate far in excess of the rate of population and employment growth;

-- the greatest growth in traffic and movement is within suburban areas, rather than between suburban areas and the central downtown district;

-- in the year 2010 Metro projects that 70% of all "trips"

made daily in the region will occur within suburban areas;

-- currently transit moves about 3% of the travellers in the region on an average workday;

-- to this point the region has accommodated most forecasted growth on vacant land within the urban growth boundary, with redevelopment expected to accommodate very little of this growth;

-- single family residential construction is occurring at less than maximum planned density;

-- rural residential development in rural exception areas is occurring in a manner and at a rate that may result in forcing the expansion of the urban growth boundary on important agricultural and forest resource lands in the future;

-- a recent study of urban infrastructure needs in the state has found that only about half of the funding needed in the future to build needed facilities can be identified.

Add to this list growing citizen concern about rising housing costs, vanishing open space, and increasing frustration with traffic congestion, and the issues associated with the growth of this region are not at all different from those encountered in other west coast metropolitan areas such as the Puget Sound region or cities in California. The lesson in these observations is that the "quilt" of 27 separate comprehensive plans together with the region's urban growth boundary is not enough to effectively deal with the dynamics of regional growth and maintain quality of life.

The challenge is clear: if the Portland metropolitan area is going to be different than other places, and if it is to preserve its vaunted quality of life as an additional 485,000 people move into the urban area in the next 20 years, then a cooperative and participatory effort to address the issues of growth must begin now. Further, that effort needs to deal with the issues accompanying growth -- increasing traffic congestion, vanishing open space, speculative pressure on rural farm lands, rising housing costs, diminishing environmental quality -- in a common framework. Ignoring vital links between these issues will limit the scope and effectiveness of our approach to managing urban growth.

Goal II provides that broad framework needed to address the issues accompanying urban growth.

PLANNING FOR A VISION OF GROWTH IN THE PORTLAND METROPOLITAN AREA

As the metropolitan area changes, the importance of coordinated and balanced planning programs to protect the environment and guide development becomes increasingly evident.

By encouraging efficient placement of jobs and housing near each other, along with supportive commercial and recreational uses, a more efficient development pattern will result.

An important step toward achieving this planned pattern of regional growth is the integration of land uses with transportation planning, including mass transit, which will link together mixed use urban centers of higher density residential and commercial development.

The region must strive to protect and enhance its natural environment and significant natural resources. This can best be achieved by integrating the important aspects of the natural environment into a regional system of natural areas, open space and trails for wildlife and people. Special attention should be given to the development of infrastructure and public services in a manner that complements the natural environment.

A clear distinction must be created between the urbanizing areas and rural lands. Emphasis should be placed upon the balance between new development and infill within the region's urban growth boundary and the need for future urban growth boundary expansion. This regional vision recognizes the pivotal role played by a healthy and active central city, while at the same time providing for the growth of other communities of the region.

Finally, the regional planning program must be one that is based on a cooperative process that involves the residents of the metropolitan area, as well as the many public and private interests. Particular attention must be given to the need for effective partnerships with local governments because they will have a major responsibility in implementing the vision. It is important to consider the diversity of the region's communities when integrating local comprehensive plans into the pattern of regional growth.

GOAL I: REGIONAL PLANNING PROCESS

Regional planning in the metropolitan area shall identify and designate areas and activities of metropolitan significance through a participatory process involving citizens, cities, counties, special and school districts, and state and regional agencies. Implementation of these goals and objectives shall occur in a cooperative manner in order to avoid creating duplicative processes, standards, and/or governmental roles. These goals and objectives shall only apply directly to acknowledged comprehensive plans of cities and counties when implemented through functional plans or the acknowledged urban growth boundary plan.

OBJECTIVE 1. CITIZEN PARTICIPATION

Metro shall develop and implement an ongoing program for citizen participation in all aspects of the regional planning program. Such a program shall be coordinated with local programs for supporting citizen involvement in planning processes, and shall not duplicate those programs.

1.1 - Regional Citizen Involvement Coordinating Committee - Metro shall establish a Regional Citizen Involvement Coordinating Committee to assist with the development of its citizen involvement program and to advise the Regional Policy Advisory Committee regarding ways to best involve citizens in regional planning activities.

1.2 - Notification - Metro shall develop programs for public notification, especially for (but not limited to) proposed legislative actions, that ensure a high level of awareness of potential consequences as well as opportunities for involvement on the part of affected citizens, both inside and outside of its district boundaries.

OBJECTIVE 2. REGIONAL POLICY ADVISORY COMMITTEE

The Metro Council shall establish a Regional Policy Advisory Committee to:

a) assist with the development and review of Metro's regional planning activities pertaining to land use and growth management, including review and implementation of these goals and objectives, present and prospective functional planning, and management and review of the region's urban growth boundary;

b) serve as a forum for identifying and discussing areas and activities of metropolitan or subregional significance; and

c) provide an avenue for involving all cities and counties and other interests in the development and implementation of growth management strategies.

2.1 - Regional Policy Advisory Committee Composition - The Regional Policy Advisory Committee (RPAC) shall be chosen according to the by-laws adopted by the Metro Council. The voting membership shall include elected officials of cities, counties, and the Metro Council as well as representatives of the State of Oregon and citizens. The composition of the Committee shall reflect the partnership that must exist among implementing jurisdictions in order to effectively address areas and activities of metropolitan significance, with a majority of the voting members being elected officials from within the Metro District boundaries.

2.2 - Advisory Committees - The Metro Council, upon the recommendation of RPAC, shall appoint technical advisory committees, task forces, and other bodies as it and the Regional Policy Advisory Committee determine a need for such bodies.

2.3 - Joint Policy Advisory Committee on Transportation (JPACT) - JPACT with the Metro Council shall continue to perform the functions of the designated Metropolitan Planning Organization as required by federal transportation planning regulations. JPACT and the Regional Policy Advisory Committee shall develop a coordinated process, to be approved by the Metro Council, to assure that regional land use and transportation planning remains consistent with these goals and objectives.

OBJECTIVE 3. APPLICABILITY OF REGIONAL URBAN GROWTH GOALS AND OBJECTIVES

These Regional Urban Growth Goals and Objectives have been developed pursuant to ORS 268.380(1). Therefore, they comprise neither a comprehensive plan under ORS 197.015(5) nor a functional plan under ORS 268.390(2). All functional plans prepared by Metro shall be consistent with these goals and objectives. Metro's management of the Urban Growth Boundary shall be guided by standards and procedures which must be consistent with these goals and objectives. These goals and objectives shall not apply directly to site-specific land use actions, including amendments of the urban growth boundary.

These Regional Urban Growth Goals and Objectives shall apply to adopted and acknowledged comprehensive land use plans as follows:

a) A regional functional plan, itself consistent with these goals and objectives, may recommend or require amendments to adopted and acknowledged comprehensive land

use plans; or

b) The management and periodic review of Metro's acknowledged Urban Growth Boundary Plan, itself consistent with these goals and objectives, may require changes in adopted and acknowledged land use plans; or

c) The Regional Policy Advisory Committee may identify and propose issues of regional concern, related to or derived from these goals and objectives, for consideration by cities and counties at the time of periodic review of their adopted and acknowledged comprehensive plans.

3.1 - Urban Growth Boundary Plan - The Urban Growth Boundary Plan has three components:

a) The acknowledged urban growth boundary line;

b) Acknowledged growth management policies derived from these goals and objectives and the statewide planning goals; and

c) Acknowledged procedures and standards for amending the urban growth boundary line.

Metro's Urban Growth Boundary is not a regional comprehensive plan but a provision of the comprehensive plans of the local governments within its boundaries. The location of the urban growth boundary line shall be consistent with applicable statewide planning goals, these goals and objectives, and acknowledged growth management policies. Amendments to the urban growth boundary line shall demonstrate consistency only with the acknowledged procedures and standards and any applicable acknowledged growth management policies.

3.2 - Functional Plans - Regional functional plans containing recommendations for comprehensive planning by cities and counties may or may not involve land use decisions. Functional plans are not required by the enabling statute to include findings of consistency with statewide land use planning goals. If provisions in a functional plan, or actions implementing a functional plan require changes in an adopted and acknowledged comprehensive land use plan, then that action may be a land use action required to be consistent with the statewide planning goals.

3.3 - Periodic Review of Comprehensive Land Use Plans - At the time of periodic review for comprehensive land use plans in the region the Regional Policy Advisory Committee:

a) shall identify functional plan provisions or changes

in functional plans adopted since the last periodic review for inclusion in periodic review notices as changes in law; and

b) may provide comments during the periodic review of adopted and acknowledged comprehensive plans on issues of regional concern.

3.4 - Periodic Review of the Regional Urban Growth Goals and Objectives - If statute changes are made to ORS 197 to allow acknowledgement of these goals and objectives as the means for meeting the statutory requirement that these goals and objectives be consistent with statewide planning goals, then this section will apply. The Regional Policy Advisory Committee shall consider the periodic review notice for these goals and objectives and recommend a periodic review process for adoption by the Metro Council.

OBJECTIVE 4. IMPLEMENTATION ROLES

Regional planning and the implementation of these Regional Urban Growth Goals and Objectives shall recognize the inter-relationships between cities, counties, special districts, Metro, regional agencies, and the State, and their unique capabilities and roles.

4.1 - Metro Role - Metro shall:

a) identify and designate areas and activities of metropolitan significance;

b) provide staff and technical resources to support the activities of the Regional Policy Advisory Committee;

c) serve as a technical resource for cities, counties, and other jurisdictions and agencies;

d) facilitate a broad-based regional discussion to identify appropriate strategies for responding to those issues of regional significance; and

e) coordinate the efforts of cities, counties, special districts, and the state to implement adopted strategies.

A functional plan adopted by the Metro Council may emerge as one of a number of possible strategies for coordinating a multijurisdictional response to an issue of regional significance.

4.2 - Role of Cities -

a) adopt and amend comprehensive plans;

b) identify potential areas and activities of metropolitan significance; .

c) cooperatively develop strategies for responding to designated areas and activities of regional significance;

d) participate in the review and refinement of these goals and objectives.

4.3 - Role of Counties -

a) adopt and amend comprehensive plans;

b) identify potential areas and activities of metropolitan significance;

c) cooperatively develop strategies for responding to designated areas and activities of regional significance;

d) participate in the review and refinement of these goals and objectives.

4.4 - Role of Special Service Districts - Assist Metro with the identification of areas and activities of metropolitan significance and the development of strategies to address them, and participate in the review and refinement of these goals and objectives.

4.5 - Role of the State of Oregon - Advise Metro regarding the identification of areas and activities of metropolitan significance and the development of strategies to address them, and participate in the review and refinement of these goals and objectives.

OBJECTIVE 5. FUNCTIONAL PLANNING PROCESS

Functional plans are limited purpose plans, consistent with these goals and objectives, which address designated areas and activities of metropolitan significance.

5.1 - Existing Functional Plans - Metro shall continue to develop, amend, and implement, with the assistance of cities, counties, special districts, and the state, statutorily required functional plans for air, water, and transportation, as directed by ORS 268.390(1), and for solid waste as mandated by ORS ch 459.

5.2 - New Functional Plans - New functional plans shall be proposed from one of two sources:

-- The Regional Policy Advisory Committee may recommend that the Metro Council adopt findings designating an area

or activity of metropolitan significance for which a functional plan should be prepared; or

-- The Metro Council may propose the preparation of a functional plan to designate an area or activity of metropolitan significance, and refer that proposal to the Regional Policy Advisory Committee.

Upon the Metro Council adopting findings for the development of a new functional plan, the Regional Policy Advisory Committee shall prepare the plan, consistent with these goals and objectives and the findings of the Metro Council. After preparing the plan and seeking broad public and local government consensus, using existing citizen involvement processes established by cities, counties, and Metro, the Regional Policy Advisory Committee may propose the plan to the Metro Council for adoption. The Metro Council may act to resolve conflicts or problems impeding the development of a new functional plan should such conflicts or problems prevent the Regional Policy Advisory Committee from completing its work in a timely or orderly manner.

The Metro Council shall hold a public hearing on the proposed plan and afterwards may decide to:

a) adopt the proposed functional plan; or

b) re-refer the proposed functional plan to the Regional Policy Advisory Committee in order to consider amendments to the proposed plan prior to adoption; or

c) amend and adopt the proposed functional plan; or

d) reject the proposed functional plan.

The proposed functional plan shall be adopted by ordinance, and shall include findings of consistency with these goals and objectives.

5.3 - Functional Plan Implementation and Conflict Resolution - Adopted functional plans shall be regionally coordinated policies, facilities, and/or approaches to addressing a designated area or activity of metropolitan significance, to be considered by cities and counties for incorporation in their comprehensive land use plans. If a city or county determines that a functional plan recommendation cannot be incorporated into its comprehensive plan, then Metro shall review any apparent inconsistencies by the following process:

a) Metro and affected local governments shall notify each other of apparent or potential comprehensive

plan inconsistencies.

b) After Metro staff review, the Regional Policy Advisory Committee shall consult the affected jurisdictions and attempt to resolve any apparent or potential inconsistencies.

c) The Regional Policy Advisory Committee shall conduct a public hearing and make a report to the Metro Council regarding instances and reasons why a city or county has not adopted changes consistent with recommendations in a regional functional plan.

d) The Metro Council shall review the Regional Policy Advisory Committee report and hold a public hearing on any unresolved issues. The Council may decide to:

1) amend the adopted regional functional plan; or

2) initiate proceedings to require a comprehensive plan change; or

3) find there is no inconsistency between the comprehensive plan(s) and the functional plan.

OBJECTIVE 6. AMENDMENTS TO THE REGIONAL URBAN GROWTH GOALS AND OBJECTIVES

The Regional Urban Growth Goals and Objectives shall be reviewed at regular intervals or at other times determined jointly by the Regional Policy Advisory Committee and the Metro Council. Any review and amendment process shall involve a broad cross-section of citizen and jurisdictional interests, and shall be conducted by the Regional Policy Advisory Committee consistent with Goal 1: Regional Planning Process. Proposals for amendments shall receive broad public and local government review prior to final Metro Council action.

6.1 - Impact of Amendments - At the time of adoption of amendments to these goals and objectives, the Metro Council shall determine whether amendments to adopted functional plans or the acknowledged regional urban growth boundary are necessary. If amendments to adopted functional plans are necessary, the Metro Council shall act on amendments to applicable functional plans after referral of proposed amendments to the Regional Policy Advisory Committee. All amendment proposals will include the date and method through which they may become effective, should they be adopted. Amendments to the acknowledged regional urban growth boundary will be considered under acknowledged urban growth boundary

amendment procedures incorporated in the Metro Code.

If changes to functional plans are adopted, affected cities and counties shall be informed in writing of those changes which are advisory in nature, those which recommend changes in comprehensive land use plans, and those which require changes in comprehensive plans. This notice shall specify the effective date of particular amendment provisions.

GOAL II: URBAN FORM

The livability of the urban region shall be maintained and enhanced through initiatives which:

-- preserve environmental quality;

-- coordinate the development of jobs, housing, and public services and facilities; and

-- inter-relate the benefits and consequences of growth in one part of the region with the benefits and consequences of growth in another.

Urban form, therefore, describes an overall framework within which regional urban growth management can occur. Clearly stating objectives for urban form, and pursuing them comprehensively provides the focal strategy for rising to the challenges posed by the growth trends present in the region today.

II.1: NATURAL ENVIRONMENT

Preservation, use, and modification of the natural environment of the region shall seek to maintain and enhance environmental quality while striving for the wise use and preservation of a broad range of natural resources.

OBJECTIVE 7. WATER RESOURCES

Planning and management of water resources should be coordinated in order to improve the quality and ensure sufficient quantity of surface water and groundwater available to the region.

7.1 Formulate Strategy - A long-term strategy, coordinated by the jurisdictions and agencies charged with planning and managing water resources, is needed to ensure that beneficial water uses of the region can be sustained while new urban growth is accommodated. New management strategies shall be developed to comply with changes in both the Federal Clean Water Act and the Federal Safe Drinking Water Act.

Planning Activities:

Planning programs for water resources management shall be evaluated to determine the ability of current efforts to:

-- Identify the future resource needs of the region for municipal and industrial water supply, irrigation, fisheries, recreation, wildlife, environmental standards and aesthetic amenities;

-- Monitor water quality and quantity trends vis-a-vis beneficial use standards adopted by federal, state, regional, and local governments for specific water resources important to the region;

-- Evaluate the cost-effectiveness of alternative water resource management scenarios, and the use of conservation for both cost containment and resource management; and

-- Preserve, create, or enhance natural water features for use as elements in nonstructural approaches to managing stormwater and water quality.

OBJECTIVE 8. AIR QUALITY

Air quality shall be protected and enhanced so that growth can occur and human health is unimpaired. Visibility of the Cascades and the Coast Range from within the region should be maintained.

8.1 Strategies for planning and managing air quality in the regional airshed shall be included in the State Implementation Plan for the Portland-Vancouver air quality maintenance area as required by the Federal Clean Air Act.

8.2 New regional strategies shall be developed to comply with Federal Clean Air Act requirements and provide capacity for future growth.

8.3 The region, working with the state, shall pursue the consolidation of the Oregon and Clark County Air Quality Management Areas.

Planning Activities:

An air quality management plan should be developed for the regional airshed which:

-- Outlines existing and forecast air quality problems;

-- Identifies prudent and equitable market based and regulatory strategies for addressing present and probable

air quality problems throughout the region;

-- Evaluates standards for visibility; and

-- Implements an air quality monitoring program to assess compliance with local, state, and federal air quality requirements.

OBJECTIVE 9. NATURAL AREAS, PARKS AND WILDLIFE HABITAT

Sufficient open space in the urban region shall be acquired, or otherwise protected, and managed to provide reasonable and convenient access to sites for passive and active recreation. An open space system capable of sustaining or enhancing native wildlife and plant populations should be established.

9.1 The regional planning process shall identify quantifiable targets *for setting* aside certain amounts and types of open space.

9.2 Corridor Systems - The regional planning process shall be used to coordinate the development of interconnected recreational and wildlife corridors within the metropolitan region.

9.2.1 A region-wide system of trails should be developed to link public and private open space resources within and between jurisdictions.

9.2.2 A region-wide system of linked significant wildlife habitats should be developed.

9.2.3 A Willamette River Greenway Plan for the region should be implemented by the turn of the century.

Planning Activities:

1) Inventory existing open space and open space opportunities to determine areas within the region where open space deficiencies exist now, or will in the future, given adopted land use plans and growth trends.

2) Assess current and future active recreational land needs. Target acreages should be developed for neighborhood, community, and regional parks, as well as for other types of open space in order to meet local needs while sharing responsibility for meeting metropolitan open space demands.

3) Develop multijurisdictional tools for planning and financing the protection and maintenance of open space resources. Particular attention will be paid to using

the land use planning and permitting process and to the possible development of a land-banking program.

4) Conduct a detailed biological field inventory of the region to establish an accurate baseline of native wildlife and plant populations. Target population goals for native species will be established through a public process which will include an analysis of amounts of habitat necessary to sustain native populations at target levels.

OBJECTIVE 10. PROTECTION OF AGRICULTURE AND FOREST RESOURCE LANDS

Agricultural and forest resource land outside the urban growth boundary shall be protected from urbanization, and accounted for in regional economic and development plans.

10.1 Rural Resource Lands - Rural resource lands outside the urban growth boundary which have significant resource value should actively be protected from urbanization.

10.2 Urban Expansion - Expansion of the urban growth boundary shall occur in urban reserves, established consistent with Objective 15.3.

Planning Activities:

A regional economic opportunities analysis shall include consideration of the agricultural and forest products economy associated with lands adjacent to or near the urban area.

II.2: BUILT ENVIRONMENT

Development in the region should occur in a coordinated and balanced fashion as evidenced by:

II.2.1 a regional "fair-share" approach to meeting the housing needs of the urban population;

II.2.2 the provision of infrastructure and critical public services concurrent with the pace of urban growth;

II.2.3 the integration of land use planning and economic development programs;

II.2.4 the coordination of public investment with local comprehensive and regional functional plans;

II.2.5 the continued evolution of regional economic opportunity; and

II.2.6 the creation of a balanced transportation system, less dependent on the private automobile, supported by both the use of emerging technology and the collocation of jobs, housing, commercial activity, parks and open space.

OBJECTIVE 11. HOUSING

There should be a diverse range of housing types available inside the UGB, for rent or purchase at costs in balance with the range of household incomes in the region. Low and moderate income housing needs should be addressed throughout the region. Public policy and investment should encourage the development of housing in locations near employment that is affordable to employees in those enterprises. Housing densities should be supportive of adopted public policy for the development of the regional transportation system and designated mixed use urban centers.

Planning Activities:

The Metropolitan Housing Rule (OAR 660, Division 7) has effectively resulted in the preparation of local comprehensive plans in the urban region that:

- provide for the sharing of regional housing supply responsibilities by ensuring the presence of single and multiple family zoning in every jurisdiction; and

- plan for local residential housing densities that support net residential housing density assumptions underlying the regional urban growth boundary.

However, it is now time to develop a new regional housing policy that directly addresses the requirements of Statewide Planning Goal 10, in particular:

1) Strategies should be developed to preserve the region's supply of special needs and existing low and moderate income housing.

2) Diverse Housing Needs - the diverse housing needs of the present and projected population of the region should be correlated with the available and prospective housing supply. Upon identification of unmet housing needs, a regionwide strategy should be developed which takes into account subregional opportunities and constraints, and the relationship of market dynamics to the management of the overall supply of housing. In addition, that strategy should address the "fair-share" distribution of housing responsibilities among the jurisdictions of the region, including the provision of supporting social services.

3) Housing Affordability - A housing needs analysis should be carried out to assess the adequacy of the supply of housing for rent and/or sale at prices for low and moderate income households. If, following that needs analysis, certain income groups in the region are found to not have affordable housing available to them, strategies should be developed to focus land use policy and public and private investment towards meeting that need.

OBJECTIVE 12. PUBLIC SERVICES AND FACILITIES

Public services and facilities including but not limited to public safety, water and sewerage systems, parks, schools, libraries, the solid waste management system, stormwater management facilities, and transportation should be planned and developed to:

1) minimize cost;

2) maximize service efficiencies and coordination;

3) result in net improvements in environmental quality and the conservation of natural resources;

4) keep pace with growth while preventing any loss of existing service levels and achieving planned service levels;

5) use energy efficiently; and

6) shape and direct growth to meet local and regional objectives.

12.1 Planning Area - The long-term geographical planning area for the provision of urban services shall be the area described by the adopted and acknowledged urban growth boundary and the designated urban reserves.

12.2 Forecast Need - Public service and facility development shall be planned to accommodate the rate of urban growth forecast in the adopted regional growth forecast, including anticipated expansions into urban reserve areas.

12.3 Concurrency - The region should seek the provision of public facilities and services at the time of new urban growth.

Planning Activities:

1) Inventory current and projected public facilities and services needs throughout the region, as described in adopted and acknowledged public facilities plans.

2) Identify opportunities for and barriers to achieving concurrency in the region.

3) Develop financial tools and techniques to enable cities, counties, school districts, special districts, Metro and the State to secure the funds necessary to achieve concurrency.

4) Develop tools and strategies for better linking planning for school, library, and park facilities to the land use planning process.

OBJECTIVE 13. TRANSPORTATION

A regional transportation system shall be developed which:

1) reduces reliance on a single mode of transportation through development of a balanced transportation system which employs highways, transit, bicycle and pedestrian improvements, and system and demand management, where appropriate.

2) provides adequate levels of mobility consistent with local comprehensive plans and state and regional policies and plans;

3) encourages energy efficiency;

4) recognizes financial constraints; and

5) minimizes the environmental impacts of system development, operations, and maintenance.

13.1 System Priorities - In developing new regional transportation system infrastructure, the highest priority should be meeting the mobility needs of significant mixed use urban centers, when designated. Such needs, associated with ensuring access to jobs, housing, and shopping within and among those centers, should be assessed and met through a combination of intensifying land uses and increasing transportation system capacity so as to minimize negative impacts on environmental quality, urban form, and urban design.

13.2 Environmental Considerations - Planning for the regional transportation system should seek to:

13.2.1) minimize the region's transportation-related energy consumption through increased use of transit, carpools, vanpools, bicycles and walking;

13.2.2) maintain the region's air quality (see Objective 8: Air Quality); and

13.2.3) minimize negative impacts on parks, public open space, wetlands, and negative effects on communities and neighborhoods arising from noise, visual impacts, and physical segmentation.

13.3 Transportation Balance -

Although the predominant form of transportation is the private automobile, planning for and development of the regional transportation system should seek to:

13.3.1) reduce automobile dependency, especially the use of single-occupancy vehicles;

13.3.2) increase the use of transit through both expanding transit service and addressing a broad range of requirements for making transit competitive with the private automobile; and

13.3.3) encourage bicycle and pedestrian movement through the location and design of land uses.

Planning Activities:

1) Build on existing mechanisms for coordinating transportation planning in the region by:

- identifying the role for local transportation system improvements and relationship between local, regional, and state transportation system improvements in regional transportation plans;
- clarifying institutional roles, especially for plan implementation, in local, regional, and state transportation plans; and
- including plans and policies for the inter-regional movement of people and goods by rail, ship, barge, and air in regional transportation plans.

2) Structural barriers to mobility for transportation disadvantaged populations should be assessed in the current and planned regional transportation system and addressed through a comprehensive program of transportation and non-transportation system based actions.

3) The needs for movement of goods via trucks, rail, and barge should be assessed and addressed through a coordinated program of transportation system improvements and actions to affect the location of trip generating

activities.

4) Transportation-related guidelines and standards for designating mixed use urban centers shall be developed.

OBJECTIVE 14. ECONOMIC OPPORTUNITY

Public policy should encourage the development of a diverse and sufficient supply of jobs, especially family wage jobs, in appropriate locations throughout the region. Expansions of the urban growth boundary for industrial or commercial purposes shall occur in locations consistent with these regional urban growth goals and objectives.

Planning Activities:

1) Regional and subregional economic opportunities analyses, as described in OAR 660 Division 9, should be conducted to:

-- assess the adequacy and, if necessary, propose modifications to the supply of vacant and redevelopable land inventories designated for a broad range of employment activities;

-- identify regional and subregional target industries. Economic subregions will be developed which reflect a functional relationship between locational characteristics and the locational requirements of target industries. Enterprises identified for recruitment, retention, and expansion should be basic industries that broaden and diversify the region's economic base while providing jobs that pay at family wage levels or better; and

-- link job development efforts with an active and comprehensive program of training and education to improve the overall quality of the region's labor force. In particular, new strategies to provide labor training and education should focus on the needs of economically disadvantaged, minority, and elderly populations.

2) An assessment should be made of the potential for redevelopment and/or intensification of use of existing commercial and industrial land resources in the region.

II.3: GROWTH MANAGEMENT

The management of the urban land supply shall occur in a manner which encourages:

II.3.1 the evolution of an efficient urban growth form which reduces sprawl;

II.3.2 a clear distinction between urban and rural lands; and

II.3.3 recognition of the inter-relationship between development of vacant land and redevelopment objectives in all parts of the urban region.

OBJECTIVE 15. URBAN/RURAL TRANSITION

There should be a clear transition between urban and rural land that makes best use of natural and built landscape features and which recognizes the likely long-term prospects for regional urban growth.

15.1 Boundary Features - The Metro urban growth boundary shall, where feasible, be located using natural and built features, including roads, drainage divides, floodplains, powerlines, major topographic features, and historic patterns of land use or settlement.

15.2 Sense of Place - Historic, cultural, topographic, and biological features of the regional landscape which contribute significantly to this region's identity and "sense of place", should be identified. Management of the total urban land supply shall occur in a manner that supports the preservation of those features, when designated, as growth occurs.

15.3 Urban Reserves - Thirty-year "urban reserves", adopted for purposes of coordinating planning and delineating areas for future urban expansion, should be identified consistent with these goals and objectives, and reviewed by Metro every 15 years.

15.3.1 Establishment of urban reserves will take into account the efficiency with which the proposed reserve can be provided with urban services in the future, the unique land needs of specific urban activities assessed from a regional perspective, the provision of green spaces between communities, and the stated intent of these Regional Urban Growth Goals and Objectives to protect farm and forest resource land from urbanization.

In addition, the following hierarchy should be used for identifying priority sites for urban reserves:

A) First, propose such reserves on rural lands excepted from Statewide Planning goals 3 and 4 in adopted and acknowledged county comprehensive

plans. This recognizes that small amounts of rural resource land adjacent to or surrounded by those "exception lands" may be necessary for inclusion in the proposal to improve the efficiency of the future urban growth boundary amendment.

B) Second, consider secondary forest resource lands, or equivalent, as defined by the state.

C) Third, consider secondary agricultural resource lands, or equivalent, as defined by the state.

D) Fourth, consider primary forest resource lands, or equivalent, as defined by the state.

E) Finally, when all other options are exhausted, consider primary agricultural lands, or equivalent, as defined by the state.

15.3.2 Expansion of the urban growth boundary shall occur consistent with Objective 17. Where urban land is adjacent to rural lands outside of an urban reserve, Metro will work with affected cities and counties to ensure that urban uses do not significantly affect the use or condition of the rural land. Where urban land is adjacent to lands within an urban reserve that may someday be included within the urban growth boundary, Metro will work with affected cities and counties to ensure that rural development does not create obstacles to efficient urbanization in the future.

Planning Activities:

1) Identification of urban reserves adjacent to the urban growth boundary shall be accompanied by the development of a generalized future land use plan. The planning effort will primarily be concerned with identifying and protecting future open space resources and the development of short-term strategies needed to preserve future urbanization potential. Ultimate providers of urban services within those areas should be designated and charged with incorporating the reserve area(s) in their public facility plans in conjunction with the next periodic review. Changes in the location of the urban growth boundary should occur so as to ensure the presence of planned key public facilities and services concurrent with development on the newly annexed lands.

2) The prospect of creating transportation and other links between the urban economy within the Metro Urban Growth Boundary and other urban areas in the state should be investigated as a means for better utilizing Oregon's

urban land and human resources.

3) The use of greenbelts for creating a clear distinction between urban and rural lands, and for creating linkages between communities, should be explored.

4) The region, working with the state and other urban communities in the northern Willamette Valley, should evaluate the opportunities for accommodating forecasted urban growth in urban areas outside of and not adjacent to the present urban growth boundary.

OBJECTIVE 16. DEVELOPED URBAN LAND

Opportunities for and obstacles to the continued development and redevelopment of existing urban land shall be identified and actively addressed. A combination of regulations and incentives should be employed to ensure that the prospect of living, working, and doing business in those locations remains attractive to a wide range of households and employers.

16.1 Redevelopment & Infill - The potential for redevelopment and infill on existing urban land will be included as an element when calculating the buildable land supply in the region. When Metro makes a finding of need for additional urban land within the urban growth boundary, it will assess redevelopment and infill potential in the region.

Metro will work with jurisdictions in the region to determine the extent to which redevelopment and infill can be relied on to meet the identified need for additional urban land. After this analysis and review, Metro will consider an amendment of the urban growth boundary to meet that portion of the identified need for land not met through commitments for redevelopment and infill.

16.2 Portland Central City - The Central City area of Portland is an area of regional and state significance for commercial, economic, cultural, tourism, government, and transportation functions. State and regional policy and public investment should continue to recognize this special significance.

16.3 Mixed Use Urban Centers - The region shall evaluate and designate mixed use urban centers. A "mixed use urban center" is a mixed use node of relatively high density, supportive of non-auto based transportation modes, and supported by sufficient public facilities and services, parks, open space, and other urban amenities. Upon identification of mixed use urban centers, state, regional, and local policy and investment shall be coordinated to achieve development objectives for those places. Minimum targets for

transit:highway mode split, jobs:housing balance, and minimum housing density may be associated with those public investments.

New mixed use urban centers shall be sited with respect to a system of such centers in the region, and shall not significantly affect regional goals for existing centers, the transportation system, and other public services and facilities.

Planning Activities:

1) Metro's assessment of redevelopment and infill potential in the region shall include but not be limited to:

   a) An inventory of parcels where the assessed value of improvements is less than the assessed value of the land.

   b) An analysis of the difference between comprehensive plan development densities and actual development densities for all parcels as a first step towards determining the efficiency with which urban land is being used. In this case, efficiency is a function of land development densities incorporated in local comprehensive plans.

   c) An assessment of the impacts on the cost of housing of redevelopment versus expansion of the urban growth boundary.

   d) An assessment of the impediments to redevelopment and infill posed by existing urban land uses or conditions.

2) Financial incentives to encourage redevelopment and infill consistent with adopted and acknowledged comprehensive plans should be pursued to make redevelopment and infill attractive alternatives to raw land conversion for investors and buyers.

3) Cities and their neighborhoods should be recognized as the focal points for this region's urban diversity. Actions should be identified to reinforce the role of existing downtowns in maintaining the strength of urban communities.

4) Tools will be developed to address regional economic equity issues stemming from the fact that not all jurisdictions will serve as a site for an economic activity center. Such tools may include off-site linkage programs to meet housing or other needs or a program of

fiscal tax equity.

5) Criteria shall be developed to guide the potential designation of mixed use urban centers. The development and application of such criteria will address the specific area to be included in the center, the type and amount of uses it is to eventually contain, the steps to be taken to encourage public and private investment. Existing and possible future mixed use urban centers will be evaluated as to their current functions, potentials, and need for future public and private investment. Strategies to meet the needs of the individual centers will be developed. The implications of both limiting and not limiting the location of large scale office and retail development in mixed use urban centers shall be evaluated.

OBJECTIVE 17. URBAN GROWTH BOUNDARY

The regional urban growth boundary, a long-term planning tool, shall separate urbanizable from rural land, be based in aggregate on the region's 20-year projected need for urban land, and be located consistent with statewide planning goals and these Regional Urban Growth Goals and Objectives.

17.1 Expansion into Urban Reserves - Upon demonstrating a need for additional urban land, urban growth boundary amendments shall only occur within urban reserves unless it can be demonstrated that Statewide Planning Goal 14 cannot be met for the urban region through use of urban reserve lands.

17.2 Urban Growth Boundary Amendment Process - Criteria for amending the urban growth boundary shall be derived from statewide planning goals 2 and 14 and relevant portions of the Regional Urban Growth Goals and Objectives.

17.2.1 Major Amendments - Proposals for major amendment of the UGB shall be made primarily through a legislative process in conjunction with the development and adoption of regional forecasts for population and employment growth. The amendment process will be initiated by a Metro finding of need, and involve local governments, special districts, citizens, and other interests.

17.2.2 Locational Adjustments - Locational adjustments of the UGB shall be brought to Metro by cities and counties based on public facility plans in adopted and acknowledged comprehensive plans.

OBJECTIVE 18. URBAN DESIGN

The identity and functioning of communities in the region should be

supported through:

a) the recognition and protection of critical open space features in the region;

b) public policies which encourage diversity and excellence in the design and development of settlement patterns, landscapes, and structures; and

c) ensuring that incentives and regulations guiding the development and redevelopment of the urban area promote a settlement pattern which:

i) is pedestrian "friendly" and reduces auto dependence;

ii) encourages transit use;

iii) reinforces nodal, mixed use, neighborhood oriented design;

iv) includes concentrated, high density, mixed use urban centers developed in relation to the region's transit system; and

v) is responsive to needs for privacy, community, and personal safety in an urban setting.

18.1 Pedestrian and transit supportive building patterns will be encouraged in order to minimize the need for auto trips and to create a development pattern conducive to face-to-face community interaction.

Planning Activities:

1) A regional landscape analysis should be undertaken to inventory and analyze the relationship between the built and natural environments and to identify key open space, topographic, natural resource, cultural, and architectural features which should be protected or provided as urban growth occurs.

2) Model guidelines and standards should be developed which expand the range of tools available to jurisdictions for accommodating change in ways compatible with neighborhoods and communities while addressing this objective.

GLOSSARY

Areas and Activities of Metropolitan Significance. A program, resource, or issue, affecting or arising from the orderly, efficient and environmentally sound development of the region, that can be factually demonstrated to require a coordinated multijurisdictional response.

Beneficial Use Standards. Under Oregon law, specific uses of water within a drainage basin deemed to be important to the ecology of that basin as well as to the needs of local communities are designated as "beneficial uses". Hence, "beneficial use standards" are adopted to preserve water quality or quantity necessary to sustain the identified beneficial uses.

Economic Opportunities Analysis. An "economic opportunities analysis" is a strategic assessment of the likely trends for growth of local economies in the state. Such an analysis is critical for economic planning and for ensuring that the land supply in an urban area will meet long-term employment growth needs.

Exception. An "exception" is taken for land when either commitments for use, current uses, or other reasons make it impossible to meet the requirements of one or a number of the statewide planning goals. Hence, lands "excepted" from statewide planning goals 3 (Agricultural Lands) and 4 (Forest Lands) have been determined to be unable to comply with the strict resource protection requirements of those goals, and are thereby able to be used for other than rural resource production purposes. Lands not excepted from statewide planning goals 3 and 4 are to be used for agricultural or forest product purposes, and other, adjacent uses must support their continued resource productivity.

Family Wage Job. A permanent job with an annual income greater than or equal to the average annual covered wage in the region. The most current average annual covered wage information from the Oregon Employment Division shall be used to determine the family wage job rate for the region or for counties within the region.

Functional Plan. A limited purpose multijurisdictional plan which carries forward strategies to address identified areas and activities of metropolitan significance.

Housing Affordability. The availability of housing such that no more than 30% (an index derived from federal, state, and local housing agencies) of the monthly income of the household need be spent on shelter.

Infill. New development on a parcel or parcels of less than one contiguous acre located within the urban growth boundary.

Infrastructure. Roads, water systems, sewage systems, systems for

stormdrainage, bridges, and other facilities developed to support the functioning of the developed portions of the environment.

Key or Critical Public Facilities and Services. Basic facilities that are primarily planned for by local government but which also may be provided by private enterprise and are essential to the support of more intensive development, including public schools, transportation, water supply, sewage, and solid waste disposal.

Local Comprehensive Plan. A generalized, coordinated land use map and policy statement of the governing body of a city or county that inter-relates all functional and natural systems and activities related to the use of land, consistent with state law.

Metropolitan Housing Rule. A rule (OAR 660, Division 7) adopted by the Land Conservation and Development Commission to assure opportunity for the provision of adequate numbers of needed housing units and the efficient use of land within the Metro Urban Growth Boundary. This rule establishes minimum overall net residential densities for all cities and counties within the urban growth boundary, and specifies that 50% of the land set aside for new residential development be zoned for multifamily housing.

Mixed Use Urban Center. A "mixed use urban center" is a designated location for a mix of relatively high density office space, commercial activity, residential uses, and supporting public facilities and services, parks and public places. There will be a limited number of these centers designated in the region, and they will be characterized by design elements which work to minimize the need to make trips by automobile either to or within a center. State, regional, and local policy and investment will be coordinated to achieve development and functional objectives for these centers.

State Implementation Plan. A plan for ensuring that all parts of Oregon remain in compliance with Federal air quality standards.

Urban Form. The net result of efforts to preserve environmental quality, coordinate the development of jobs, housing, and public services and facilities, and inter-relate the benefits and consequences of growth in one part of the region with the benefits and consequences of growth in another. Urban form, therefore, describes an overall framework within which regional urban growth management can occur. Clearly stating objectives for urban form, and pursuing them comprehensively provides the focal strategy for rising to the challenges posed by the growth trends present in the region today.

Urban Growth Boundary. A boundary which identifies urbanizable lands to be planned and serviced to support urban development densities, and which separates urbanizable lands from rural lands.

Urban Reserve. An area adjacent to the present urban growth boundary that would provide priority locations for any future urban growth boundary amendments. Urban reserves are intended to provide cities, counties, other service providers, and both urban and rural land owners with a greater degree of certainty regarding future regional urban form than presently exists. Whereas the urban growth boundary describes an area needed to accommodate the urban growth forecasted over a twenty year period, the urban reserves describe an area capable of accommodating the growth expected for an additional 30 years. Therefore, the urban growth boundary and the urban reserves together provide the region with a 50-year planning area.

FINANCE COMMITTEE REPORT

ORDINANCE NO. 91-390A ADOPTING THE ANNUAL BUDGET FOR FISCAL YEAR 1991-92, MAKING APPROPRIATIONS AND LEVYING AD VALOREM TAXES

Date: June 24, 1991 Presented By: Councilor Van Bergen

COMMITTEE RECOMMENDATION: At it's June 20, 1991 meeting the Committee voted unanimously to recommend Council adoption of Ordinance No. 91-390 as amended. Present and voting were Councilors Devlin, Van Bergen and Wyers. Councilors Buchanan and Hansen were excused.

COMMITTEE DISCUSSION/ISSUES: Jennifer Sims, Finance and Management Information Director, presented the staff report. She indicated that the Approved FY 1991-92 Budget was submitted to the Tax Supervising and Conservation Commission in mid-May and a hearing was held on the Budget on June 13, 1991. Since the approval of the Budget on May 2, 1991 several changes have been proposed by various departments. The specific changes are outlined in the Staff Report dated June 21, 1991 including the following:

- an increase in the Council Budget (General Fund) for the Bi-State program and Councilor Per Diem.

- an adjustment in the Finance and Management Information Budget (Support Service Fund) to fully budget the Charter Committee program in FY 1991-92.

- an increase in the Facilities Management Dept. Budget (Building Management Fund and Support Service Fund) to fund the lease of space outside the Metro Center Building for the Transportation Dept.

- an adjustment to lower the Beginning Fund Balance and Unappropriated Fund Balance in the Zoo Operating Fund.

- several adjustments in the Solid Waste Operating Fund including: 1) an overall increase in the Beginning Fund Balance (the restricted Fund Balance is increased and the unrestricted portion of the Fund Balance is decreased); 2) an increase in the Materials and Services category in the Waste Reduction program; and 3) an increase in the Unappropriated Balance of the Fund.

- an adjustment to the Transportation Dept. Budget (Transportation Planning Fund) to increase the Beginning Fund Balance and the Materials and Services category to carry over certain program expenditures next fiscal year.

- an adjustment to the Planning and Development Dept. Budget (Planning and Development Fund) to increase the Beginning Fund Balance and Materials and Services category to carry over certain program expenditures next fiscal year.

- an adjustment to increase revenue in the Smith and Bybee Lakes Trust Fund and a corresponding increase in the Materials and Services expenditure category in the Fund.

In response to a question Ms. Sims pointed out that the response from the Tax Supervising and Conservation Commission had not been received to date but will be attached to this Ordinance as Exhibit A once received. Council Staff reviewed for the Committee the A Draft of Ordinance No. 91-390 which includes amendments to lower the total amount of the property tax levy of the District from $14,533,080 to $11,045,400, to lower the amount of the property tax levy for Convention Center Bond debt service from $9,127,080 to $5,639,400 and to set the Excise Tax rate for FY 1991-92 at 5.25%. Council Staff pointed out that the specific amendments to the Budget and Appropriations Schedule included in the Staff Report dated June 21, 1991 and referred to above will be incorporated into Exhibits B and C of the Ordinance.

METRO COUNCIL
Agenda Item No. 6.2
June 27, 1991

TRANSPORTATION AND PLANNING COMMITTEE REPORT

ORDINANCE NO. 91-408A, AMENDING THE PLANNING PROCEDURE FOR DESIGNATING FUNCTIONAL PLANNING AREAS AND ACTIVITIES

Date: June 26, 1991 Presented by: Councilor Gardner

COMMITTEE RECOMMENDATION: At the June 25, 1991, Transportation and Planning Committee meeting, Councilors Devlin, McLain, Van Bergen and myself voted unanimously to recommend Council adopt Ordinance No. 91-408A as amended. Councilor Bauer was absent.

COMMITTEE DISCUSSION/ISSUES: Ordinance No. 91-408A would amend and make a part of the Metro Code Ordinance No. 86-207 describing Metro's functional planning process. This ordinance was developed to: 1) clarify the District's process for determining areas and activities which may merit the development of functional plans; 2) provide a consistent legal context for Metro functional planning procedures.

The Committee approved ordinance amendments which structure the provisions for inclusion in the Metro Code as Chapter 3.06; add a "Policy and Purpose" introductory statement; and provide generally for Council standing committees to identify potential functional planning areas/ activities during the annual budget review process.

Committee members briefly discussed the variety of legal language used to described Metro's functional planning authority. Metro Legal Counsel Larry Shaw noted state statute language was very broad and Metro efforts, such as Ordinance No. 91-408, aimed at establishing a consistent legal description of Metro's functional planning actions.

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GOVERNMENTAL AFFAIRS COMMITTEE REPORT

ORDINANCE NO. 91-407A, AMENDING SECTIONS OF THE METRO CODE RELATING TO CONDUCT OF DEBATE AT COUNCIL MEETINGS, RECEIPT OF PUBLIC TESTIMONY AT COUNCIL MEETINGS AND CONSIDERATION OF A CONSENT AGENDA AT COUNCIL MEETINGS AND STANDING COMMITTEES OF THE COUNCIL.

Date: June 25, 1991 Presented by: Councilor Devlin

COMMITTEE RECOMMENDATION: At its June 20, 1991 meeting the Governmental Affairs Committee voted 3-0 to recommend Council adoption of Ordinance No. 91-407A. Voting were Councilors Devlin, Collier, and DeJardin. Councilors Hansen and Knowles were excused.

COMMITTEE DISCUSSION/ISSUES: Councilor Ruth McFarland and Council Administrator Don Carlson described the nature of the Ordinance for the committee. Councilor McFarland said it codifies some points which are not now official procedure, and it conforms with the provision of Senate Bill 299 which calls for a 90-day effective date for ordinances. She suggested an amendment to Section 2(g) of the ordinance, which would require the Clerk to rotate the order of each roll call vote. Her amendment would add, "except that the Presiding Officer shall always vote last."

Mr. Carlson explained that the ordinance sets out the way to implement rules of procedure, which are to be adopted by resolution. He then summarized the handout entitled, "Description of Changes by Section" (attached). Councilor DeJardin asked for clarification of the provision in Section 5(h) calling for an item to be considered defeated if it has been in committee for six months with no action taken. Mr. Carlson said that the Presiding Officer could re-refer the item to another committee, and that the Council Analysts will be responsible to monitor the time that items have been in committee. Councilor Devlin asked whether the provision in Section 5(h) which outlines committee authority would permit a committee to refer an item to another committee. The answer, after some discussion, was no: only the Council can authorize a subsequent referral. (The Presiding Officer can continue to make multiple referrals when an item is introduced.)

Chair Devlin opened the public hearing. Mr. John Ayer spoke on the companion resolution, 91-1467. He offered to coordinate between Metro, Clackamas County and its CPO's on testimony. He also spoke against the resolution's proposed three-minute limit on testimony. Councilor Devlin said this issue is one of several that will require some further committee work on the resolution.

The Committee voted to recommend Council approval of the Ordinance, incorporating Councilor McFarland's amendment.

ORDINANCE 91-407

DESCRIPTION OF CHANGES BY SECTION

SECTION 1

- o Subsection (C) — Adds clarifying language regarding rules of procedure
- o Subsection (i) — Replaces the current language on effective date of ordinances with language that is required by State law. The new subsection (i) is substantially the same as language in SB 299.
- o Subsection (l) — Adds language to clarify the new effective date provisions apply to emergency ordinances.

SECTION 2

- o Subsection (e) — Adds language to require the Council to adopt rules of procedure governing the conduct of debate at Council meetings.
- o Subsection (g) — Adds language to require the Council Clerk to rotate the order of roll call votes at each Council meeting.
- o Subsection (i) — Adds clarifying language about the relationship of Council adopted rules of procedure and "Roberts Rules of Order" and authorizes the Council by a vote of eight members to suspend any rule adopted by the Council.

SECTION 3

- o Subsection (b) — Adds language to require the Council to adopt rules of procedure relating to the appearance of members of the public at Council meetings.

SECTION 4

- o Subsection (c) — Revises the language regarding the consent agenda. Requires the adoption of rules establishing criteria for the placing of items on the consent agenda.
- o Subsection (d) — Revises language regarding removal of matters from the consent agenda.

SECTION 5

- o Subsection (c) — Adds clarifying language regarding rules of procedure for standing committees.

- o Subsection (h) — Adds language which states those actions which a standing committee may take on an ordinance or resolution and provides a method of terminating consideration of an ordinance or resolution which is not referred from a standing committee.

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BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING METRO CODE SECTIONS 2.01.070, 2.01.090, 2.01.120, 2.01.130 AND 2.01.140 RELATING TO CONDUCT OF DEBATE AT COUNCIL MEETINGS, RECEIPT OF PUBLIC TESTIMONY AT COUNCIL MEETINGS AND CONSIDERATION OF A CONSENT AGENDA AT COUNCIL MEETINGS AND STANDING COMMITTEES OF THE COUNCIL	)	ORDINANCE NO. 91-407 Introduced by Councilors McFarland and McLain and Presiding Officer Collier

THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT HEREBY ORDAINS:

Section 1. Metro Code Section 2.01.070 is hereby amended as follows:

2.01.070 Ordinances:

(a) The legislative action of the Metropolitan Service District shall be by Ordinance.

(b) Except as provided in Subsection (g) of this section, before an ordinance is adopted, it shall be read during two regular meetings of the Council on two different days at least six (6) days apart. The reading shall be full and distinct unless at the meeting:

(1) A copy of the ordinance is available for each person who desires a copy; and

(2) The Presiding Officer directs that the reading be by title only.

(c) Ordinances may be introduced for Council consideration by the Council, a Councilor, a committee of the Council or the Executive Officer. The Council by resolution shall adopt rules establishing procedures for introduction and consideration of ordinances.

(d) Except as provided in subsection (1) of this section, the affirmative vote of the majority of the members of the Council (7) is required to adopt an ordinance. A roll call vote shall be taken on all ordinances. Any ordinance which receives six (6) or more Nay votes shall be defeated and shall be filed and receive no further consideration. Any ordinance voted upon and not defeated shall be continued to the next regular meeting.

(e) Within two working days of adoption, any ordinance subject to the Executive Officer's veto shall be enrolled and transmitted to the Executive Officer for veto consideration.

(f) The Executive Officer shall veto an ordinance by filing a written and signed message with the Clerk no later than 5:00 p.m. of the fifth working day following adoption of the ordinance. If the Clerk has not received such veto message within the prescribed time then the ordinance shall be considered finally adopted.

(g) The Council may override an Executive Officer veto by am affirmative vote of eight members of the Council at the next regular meeting of the Council, but not later than 30 calendar days after the Executive Officer's veto. The vote to override an Executive Officer veto shall be the first item of business on the Council's agenda and a roll call vote shall be taken on all considerations of an override to a veto.

(h) Ordinances adopted by the Council which are not legislative in nature as determined by the General Counsel shall not be subject to the Executive Officer's veto.

[~~(i) Ordinances not subject to the veto shall become effective on the date of adoption unless a later date is specified therein. Ordinances subject to the veto shall become effective on the date of final adoption unless a later date is specified therein.~~]

(i) Unless otherwise specified by the Council in the ordinance, an ordinance shall become effective on the 90th day after its adoption. If an ordinance is vetoed by the Executive Officer and the veto is overridden by the Council, the date of adoption shall be the date on which the veto is overridden. Except as provided in ORS 268.465 and 268.507, the Council by a majority vote of its members may declare that an emergency exists in which case an ordinance may take effect immediately or in less than 90 days. The Council by a majority vote of its members may prescribe that an ordinance take effect later that the 90th day after its adoption. If the Council refers an ordinance to the electors, the ordinance shall become effective on the 30th day after its approval by a majority of the electors voting on the measure or on a later date specified in the ordinance. If a referendum petition, other than a petition referring an ordinance declaring an emergency, is filed with the filing officer not later than the 90th day after the adoption of the ordinance and before the ordinance takes effect, the effective date of the ordinance shall be suspended. An ordinance referred by a proper referendum petition shall become inoperative and shall not take effect if a minority of the electors voting on the measure reject the ordinance.

(j) Within seven (7) days after adoption or final adoption of an ordinance, the enrolled ordinance shall be:

(1) Signed by the Presiding Officer;

(2) Attested by the person who served as Recording Secretary of the Council at the meeting at which the Council adopted the ordinance; and

(3) Filed in the records of the District.

(k) If required by law a certified copy of each ordinance shall be filed with the Division of Courts Process of Multnomah County, and the County Clerk for Washington and Clackamas Counties.

(l) Pursuant to ORS 198.550(3), an ordinance to meet an emergency may be introduced, read once, and put on its final passage at a regular or special meeting, without being described in a published agenda, if the reasons requiring immediate action are described in the ordinance. The unanimous approval of all members of the Council at the meeting, a quorum being present, is required to adopt an emergency ordinance. Failing such approval, the emergency ordinance shall be considered pursuant to subsections 2.01.070(b) and (c) above. Emergency ordinances may be subject to the veto of the Executive Officer as described in subsection (e), (f) and (g) of this section [.] and shall have an effective date as described in subsection (i) of this section.

Section 2. Metro Code Section 2.01.090 is hereby amended as follows:

2.01.090 Conduct of Meetings:

(a) A quorum of the Council is seven (7) members. If a quorum is present, the Council may proceed with the transaction of its business.

(b) Minutes of each meeting shall be prepared by the Clerk of the Council, and shall include at least the following information:

(1) All members of the Council present;

(2) All motions, proposals, resolutions, orders, ordinances and rules proposed and their dispositions;

(3) The results of all votes and the vote of each Councilor by name;

(4) The substance of any discussion on any matter.

(c) Minutes of executive sessions may be limited consistent with ORS 192.660.

(d) The written minutes shall be available to the public within a reasonable time after the meeting, and shall be maintained as a permanent record of the actions of the Council by the Clerk of the Council.

(e) The Council shall by resolution adopt rules establishing procedures governing conduct of debate on matters considered by the Council at Council meetings.

(f) [~~(e)~~] Council members present, but not voting or not specifically abstaining shall be counted as voting with the majority. In the event that there is no such majority, such members shall be counted as abstaining.

(g) [~~(f)~~] Except for ordinances and rules, the Presiding Officer may order the unanimous approval of any matter before the Council unless there is an objection from one or more Councilors. If there is an objection, then a voice vote shall be taken, unless the objecting Councilor requests a roll call vote and at least two (2) Councilors concur in such request, in which case a roll call vote shall be taken. At each meeting the Clerk of the Council shall rotate the order for each roll call vote so that the Councilor who voted first shall vote last on the next roll call vote, except that the Presiding Officer shall always vote last.

(h) [~~(g)~~] In the event a matter is the subject of a voice vote or a roll call vote, after the vote is taken the Presiding Officer shall announce the result of the votes. Prior to proceeding to the next item on the agenda, or if the item voted upon is the last item on the agenda before adjournment, any member may request that the Clerk of the Council change their vote in which case the change in vote shall be announced by the Presiding Officer and the result of the votes as modified shall also be announced. Upon commencement of the next agenda or adjournment, as the case may be, all votes shall become final and may not be further changed without the unanimous consent of the Council.

(i) [~~(h)~~] Any matter not covered by this chapter or a rule adopted by the Council shall be determined by "Roberts Rules of Order," latest revised edition. The Council may by a positive vote of eight (8) members authorize the suspension of any rule adopted by the Council.

(j) [~~(i)~~] All meetings of the Council, its committees, and advisory committees shall be held and conducted in accordance with the Oregon Public Meetings Law.

Section 3. Metro Code Section 2.01.120 is hereby amended as follows:

2.01.120 Communications from the Public: Communications from the public both for matters on the agenda and matters not on the agenda may be allowed by the Council; provided, however:

(a) Persons addressing the Council shall do so from the rostrum upon first gaining recognition of the Presiding Officer and after stating name and address.

(b) To facilitate the orderly transaction of business, the Presiding Officer may limit the time, order and number of appearances[~~.~~] in accordance with rules establishing procedures adopted by resolution by the Council.

Section 4. Metro Code Section 2.01.130 is hereby amended as follows:

2.01.130 Order of Business:

(a) The general order of business for the Council shall be prescribed by resolution.

(b) Questions relating to the priority of business shall be decided without debate. The general order of business shall not be varied except upon the affirmative vote of a majority of the Council present and voting, a quorum being present.

(c) A [~~unanimous consent calendar~~] consent agenda shall be presented for the consideration and vote of the Council only at regular meetings. Items may be placed on the consent agenda pursuant to rules establishing criteria adopted by the Council by resolution. Copies of the consent [~~calendar~~] agenda shall be printed and distributed prior to consideration.

(d) Before calling for the vote on the consent [~~calendar~~] agenda, the Presiding Officer shall ask if any Councilor objects to any matter on the consent [~~calendar~~] agenda. If any matter on the consent [~~calendar~~] agenda is objected to by a member of the Council, that matter shall be removed from the consent [~~calendar~~] agenda and placed upon the regular agenda of the Council [~~under other business.~~] at a time or place determined by the Presiding Officer.

Section 5. Metro Code Section 2.01.140 is hereby amended as follows:

2.01.140 Standing Committees of the Council:

(a) The Council may establish standing committees as it deems necessary.

(b) Members of all standing committees shall be appointed by the Presiding Officer subject to confirmation of the Council. The first named shall be the Chair and the second named shall be the Vice Chair.

(c) A majority of the members of the standing committee shall constitute a quorum for the transaction of business before the Committee. Except as otherwise provided in this chapter or rules adopted by the Council, all standing committees of the Council shall be governed by "Roberts Rules of Order," latest revised edition.

(d) All standing committees shall meet at the call of the Chair or upon the request of a majority of the members of the Committee.

(e) The purposes of the standing committees are to:

(1) Make studies of and inquiries into areas into concern and interest to the Council.

(2) Report information to the Council.

(3) Prepare and submit recommendations, proposals and ordinances to the Council.

(f) Unless otherwise specifically provided, standing Committees of the Council shall have the power to:

(1) Hold meetings at such times and places as the committee considers expedient.

(2) Hold public hearings and take testimony.

(3) Make findings, conclusions and recommendations.

(4) Draft and prepare resolutions and ordinances for consideration by the Council.

(5) Appoint task forces and committees to advise the committees of the Council, subject to Council approval.

(g) Standing committees shall conduct business according to the following rule:

(1) A quorum of the committee is necessary to take action on any matter before the committee;

(2) Any matter before a committee may be decided by a majority of a quorum;

(3) Each committee chair shall have one (1) vote and the chair may vote and discuss any issue before the committee without relinquishing his or her position as chair;

(4) Any member may make a motion for action by the committee and a second is not necessary for committee consideration of the motion;

(5) Comment from members of the public appearing at the committee shall be solicited prior to the committee taking action on any matter before it. The chair may set time limits for public comment on matters before the committee; and

(6) A committee may go into executive session for the purposes and following procedures prescribed by law.

(h) A standing committee may take the following action on an ordinance or resolution:

(1) Refer the ordinance or resolution to the Council or another Committee, if it has received a subsequent referral by the Presiding Officer, either as originally submitted or as amended with a recommendation for approval or with no recommendation; or

(2) Table the ordinance or resolution; or

(3) Continue the ordinance or resolution to another committee meeting.

Any ordinance or resolution which remains in a standing committee over six (6) months from the date it was introduced shall be considered to be defeated and shall be filed with the Council Clerk and receive no further consideration. By majority vote of a quorum of the Council or by action of the Presiding Officer any matter referred to a standing committee may be removed from the committee and reassigned to another committee or be considered by the Council at a subsequent meeting. Consideration of such action shall take place under the "Councilor Communication[-] and Committee Reports" agenda item.

(i) The term for a committee member shall be one (1) year. Except for filling vacancies, committee appointments shall be made in January of each year.

(j) No committee will incur any indebtedness or hire any personnel without the express approval of the Council.

(k) The Chair, Vice Chair or committee members may be removed from committee assignment(s) upon the affirmative vote of the majority of the Council (7). Consideration of such agenda item shall take place under the "Councilor Communication[-] and Committee Reports" agenda item.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1991.

_____
Tanya Collier, Presiding Officer

Attest:

_____
Clerk of the Council

TRANSPORTATION AND PLANNING COMMITTEE REPORT

RESOLUTION NO. 91-1449A, AUTHORIZING THE EXECUTION OF A MULTI-YEAR CONTRACT WITH TRI-MET FOR THE TRANSFER OF $2,000,000 TO PROVIDE A PORTION OF LOCAL MATCH TO FEDERAL FUNDS FOR FINANCING THE WESTSIDE LIGHT RAIL PROJECT ("PROJECT")

Date: June 12, 1991 Presented by: Councilor Gardner

COMMITTEE RECOMMENDATION: At the June 11, 1991, Transportation and Planning Committee meeting, Councilors Bauer, Devlin, McLain, Van Bergen and myself voted 4 to 1 (Councilor Van Bergen dissenting) to recommend Council adopt Resolution No. 91-1449A as amended.

COMMITTEE DISCUSSION/ISSUES: Resolution No. 91-1449A authorizes an intergovernmental agreement to transfer $2,000,000 to Tri-Met for Metro's contribution toward the $21,000,000 local match for the Westside light rail (LRT) project. Transportation Department Director Andy Cotugno provided a brief review of the Westside LRT financing agreement which the Council adopted through Resolution No. 91-1300 last July. Metro's $2,000,000 contribution is in recognition of the benefits the Zoo will realize from the Zoo/OMSI/World Forestry Center LRT station. Mr. Cotugno highlighted additional points about the resolution and agreement:

- Metro and Tri-Met will need to negotiate at a later date a payment schedule for the transfer;
- The resolution establishes the intent to use a Zoo/OMSI/WFC parking fee as the payment vehicle but project specifics have yet to be developed;
- Action will be required by the City of Portland, as lease holder of the parking lot property, to implement a parking fee system (depending on the final project scope).

Mr. Cotugno identified parking fee benefits, noting it would help the Zoo to better manage parking demand; it would serve as a deterrent to LRT riders using the Zoo lot as a "park-and-ride" lot; and it would provide an incentive to increase use of public transit.

The Metro Regional Facilities Committee considered Resolution No. 91-1449 just prior to the Transportation and Planning Committee and Mr. Cotugno reported their concerns: 1) Seeking to have Tri-Met improve bus service to the Zoo between any parking fee initiation and the actual start of LRT service; 2) Exploring other options, such as borrowing from the Solid Waste Revenue Fund, to delay imposing a parking fee until light rail service begins.

As a result of these concerns, the Regional Facilities Committee recommended amending point 3. under the "Be It Resolved" section to include an additional sentence:

Prior to implementation of parking fees, consideration will be given to alternatives involving borrowing of funds with a delay in imposition of parking fees until after opening of LRT or improve-

ments in bus service prior to opening of LRT and after imposition of parking fees.

Committee discussion clarified that the proposed "borrowing of funds" referred explicitly to Metro interfund borrowing.

The Transportation and Planning Committee concurred with this amendment and recommended its adoption. In dissenting against the resolution as amended, Councilor Van Bergen expressed concerns about Metro liability for the parking lot and said he did not like to see an additional fee imposed at the Zoo. He asked staff whether the City of Portland could terminate the parking lot lease with a minimum amount of notice. He said he would have supported an open resolution, which did not speak to a specific funding mechanism. Committee members also expressed concern about the lack of cost information for implementing a parking fee.

Councilors agreed that with the Westside Preferred Alternative including the Zoo stop, as formally supported by Metro, it was incumbent upon the District to meet the $2,000,000 obligation.

RESOLUTION No.

RE: Agenda Item 8.1

Resolution 91-1449A

Approves the concept of fee parking at the Zoo/OMSI/WFC Parking Lot. (Resolution)

WHEREAS, in 1979, by Ordinance No. 147431, the City of Portland authorized and entered into a Lease with the Metropolitan Service District (Metro), the Oregon Museum of Science and Industry (OMSI), and the Western Forestry Center (WFC) (collectively "the lessees") for a 35-year lease of the Parking Lot previously operated by the City of Portland that served the "lessees" and others; and

WHEREAS, Tri-Met upon recommendation of the City, Metro, and others, has approved an alignment for the Westside Light Rail Project that includes the long tunnel option with a station at the Zoo/OMSI/WFC/Vietnam Veterans Memorial of Oregon/Hoyt Arboretum area; and

WHEREAS, Metro has committed $2,000,000 toward the cost of the light rail system, as its share of the local match, in recognition of the public benefit to be gained from the construction of a station to serve the area; and

WHEREAS, Metro has proposed to establish fee parking at the Zoo/OMSI/WFC Parking Lot to generate revenues for the Westside local match; and

WHEREAS, fee parking would provide revenues for future on-site operating, maintenance, and transportation expenses to the lessees and the city's Washington Park system; and

WHEREAS, fee parking would encourage transit patronage to the Zoo/OMSI/WFC area supportive of the city's Arterial Streets Classification Policy and the Regional Transportation Plan; and

WHEREAS, further study is needed to determine: the potential impact of fee parking on the three institutions and other park users; the rate structure; and an expected revenue schedule; and

WHEREAS, a management plan is needed to modify and control traffic and parking in the Zoo/OMSI/WFC Parking Lot (including SW Knight Boulevard), and minimize impacts to Washington Park users at surrounding parking lots at VVMO and Hoyt Arboretum, and parking along S.W. Kingston, and SW Fairview; and

NOW, THEREFORE BE IT RESOLVED, that the City Council approves the concept of fee parking at the Zoo/OMSI/WFC Parking Lot, with revenues used to pay for Metro's $2,000,000 share of the light rail system.

BE IT FURTHER RESOLVED, that the City Council directs the Bureau of Parks and Recreation and the Bureau of Transportation to prepare an Inter-governmental Agreement establishing fee structure, conditions for the parking and circulation management plan, modifications to parking lots and streets impacted by the parking fee, allocation of parking fee revenues needed to implement the Agreement, and revenue allocated for Westside local match requirements.

BE IT FURTHER RESOLVED, that if fee parking is continued after meeting the above financial obligations, the City Council expects that that Portland Park Bureau will receive a share of these revenues.

BE IT FURTHER RESOLVED, that the City Council directs the Bureau of Parks and Recreation to prepare a new Lease superseding the Lease of 1979 to reflect changes to the management of the Zoo/OMSI/WFC Parking Lot.

Adopted by the Council,

Commissioner Mike Lindberg
Linda M. Dobson
June 25, 1991

BARBARA CLARK
Auditor of the City of Portland
By

Deputy

FINANCE COMMITTEE REPORT

RESOLUTION NO. 91-1471 AMENDING THE CLASSIFICATION PLAN AND THE PAY PLAN FOR NON-REPRESENTED EMPLOYEES

Date: June 21, 1991 Presented By: Councilor Van Bergen

COMMITTEE RECOMMENDATION: At it's June 20, 1991, meeting the Committee voted unanimously to recommend Council adoption of Resolution No. 91-1471. Present and voting were Councilors Devlin, Van Bergen and Wyers. Councilors Buchanan and Hansen were excused.

COMMITTEE DISCUSSION/ISSUES: Paula Paris, Personnel Manager, and Kim Huey, Personnel Analyst, presented the Staff Report. Ms. Huey indicated that the Metro Code requires the Council to approve all new or revised classification descriptions to the Classification Plan and changes to the Pay Plan. In regard to the Classification Plan, the Resolution proposes changes to 15 new or existing positions. The new or revised descriptions are designated as Exhibits A through N. All the proposed descriptions were utilized by department managers in preparing FY 1991-92 budget requests. In regard to the proposed Pay Plan which is designated as Exhibit O, it is amended to include only those positions which are non-represented as wages for the represented employees are subject to the collective bargaining agreement.

In response to a question from Staff, Ms. Huey indicated the proposed Pay Plan schedule is at the same level as the current year pay plan.

METRO COUNCIL
Agenda Item No. 8.3
June 27, 1991

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF PARTIAL FUNDING OF THE 1000 FRIENDS OF OREGON WESTERN BYPASS STUDY LAND USE ALTERNATIVE ANALYSIS PROJECT, "MAKING THE LAND USE, TRANSPORTATION, AIR QUALITY CONNECTION," INCLUDING DIRECT FUNDING OF CONSULTANT AND SOFTWARE ELEMENTS AND IN-KIND SERVICES FROM METRO STAFF	RESOLUTION NO. 91-1469A Introduced by Rena Cusma, Executive Officer

WHEREAS, The 1000 Friends of Oregon have initiated a land use alternative study for the Western Bypass Study being carried out by the Oregon Department of Transportation; and

WHEREAS, Elements of the work are complementary to work in Metro's work program over the next two years, including the purchase of a calibrated land use forecast allocation model; and

WHEREAS, The 1000 Friends of Oregon have solicited funds from numerous sources and have requested both funds and in-kind services from Metro; and

WHEREAS, The participation of the Metropolitan Service District in this project will benefit both the region and this study; now, therefore,

BE IT RESOLVED,

1. That the Metropolitan Service District shall contribute $40,000 for the purpose of purchasing the land use forecasting model and consultant help in improving Metro's transportation modeling system.

2. That the Metropolitan Service District shall provide up to $40,000 of in-kind services, both staff and

computer time, to further the project.

3. $20,000 of the $40,000 in-kind services are for scenario travel forecasts, subject to execution of an agreement with Cambridge Systematics (1000 Friends Contractor) for their payment of 50 percent of $40,000 total incurred costs. Metro's maximum in-kind contribution for scenario travel forecasts is $20,000.

4. That the Executive Officer of the Metropolitan Service District is authorized to enter into an Agreement with the 1000 Friends of Oregon similar in form to Exhibit A which is attached.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1991.

_____
Tanya Collier, Presiding Officer

91-1469.RES
6-26-91
TKL:lmk

ATTACHMENT A

SCOPE OF WORK
METRO/1000 FRIENDS OF OREGON

Making the Land Use, Transportation, Air Quality Connection

1. DELIVERABLES TO METRO:

   a. 1000 Friends of Oregon and their consultant team will deliver to Metro a calibrated Iterative Transportation and Land Use Package (ITLUP), also known as DRAM-EMPAL. This population and employment allocation model should be set up to allocate to a mutually agreed-upon zone system (120 to 500 zones) the growth over any long-range growth horizon. This model was chosen by 1000 Friends aided by a National Technical Advisory Committee following a nationwide response to a Request for Proposals. The model was developed at the University of Pennsylvania by Dr. Stephen Putman who is a subcontractor to Cambridge Systematics, a member of the 1000 Friends consortium of consultants. This phase of the work will put in place an allocation model that Metro will use for the next regional long-range forecast allocation (in conjunction with the Regional Urban Growth Management process). The model must be calibrated using local (Metro supplied) data and be left at Metro to run on Metro's computer. It is expected that this model will be operable by October 31, 1991.

   b. 1000 Friends of Oregon and their consultant team will deliver to Metro improvements to the Metro transportation models, primarily in the inclusion of variables to better reflect density and design elements as they affect the choice of walk and bicycle modes. These models will be implemented at Metro within the EMME/2-MTX model software by October 31, 1991. The consortium member responsible for this is Cambridge Systematics. The combined cost to Metro for Subtasks 1a and 1b is $40,000, payable to 1000 Friends of Oregon.

2. IN-KIND SERVICES FROM METRO:

   Metro will provide advice and coordination to 1000 Friends of Oregon and their consultant team in the development and integration of these models/improvements in the Portland regional context and the integration into the modeling system at Metro. The Metro resources will consist of Keith Lawton, Dick Walker, Dick Bolen and Doug Anderson. A maximum level of support of $20,000 (estimated to be 400 hours) will be provided.

3. SCENARIO FORECASTS FROM METRO:

Based upon inputs from 1000 Friends and their consultant team, Metro will model land use and transportation scenarios to give measures of travel, congestion, energy consumption and emission inventories. Metro is prepared to contribute staff and computer services for one-half of the actual cost including computer costs up to a maximum of $20,000, to be matched by the 1000 Friends' contractor. Metro will invoice Cambridge Systematics monthly for one-half of actual incurred costs.

TKL:lmk
MET1000F.CON
6-13-91

Contract No. 901-935

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT dated this 4th day of June 1991, is between the METROPOLITAN SERVICE DISTRICT, a municipal corporation, hereinafter referred to as "METRO," whose address is 2000 S.W. First Avenue, Portland, OR 97201-5398, and 1000 Friends of Oregon, hereinafter referred to as "CONTRACTOR," whose address is 534 SW Third, Portland, OR, for the period of June 20, 1991, through June 30, 1992, and for any extensions thereafter pursuant to written agreement of both parties.

W I T N E S S E T H :

WHEREAS, This Agreement is exclusively for Personal Services;

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

CONTRACTOR AGREES:

1. To perform the services and deliver to METRO the materials described in the Scope of Work attached hereto Attachment "A";

2. To provide all services and materials in a competent and professional manner in accordance with the Scope of Work;

3. All applicable provisions of ORS chapters 187 and 279, and all other terms and conditions necessary to be inserted into public contracts in the State of Oregon, are hereby incorporated as if such provision were a part of this Agreement, including but not limited to ORS 279.310 to 279.320.

Specifically, it is a condition of this contract that Contractor and all employers working under this Agreement are subject employers that will comply with ORS 656.017 as required by 1989 Oregon Laws Chapter 684.

4. To maintain records relating to the Scope of Work on a generally recognized accounting basis and to make said records available to METRO at mutually convenient times;

5. To indemnify and hold METRO, its agents and employees harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, with any patent infringement arising out of the use of CONTRACTOR'S designs or other materials by METRO and for any claims or disputes involving subcontractors;

6. To comply with any other "Contract Provisions" attached hereto as so labeled; and

7. CONTRACTOR shall be an independent contractor for all purposes, shall be entitled to no compensation other than the compensation provided for in the Agreement. CONTRACTOR hereby certifies that it is the direct responsibility employer as provided in ORS 656.407 or a contributing employer as provided in ORS 656.411.

In the event CONTRACTOR is to perform the services described in this Agreement without the assistance of others, CONTRACTOR hereby agrees to file a joint declaration with METRO to the effect that CONTRACTOR services are those of an independent contractor as provided under Chapter 864 Oregon Laws, 1979.

METRO AGREES:

1. To pay CONTRACTOR for services performed and materials delivered in the maximum sum of FORTY THOUSAND AND 00/100THS ($40,000) DOLLARS and in the manner and at the time designated in the Scope of Work; and

2. Metro agrees to provide in-kind support of up to FORTY THOUSAND AND 00/100THS ($40,000). These initial services consist of TWENTY THOUSAND AND 00/100THS DOLLARS ($20,000) for direct data acquisition and consulting services on the modeling structure and TWENTY THOUSAND AND 00/100THS DOLLARS ($20,000) for the preparation and running of scenario-based model forecasts. This latter scenario travel forecast work is subject to reimbursement to Metro by Cambridge Systematics for one-half of the full incurred cost of $40,000 at a 50 percent rate. Metro will charge Cambridge Systematics at half rates for up to $40,000 of scenario travel forecast work.

3. To provide full information regarding its requirements for the Scope of Work.

1000 FRIENDS AGREES:

1. To give Metro ownership, title to, or license to use the calibrated land use allocation model (DRAM-EMPAL) resulting from this study as described in Attachment "A".

BOTH PARTIES AGREE:

1. That METRO may terminate this Agreement upon giving

CONTRACTOR five (5) days' written notice without waiving any claims or remedies it may have against CONTRACTOR;

2. That, in the event of termination, METRO shall pay CONTRACTOR for services performed and materials delivered prior to the date of termination; but shall not be liable for indirect or consequential damages;

3. That, in the event of any litigation concerning this Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs, including fees and costs on appeal to an appellate court;

4. That this Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any condition, be assigned or transferred by either party; and

5. That this Agreement may be amended only by the written agreement of both parties.

CONTRACTOR NAME	METROPOLITAN SERVICE DISTRICT
By: _____	By: _____
Date: _____	Date: _____

APPROVED AS TO FORM:

By: _____

Date: _____

KT:TKL:bc
901-935.PSA
6/26/91

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: June 26, 1991

TO: Metro Council
Interested Parties

FROM: Paulette Allen, Clerk of the Council

RE: Agenda Item No. 8.4; Resolution No. 91-1415

The attached model siting ordinance was not printed in the June 27 Council agenda packet due to the size of that document.

MODEL ORDINANCE

BEFORE THE [*CITY COUNCIL/COUNTY COMMISSION*] OF
[*CITY/COUNTY*], OREGON

AN ORDINANCE AMENDING THE	)	
[*ZONING ORDINANCE/COMMUNITY DEVELOPMENT*	)	
CODE] OF [*CITY/COUNTY*], OREGON	)	ORDINANCE NO. ___
REGARDING THE SITING AND USE OF	)	
CERTAIN SOLID WASTE FACILITIES	)	

WHEREAS, [*City/County*] desires to provide for the siting of certain solid waste facilities in a manner that protects the environment and the health, safety and welfare of its citizens; and

WHEREAS, [*City/County*] has adopted a comprehensive plan that addresses solid waste facilities. It provides: [*quote relevant language from local Plan*]; and

WHEREAS, the Metropolitan Service District Regional Solid Waste Management Plan states that "each city and county shall provide appropriate zoning to allow planned solid waste facilities or enter into intergovernmental agreements with others to assure such zoning. Whether by outright permitted use, conditional use or otherwise, appropriate zoning shall utilize only clear and objective standards that do not effectively prohibit solid waste facilities;" and

WHEREAS, [*City/County*] desires to fulfill its responsibility to implement the Metro Regional Solid Waste Management Plan within its jurisdiction; and

WHEREAS, [*City/County*] adopts the Findings and Conclusions in Support of an Ordinance Regarding Solid Waste Facilities, attached hereto and incorporated herein by reference;

NOW THEREFORE, [*City/County*] does ordain as follows:

Contents

SECTION 1. Facility Definitions

A. Conditionally Exempt Small Quantity Collection Facility. A facility that receives, sorts, stores, controls, and processes for safe transport hazardous materials from small quantity generators, each of which produces less than 100 kg (220 lbs.) of hazardous waste per month.

B. Demolition landfill. A land disposal site for receiving, sorting and disposing only land clearing debris, including vegetation and dirt, building construction and demolition debris and inert materials, and similar substances.

C. Household hazardous waste depot. A facility for receiving, sorting, processing and temporarily storing household hazardous waste and for preparing that waste for safe transport to an approved transfer, processing or disposal facility.

D. Limited purpose landfill. A land disposal site for the receiving, sorting and disposing of non-hazardous waste material, including but not limited to asbestos, treated petroleum-contaminated soil, construction, land clearing and demolition debris, wood, treated sludge from industrial processes, or other specific waste material other than unseparated municipal solid waste.

E. Material recovery facility. A facility that receives and sorts mixed solid waste to separate from that waste material that still has useful physical or chemical properties after having served a useful purpose and to process, reuse, recycle or recover for energy the material for the same or other purpose.

F. Mixed construction and demolition debris recycling facility. A facility that receives, stores, processes, and recovers recyclable material from mixed construction and demolition debris for reuse, sale, or further processing.

G. ~~Mixed~~ solid waste composting facility. A facility that receives, stores, and processes solid waste ~~to separate out the recyclable and organic components of the waste and~~ to biologically decompose the organic waste under aerobic or anaerobic conditions into a final product such as compost, mulch, etc. that can be stored, sold or used as a soil amendment or for other useful purposes.

H. Monofill. A land disposal site for receiving, sorting and disposing only one material or class of materials for burial, such as a facility which accepts only asbestos.

I. Municipal solid waste depot. A facility where sealed containers are received, stored up to 72 hours, staged, and/or transferred from one mode of transportation to another.

J. Solid waste facility. Any facility or use defined in section 1 of this ordinance. A recycling drop box and a crematorium are not solid waste facilities.

K. Small scale specialized incinerator. A facility that receives, processes, stores and burns a waste product as an accessory use to a permitted use, including incinerators for disposal of medical wastes as part of a medical facility, but not including mass incinerators, resource derived fuel technologies, crematorium, or process that uses unseparated municipal solid waste.

L. Solid waste transfer station. A facility that receives, processes, temporarily stores and prepares solid waste for transfer to large vehicles for transport to a final disposal site with or without material recovery prior to transfer.

M. Treatment and storage facility. A facility that receives, processes and stores hazardous materials and that complies with the Resource Conservation and Recovery Act, 42 USC §§ 6901-6987.

N. Wood waste recycling facility. A facility that receives, stores, and processes scrap lumber, timbers, or natural wood debris, including logs, limbs, and tree trunks, for reuse, recycling or energy recovery into products such as hog fuel, fuel pellets, or fireplace logs. All raw material shall be untreated wood and shall not contain pressure treated or wood preservative treated wood.

O. Yard debris depot. A facility that receives yard debris for temporary storage, awaiting transport to a facility for processing.

P. Yard debris processing facility. A facility that receives, stores and processes yard debris into a soil amendment, mulch or other useful product through controlled biological decomposition.

SECTION 2. General Definitions

A. Aerobic. A process that uses free atmospheric oxygen.

B. Anaerobic. A process that does not allow the introduction of free atmospheric oxygen.

C. Disposal. The discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground water.

D. Foot candle. A unit of illumination. One foot-candle is the intensity of illumination when a source of 1 candle-power illuminates a screen 1 foot away.

E. Gravity (g). The attraction exerted by any mass in space upon any other mass, such as the pull exerted by the earth on the moon or by the sun on the earth.

F. Hazardous waste. Discarded, useless or unwanted material or residues in solid, liquid or gaseous state that cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

G. Hog fuel. Fuel generated from wood waste that has been fed through a machine that reduces it to a practically uniform size of chips or shreds.

H. Inert material. Material that remains unchanged by variations in chemical, environmental, storage, and use conditions.

I. Leachate. Liquid that has come into direct contact with solid waste and contains dissolved and/or suspended contaminants as a result of such contact.

J. Level of service (LOS). A measure of the overall comfort afforded to motorists as they pass through a roadway segment or intersection, based on such things as impediments caused by other vehicles, number and duration of stops, travel time, and the reserve capacity of a road or an intersection, (i.e., that portion of the available time that is not used). LOS generally is referred to by the letters A through F, with LOS E or F being generally unacceptable. LOS generally is calculated using the methodology in the *Highway Capacity Manual, Special Report 209*, by the Transportation Research Board (1985).

K. Lower explosive limit. The minimum concentration of gas or vapor in air that will propagate a flame at 25 degrees Celsius in the presence of an ignition source.

L. Mixed solid waste. Solid waste that contains recyclable and non-recyclable materials.

M. Municipal solid waste. Solid waste primarily from residential, business, and institutional uses.

N. Non-attainment area. A geographical area of the State which exceeds any state or federal primary or secondary ambient air quality standard as designated by the Oregon Environmental Quality Commission and approved by the U.S. Environmental Protection Agency.

O. Primary impact area. The area in which a solid waste facility operator will remove litter and illegally dumped waste. This area shall include primary routes to the facility within one-half mile of the facility, based on the traffic study, unless a greater distance is required by the approval authority or warranted based on annual review of illegal dumping.

P. Processing. An activity or technology intended to change the physical form or chemical content of solid waste or recycled material including, but not limited to sorting, baling, composting, classifying, hydropulping, incinerating or shredding.

Q. Professional engineer. A professional engineer currently licensed to practice in the State of Oregon. The type of professional engineer may be specified in the ordinance, (e.g., civil, structural, acoustic, traffic, etc.).

R. Recycled materials. Solid waste that is transformed into new products in such a manner that the original products may lose their identity.

S. Recycling. The use of secondary materials in the production of new items. As used here, recycling includes materials reuse.

T. Rural zone. A land use zone adopted by a unit of local government that applies to land outside a regional urban growth boundary.

U. Significant vegetation. A tree exceeding 6 inches in diameter measured 4 feet above grade at the base of the tree or other vegetation more than 4 feet above grade, but not including blackberry or other vines or weeds.

V. Soil amendment. A material, such as yard waste compost, added to the soil to improve soil chemistry or structure.

W. Solid waste. All putrescible and non-putrescible wastes including but not limited to garbage, rubbish, refuse, ashes, waste paper and cardboard; sewage sludges, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; metal or discarded machinery; discarded home and industrial appliances; manure; vegetable or animal solid and semi-solid waste, dead animals and other wastes. The term does not include hazardous waste.

X. Urban zone. A land use zone adopted by a unit of local government that applies to land inside a regional urban growth boundary.

Y. Wetland. An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that, under normal circumstances, does support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are identified on the Goal 5 inventory of such features or, in the absence of such an inventory, are based on the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989).

SECTION 3. Solid Waste Facilities Allowed by Zone

A. Solid waste facilities as a [*principal/primary*] or conditional use.

1. The following solid waste facilities are permitted as [*principal/primary*] uses in the [*insert zones as determined by the local government*], subject only to the applicable provisions of Sections 4 through 7 of this ordinance:

> [*List facilities allowed as a principal/primary use. Repeat as necessary for each zone or group of zones. It is suggested that all of the listed solid waste facilities be permitted in rural industrial/commercial and urban industrial zones and that smaller scale uses be permitted in land extensive commercial zones. In rural zones, an urban land use may be subject to statutory and Goal limits. Note: regulations of the underlying zone do not apply unless incorporated into this ordinance.*]

2. The following solid waste facilities are permitted as conditional uses [*or equivalent*] in the [*insert other zones as determined by City/County*, subject only to the applicable provisions of Sections 4 through 7 of this ordinance:

> [*List facilities allowed as a conditional use. Repeat as necessary for each zone or for groups of zones. It is suggested that all of the listed solid waste facilities not allowed pursuant to Section 3.A.1 be permitted subject to Section 3.A.2 in industrial and land extensive commercial zones. In rural zones, an urban land use may be subject to statutory and Goal limits. Note: other conditional use regulations do not apply to solid waste uses unless incorporated into this ordinance.*]

B. Accessory use solid waste facilities.

The following solid waste facilities are permitted, subject to the applicable regulations of the zone, as an accessory use to a permitted or conditional use without being subject to the conditional use review:

a. Household hazardous waste depot, provided the facility is accessory to a public facility or to a use in an industrial zone.

b. Small scale specialized incinerator, provided the facility does not accept more than 220 pounds per day of waste from off-site.

c. Recycling drop boxes, provided they also comply with Section 4.G.5.

C. Multiple purpose solid waste facility.

A solid waste facility may include more than one kind of facility as defined in Section 1. An application that includes more than one kind of facility is permitted in a given zone only if all of the uses proposed in the facility are permitted in that zone. If any of the uses proposed are allowed only as a conditional use in the zone, then all of the uses proposed shall be considered conditional uses.

D. Temporary solid waste facility.

The following solid waste facilities may be approved as a temporary use in any zone without being subject to conditional use review if the use operates not more than 3 days per calendar month, subject only to the dimensional requirements of the underlying zone [*e.g., setbacks and height*] and the applicable provisions of Sections [*4A, 4C through 4G, and 4J through 4O*] and the approporiate requirements of Sections 5 through 7:

[*List facilities allowed. It is suggested that a demolition debris depot, household hazardous waste depot, yard debris depot, and plastics recycling depot be allowed as a temporary use in all zones. Local governments may want to prohibit temporary solid waste facilities in residential zones unless associated with a public use. The parts of Section 4 listed for temporary facilities are the ones most relevant to such a use. Local governments may want to subject such facilities to other provisions of Section 4 than listed above.*]

E. Prohibited solid waste facility.

1. Unless allowed by Sections 3.A through 3.D, a solid waste facility is prohibited.

2. Notwithstanding Sections 3.A through 3.D above, the following solid waste facility [*or facilities*] [*is/are*] prohibited in the following zones:

[*List specific solid waste facilities and zones where they are prohibited, such as open space zones, historic district zones, environmental or natural resource zones, etc.*]

SECTION 4. Approval Criteria and Development Standards

Table 1 lists which approval criteria and development standards apply to each kind of solid waste use defined in Section 1. An application for a facility that includes more than one kind of use is subject to the criteria and standards that apply to all uses in the facility.

In the left hand column of Table 1 is a list of the solid waste facilities regulated by this ordinance. Across the top of the table are the subjects regulated by the ordinance. They are listed in the order in which they appear after the table. To identify which criteria and standards apply to a given facility, identify the facility in the left hand column and read across the row. A dot "•" at the intersection of a row and column indicates that the facility listed in the left hand column is subject to the approval criterion or standard at the top of the column. An "x" at the intersection of a row and column indicates that the facility listed in the left hand column is not subject to the criterion or standard at the top of the column.

Some criteria and standards incorporate by reference state and federal regulations that are included as appendices to the ordinance or are incorporated by reference in those appendices. The [*City/County*] approval authority applies those state and federal regulations as though it is the state or federal agency responsible for administering them. The approval authority uses the procedure in this ordinance that applies to the application for the solid waste facility in question rather than using the procedure provided in the state and federal regulations. Local review does not substitute for state or federal review required by regulations in the appendices, and local action does not bind state or federal agencies about matters of state or federal jurisdiction.

[Local governments can use the model ordinance in 4 ways: (1) with the appendices as approval criteria; (2) with the appendices as information requirements, (3) without the appendices, or (4) in combination. The appendices contain state or federal regulations that apply to some or all solid waste uses. They should be updated to keep current (see §6.G).

Option 1: The model ordinance is written assuming the appendices are approval criteria.

Option 2: The appendices can be used to collect information so that the local government can prepare to participate in state or federal agency actions regarding the proposed facility. To use the appendices as information requirements, modify the preceding paragraph, Sections 4.O through 4.T, and Sections 6.D and F to require information only.

Option 3: The appendices can be deleted, deferring to the responsible agency whether a proposed facility complies with them. To use option 3, delete the last paragraph in the text above, the ""Methane gas impacts" and "Air quality impacts" columns and the superscripts and bracketed numbers on Table 1, and Sections 4.R through 4.T and 6.G, and modify Sections 4.O through 4.Q and Sections 6.D and F to delete reference to the appendices.

Option 4: To use the model ordinance with a combination of approaches, modify the last paragraph in the text above and Table 1 to include a rule, notes or symbols to identify what appendices apply to what facilities and change Sections 6.D and F accordingly.

For instance, applicable standards could vary with the kind of facility using option 4. A local government could decide that all landfills and solid waste transfer stations should be subject to the standards in all the appendices. Or a facility could be subject to only certain appendices; for instance, an incinerator could be subject to the air quality provisions in appendices 9 through 11, because it is likely to have air quality impacts, but not subject to noise or water quality standards in other appendices, because such impacts are not likely.

Or a facility could be subject to the appendices if it exceeds a certain measure of land use intensity or has a certain impact on land resources, defined in terms of the number of vehicle trips generated by the facility, by the capacity of the facility, or by the area of the site to be developed. Therefore, a facility would be subject to standards in the appendices if it would generate more than 200 vehicle trips per day, would have a capacity of 200 cubic yards of material per day, or would involve development of an area of an acre or more.]

TABLE 1 - APPROVAL CRITERIA APPLICABLE TO FACILITIES

Code section / Proposed use	Wetlands, habitat and natural area impacts	Vibration impacts	Landscaping and site design impacts	Historic resource impacts	Operating impacts	Signage impacts	Outdoor storage impacts	Litter impacts	Vector control impacts	Fire protection and explosion	Traffic circulation and access	Floodplain conditions	Topographic conditions	Geologic and soil conditions	Noise impacts [2] [1]	Odor impacts [2] [2,3]	Ground and surface water impacts [2] [4,5,6,7]	Methane gas impacts [3] [8]	Air quality impacts [3] [2,9,10]
Cond exmpt sm quan collect facil [1]																			
Demolition landfill	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Household hazardous waste depot	•	x	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Limited purpose landfill	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Material recovery facility	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Mixed c/d debris recycling facility	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•
Mixed waste composting facility	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Monofill	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Municipal solid waste depot	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•
Small scale specialized incinerator	•	x	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Solid waste transfer station	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•
Treat, storage & disposal facility [4]	•	x	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Wood waste recycling facility	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•
Yard debris depot	•	x	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	x	•
Yard debris processing facility	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•

• applicable standard
x standard not applicable
[1] standards for conditionally exempt small quantity collection facilities will be developed in the future
[2] incorporates local and state or federal regulations in appendix number(s) in brackets
[3] incorporates state or federal regulations in appendix number(s) in brackets
[4] a T,S,D facility also is subject to standards and criteria in appendix II

A. Wetlands, habitat and natural area impacts.

1. The applicant shall identify and describe the significance and functional value of wetlands on the site and protect those wetlands from adverse effects of the development. A facility complies with this standard if it complies with Section 4.A.1.a or b below:

a. The facility will not reduce the area of wetlands on the site, and development will be separated from such wetlands by a minimum of [*60*] feet, which shall be retained in its existing condition or enhanced for compatibility with the wetland. The setback may be reduced to as little as [*x*] feet if the applicant shows such lesser setback will not adversely affect the wetland, provided Section 4.C does not require more than the requested setback. Lack of adverse effect can be demonstrated by showing the following among other means:

(1) A natural condition such as topography, soil, vegetation or other feature isolates the area of development from the wetland;

(2) Impact mitigation measures will be designed, implemented, and monitored to provide effective protection against harm to the wetland from sedimentation, erosion, loss of surface or ground water supply, or physical trespass; and/or

(3) A lesser setback complies with federal and state permits or standards that will apply to state and federal permits, if required.

b. Where existing wetlands are eliminated by the facility, the applicant will develop or enhance an area of wetland on the site or in the same drainage basin that is at least equal to the area and functional value of wetlands eliminated.

2. The applicant shall provide appropriate plans and text that identify and describe the significance and functional value of natural features on the site [*if identified in the Comprehensive Plan or the Goal 5 inventory or if in a natural resource zone or equivalent*], and protect those features from impacts of the development or mitigate adverse effects that will occur. A facility complies with this standard if:

a. The site does not contain an endangered or threatened plant or animal species or a critical habitat for such species identified by federal or state government [*and does not contain significant natural features identified in the Comprehensive Plan if the local Comprehensive Plan includes an inventory and assessment of such features*]; and

b. The facility will comply with applicable requirements of the [*natural resource zone*] if one applies to the site; and

c. The applicant will excavate and store topsoil separate from subsurface soil, and shall replace the topsoil over disturbed areas of the site not covered by buildings or pavement or will provide other appropriate medium for revegetation of those areas, such as yard debris compost; and

d. The applicant will retain significant vegetation in areas that will not be covered by buildings or pavement or disturbed by excavation for the facility; will replant areas disturbed by the development and not covered by buildings or pavement with native species vegetation unless other vegetation is needed to buffer the facility; will protect disturbed areas and adjoining habitat from potential erosion until replanted vegetation is established; and will provide a plan or plans identifying each area and its proposed use; and

e. Development associated with the facility will be set back from the edge of a significant natural area [*identified by Comprehensive Plan*] by a minimum of [*60*] feet, which shall be retained in its existing condition or enhanced for compatibility with the natural area. The setback may be reduced to as little as [*x*] feet if the applicant shows such lesser setback will not adversely affect the natural area, provided Section 4.C does not require more than the requested setback. Lack of adverse effect can be demonstrated by showing the same sort of evidence as in Section 4.A.1.a above.

B. Vibration impacts.

The facility shall not cause vibrations that exceed 0.002g peak at a property line, except vibration from construction and from vehicles that leave the site and except for vibrations that last 5 minutes or less per day, based on a written statement certified by a professional engineer.

C. Landscaping and site design impacts.

1. Except as noted in Section 4.C.2, the facility shall comply with the setback requirements and height limits of the underlying zone; provided, if the facility adjoins a commercial zone, the minimum setback shall be [*100*] feet; provided further, if the facility adjoins a residential or open space zone, the minimum setback shall be [*200*] feet.

2. Structures, exterior storage and processing areas, and vehicle maneuvering and parking are prohibited in setbacks required pursuant to Section 4.C.1 above, provided:

a. The approval authority may reduce the required setback if a lesser setback will not adversely affect the privacy, use, or visual character of existing uses on adjoining land, based on the scale and design of the use or structure(s), landscaping and buffers, or on the topography, vegetation, or other natural features of the site;

b. Minor building features such as eaves, chimneys, fire escapes, bay windows, uncovered stairs, wheelchair ramps, and uncovered decks no more than 3 feet above grade may extend up to 20% into a required setback;

c. Attached mechanical structures such as heat pumps, air conditioners, emergency generators, and water pumps may extend into a required setback except adjoining or across a street from an abutting residential zone;

d. Fences, walls, berms, landscaping, access drives, and an entry sign(s) are permitted in the setback; and

e. Notwithstanding the preceding, structures shall be situated so they comply with the Uniform Building Code adopted in Oregon.

3. Exterior building surfaces shall be finished. Metal used on the exterior of the building shall be anodized or painted; galvanized or coated steel shall not be left unpainted.

4. Buildings with walls containing more than 2,500 square feet above grade shall incorporate fascias, canopies, arcades, or multiple colors or building materials to break up large wall surfaces visually into areas of 1,000 square feet or less, unless it would be contrary to the purpose of the wall, such as for retaining earth or for structural support.

5. Attached mechanical structures and roof-mounted equipment shall be screened from view from ground level at adjoining public streets and property zoned residential or open space. Screening may include landscaping, sight obscuring fencing or other features.

6. The facility shall not cause glare or lights to shine off site in excess of 0.5 footcandles onto non-industrial zoned land, based on a written statement certified by a professional engineer.

7. Structures shall not obstruct scenic views or vistas identified in the Comprehensive Plan, although structures may be visible from off site.

8. Major activity areas of the site, such as loading and delivery areas, shall be oriented away from adjoining land zoned for residential or open space uses.

9. At least 20% of the facility site shall be landscaped with living vegetation in an appropriate medium, such as yard debris compost. Landscaped areas shall have a permanent irrigation system equipped with automatic controls. Where landscaping is situated in required setbacks or adjoins buildings and other structures, it shall include evergreen species at least 6 feet above grade at planting and situated not farther apart than the radius of the crown of a mature specimen. The approval authority may waive or reduce the level of landscaping where necessary to allow sight distance for vehicular traffic, to enable views of signs or other features of the facility that should be visible to enhance the function of the facility, or to protect solar access to adjoining property. The approval authority may require larger or more numerous trees where necessary to reduce the potential adverse visual effects of a facility. Existing significant vegetation shall be retained, where feasible, and may substitute for other required vegetation. Landscaping in setbacks and parking lots counts toward the 20%.

10. All utilities will be underground; provided, electric and telephone lines may be above ground to the extent such features are above ground on adjoining land or land in the immediate vicinity.

D. Historic resource impacts.

The facility shall not adversely affect historic resources listed in the comprehensive plan [*or inventory of historic resources adopted by [City/County]*]. A facility complies with this standard if the site and adjoining land do not contain an identified historic resource and are not in an historic district. If the site or adjoining land contains such a resource, then the applicant shall show the facility design preserves the historic resource character.

E. Operating impacts.

1. Exterior activities are prohibited between 10 pm and 7 am daily; provided, vehicles may continue to enter and exit the site and maintenance may be conducted at all hours if they do not violate applicable provisions of Sections [*4.B, C.6 and 8, K.2 and O*] during any hours.

2. For a solid waste transfer station, most solid waste may be stored in an open pit or floor inside a building up to 24 hours or in a sealed container on the site up to 72 hours. Separated recycled materials may be stored on the site up to 30 days in unsealed containers.

F. Signage impacts.

1. Signs shall comply with sign regulations of the zone, except as provided herein.

2. If the facility is open to the public, then the applicant shall provide a sign(s) at the entrance(s) to the facility that is clearly legible and visible from the adjoining public road. The sign shall identify the name of the facility, the name and telephone number of the operator, and hours of operation of the facility. The entry sign(s) may be up to 32 square feet per side and up to 10 feet above grade, unless the zone allows larger signs. Directional information to orient drivers shall be included on the entry sign(s) or on interior signs.

3. A sign(s) describing recommended access routes to the facility, materials accepted, instructions for correct preparation of accepted materials, recycling services, and fees for disposing materials shall be posted at the facility. Signs that use recycled materials, including recycled plastic, are encouraged.

4. Signs interior to the site shall be be coordinated and consistent in appearance.

G. Outdoor storage impacts.

1. Outdoor storage of mixed solid waste or recovered materials is prohibited, except in a landfill or composting facility approved for that purpose, or unless a professional engineer certifies in writing that the material is chemically inert. Outdoor storage of hazardous materials is prohibited.

2. Source-separated materials other than yard debris and wood waste shall be stored in containers in an area enclosed on at least three sides and roofed; provided, in a rural zone, such materials shall be enclosed on any side visible from adjoining public or private property and roofed.

3. Wood waste, yard debris, and compacted solid waste in sealed containers may be stored outdoors if it complies with the applicable dimensional and design standards. Yard debris shall be removed from the site on at least a weekly basis.

4. Storage areas larger than 2 cubic yards for recovered materials shall be enclosed.

5. Recycling drop boxes for recyclable materials on the site of a solid waste facility shall be painted and maintained in good repair; shall be situated on a paved surface; and shall be emptied before collected items exceed the height of the box or within five days of becoming full. The applicant shall post a notice on any recycling drop box that only domestic recyclable or reusable materials, such as paper, cardboard, glass, tin, aluminum, plastic and clothing are permitted. Yard debris, appliances, or other large items that may be repairable, recylcable or reusable are prohibited, unless the box is designed for that purpose. The name and telephone number of the operator shall be posted on the box.

6. Outdoor storage areas shall not be visible when viewed from a height of 5 feet at the edge of the property, except as provided above. A facility complies with this standard when outdoor storage is enclosed within a sight obscuring fence, wall, berm, or landscaping at least 6 feet high but not more than 10 feet high. A wood fence is sight obscuring when attached vertical or horizontal fence boards are separated by not more than 1/4-inch. A metal fence consisting of chain link or woven fabric is sight obscuring when water and insect resistant wood or plastic slats are inserted in the fence material so they are separated by not more than 3/8-inch. Landscaping is sight obscuring when it includes evergreen material at least 6 feet high and not more than 2 feet on center at planting.

H. Litter impacts.

1. Except for a facility receiving material exclusively in enclosed containers and not open to the public, or a facility involved exclusively in recycling, the applicant shall submit to [*City/County*] a plan to eliminate litter in the primary impact area, unless a greater distance is specified pursuant to Section 4.H.1.b below. The operator shall be responsible for the cost of collecting, removing and disposing of litter and illegally dumped waste within the primary impact area. The plan must include at least the following:

a. For a facility open to the public, appropriate gates, signs and other traffic control devices to direct traffic to the facility along approved routes that avoid public parks, residential and retail districts and major public attractions to the extent possible;

b. A delineation of the primary impact area in which the operator will remove litter and illegally dumped waste at the cost of the operator. The primary impact area shall extend at least 1/2 mile from the edge of the facility boundary along primary routes to the facility identified in the traffic study. Illegally dumped waste consists of material in excess of 2 cubic yards at a given location; litter includes lesser amounts of material at a given location. The area within which the applicant is responsible for clean-up may be adjusted over time based on where illegal dumping actually occurs;

c. The establishment of a patrol to remove litter at least twice each day, seven days each week along designated routes within the primary impact area;

d. Provisions for the removal of illegally dumped waste within the primary impact area within 24 hours of discovery;

e. For a facility open to the public, provisions to make available written information that describes access routes to the facility, fees for wastes permitted at the facility, and recycling incentives; and

f. For a landfill, a description of measures to be used to minimize blowing of litter from the site, such as periodic application of cover material, spraying with liquid, or use of portable fencing.

2. The operator shall take reasonable measures to assist the [*City/County*] to identify the source of illegal waste. If the [*City/County*] identities the source of the waste, the [*City/County*] may take measures to reimburse the operator for the cost of collection and removal of the waste.

I. Vector control impacts.

For any facility where solid waste could sustain or attract rodents or insects, because of the solid waste in question or the environmental characteristics of the site, the applicant shall submit a plan to reduce the potential for rodent and insect propagation using the best available technology.

J. Fire protection and explosion.

The facility shall comply with the Uniform Fire Code (UFC) as adopted by [*City/County*] and the Uniform Building Code (UBC) adopted in Oregon. Facilities that accept hazardous materials shall comply with UFC Article 80.

K. Traffic circulation and access.

1. Access requirements for a facility shall be based on the number and type of vehicle trips generated by the facility. The number of trips generated per day shall be based on the most recent version of the *Trip Generation Manual* of the Institute of Traffic Engineers; provided, the applicant may submit a trip generation study certified by a professional traffic engineer of other similar facilities as the basis for trip generation from the proposed facility. If a proposed facility is not listed in the *Trip Generation Manual* and a trip generation study of other similar facilities is not available, then the number and type of vehicle trips generated by the proposed facility shall be based on the figures for the use most similar to the proposed facility for which the *Trip Generation Manual* contains data.

2. The applicant shall identify designated routes for vehicular traffic generated by the proposed facility and shall provide written information to facility users describing and promoting use of those routes. Designated routes shall be selected to minimize traffic on nonarterial streets and shall not use streets in residential zones if nonresidential streets provide access.

3. For a facility that generates more than 200 vehicle trips per day, the applicant shall submit a traffic study by a professional traffic engineer that shows the facility will not cause traffic volumes that exceed the capacity of the street based on the [*street standards or holding capacity assumptions of the transportation master plan of [City/County]*], or that cause any intersection affected by that traffic to have a Level of Service [*E or*] F.

4. A facility in an urban zone shall provide for a deceleration/turn lane at proposed access points to separate facility-bound traffic from other traffic if deemed warranted by the traffic study required in Section 4.K.3. The lane shall accommodate at least two stacked vehicles and shall taper at a ratio of not less than 25:1 to match the standard roadway width.

L. Floodplain conditions.

The facility will comply with the applicable flood plain zone regulations of [*cite City/County code or ordinance]*]. All solid waste stored in a flood plain zone shall be enclosed in a structure with a finished floor elevation at least 1 foot above the 100-year base flood elevation as determined by Federal Emergency Management Agency maps or by a survey by a professional land surveyor licensed in the State of Oregon.

M. Topographic conditions.

The facility shall comply with the [*slope hazard*] regulations of [*cite City/County code or ordinance*].

N. Geologic and soil conditions.

The facility shall comply with the [*geologic/soil hazard*] regulations of [*cite City/County code or ordinance*].

O. Noise impacts.

1. If the facility site is not in an industrial zone or does not adjoin land exclusively in an industrial zone, or if it adjoins a noise sensitive use, such as a residence, hospital, or school [*or substitute specific sites identified in the Comprehensive Plan*], then:

a. The applicant shall submit to [*City/County*] a study by a professional acoustical engineer of noise levels at the facility site boundary, including at the site boundary adjoining any residential or noise sensitive use; and

b. The applicant shall show the facility will not cause noise in excess of the applicable standards in Appendix 1 [*or cite more stringent [City/County] standards*], based on accepted noise modeling procedures and worst case assumptions when all noise sources on the site are operating simultaneously [*or other applicable [City/County] standard*].

c. If the facility may exceed applicable noise standards, based on the results of the noise model, then the applicant shall submit a noise mitigation program prepared by a professional acoustical engineer that shows the facility will comply with the applicable noise standards as operated.

2. If the facility site is in an industrial zone, adjoins land exclusively in an industrial zone, and does not adjoin a noise sensitive use [*identified in the Comprehensive Plan*], then the applicant shall show the facility will not cause noise in excess of the noise standards in Appendix 1 [*or more stringent [City/County] standards*], based on a written statement certified by a professional acoustical engineer.

3. Outdoor amplified sound systems are prohibited.

P. Odor impacts.

1. The facility:

a. Will incorporate the best practicable design and operating measures to reduce the potential for odors detectable offsite from such things as spillage of waste, venting of dust, residual amounts of waste in operating areas of the site, and vehicle odors in stacking, maneuvering and staging areas by such means as listed in Appendix 2; and

b. Will not cause unusual or annoying odors, considering the density of the surrounding population, the duration of the emissions, and other factors relevant to the impact of such emissions.

2. Open burning of solid waste will not occur, unless:

a. Open burning is consistent with the standards in Appendix 3; or

b. The facility is outside the area where open burning is banned, and a permit is not required by the Oregon Department of Environmental Quality (ODEQ).

Q. Ground and surface water impacts.

1. The facility shall:

a. Collect all waste water from production, washing down of equipment and vehicles, and similar activities and discharge the water to a public sanitary sewer if:

(1) The sewer adjoins or can be extended to the site, based on applicable rules of the sewer service provider; and

(2) The sewer has the capacity to accommodate waste water from the facility as determined by the sewer service provider or by a professional civil engineer; or

b. Provide an alternative sanitary waste disposal method that is or will be approved by ODEQ; or

c. Provide an alternative waste disposal method that is consistent with the applicable water quality standards in Appendix 4 and will not cause drinking water supplies to violate the applicable water quality standards in Appendix 5; or

d. Not provide water for production activites, vehicle washing, or sanitary waste and divert and/or contain storm water so that it does not enter solid waste on the site.

2. Where there is substantial evidence that the facility could cause the ground or surface water in the vicinity of the facility to violate applicable standards in Appendices 4 or 5, the approval authority may require an applicant to submit and implement a ground water self-monitoring program prepared by a professional civil engineer, which includes among other things:

a. An ODEQ-certified laboratory analysis of existing ground water quality in the aquifer beneath and down gradient from the site. The analysis shall show each of the constituents for which there are standards in Appendix 5 complies with applicable standards in that appendix;

b. Drilling one or more ground water monitoring wells to sample the uppermost aquifer within 500 feet of the boundary of the facility boundary, and providing certified laboratory analysis of water samples at least monthly to the [*City/County*]. If such a well or wells requires approval by the Oregon Department of Water Resources, then the applicant shall obtain such approval before a building permit is issued for the facility; and

c. A notification and corrective action plan in the event of ground water contamination. If any constituent is detected at statistically significant levels above a water quality standard, the applicant shall implement the plan.

3. An applicant for a landfill, mixed waste compost facility, wood waste recycling facility, yard debris depot or processing facility shall submit a leachate collection and treatment plan and program prepared by a professional civil engineer consistent with the applicable standards in Appendix 6. A leachate collection and treatment plan and program is not required if solid waste will be covered, enclosed or stored in containers so that storm water does not enter it.

4. An applicant for a household hazardous waste collection facility, material recovery facility, solid waste depot or transfer station shall submit a plan and program prepared by a professional civil engineer to collect, pretreat and dispose waste water from the floor or operating area of such facility and to prevent surface water from mixing with solid waste spills.

5. The applicant shall submit and implement a plan prepared by a professional civil engineer to reduce the amount of waste water caused by hosing down equipment, tipping areas, platforms and other facility features, such as by using compressed air or vacuum equipment for cleaning.

6. The applicant shall submit and implement a plan prepared by a professional civil engineer or landscape architect to collect storm water from all impervious areas of the site and to dispose of storm water. Storm water shall be disposed in the following manner:

a. Storm water disposal shall comply with the storm drainage master plan of the [*City/County/USA*] [*and with applicable basinwide storm water management plans, such as the Johnson Creek or Tualatin River Storm Water Management Plans*], as determined by the [*City/County Engineer/USA*].

b. If there is not a storm drainage master plan for the area of the facility, then storm water shall be discharged to a storm sewer if it is available or can be extended to the site, [*based on the applicable rules of the storm sewer service provider,*] and if it has adequate capacity to accommodate storm water from the site, as determined by [*the sewer service provider or*] a professional civil engineer or landscape architect.

c. If a storm sewer with adequate capacity is not available, then the applicant shall:

(1) Retain storm water on-site; and/or

(2) Detain storm water on-site and discharge it from the site at no greater rate than before development of the facility; or

(3) Discharge storm water at full rate to public drainage features, such as a roadside ditch or regional drainage facility, if there is adequate capacity to accommodate it as determined by a professional civil engineer or landscape architect. Where discharging water at full rate would exceed the capacity of downstream drainage features, then the applicant shall:

(a) Provide a detention pond or ponds to contain water in excess of the system's capacity; and/or

(b) Identify improvements to downstream drainage features necessary to accommodate the increased volume or rate of flow without adversely affecting adjoining property and either:

(i) Provide such improvements before operation of the facility, or

(ii) Contribute necessary funds to the [*City/County/USA*] so that the [*City/County/USA*] can undertake such improvements.

(c) If off-site improvements are required so storm water from the site can be accommodated, then, before issuance of a building permit for the facility, the applicant and the [*City/County/USA*] shall execute an agreement to pay back the applicant for the cost of improvements to the extent those improvements exceed the storm drainage needs generated by the facility.

[*Effective November 1991, ODEQ will require a discharge permit for industrial storm water drainage control. That permit or the regulations for that permit may substitute for the specific provisions above.*]

7. Except as otherwise provided by the storm drainage master plan of the [*City/County/USA*], the collection and disposal system shall be sized to accommodate peak flows from a 25-year storm event, based on the flow from the area that includes the site and the basin that drains onto it, assuming permitted development of that area, as determined by a professional civil engineer or landscape architect.

8. Before storm water is discharged from the site or into the ground, the applicant will direct it through features to remove sediment, grease and oils, and water soluble materials in the water. Such features shall comply with the storm drainage standards of the [*City/County/USA*].

9. The applicant shall submit a plan prepared by a professional civil engineer or landscape architect to reduce the potential for erosion along natural and constructed drainageways and across slopes during and after construction.

10. For a landfill, the applicant shall submit a closure plan that is consistent with the standards in Appendix 7 and that shows surface and ground water will be protected against pollution after the facility is closed.

R. Methane gas impacts.

1. The applicant shall submit a statement from a professional engineer that the facility will not cause methane gas; or

2. The applicant shall submit a methane gas control program prepared by a professional engineer that shows:

a. The facility will not cause methane gas in excess of 25 percent of the lower explosive limit for methane in facility structures or in excess of the lower explosive limit at the facility boundary; and

b. The gas shall be collected and vented, incinerated, or put to or prepared for a productive use; and

c. Methane will be measured in structures and at the facility boundary, consistent with the standards in Appendix 8.

S. Air quality impacts. A facility shall not cause detrimental air quality impacts. A facility complies with this standard if:

1. For a facility that includes an incinerator, the facility will comply with air quality standards in Appendix 9;

2. For a facility for which an ODEQ Air Contaminant Discharge Permit is required, the facility will comply with the standards in Appendix 10; and

3. All facilities shall comply with the standards in Appendix 2.

T. Transfer, Storage and Disposal facilities.

A transfer, storage, and disposal facility shall comply with the standards in Appendix 11.

SECTION 5. Application Contents

A. In addition to submitting application forms provided by the [*City/County*], the applicant shall describe at least the following features of the proposed facility:

1. Capacity and projected life.

2. The population or industries to be served.

3. The amount of solid waste that is expected to be accommodated at the facility from the population or industries to be served, including maximum daily and monthly amounts and average annual volume and weight of waste to be received.

4. For a landfill, planned future uses of the site after closure.

5. The quantity of each type of waste stream projected to be accommodated at the facility. Examples of waste streams include domestic waste, commercial and institutional waste, industrial waste, construction and demolition waste, agricultural waste, sewage sludge, contaminated clean-up materials, etc.

6. The operating characteristics of the facility, including equipment used, hours of operation, and volume, distribution, and type of traffic associated with the use, and a traffic study if required by Section 4 of this ordinance.

7. The kind or kinds of facility or facilities proposed, based on the definitions in Section 1.

B. Unless waived by the [*planning director*] pursuant to Section 6.D.3, the application shall include:

1. A written description of the location of the site with respect to known or easily identifiable landmarks and access routes to and from the area the facility will serve.

2. A legal description of the tract or tracts to be used for the facility.

3. Except for an accessory facility, a map or maps showing the location of the site, existing and approved land uses within a minimum [*250*]-foot radius of the boundary of the site inside the regional urban growth boundary or within a minimum [*500*]-foot radius of the site outside the regional urban growth boundary; public water supply wells, surface waters, access roads within that radius; historic sites, areas of significant environmental concern or resources, or significant environmental features identified in the comprehensive plan within the applicable radius; other existing or approved man-made or natural features relating to the facility; and a north arrow, bar scale, and drawing date.

4. Except for an accessory use or temporary facility, an aerial photograph of the site and the area within the relevant radius with the boundary of the site outlined.

5. Except for an accessory or temporary facility, a map or maps showing the existing topography of the site with contour intervals not to exceed 2 feet if slopes are less than 5 percent, not to exceed 5 feet if slopes are more than 5 percent, and not to exceed 10 feet if slopes are more than 20 percent; natural features of the site including water bodies and wetlands; the boundary of the 100 year floodplain based on Federal Emergency Management Agency data; public easements of record; manmade features including buildings, utilities, fences, roads, parking areas, and drainage features; boundaries of existing waste disposal areas and soil borrow areas if any; locations of borings, piezometers, monitoring wells, test pits, water supply wells, and facility monitoring or sampling points and devices; a benchmark; and a north arrow, bar scale, and drawing date.

6. For a landfill, data regarding average annual and monthly precipitation and evaporation and prevailing wind direction and velocity, based on data from the National Oceanic and Atmonspheric Administration or other federal or state agency, or from on-site measurements.

7. For a landfill, information regarding minimum, maximum and average annual flow rates and monthly variations of streams on the site, based on stream gaging data collected by the US Geological Service or other federal or state agency supplemented with reliable site specific data as available.

8. A map or maps showing and describing the type and size of existing vegetation on the site, and identifying vegetation to be removed and retained.

9. A grading plan showing site elevations when grading is completed, including any modifications to drainage channels and any required retaining walls or other means of retaining cuts or fills.

10. A site plan showing proposed structures, signs, parking, outdoor storage, landscaping, berms, fencing, and other features of the facility.

11. Responses to the applicable criteria of Section 4 of this ordinance.

12. If other local, state or federal permits are required for construction and operation of the proposed facility, then:

a. The applicant shall submit a copy of such permit(s); or

b. The applicant shall submit:

(1) A schedule for submitting the required applications; a description of the requirements of the laws and regulations applicable to such other local, state or federal permits; a summary of how the applicant proposes to comply with the requirements; a list of which regulations require local land use approval; and a list of potentially conflicting local, state or federal standards; and

(2) A copy of any application filed for another local, state or federal permit for the proposed facility within 10 working days after it is filed with the local, state or federal agency; and

(3) A copy of any written correspondence or published notice from the local, state or federal agency regarding that application within 10 working days after the applicant receives that correspondence or notice from the local, state or federal agency.

SECTION 6. Review Procedures and Burden of Proof

A. Before filing an application pursuant to this ordinance, an applicant shall submit to [*City/County*] a request for a pre-application conference pursuant to [*incorporate relevant section of the local ordinance*], unless waived by the [*planning director*].

B. Before accepting an application as complete, the [*planning director*] may decide additional expertise is warranted to evaluate it due to exceptional circumstances, the complexity of the proposed facility, or its potential impacts. The [*planning director*] may hire a professional engineer with the necessary expertise to make a written evaluation of specific application elements required pursuant to the ordinance.

1. The written evaluation shall be available no later than 30 days after the applicant submits a deposit to pay for the work. Within 10 days after the written evaluation is available, the [*planning director*] shall determine whether the application is complete and advise the applicant in writing accordingly, listing any additional information required to make the application complete.

2. The [*planning director*] shall draft a work program and estimate the cost of hiring a professional engineer with the necessary expertise for the written evaluation and shall advise the applicant of that cost, which shall not exceed [*10*] times the application fee [*or other reasonable limit*] unless approved by the applicant. The applicant shall deposit a sum equal to the estimated cost of such services before the application is deemed complete. If the cost of such services is less than estimated, [*City/County*] shall refund any excess to the applicant. If the cost of such services is more than estimated, [*City/County*] shall bill the applicant for such additional cost; provided, the cost of such services shall not exceed [*110%*] of the estimated cost unless the applicant or the [*City/County*] agrees in writing to assume such additional cost.

3. This provision does not authorize the [*City/County*] to collect money from an applicant for independent evaluation of ongoing operations or periodic review of a facility. A fee may be required pursuant to Section 7.F before renewal, but not at time of application or approval.

C. Except as provided in Section 6.B, within 10 working days after receipt of an application, [*City/County*] shall determine whether the application is complete. If [*City/County*] determines the application is not complete, [*City/County*] shall send the applicant a written statement explaining why the application is not complete and listing criteria and standards for which information is not provided or is not responsive. If [*City/County*] determines an application is complete, it shall send the applicant a written statement to that effect.

D. An application for a solid waste facility under this ordinance is complete if:

1. It includes substantial evidence that the proposed facility will or can comply with the applicable approval criteria and development standards in Section 4 and the appendices incorporated therein, and any written evaluation required under Section 6B is completed; or

2. It includes substantial evidence that it is possible, likely and reasonable that the proposed facility will or can comply with the applicable approval criteria and development standards in Section 4 and the appendices incorporated therein, identifies that evidence, and provides a schedule for its submission, and any written evaluation required under Section 6B is completed;

[*If the local land use regulations do not authorize the planning director to exercise discretion to determine whether an application includes substantial evidence, then subsections 1 and 2 above should be revised so that an application is deemed complete if it contains information that addresses the applicable approval criteria and development standards in Section 4 and the appendices incorporated therein, and any written evaluation required under Section 6B is completed.*]

[*To incorporate the appendices as information guidelines instead of as criteria, Sections 6.D.1 and 2 could read:*

1. It includes substantial evidence that the proposed facility will or can comply with the applicable approval criteria and development standards in Section 4 and includes information regarding the applicable appendices incorporated therein; or

2. *It includes substantial evidence that it is possible, likely and reasonable that the proposed facility will or can comply with the applicable approval criteria and development standards in Section 4, identifies that evidence, and provides a schedule for its submission and includes information regarding the applicable appendices incorporated therein.*]

3. It includes the requirements of Section 5, except to the extent the [*planning director/approval authority*] determines certain requirements of Section 5 are inapplicable or are unwarranted given the scale and nature of the proposed facility.

E. [*City/County*] shall provide public notice and an opportunity for submission of written information and/or for a public hearing to consider compliance with the terms of this ordinance for any matter involving the exercise of factual, policy, or legal judgment. [*Note: If the 1991 legislature amends ORS 197 to allow exercise of some judgment without public notice and hearing, then Section E should be amended accordingly.*]

F. An applicant for a solid waste facility bears the burden of proving only that a facility complies with this ordinance and provisions it incorporates by reference. The following presumptions and procedures apply when evaluating compliance with that burden of proof.

1. An applicant is rebuttably presumed to bear the burden of proof if the application includes substantial evidence that the facility complies with the applicable criteria and standards for the facility in Section 4 and the appendices incorporated therein.

2. Substantial evidence can be rebutted only by evidence of equal or greater probative value. For instance, testimony from a professional engineer about a given subject in which an engineer has expertise may be rebutted only by testimony or evidence from another professional engineer or a person similarly qualified about that subject. Testimony from an expert witness regarding matters relevant to the expertise of the witness cannot be rebutted by testimony from a non-expert witness. This subsection does not limit what may be introduced as testimony; it affects the weight to be accorded that testimony.

3. If evidence of equal probative value is offered that a given facility does and does not comply with a given criterion or standard, then the approval authority shall weigh the evidence, identify which evidence it accepts as the basis for its decision, and explain why that evidence is accepted and why the contrary evidence is rejected.

4. The approval authority shall issue a Land Use Compatibility Statement and a final decision with appropriate findings, conclusions and conditions of approval if, after the appropriate review process, it finds there is substantial evidence that the facility complies with all applicable provisions in Sections 4 and 5 and the appendices incorporated therein [*and [City/County] laws incorporated by reference*], subject to appropriate conditions, and that such evidence was not rebutted and does not need to be supplemented.

5. If, after a public hearing [*or another intial level of review; for instance, the close of the public record following public notice and an opportunity to file written comments*], the approval authority finds that:

a. There is substantial evidence that the facility complies with some applicable provisions in Sections 4 and 5 and the appendices incorporated therein, and that such evidence was not rebutted and does not need to be supplemented to resolve disputes, and

b. There is not substantial evidence that the facility complies with one or more applicable provisions in Sections 4 and 5 and the appendices incorporated therein, or that such evidence was rebutted or requires augmenting to resolve disputes, and

c. It is possible, likely and reasonable that the applicant will provide new substantial evidence regarding provisions identified pursuant to Section 6.F.5.b within 6 months[*or 1 year if the local code prohibits re-application for a denied project for 1 year*], then the approval authority shall:

(1) Issue a written final decision approving the proposed facility in concept that, among other things:

(a) Identifies standards with which the application complies and provide findings and conclusions showing why it complies, based on substantial evidence in the record, and subject to appropriate conditions of approval;

(b) Identifies evidence the applicant must submit to show the proposed facility complies with other applicable provisions of this ordinance, impose a schedule for its submission, and include any requirements pursuant to Section 6.B above; and

(c) Describe how that substantial evidence will be reviewed, including any public notice and hearing requirements.

(2) Issue a Land Use Compatibility Statement to the applicant or to applicable local, state, or federal agencies.

6. The approval authority shall issue a final decision that denies the application if, after the appropriate review process, it finds that:

a. The record does not contain substantial evidence that the facility complies with all applicable provisions in Sections 4 and 5 and the appendices incorporated therein, in which case the decision shall identify the section(s) about which the record does not contain substantial evidence; or

b. There is more persuasive and at least equally substantial evidence contrary to evidence that the proposed use complies with applicable standards in Sections 4 and 5 and the appendices incorporated therein, in which case the decision shall identify the provisions for which evidence against the facility overwhelmed the evidence in favor; and

c. The applicant declines to supplement the record regarding standards identified pursuant to Sections 6.F.6.a and b. above, or it is not possible, likely, and reasonable that substantial evidence necessary to address standards identified pursuant to Sections 6.F.6.a and b. above will be available within 6 months after the date of the decision [*or 1 year if the local code prohibits re-application for a denied project for 1 year*].

[*Or, to incorporate the appendices as information guidelines instead of as criteria and standards, Sections 6.F.1 and 4 through 6 should be amended to delete reference to the appendices as part of the burden of proof. For instance, Section 6.F.1 could read:*

1. An applicant is rebuttably presumed to bear the burden of proof if the application includes substantial evidence that the facility complies with the applicable criteria and standards for the facility in Section 4 and includes information regarding the appendices incorporated therein.]

G. The appendices of this ordinance should be amended to include changes to regulations cited herein at the earliest practicable opportunity. If a regulation included in an appendix is amended by state or federal agencies and the appendix is not amended when an application for a facility is deemed complete, then the regulation included in the appendix shall apply to the facility. [*Subsection G is deleted if appendices are not adopted; see p. 10.*]

SECTION 7. Conditions of Approval and Enforcement

A. The approval authority may approve an application for a facility subject to conditions of approval. Conditions of approval shall be reasonably related to impacts of the facility and the requirements of this ordinance and provisions incorporated herein. All facilities approved pursuant to this ordinance shall be subject to a condition requiring that landscaping, air and water quality structures and devices, signs, structures, paved areas, and other features of the facility be maintained in good condition and that such features be replaced if they fail to survive or are rendered ineffective over time.

B. Conditions of approval may require an applicant to submit a written statement or permit from state or federal agencies responsible for administering a regulation to which the proposed facility is subject, if the record does not contain such a statement or permit.

1. Such a condition may fulfill provisions of Sections 4.O through 4.S that the facility comply with state or federal regulations incorporated therein, subject to a further condition that the applicant submit a written statement or permit showing the facility complies with the applicable state or federal regulation before a building permit is issued for the facility; provided further,

2. Such a condition shall require appropriate review and allow modification of the decision and conditions of approval regarding the application if a state or federal permit substantially changes a proposed facility from what was approved by [City/County] in ways relevant to applicable provisions of Section 4.

C. All facilities approved pursuant to this ordinance shall comply with applicable state and federal regulations as a condition of approval. Approval of a facility pursuant to this ordinance does not preclude imposition of more stringent state or federal regulations adopted after the effective date of this ordinance.

D. Any facility which is required to obtain a franchise from the Metropolitan Service District (Metro) pursuant to ORS Chapter 459 shall obtain said franchise and provide a copy of said franchise to [*City/County*] before a [*building/occupancy*] permit is issued for the facility.

E. [*City/County*] shall enforce the conditions of approval pursuant to [*cite the relevant local law*]. If Metro issues a franchise for the facility, then [*City/County*] shall send to Metro a copy of any written correspondence or notices [*City/County*] sends to the applicant regarding enforcement of conditions of approval. Metro may remedy violations of conditions of approval regarding the facility and charge the franchisee for the cost of such remedial action unless provided otherwise in the franchise.

F. [*City/County*] may conduct a periodic performance review of an approved facility to determine whether it continues to comply with the criteria and standards then applicable and to modify conditions of approval that apply to the facility so that it continues to comply. The approval authority shall specify the time for any periodic review. [*City/County*] may impose a fee for periodic review.

SECTION 8. Severability

If any part of this ordinance is for any reason held to be invalid or unconstitutional, the remainder of this ordinance shall continue in full force and effect.

Adopted this ____ day of _____, 1991.

[*City Council/Board of Commissioners*] of [*City/County*]
By: _____

Approved as to form:
[*City Attorney/County Counsel*]

_____
[*Legal counsel*]

INDEX TO APPENDICES

1. OAR 340-35-035 (Noise standards)
2. OAR 340-21--050 through 340-21-060 (Fugitive emissions)
3. OAR 340-23-065, -070, -075, and -100 and Figure 1A (Open burning standards)
4. OAR 340-41-026, -120, -150, -215, -445, and -482 through -495 (Water quality policies, standards, and treatment criteria)
5. 40 Code of Federal Regulations Part 141, Subpart B (National Primary Drinking Water Regulations, Maximum contaminant levels)
6. OAR 340-61-040(3) (Leachate collection and treatment plan standards)
7. OAR 340-61-033 (Landfill closure standards)
8. OAR 340-61-040(8) (Methane gas monitoring program standards)
9. OAR 340-25-850 through 340-25-905 (Air quality standards for incinerators)
10. OAR 340-20-140 through 340-20-160 and 340-20-220 through 340-20-276 (Air Contaminant Discharge Permit: applicability and procedures)
11. OAR 340-120 (Transfer, Storage and Disposal Facility regulations)

References to other state and federal regulations incorporated by state or federal regulations in the appendices are incorporated herein.

Procedures in state and federal regulations do not apply to review by [*City/County*]. The [*City/County*] approval authority applies applicable appendices as though it is the state or federal agency responsible for administering them. But the approval authority uses the procedure required by this ordinance for the solid waste facility in question rather than using the procedures in the state and federal regulations.

Local review does not substitute for state or federal review required by regulations in the appendices, and local action does not bind state or federal agencies about matters of state or federal jurisdiction.

APPENDIX 1

OAR 340-35-035

(Noise standards)

Noise Control Regulations for Industry and Commerce

340-35-035 (1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules.

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules.

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L_{10} or L_{50}, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule.

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or

indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (5)(j), and (5)(k) of this rule, shall not be excluded from this ambient measurement.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

(d) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule:

(A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m.

(B) All Other Impulse Sounds. 100 db, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

(f) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsections (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in Table 10.

(B) One-third Octave Band. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band.

This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department.

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1).

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis.

(b) Warning devices not operating continuously for more than 5 minutes.

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles.

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act.

(e) Sounds created by bells, chimes, or carillons.

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling

alleys or amusement parks operating in one location for a significant period of time.

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment.

(i) Sounds created by lawn care maintenance and snow removal equipment.

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-35-045.

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-35-030(1)(e).

(l) Sounds created by agricultural activities.

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-35-010, for:

(a) Unusual and/or infrequent events;

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property;

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question;

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source;

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

[ED. NOTE: The tables referenced in the above rule may be obtained from the adopting agency or the Secretary of State.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 467

Hist: DEQ 77, f. 9-5-74, ef. 9-25-74; DEQ 135, f. & ef. 6-7-77; DEQ 8-1980, f. & ef. 3-11-80; DEQ 7-1983, f. & ef. 4-22-83

TABLE 7
(340-35-035)

Existing Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

7 a.m.-10 p.m.	10 p.m.-7 a.m.
L_{50} - 55 dBA	L_{50} - 50 dBA
L_{10} - 60 dBA	L_{10} - 55 dBA
L_{1} - 75 dBA	L_{1} - 60 dBA

TABLE 8
(340-35-035)

New Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
L_{50} - 55 dBA	L_{50} - 50 dBA
L_{10} - 60 dBA	L_{10} - 55 dBA
L_{1} - 75 dBA	L_{1} - 60 dBA

TABLE 9
(340-35-035)

Industrial and Commercial Noise Source Standards for Quiet Areas

Allowable Statistical Noise Levels in Any One Hour

7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
L_{50} - 50 dBA	L_{50} - 45 dBA
L_{10} - 55 dBA	L_{10} - 50 dBA
L_{1} - 60 dBA	L_{1} - 55 dBA

TABLE 10
(340-35-035)

Median Octave Band Standards for Industrial and Commercial Noise Sources

Allowable Octave Band Sound Pressure Levels

Octave Band Center Frequency, Hz	7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1000	49	43
2000	46	40
4000	43	37
8000	40	34

APPENDIX 2

OAR 340-21-050 and -060

(Fugitive emissions)

Fugitive Emissions

Definitions

340-21-050 As used in this rule, unless otherwise required by context:

(1) "Fugitive emissions" means dust, fumes, gases, mist, odorous matter, vapors or any combination thereof not easily given to measurement, collection, and treatment by conventional pollution control methods.

(2) "Nuisance conditions" means unusual or annoying amounts of fugitive emissions traceable directly to one or more specific sources. In determining whether a nuisance condition exists, consideration shall be given to all of the circumstances, including density of population, duration of the activity in question, and other applicable factors.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Applicability

340-21-055 This rule shall be applicable:

(1) Within Special Control Areas, as defined in rule 340-21-010.

(2) When ordered by the Department, in other areas when the need for application of the regulation, and the practicability of control measures, have been clearly demonstrated.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Requirements

340-21-060 (1) When fugitive emissions escape from a building or equipment in such a manner and amount as to create nuisance conditions or to violate any regulation, the Department may, in addition to other means of obtaining compliance, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that air contaminants are controlled or removed before discharge to the open air.

(2) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of asphalt, oil, water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;

(c) Full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;

(d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

(e) Adequate containment during sandblasting or other similar operations;

(f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;

(g) The prompt removal from paved streets of earth or other material which does or may become airborne.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

APPENDIX 3

OAR 340-23-065, -070, -075, and -100 and Figure 1A

(Open burning standards)

Clackamas County

340-23-065 Open burning prohibitions for Clackamas County:

(1) Industrial open burning is prohibited except as provided in OAR 340-23-100.

(2) Agricultural open field burning of grass and cereal grain fields for seed production is regulated by OAR Chapter 340, Division 26, Rules for Open Field Burning (Willamette Valley). All other agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

(a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.

(b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.

(3) Commercial open burning is prohibited except as may be provided by OAR 340-23-100.

(4) Construction and Demolition open burning is allowed subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal except that unless authorized pursuant to OAR 340-23-100, Construction and Demolition open burning is prohibited within special control areas including the following:

(a) Areas in or within six (6) miles of the corporate city limits of Gladstone, Happy Valley, Lake Oswego, Milwaukie, Oregon City, Portland, Rivergrove and West Linn.

(b) Areas in or within three (3) miles of the corporate city limits of Canby, Estacada, Gresham, Molalla, Sandy and Wilsonville.

(5) Domestic open burning:

(a) As generally depicted in Figure 1A of OAR 340-23-115, domestic open burning is always prohibited within the following fire districts unless authorized pursuant to OAR 340-23-100: Clackamas County RFPD #1, that portion of Clackamas County RFPD #54 which lies within the Metropolitan Service District, that portion of Clackamas County RFPD #71 which lies west of a line extending due north of the western tip of Beebe Island in the Clackamas River, Glenmorrie RFPD #66, Gladstone, Lakegrove RFPD #57, Lake Oswego, Milwaukie, Oregon City, Oak Lodge, Portland, Riverdale RFPD #60, Rosemont RFPD #67, that part of Tualatin RFPD #64 which lies north of I-205 and West Linn.

(b) Areas of Clackamas County generally depicted in Figure 1 of OAR 340-23-115 and not included in the area where burning is prohibited by OAR 340-23-065(5)(a), domestic open burning is prohibited except that open burning of yard debris is allowed within the following fire districts between March first and June fifteenth inclusive and between October first and December fifteenth inclusive, subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

(A) Beaver Creek RFPD #55,

(B) Boring RFPD #59,

(C) Canby,

(D) Canby RFPD #62,

(E) That portion of Clackamas Co. RFPD #54 which lies outside the Metropolitan Service District,

(F) That portion of Clackamas RFPD #71 which lies east of a line extending due north of the western tip of Beebe Island in the Clackamas River,

(G) Happy Valley RFPD #65,

(H) Sandy RFPD #72,

(I) That part of Tualatin RFPD #64 which lies south of I-205.

(c) Domestic open burning is allowed in all other areas of Clackamas County subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

Stat. Auth.: ORS Ch. 468 & 477
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84

Multnomah County

340-23-070 Open burning prohibitions for Multnomah County:

(1) Industrial open burning is prohibited except as provided in OAR 340-23-100.

(2) Agricultural open field burning of grass and cereal grain fields for seed production is regulated by OAR Chapter 340, Division 26, Rules for Open Field Burning (Willamette Valley). All other agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

(a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.

(b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.

(3) Commercial open burning is prohibited except as provided in OAR 340-23-100.

(4) Construction and Demolition open burning, unless authorized pursuant to OAR 340-23-100, is prohibited west of the Sandy River but is allowed east of the Sandy River subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Domestic open burning:

(a) As generally depicted in Figure 1A of OAR 340-23-115, open burning is always prohibited within the following area of Multnomah County unless authorized pursuant to OAR 340-23-100: west of a line beginning at the eastern most point where the Portland city limit meets the Multnomah-Clackamas Counties line, thence northward and eastward along the Portland city limits to Johnson Creek, thence continuing eastward and northward along Johnson Creek to the Gresham city limit, thence northward and eastward along the Gresham city limit to 182nd Avenue, thence northward along 182nd Avenue to its junction with 181st Avenue, thence northward along 181st Avenue to Sandy Boulevard, thence eastward along Sandy Boulevard to 185th Avenue, thence northward along 185th Drive and its extension to the Columbia River and the state line, but excluding that portion of western Multnomah County included in Skyline RFPR #20, Sauvie Island, Burlington Water District and all other areas in northwestern Multnomah County which are outside of a Fire Protection District.

(b) As generally depicted in Figure 1 of OAR 340-23-115, domestic open burning is prohibited in areas of Multnomah County west of the Sandy River not included in the area where burning is prohibited by OAR 340-23-070(5)(a), except, that open burning of yard debris is allowed from March first to June fifteenth inclusive and from October first to December fifteenth inclusive, subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(c) Domestic open burning is allowed east of the Sandy River subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

Stat. Auth.: ORS Ch. 468 & 477
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84

Washington County

340-23-075 Open burning prohibitions for Washington County:

(1) Industrial open burning is prohibited except as provided in OAR 340-23-100.

(2) Agricultural open field burning of grass and cereal grain fields for seed production is regulated by OAR Chapter 340, Division 26, Rules for Open Field Burning (Willamette Valley). All other agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

(a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.

(b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours into prohibition condition days.

(3) Commercial open burning is prohibited except as may be provided by OAR 340-23-100.

(4) Construction and Demolition open burning, unless authorized pursuant to OAR 340-23-100, is prohibited in all incorporated areas and areas within rural fire protection districts. Construction and demolition open burning is allowed in all other areas subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Domestic open burning:

(a) As generally depicted in Figure 1A of OAR 340-23-115, open burning is always prohibited within the following area of Washington County unless authorized pursuant to OAR 340-23-100:

(A) That portion of Tualatin RFPD north of I-205 plus the area including the cities of Tualatin, Durham, Tigard and King City, which is north of a line starting at the point where I-205 meets the Tualatin city limit, thence westward, southward, westward and finally northward along the Tualatin city limit to Highway 99W, thence northward along Highway 99W to the Tualatin River, thence westward along the Tualatin River to its intersection with the boundary of the Metropolitan Service District, thence generally northward and westward along the Metropolitan Service District Boundary between the Tualatin RFPD and Washington County RFPD #1.

(B) That part of Washington County Rural Fire Protection District #1 which is within the Metropolitan Service District.

(C) That part of Washington County Rural Fire Protection District #2 starting at the point where Highway 26 crosses the eastern boundary of the fire district, thence westward along Highway 26 to Cornelius Pass Road, thence northward along Cornelius Pass Road to West Union Road, thence eastward along West Union Road to the fire district boundary, thence southerly along the district boundary to the point of beginning.

(b) Excluding areas listed in subsection (a) of this section, domestic open burning is prohibited in all municipal and rural fire protection districts of Washington County excluding the Tri-Cities RFPD as generally depicted in Figure 1 of OAR 340-23-115, except that open burning of yard debris is allowed between March first and June fifteenth inclusive and between October first and December fifteenth inclusive subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(c) Domestic open burning is allowed in the Tri-Cities RFPD and in all unincorporated areas of Washington County outside of municipal or rural fire protection districts subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

Stat. Auth.: ORS Ch. 468 & 477
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84

Letter Permits

340-23-100 (1) Open Burning of commercial, industrial, construction or demolition waste on a singly occurring or infrequent basis or the open burning of yard debris which is otherwise prohibited, may be permitted by a letter permit issued by the Department in accordance with this rule and subject to OAR 340-23-040 and 340-23-042 and the require-

.nents and prohibitions of local jurisdictions and the State Fire Marshal. OAR 340-14-025, 340-20-140, and 340-20-150 through 340-20-185 shall not apply.

(2) A letter permit may only be issued on the basis of a written application for disposal of material by burning which has been approved by the Department. Each application for a letter permit shall contain the following items:

(a) The quantity and type of material proposed to be burned;

(b) A listing of all alternative disposal methods and potential costs which have been identified or investigated;

(c) The expected amount of time which will be required to complete the burning (not required for yard debris);

(d) The methods proposed to be used to insure complete and efficient combustion of the material;

(e) The location of the proposed burning site;

(f) A diagram showing the proposed burning site and the structures and facilities inhabited or used in the vicinity including distances thereto;

(g) The expected frequency of the need to dispose of similar materials by burning in the future.

(h) Any other information which the applicant considers relevant or which the Department may require.

(i) For open burning of yard debris:

(A) A "Hardship Permit Application" completed on a form supplied by the Department; and

(B) Either payment of the appropriate fee pursuant to section (11) of this rule or a "waiver request" completed on a form supplied by the Department.

(3) Upon receipt of a written application the Department may approve the application if it is satisfied that:

(a) The applicant has demonstrated that all reasonable alternatives have been explored and no practicable alternative method for disposal of the materials exists; and

(b) The proposed burning will not cause or contribute to significant degradation of air quality.

(4) The Department also may deny an application for a letter permit or revoke or suspend an issued letter permit on any of the following grounds:

(a) Any material misstatement or omission in the application or a history of such misstatements or omissions by the applicant;

(b) Any actual or projected violation of any statute, rule, regulation, order, permit, ordinance, judgment or decree.

(5) In making its determination under section (3) of this rule, the Department may consider:

(a) The conditions of the airshed of the proposed burning;

(b) The other air pollution sources in the vicinity of the proposed burning;

(c) The availability of other methods of disposal, and special circumstances or conditions which may impose a hardship on an applicant;

(d) The frequency of the need to dispose of similar materials in the past and expected in the future;

(e) The applicant's prior violations, if any;

(f) The projected effect upon persons and property in the vicinity; and

(g) Any other relevant factor.

(6) Each letter permit issued by the Department pursuant to section (2) of this rule shall contain at least the following elements:

(a) The location at which the burning is permitted to take place.

(b) The number of actual calendar days on which burning is permitted to take place, not to exceed seven (7). Burning pursuant to a permit for yard debris shall be limited to three (3) days per season unless satisfactory justification for more burning is provided by the applicant.

(c) The period during which the permit is valid, not to exceed a period of thirty (30) consecutive days, except a permit for yard debris. The actual period in the permit shall be specific to the needs of the applicant.

(d) A letter permit for yard debris shall be valid for a single burning season or for both the spring and fall burning seasons during a calendar year, as appropriate to the application and the fee paid pursuant to the schedule in OAR 340-23-100(11). The spring burning is from March 1 to June 15, inclusive, and the fall burning season is from October 1 to December 15, inclusive.

(e) Equipment and methods required to be used by the applicant to insure that the burning is accomplished in the most efficient manner over the shortest period of time to minimize smoke production.

(f) The limitations, if any, based on meteorological conditions required before burning may occur. Open burning under permits for yard debris shall be limited to the hours and times which limit seasonal domestic yard debris burning permitted in the county where the burning under the letter permit is to occur.

(g) Reporting requirements for both starting the fire each day and completion of the requested burning, (optional for permits for yard debris).

(h) A statement that OAR 340-23-040 and OAR 340-23-042 are fully applicable to all burning under the permit.

(i) Such other conditions as the Department considers to be desirable.

(7) Regardless of the conditions contained in any letter permit, each letter permit, except permits for yard debris, shall be valid for not more than thirty (30) consecutive calendar days of which a maximum of seven (7) can be used for burning. The Department may issue specific letter permits for shorter periods.

(8) Letter permits shall not be renewable. Any requests to conduct additional burning shall require a new application and a new permit.

(9) For locations within Clackamas, Columbia, Multnomah and Washington Counties, letter permits may be issued only for the purpose of disposal of:

(a) Material resulting from emergency occurrences including, but not limited to floods, storms or oil spills.

(b) Material originating as yard debris which has been collected and stored by governmental jurisdictions provided that no other reasonable means of disposal are available.

(c) Yard debris excluding grass clippings and leaf piles, on the property of a private residence where the inability to burn creates a significant hardship due to:

(A) An economic burden when the estimated cost of alternative means of yard debris disposal presents a financial hardship in relation to household income and expenses of the applicant.

(B) A physical handicap, personal disability, chronic illness, substantial infirmity or other physical limitation substantially inhibiting the ability of the applicant to process or transport yard debris; or

(C) Inaccessibility of yard debris, where steepness of terrain or remoteness of the debris site makes access by processing or transportation equipment unreasonable.

(10) No person shall violate any condition, limitation, or term of a letter permit.

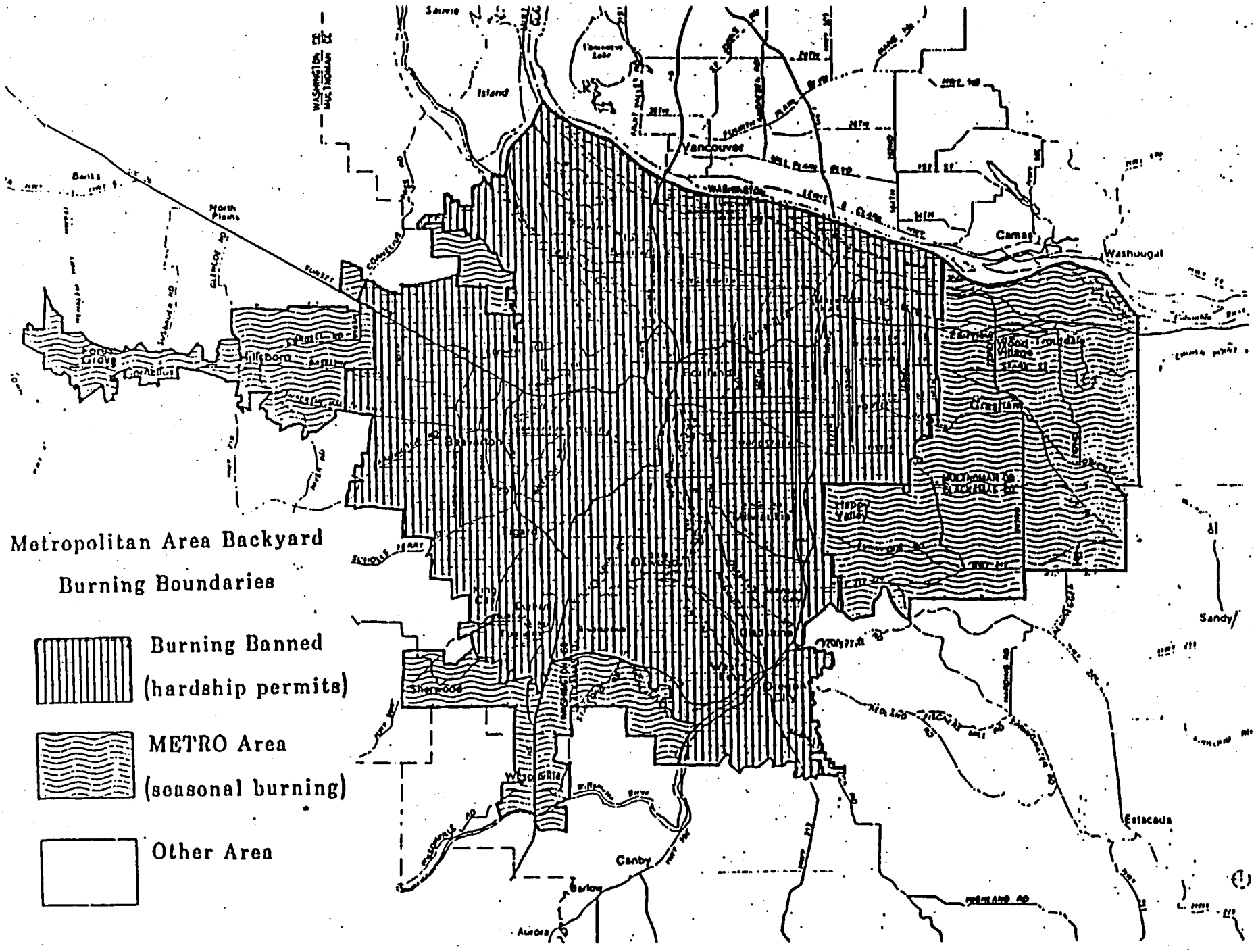
(11) All applications for a letter permit for yard debris shall be accompanied by a permit fee which shall be payable to the Department and become non-refundable upon issuance of the permit. The fee to be submitted is:

(a) For a single burning season, spring or fall – $20.

(b) For a calendar year – $30.

(12) The Department may waive the single season permit fee if the applicant shows that the cost of the hardship permit presents an extreme financial hardship in relation to the household income and expenses of the applicant.

Stat. Auth.: ORS Ch. 468 & 477
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84



340-23-115
FIGURE 1A

APPENDIX 4

OAR 340-41-026, -120, -150, -215, -445, and -482 through -495

(Water quality policies, standards and treatment criteria)

General Water Quality Standards

~~340-41-025 [SA 26, f. 6-1-67; DEQ 39, f. 4-5-72, cf. 4-15-72; DEQ 55, f. 7-2-73, cf. 7-15-73; Repealed by DEQ 128, f. & cf. 1-21-77]~~

Policies and Guidelines Generally Applicable to All Basins

340-41-026 (1)(a) Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water within surface waters of the following areas:

(A) National Parks;

(B) National Wild and Scenic Rivers;

(C) National Wildlife Refuges;

(D) State Parks.

(b) Point source discharges shall follow policies and guidelines (2), (4), and (5), and nonpoint source activities shall follow guidelines (6), (7), (8), (9) and (10).

(2) In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) of this rule.

(3) The Commission or Director may grant exceptions to sections (2) and (5) and approvals to section (4) for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2).

(a) In allowing new or increased discharged loads, the Commission or Director shall make the following findings:

(A) The new or increased discharged load would not cause water quality standards to be violated;

(B) The new or increased discharge load would not threaten or impair any recognized beneficial uses;

(C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited unless the pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to be water quality limited; and

(D) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.

(b) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. The strategy that has been followed in stream management has hastened the development and application of treatment technology that would not have otherwise occurred. As a result, some waters in Oregon have assimilative capacity above that which would exist if only the minimum level of waste treatment was achieved. This unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Director shall consider the following:

(A) Environmental Effects Criteria.

(i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes.

(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, as appropriate.

(iii) Beneficial effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.

(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loading will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:

(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increase loading.

(ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives shall be evaluated.

(4) For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved subject to the criteria in section (3) of this rule.

(5) No discharges of wastes to lakes or reservoirs shall be allowed except as provided in section (3) of this rule.

(6) Log handling in public waters shall conform to current EQC policies and guidelines.

(7) Sand and gravel removal operations shall be conducted pursuant to a permit from the Division of State Lands and separated from the active flowing stream by a water-tight berm wherever physically practicable. Recirculation and reuse of process water shall be required wherever practicable. Discharges, when allowed, or seepage or leakage losses to public waters shall not cause a violation of water quality standards or adversely affect legitimate beneficial uses.

(8) Logging and forest management activities shall be conducted in accordance with the Oregon Forest Practices Act so as to minimize adverse effects on water quality.

(9) Road building and maintenance activities shall be conducted in a manner so as to keep waste materials out of public waters and minimize erosion of cut banks, fills, and road surfaces.

(10) In order to improve controls over nonpoint sources of pollution, federal, state, and local resource management agencies will be encouraged and assisted to coordinate planning and implementation of programs to regulate or control runoff, erosion, turbidity, stream temperature, stream flow, and the withdrawal and use of irrigation water on a basin-wide approach so as to protect the quality and beneficial uses of water and related resources. Such programs may include, but not be limited to, the following:

(a) Development of projects for storage and release of suitable quality waters to augment low stream flow;

(b) Urban runoff control to reduce erosion;

(c) Possible modification of irrigation practices to reduce or minimize adverse impacts from irrigation return flows;

(d) Stream bank erosion reduction projects.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & cf. 1-9-80; DEQ 13-1989, f. & cert. ef. 6-14-89

plan shall be provided in accordance with specific permit conditions for those sources or activities for which permits are required and the following implementation program:

(a) For new or expanded waste loads or activities, fully approved treatment or control facilities, or both shall be provided prior to discharge of any wastes from the new or expanded facility or conduct of the new or expanded activity.

(b) For existing waste loads or activities, additional treatment or control facilities necessary to correct specific unacceptable water quality conditions shall be provided in accordance with a specific program and timetable incorporated into the waste discharge permit for the individual discharger or activity. In developing treatment requirements and implementation schedules for existing installations or activities, consideration shall be given to the impact upon the overall environmental quality including air, water, land use, and aesthetics.

(c) Wherever minimum design criteria for waste treatment and control facilities set forth in this plan are more stringent than applicable federal standards and treatment levels currently being provided, upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities. Such deferral will be acknowledged in the permit for the source.

(d) Where planning or design or construction of new or modified waste treatment and controls to meet prior applicable state or federal requirements is underway at the time this plan is adopted, such plans, design, or construction may be completed under the requirements in effect when the project was initiated. Timing for upgrading to meet more stringent future requirements will be as provided in section (3) of this rule.

(4) Confined animal feeding operations shall be regulated pursuant to rules 340-51-005 through 340-51-080 in order to minimize potential adverse effect on water quality.

(5) Programs for control of pollution from non-point sources when developed by the Department, or by other agencies pursuant to Section 208 of Public Law 92-500 and approved by the Department, shall as applicable, be incorporated into this plan by amendment via the same process used to adopt the plan unless other procedures are established by law.

(6) Where minimum requirements of federal law or enforceable regulations are more stringent than specific provisions of this plan, the federal requirements shall prevail.

(7) Within a framework of state-wide priority and available resources, the Department will monitor water quality within the basin for the purposes of evaluating conformance with the plan and developing information for future additions or updating.

(8) The EQC recognizes that the potential exists for conflicts between water quality management plans and the land use plans and resource management plans which local governments and other agencies must develop pursuant to law. In the event any such conflicts develop, it is the intent of

Implementation Program Applicable to All Basins

340-41-120 (1) No waste treatment and disposal facilities shall be constructed or operated and no wastes shall be discharged to public waters without obtaining a permit from the Department as required by ORS 468.740.

(2) Plans for all sewage and industrial waste treatment, control, and disposal facilities shall be submitted to the Department for review and approval prior to construction as required by ORS 468.742.

(3) Minimum design criteria for waste treatment and control facilities prescribed under this plan and such other waste treatment and controls as may be necessary to insure compliance with the water quality standards contained in this

the Department to meet with the local government or responsible agency to formulate proposed revisions to one or both so as to resolve the conflict. Revisions will be presented for adoption via the same process used to adopt the plan unless other specific procedures are established by law.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 128, f. & ef. 1-21-77

Nuisance Phytoplankton Growth

340-41-150 The following values and implementation program shall be applied to lakes, reservoirs, estuaries and streams, except for ponds and reservoirs less than 10 acres in surface area, marshes and saline lakes:

(1) The following average Chlorophyll a values shall be used to identify water bodies where phytoplankton may impair the recognized beneficial uses:

(a) Natural lakes which thermally stratify: 0.01 mg/l;

(b) Natural lakes which do not thermally stratify, reservoirs, rivers and estuaries: 0.015 mg/l.

Average Chlorophyll a values shall be based on the following methodology (or other methods approved by the Department): a minimum of three (3) samples collected over any three consecutive months at a minimum of one representative location (e.g., above the deepest point of a lake or reservoir or at a point mid-flow of a river) from samples integrated from the surface to a depth equal to twice the secchi depth or the bottom (the lesser of the two depths); analytical and quality assurance methods shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Wastewater.

(2) Upon determination by the Department that the values in section (1) of this rule are exceeded, the Department shall:

(a) In accordance with a schedule approved by the Commission, conduct such studies as are necessary to describe present water quality; determine the impacts on beneficial uses; determine the probable causes of the exceedanceand beneficial use impact; and develop a proposed control strategy for attaining compliance where technically and economically practicable. Proposed strategies could include standards for additional pollutant parameters, pollutant discharge load limitations, and other such provisions as may be appropriate.

Where natural conditions are responsible for exceedance of the values in section (1) of this rule or beneficial uses are not impaired, the values in section (1) of this rule may be modified to an appropriate values for that water body;

(b) Conduct necessary public hearings preliminary to adoption of a control strategy, standards or modified values after obtaining Commission authorization;

(c) Implement the strategy upon adoption by the Commission.

(3) In cases where waters exceed the values in section (1) of this rule and the necessary studies are not completed, the Department may approve new activities (which require Department approval), new or additional (above currently approved permit limits) discharge loadings from point sources provided that it is determined that beneficial uses would not be significantly impaired by the new activity or discharge.

[Publication: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 7-1986, f. & ef. 3-26-86

Minimum Design Criteria for Treatment and Control of Wastes

340-41-215 Subject to the implementation program set forth in rule 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the North Coast — Lower Columbia River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468.740 and recognize that the actual performance level may at times be less than the design criteria.):

(1) Sewage wastes:

(a) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(b) During the period of high streamflows (approximately November 1 to April 30) and for direct ocean discharges: A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(c) Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise approved by the EQC.

(d) Sewage wastes shall be disinfected, after treatment, equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit.

(e) Positive protection shall be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary but not presently practicable.

(f) More stringent waste treatment and control requirements may be imposed where special conditions may require.

(2) Industrial wastes:

(a) After maximum practicable inplant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significance are present, and control of toxic or other deleterious substances).

(b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:

(A) The uses which are or may likely be made of the receiving stream;

(B) The size and nature of flow of the receiving stream;

(C) The quantity and quality of wastes to be treated; and

(D) The presence or absence of other sources of pollution on the same watershed.

(c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays.

(d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters.

(e) Positive protection shall be provided to prevent bypassing of raw or inadequatelytreated industrial wastes to any public waters.

(f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur shall be developed and maintained.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 128, f. & cf. 1-21-77

Water Quality Standards Not to be Exceeded (To be Adopted Pursuant to ORS 468.735 and Enforceable Pursuant to ORS 468.720, 468.990, and 468.992)

340-41-445 (1) Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flows shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dissolved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest possible levels.

(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(a) Dissolved oxygen (DO):

(A) Multnomah Channel and main stem Willamette River from mouth to the Willamette Falls at Oregon City, river mile 26.6: The DO concentrations shall not be less than 5 mg/l.

(B) Main stem Willamette River from the Willamette Falls to Newberg, river mile 50: The DO concentrations shall not be less than 6 mg/l.

(C) Main stem Willamette River from Newberg to Salem, river mile 85: The DO concentrations shall not be less than 7 mg/l.

(D) Main stem Willamette River from Salem to confluence of Coast and Middle Forks, river mile 187: The DO concentrations shall not be less than 90% of saturation.

(E) All other Willamette Basin streams:

(i) Salmonid fish producing waters: The DO concentration shall not be less than 90% of saturation at seasonal low or less than 95% of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

(ii) Non-Salmonid fish producing waters: The DO concentration shall not be less than 6 mg/l.

(F) Columbia River (river mile 86 to 120): The DO concentration shall not be less than 90% of saturation.

(b) Temperature:

(A) Multnomah Channel and the main stem Willamette River from mouth to Newberg, river mile 50: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 70° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 69.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 68° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(B) Willamette River from Newberg to confluence of Coast and Middle Forks, river mile 187: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 64° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(C) All other Willamette Basin streams:

(i) Salmonid fish producing waters: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 58° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 57.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 56° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(ii) Non-Salmonid fish producing waters: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 64° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(D) Columbia River: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 68° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 67.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 66° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of

this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(c) Turbidity (Jackson Turbidity Units, JTU): No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare.

(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges:

(A) Columbia River: 7.0 to 8.5.

(B) All other basin waters: 6.5 to 8.5.

(e) Organisms of the coliform group where associated with fecal sources (MPN or equivalent MF using a representative number of samples):

(A) Main stem Willamette River (river miles 0 to 187) and Multnomah Channel: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(B) All other Willamette Basin streams: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(C) Columbia River:

(i) Upstream from Highway 5 bridge between Portland and Vancouver (river mile 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(ii) Downstream from Highway 5 bridge between Portland and Vancouver (river miles 0 to 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(f) Bacterial pollution or other conditions deleterious to waters used for domestic purposes, livestock watering, irrigation, bathing, or shellfish propagation, or otherwise injurious to public health shall not be allowed.

(g) The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.

(h) The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed.

(i) The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shellfish shall not be allowed.

(j) The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.

(k) Objectionable discoloration, scum, oily sleek or floating solids, or coating of aquatic life with oil films shall not be allowed.

(l) Aesthetic conditions offensive to the human senses of sight, taste, smell, or touch shall not be allowed.

(m) Radioisotope concentrations shall not exceed maximum permissible concentrations (MPC's) in drinking water, edible fishes or shellfishes, wildlife, irrigated crops, livestock and dairy products, or pose an external radiation hazard.

(n) The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and ten percent (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for Hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

(o) Total Dissolved Solids: Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in rule 340-41-442:

(A) Columbia River.....500 mg/l

(B) Willamette River & Tributaries...100.0 mg/l

(p) Toxic Substances:

(A) Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may bioaccumulate to levels that adversely affect public health, safety, or welfare; aquatic life; or other designated beneficial uses.

(B) Levels of toxic substances shall not exceed the most recent criteria values for organic and inorganic pollutants established by EPA and published in Quality Criteria for Water (1986). A list of the criteria is presented in Table 20.

(C) The criteria in paragraph (B) of this subsection shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Where no published EPA criteria exist for a toxic substance, public health advisories and other published scientific literature may be considered and used, if appropriate, to set guidance values.

(D) Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, asthe Department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical substances without numeric criteria, to aquatic life. These studies, properly conducted in accordance with standard testing procedures, may be considered as scientifically valid data for the purposes of paragraph (C) of this subsection. If toxicity occurs, the Department shall evaluate and implement measures necessary to reduce toxicity on a case-by-case basis.

(3) Where the natural quality parameters of waters of the Willamette River Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

(4) Mixing zones:

(a) The Department may allow a designated portion of a receiving water to serve as a zone of initial dilution for waste waters and receiving waters to mix thoroughly and this zone will be defined as a mixing zone.

(b) The Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone, provided that the following conditions are met:

(A) The water within the mixing zone shall be free of:

(i) Materials in concentrations that will cause acute (96HLC50) toxicity to aquatic life. Acute toxicity is measured as the lethal concentration that causes 50 percent mortality of organisms within a 96-hour test period.

(ii) Materials that will settle to form objectionable deposits.

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions.

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths.

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in waste water discharge permits.

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the waste water discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of receiving waters, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to:

(A) Be as small as feasible;

(B) Avoid overlap with any other mixing zones to the extent possible and be less than the total stream width as necessary to allow passage of fish and other aquatic organisms;

(C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department;

(D) Not threaten public health;

(E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.

(d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to submit all information necessary to define a mixing zone, such as:

(A) Type of operation to be conducted;

(B) Characteristics of effluent flow rates and composition;

(C) Characteristics of low flows of receiving waters;

(D) Description of potential environmental effects;

(E) Proposed design for outfall structures.

(e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary.

(f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

(5) Testing methods: The analytical testing methods for determining compliance with the water quality standards contained in this rule shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Waste Water published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, unless the Department has published an applicable superseding method, in which case testing shall be in accordance with the superseding method; provided, however, that testing in accordance with an alternative method shall comply with this rule if the Department has published the method or has approved the method in writing.

[Publication: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & ef. 1-9-80; DEQ 18-1987, f. & ef. 9-4-87

Sandy Basin

Beneficial Water Uses to be Protected

340-41-482 Water quality in the Sandy River Basin (see Figures 1 and 8) shall be managed to protect the recognized beneficial uses as indicated in Table 7.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 9-1985, f. & ef. 8-6-85

Water Quality Standards Not to be Exceeded (To be Adopted Pursuant to ORS 468.735 and Enforceable Pursuant to ORS 468.720, 468.990, and 468.992)

340-41-485 (1) Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flow shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dissolved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest possible levels.

(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Sandy River Basin:

(a) Dissolved oxygen (DO):

(A) Main Stem Columbia River (river miles 120 to 147): DO concentrations shall not be less than 90 percent of saturation.

(B) All other Basin waters: DO concentrations shall not be less than 90 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

(b) Temperature:

(A) Main Stem Columbia River (river miles 120 to 147): No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 68° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 67.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 66° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(B) All other Basin waters: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 58° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 57.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 56° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(c) Turbidity (Jackson Turbidity Units, JTU): No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare.

(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

(d) pH (hydrogen ion concentration):

(A) Main Stem Columbia River (river miles 120 to 147): pH values shall not fall outside the range of 7.0 to 8.5.

(B) All other Basin waters: pH values shall not fall outside the range of 6.5 to 8.5.

(e) Organisms of the coliform group where associated with fecal sources (MPN or equivalent MF using a representative number of samples): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(f) Bacterial pollution or other conditions deleterious to waters used for domestic purposes, livestock watering, irrigation, bathing, or shellfish propagation, or otherwise injurious to public health shall not be allowed.

(g) The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.

(h) The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed.

(i) The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shellfish shall

not be allowed.

(j) The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.

(k) Objectionable discoloration, scum, oily sleek or floating solids, or coating of aquatic life with oil films shall not be allowed.

(l) Aesthetic conditions offensive to the human senses of sight, taste, smell, or touch shall not be allowed.

(m) Radioisotope concentrations shall not exceed maximum permissible concentrations (MPC's) in drinking water, edible fishes or shellfishes, wildlife, irrigated crops, livestock and dairy products, or pose an external radiation hazard.

(n) The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and ten percent (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for Hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

(o) Total Dissolved Solids: Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in rule 340-41-482:

(A) Main Stem Columbia River (river miles 120 to 147) — 200.0 mg/l;

(B) All Other Basin Waters — 100.0 mg/l.

(p) Toxic Substances:

(A) Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may bioaccumulate to levels that adversely affect public health, safety, or welfare; aquatic life; or other designated beneficial uses.

(B) Levels of toxic substances shall not exceed the most recent criteria values for organic and inorganic pollutants established by EPA and published in Quality Criteria for Water(1986). A list of the criteria is presented in Table 20.

(C) The criteria in paragraph (B) of this subsection shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Where no published EPA criteria exist for a toxic substance, public health advisories and other published scientific literature may be considered and used, if appropriate, to set guidance values.

(D) Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, as the Department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical substances without numeric criteria, to aquatic life. These studies, properly conducted in accordance with standard testing procedures, may be considered as scientifically valid data for the purposes if paragraph (C) of this subsection. If toxicity occurs, the Department shall evaluate and implement measures necessary to reduce toxicity on a case-by-case basis.

(3) Where the natural quality parameters of waters of the Sandy Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

(4) Mixing zones:

(a) The Department may allow a designated portion of a receiving water to serve as a zone of initial dilution for waste waters and receiving waters to mix thoroughly and this zone will be defined as a mixing zone.

(b) The Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone, provided that the following conditions are met:

(A) The water within the mixing zone shall be free of:

(i) Materials in concentrations that will cause acute (96HLC50) toxicity to aquatic life. Acute toxicity is measured as the lethal concentration that causes 50 percent mortality of organisms within a 96-hour test period.

(ii) Materials that will settle to form objectionable deposits.

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions.

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths.

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in waste water discharge permits.

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the waste water discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of receiving waters, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to:

(A) Be as small as feasible;

(B) Avoid overlap with any other mixing zones to the extent possible and be less than the total

stream width as necessary to allow passage of fish and other aquatic organisms;

(C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department;

(D) Not threaten public health;

(E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.

(d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to submit all information necessary to define a mixing zone, such as:

(A) Type of operation to be conducted;

(B) Characteristics of effluent flow rates and composition;

(C) Characteristics of low flows of receiving waters;

(D) Description of potential environmental effects;

(E) Proposed design for outfall structures.

(e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary.

(f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

(5) Testing methods: The analytical testing methods for determining compliance with the water quality standards contained in this rule shall be in accordance with the most recent edition of **Standard Methods for the Examination of Water and Waste Water** published jointly by the **American Public Health Association, American Water Works Association, and Water Pollution Control Federation**, unless the Department has published an applicable superseding method, in which case testing shall be in accordance with the superseding method; provided, however, that testing in accordance with an alternative method shall comply with this rule if the Department has published the method or has approved the method in writing.

[Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & ef. 1-9-80; DEQ 18-1987, f. & ef. 9-4-87

Minimum Design Criteria for Treatment and Control of Wastes

340-41-495 Subject to the implementation program set forth in rule 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the Sandy River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time, but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468.740 and recognizes that the actual performance level may at times be less than the design criteria.):

(1) Sewage wastes:

(a) Main Stem Columbia River (river miles 120 to 147):

(A) During periods of low stream flows (approximately July 1 to January 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately February 1 to June 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(b) All other Basin waters:

(A) During periods of low stream flows (approximately June 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately November 1 to May 31): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(c) Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise approved by the EQC.

(d) Sewage wastes shall be disinfected, after treatment; equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit.

(e) Positive protection shall be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary, but not presently practicable.

(f) More stringent waste treatment and control requirements may be imposed where special conditions may require.

(2) Industrial wastes:

(a) After maximum practicable inplant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significance are present, and control

of toxic or other deleterious substances).

(b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:

(A) The uses which are or may likely be made of the receiving stream;

(B) The size and nature of flow of the receiving stream;

(C) The quantity and quality of wastes to be treated; and

(D) The presence or absence of other sources of pollution on the same watershed.

(c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays.

(d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters.

(e) Positive protection shall be provided to prevent bypassing of raw or inadequately treated industrial wastes to any public waters.

(f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur, shall be developed and maintained.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 128, f. & ef. 1-21-77

APPENDIX 5

40 Code of Federal Regulations (CFR) Part 141, Subpart B

(Primary Drinking Water Regulations: Maximum contaminant levels)

Subpart B—Maximum Contaminant Levels

§ 141.11 Maximum contaminant levels for inorganic chemicals.

(a) The MCL for nitrate is applicable to both community water systems and non-community water systems except as provided by in paragraph (d) of this section. The levels for the other inorganic chemicals apply only to community water systems. Compliance with MCLs for inorganic chemicals is calculated pursuant to § 141.23.

(b) The following are the maximum contaminant levels for inorganic chemicals other than fluoride:

Contaminant	Level, milligrams per liter
Arsenic	0.05
Barium	1
Cadmium	0.010
Chromium	0.05
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05

(c) The maximum contaminant level for fluoride is 4.0 mg/l. See 40 CFR 143.3, which establishes a secondary maximum contaminant level at 2.0 mg/l.

(d) At the discretion of the State, nitrate levels not to exceed 20 mg/l may be allowed in a non-community water system if the supplier of water demonstrates to the satisfaction of the State that:

(1) Such water will not be available to children under 6 months of age; and

(2) There will be continuous posting of the fact that nitrate levels exceed 10 mg/l and the potential health effects of exposure; and

(3) Local and [illegible]e public health authorities will b[illegible]tified annually of nitrate levels that exceed 10 mg/l; and

(4) No adverse health effects shall result.

[40 FR 59570, Dec. 24, 1975, as amended at 45 FR 57342, Aug. 27, 1980; 47 FR 10998, Mar. 12, 1982; 51 FR 11410, Apr. 2, 1986]

§ 141.12 Maximum contaminant levels for organic chemicals.

The following are the maximum contaminant levels for organic chemicals. The maximum contaminant levels for organic chemicals in paragraphs (a) and (b) of this section apply to all community water systems. Compliance with the maximum contaminant levels in paragraphs (a) and (b) of this section, is calculated pursuant to § 141.24. The maximum comtaminant level for total trihalomethanes in paragraph (c) of this section applies only to community water systems which serve a population of 10,000 or more individuals and which add a disinfectant (oxidant) to the water in any part of the drinking water treatment process. Compliance with the maximum contaminant level for total trihalomethanes is calculated pursuant to § 141.30.

	Level, milligrams per liter
(a) Chlorinated hydrocarbons:	
Endrin (1,2,3,4,10, 10-hexachloro-6, 7-epoxy-1,4, 4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2, 2-bis [p-methoxyphenyl] ethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_8$-Technical chlorinated camphene, 67-69 percent chlorine)	0.005
(b) Chlorophenoxys:	
2,4-D, (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01
(c) Total trihalomethanes (the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform) and trichloromethane (chloroform))	0.10 mg/l.

[40 FR 59570, Dec. 24, 1975, as amended at 44 FR 68641, Nov. 29, 1979]

§ 141.13 Maximum contaminant levels for turbidity.

The maximum contaminant levels for turbidity are applicable to both community water systems and non-community water systems using surface water sources in whole or in part. The maximum contaminant levels for turbidity in drinking water, measured at a representative entry point(s) to the distribution system, are:

(a) One turbidity unit (TU), as determined by a monthly average pursuant to § 141.22, except that five or fewer turbidity units may be allowed if the supplier of water can demonstrate to the State that the higher turbidity does not do any of the following:

(1) Interfere with disinfection;

(2) Prevent maintenance of an effective disinfectant agent throughout the distribution system; or

(3) Interfere with microbiological determinations.

(b) Five turbidity units based on an average for two consecutive days pursuant to § 141.22.

[40 FR 59570, Dec. 24, 1975]

EFFECTIVE DATE NOTE: At 54 FR 27527, June 29, 1989, § 141.13 was amended, adding introductory text, effective December 31, 1990. This section already contains an introductory text. EPA will publish a document at a later date clarifying the status of the current introductory text. For the convenience of the user, the added material follows.

§ 141.13 Maximum contaminant levels for turbidity.

The requirements in this section apply to unfiltered systems until December 30, 1991, unless the State has determined prior to that date, in writing pursuant to § 1412(b)(7)(C)(iii), that filtration is required. The requirements in this section apply to filtered systems until June 29, 1993. The requirements in this section apply to unfiltered systems that the State has determined, in writing pursuant to § 1412(b)(7)(C)(iii), must install filtration, until June 29, 1993, or until filtration is installed, whichever is later.

* * * * *

§ 141.14 Maximum microbiological contaminant levels.

The maximum contaminant levels for coliform bacteria, applicable to community water systems and non-community water systems, are as follows:

(a) When the membrane filter technique pursuant to § 141.21(a) is used, the number of coliform bacteria shall not exceed any of the following:

(1) One per 100 milliliters as the arithmetic mean of all samples examined per compliance period pursuant to § 141.21(b) or (c), except that, at the primacy Agency's discretion systems required to take 10 or fewer samples per month may be authorized to exclude one positive routine sample per month from the monthly calculation if:

(i) As approved on a case-by-case basis the State determines and indicates in writing to the public water system that no unreasonable risk to health existed under the conditions of this modification. This determination should be based upon a number of factors not limited to the following:

(A) The system provided and had maintained an active disinfectant residual in the distribution system, (B) the potential for contamination as indicated by a sanitary survey, and (C) the history of the water quality at the public water system (e.g. MCL or monitoring violations); (ii) the supplier initiates a check sample on each of two consecutive days from the same sampling point within 24 hours after notification that the routine sample is positive, and each of these check samples is negative; and (iii) the original positive routine sample is reported and recorded by the supplier pursuant to §§ 141.31(a) and 141.33(a). The supplier shall report to the State its compliance with the conditions specified in this paragraph and a summary of the corrective action taken to resolve the prior positive sample result. If a positive routine sample is not used for the monthly calculation, another routine sample must be analyzed for compliance purposes. This provision may be used only once during two consecutive compliance periods.

(2) Four per 100 milliliters in more than one sample when less than 20 are examined per month; or

(3) Four per 100 milliliters in more than five percent of the samples when 20 or more are examined per month.

(b) (1) When the fermentation tube method and 10 milliliter standard portions pursuant to § 141.21(a) are used, coliform bacteria shall not be present in any of the following:

(i) More than 10 per [illegible] of the portions (tubes) in any on[illegible]nth pursuant to § 141.21 (b) or (c) except that, at the State's discretion, systems required to take 10 or fewer samples per month may be authorized to exclude one positive routine sample resulting in one or more positive tubes per month from the monthly calculation if:

(A) As approved on a case-by-case basis the State determines and indicates in writing to the public water system that no unreasonable risk to health existed under the conditions of this modification. This determination should be based upon a number of factors not limited to the following: (1) The system provided and had maintained an active disinfectant residual in the distribution system, (2) the potential for contamination as indicated by a sanitary survey, and (3) the history of the water quality at the public water system (e.g. MCL or monitoring violations);

(B) The supplier initiates a check sample on each of two consecutive days from the sampling point within 24 hours after notification that the routine sample is positive, and each of these check samples is negative; and

(C) The original positive routine sample is reported and recorded by the supplier pursuant to § 141.31(a) and § 141.33(a). The supplier shall report to the State its compliance with the conditions specified in this paragraph and report the action taken to resolve the prior positive sample result. If a positive routine sample is not used for the monthly calculation, another routine sample must be analyzed for compliance purposes. This provision may be used only once during two consecutive compliance periods.

(ii) Three or more portions in more than one sample when less than 20 samples are examined per month; or

(iii) Three or more portions in more than five percent of the samples when 20 or more samples are examined per month.

(2) When the fermentation tube method and 100 milliliter standard portions pursuant to § 141.21(a) are used, coliform bacteria shall not be present in any of the following:

(i) More than ercent of the portions (tubes) in / month pursuant to § 141.21 (b) or (c), except that, State discretion, systems required to take 10 or fewer samples per month may be authorized to exclude one positive routine sample resulting in one or more positive tubes per month from the monthly calculation if:

(A) As approved on a case-by-case basis the State determines and indicates in writing to the public water system that no unreasonable risk to health existed under the conditions of this modification. This determination should be based upon a number of factors not limited to the following: (1) The system provided and had maintained an active disinfectant residual in the distribution system, (2) the potential for contamination as indicated by a sanitary survey, and (3) the history of the water quality at the public water system (e.g. MCL or monitoring violations);

(B) The supplier initiates two consecutive daily check samples from the same sampling point within 24 hours after notification that the routine sample is positive, and each of these check samples is negative; and

(C) The original positive routine sample is reported and recorded by the supplier pursuant to § 141.31(a) and § 141.33(a). The supplier shall report to the State its compliance with the conditions specified in this paragraph and a summary of the corrective action taken to resolve the prior positive sample result. If a positive routine sample is not used for the monthly calculation, another routine sample must be analyzed for compliance purposes. This provision may be used only once during two consecutive compliance periods.

(ii) Five portions in more than one sample when less than five samples are examined per month; or

(iii) Five portions in more than 20 percent of the samples when five or more samples are examined per month.

(3) When the Minimal Medium ONPG-MUG test described in § 141.21(a) of this part is used, coliform bacteria shall not be present at levels exceeding those specified in paragraph (b)(1) (i)-(iii) of this section.

(c) For community or non-community systems that are required to sample at a rate of less than 4 per month, compliance with paragraph (a), (b)(1), or (b)(2) of this section shall be based upon sampling during a 3 month period, except that, at the discretion of the State, compliance may be based upon sampling during a one-month period.

(d) If an average MCL violation is caused by a single sample MCL violation, then the case shall be treated as one violation with respect to the public notification requirements of § 141.32.

[40 FR 59570, Dec. 24, 1975, as amended at 45 FR 57343, Aug. 27, 1980; 54 FR 30001, July 17, 1989]

EFFECTIVE DATE NOTE: At 54 FR 27862, June 29, 1989, § 141.14 was removed, effective December 31, 1990.

§ 141.15 Maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity in community water systems.

The following are the maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity:

(a) Combined radium-226 and radium-228—5 pCi/1.

(b) Gross alpha particle activity (including radium-226 but excluding radon and uranium)—15 pCi/1.

[41 FR 28404, July 9, 1976]

§ 141.16 Maximum contaminant levels for beta particle and photon radioactivity from man-made radionuclides in community water systems.

(a) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

(b) Except for the radionuclides listed in Table A, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be calculated on the basis of a 2 liter per day drinking water intake using the 168 hour data listed

in "*Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure*," NBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 millirem/year.

TABLE A—AVERAGE ANNUAL CONCENTRATIONS ASSUMED TO PRODUCE A TOTAL BODY OR ORGAN DOSE OF 4 MREM/YR

Radionuclide	Critical organ	pCi per liter
Tritium	Total body	20,000
Strontium-90	Bone marrow	8

[41 FR 28404, July 9, 1976]

Subpart C—Monitoring and Analytical Requirements

§ 141.21 Coliform sampling.

(a) *Routine monitoring.* (1) Public water systems must collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan. These plans are subject to State review and revision.

(2) The monitoring frequency for total coliforms for community water systems is based on the population served by the system, as follows:

TOTAL COLIFORM MONITORING FREQUENCY FOR COMMUNITY WATER SYSTEMS

Population served	Minimum number of samples per month
25 to 1,000 [1]	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25

TOTAL COLIFORM MONITORING FREQUENCY FOR COMMUNITY WATER SYSTEMS—Continued

Population served	Minimum number of samples per month
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,001 or more	480

[1] Includes public water systems which have at least 15 service connections, but serve fewer than 25 persons.

If a community water system serving 25 to 1,000 persons has no history of total coliform contamination in its current configuration and a sanitary survey conducted in the past five years shows that the system is supplied solely by a protected groundwater source and is free of sanitary defects, the State may reduce the monitoring frequency specified above, except that in no case may the State reduce the monitoring frequency to less than one sample per quarter. The State must approve the reduced monitoring frequency in writing.

(2) The monitoring frequency for total coliforms for non-community water systems is as follows:

(i) A non-community water system using only ground water (except ground water under the direct influence of surface water, as defined in § 141.2) and serving 1,000 persons or fewer must monitor each calendar quarter that the system provides water to the public, except that the State may reduce this monitoring frequency, in writing, if a sanitary survey shows that the system is free of sanitary defects. Beginning June 29, 1994, the State cannot reduce the monitor-

APPENDIX 6

OAR 340-61-040(3)

(Leachate collection and treatment plan standards)

Special Rules Pertaining to Landfills
340-61-040

(3) Leachate. Any person designing, constructing, or operating a landfill shall ensure that leachate production is minimized. Where required by the Department, leachate shall be collected and treated or otherwise controlled in a manner approved by the Department.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 2-1984, f. & ef. 1-16-84

APPENDIX 7

OAR 340-61-033

(Landfill closure standards)

Closure Plans

340-61-033 (1) A closure plan must specify the procedures necessary to completely close the land disposal site at the end of its intended operating life. The plan must also identify the activities which will be carried on after closure to properly monitor and maintain the completed land disposal site. At a minimum, the plan shall include:

(a) Detailed plans and specifications consistent with the applicable requirements of rule 340-61-035 and 340-61-040(1), unless an exemption is granted as provided in rule 340-61-025(4);

NOTE: If some of this information has been previously submitted, the permittee shall review and update it to reflect current conditions and any proposed changes in closure or post-closure activities.

(b) A description of how and when the facility will be closed. The description shall, to the extent practicable, show how the disposal site will be closed as filling progresses to minimize the area remaining to be closed at the time that the site stops receiving waste. A time schedule for completion of closure shall be included;

(c) Details of how leachate discharges will be minimized and controlled and treated if necessary;

(d) Details of any landfill gas control facilities, their operation and frequency of monitoring;

(e) Details of final cover including soil texture, depth and slope;

(f) Details of surface water drainage diversion;

(g) A schedule of monitoring the site after closure;

(h) A projected frequency of anticipated maintenance activities at the site after closure, including but not limited to repairing, recovering and regrading settlement areas, cleaning out surface water diversion ditches, and re-establishing vegetation;

(i) Other information requested by the Department necessary to determine whether the disposal site will comply with all applicable rules of the Department.

(2) Approval of Closure Plan. After approval by the Department, the permittee shall implement the closure plan within the approved time schedule.

(3) Amendment of Plan. The approved closure plan may be amended at any time during the active life of the landfill or during the post-closure care period as follows:

(a) The permittee must amend the plan whenever changes in operating plans or facility design, or changes in these rules, or events which occur during the active life of the landfill or during the post-closure care period, significantly affect the plan. The permittee must also amend the plan whenever there is a change in the expected year of closure. The permittee must submit the necessary plan amendments to the Department for approval within 60 days after such changes or as otherwise required by the Department;

(b) The permittee may request to amend the plan to alter the closure requirements, to alter the post-closure care requirements, or to extend or reduce the post-closure care period based on cause. The request must include evidence demonstrating to the satisfaction of the Department that:

(A) The nature of the landfill makes the closure or post-closure care requirements unnecessary, or

(B) The nature of the landfill supports reduction of the post-closure care period, or

(C) The requested extension in the post-closure care period or alteration of closure or post-closure care requirements is necesssary to prevent threat of adverse impact on public health, safety or the environment.

(c) The Department may amend a permit to require the permittee to modify the plan if it is necessary to prevent the threat of adverse impact on public health, safety or the environment. Also, the Department may extend or reduce the post-closure care period or alter the closure or post-closure care requirements based on cause.

Stat. Auth.: ORS Ch.
Hist.: DEQ 2-1984, f. & ef. 1-16-84

APPENDIX 8

OAR 340-61-040(8)

(Methane gas monitoring program standards)

Special Rules Pertaining to Landfills
340-61-040

(8) Gas Control. No person shall establish, operate, expand or modify a landfill such that:

(a) The concentration of methane (CH_4) gas at the landfill exceeds twenty-five (25) percent of its lower explosive limit in facility structures (excluding gas control or gas recovery system components) or its lower explosive limit at the property boundary;

(b) Malodorous decomposition gases become a public nuisance.

(9) Surface Drainage Control. Each permittee shall ensure that:

(a) The landfill is designed, constructed and maintained so that drainage will be diverted around or away from active and completed operational areas;

(b) The surface contours of the landfill are maintained such that ponding of surface water is minimized.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 2-1984, f. & ef. 1-16-84

APPENDIX 9

OAR 340-25-850 through 340-25-905

(Air quality standards for incinerators)

Effective 3-13-1990
EQC met 3-02-1990

Incinerator Regulations
OAR 340-25-850 to -905

Purposes and Application

340-25-850 The purpose of these rules is to establish state of the art emission standards, design requirements, and performance standards for all solid and infectious waste and crematory incinerators in order to minimize air contaminant emissions and provide adequate protection of public health. The rules apply to all existing waste incinerators and to all that will be built, modified, or installed in the State of Oregon.

Definitions

340-25-855 (1) "Acid Gases" means any exhaust gas which includes hydrogen chloride and sulfur dioxide.

(2) "Best Available Control Technology (BACT)" means an emission limitation as defined by OAR 340-20-225 (4).

(3) "Continuous Emission Monitoring" means a monitoring system for continuously measuring the emissions of a pollutant from an affected incinerator. Continuous monitoring equipment and operation shall be certified in accordance with EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Department's CEM Manual.

(4) "Crematory Incinerator" means an incinerator used solely for the cremation of human and animal bodies.

(5) "Department" means the Department of Environmental Quality.

(6) "Dry Standard Cubic Foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from waste or refuse burning, "Standard Cubic Foot (scf)" implies adjustment of gas volume to that which would result at a concentration of 7% oxygen or 50% excess air.

(7) "Emission" means a release into the atmosphere of air contaminants.

(8) "Fugitive Emissions" means the same as defined in section 340-20-225 (11). (12)

(9) "Incinerator" means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of unwanted material.

(10) "Infectious Waste" means waste as defined in ORS 763, Oregon Laws 1989, which contains or may contain any disease producing microorganism or material, and includes, but not limited to the following:

(a) "Biological waste," which includes blood and blood products, and body fluids that cannot be directly discarded into a municipal sewer system, and waste materials saturated with blood or body fluids, but does not include soiled diapers.

(b) "Cultures and stocks," which includes etiologic agents and associated biologicals; including specimen cultures and dishes, devices used to transfer, inoculate and mix cultures, wastes from production of biologicals, and serums and discarded

live and attenuated vaccines. "Cultures" does not include throat and urine cultures.

(c) "Pathological waste," which includes biopsy materials and all human tissues, anatomical parts that emanate from surgery, obstetrical procedures, autopsy and laboratory procedures and animal carcasses exposed to pathogens in research and the bedding and other waste from such animals. "Pathological wastes" does not include teeth or formaldehyde or other preservative agents.

(d) "Sharps," which includes needles, IV tubing with needles attached, scalpel blades, lancets, glass tubes that could be broken during handling and syringes that have been removed from their original sterile containers.

(11) "Infectious Waste Facility" means an incinerator which is operated or utilized for the disposal or treatment of infectious waste, including combustion for the recovery of heat, and which utilizes high temperature thermal destruction technologies.

(12) "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background.

(13) "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Method 5 or an equivalent test method in accordance with the Department Source Test Manual. Particulate matter emission determinations by EPA Method 5 shall consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each and a minimum sampling volume of 30.0 dscf each.

(14) "Parts Per Million (ppm)" means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).

(15) "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

(16) "Primary Combustion Chamber" means the discrete equipment, chamber or space in which drying of the waste, pyrolysis, and essentially the burning of the fixed carbon in the waste occurs.

(17) "Secondary (or Final) Combustion Chamber" means the discrete equipment, chamber, or space in which the products of pyrolysis are combusted in the presence of excess air such that essentially all carbon is burned to carbon dioxide.

(18) "Solid Waste" means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as metal, glass, and rock.

(19) "Solid Waste Facility" means an incinerator which is operated or utilized for the disposal or treatment of solid waste including combustion for the recovery of heat, and which utilizes high temperature thermal destruction technologies.

(20) "Standard Conditions" means temperature of 68 degrees fahrenheit (15.6 degrees Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 kilograms per square centimeter).

(21) "Startup/Shutdown" means the time during which an air contaminant source or emission control equipment is brought into normal operation and normal operation is terminated, respectively.

(22) "Transmissometer" means a device that measures opacity and conforms to EPA Specification Number 1 in Title 40 Code of Federal Regulations, Part 60, Appendix B.

Solid and Infectious Waste Incinerators

Best Available Control Technology

340-25-860 (1) Notwithstanding the specific emission limits set forth in rule 340-25-865, in order to maintain overall air quality at the highest possible levels, all incinerator facilities are required to use best available control technology (BACT). In no event shall the application of BACT result in emissions of any air contaminant which would exceed the emission limits set forth in these rules.

(2) All installed equipment shall be operated and maintained in such a manner that emissions of air contaminants are kept at lowest possible levels.

Emission Limitations

340-25-865 (1) No person shall cause, suffer, allow, or permit the operation of any waste incinerator in a manner which violates the following emission limits and requirements:

(a) Particulate Emissions:

(A) For new incinerator facilities, emissions from each stack shall not exceed 0.015 grains per dry standard cubic foot of exhaust gases corrected to 7 percent O_2 at standard conditions.

(B) For existing incinerator facilities, emissions from each stack shall not exceed 0.030 grains per dry standard cubic foot of exhaust gases corrected to 7 percent O_2 at standard conditions.

(b) Hydrogen Chloride (HCl) for all incinerator facilities, emissions of hydrogen chloride from each stack shall not exceed 50 ppm during any 60-minute period corrected to 7 percent O_2; or shall be reduced by at least ninety (90) percent by weight on an hourly basis.

(c) Sulfur Dioxide (SO_2) for all incinerator facilities, emissions of sulfur dioxide from each stack shall not exceed 50 ppm as a running three-hour average corrected to 7 percent O_2; or shall be reduced by at least seventy (70) percent by weight on a three-hour basis.

(d) Carbon Monoxide (CO) for all incinerator facilities, emissions of carbon monoxide from each stack shall not exceed 100 ppm as a running eight-hour average corrected to 7 percent O_2.

(e) Nitrogen Oxide (NO_x). Emissions of nitrogen oxide from each stack shall not exceed 200 ppm as a running 24-hour average corrected to 7 percent O_2 for new incinerator facilities capable of processing more than 250 tons/day of wastes.

(f) Opacity. The opacity as measured visually or by a transmissometer shall not exceed 10 percent for a period aggregating more than six minutes in any 60 minute period.

(g) Fugitive Emissions. Solid waste incinerator facilities shall be operated in a manner which prevents or minimizes fugitive emissions, including the paving of all normally traveled roadways within the plant boundary and enclosing all material transfer points.

(h) Other Wastes. No incinerator subject to these rules shall burn radioactive or hazardous waste, or any other wastes not specifically authorized in the Department's Air Contaminant Discharge Permit.

(i) Other Contaminants. In the absence of an air-contaminant-specific emission limit or ambient air quality standard, the Department may establish by permit emission limits for any hazardous air contaminants that are more protective of human health and the environment for any waste incinerator subject to these rules.

Design and Operation

340-25-870 (1) Temperature and Residence Time. Each incinerator shall be designed and operated to maintain combustion gases at a minimum temperature of 1800°F for at least one second residence time. For a multi-chamber incinerator, these parameters must be met after the primary combustion chamber, which shall be maintained at no less than 1400°F.

(2) Auxiliary Burners. Each incinerator shall be designed and operated with automatically controlled auxiliary burners capable of maintaining the combustion chamber temperatures specified in (1), and shall have sufficient auxiliary fuel capacity to maintain said temperatures.

(3) Interlocks. Each incinerator shall be designed and operated with an interlock system which:

(a) prevents charging until the final combustion chamber reaches 1800°F;

(b) for batch-fed incinerators, prevents recharging until each combustion cycle is complete;

(c) ceases charging if the incinerator temperature falls below either 1800°F for any continuous 15-minute period; and

(d) ceases charging if carbon monoxide levels exceed 150 ppm, corrected to 7 percent O_2 over a continuous 15-minute period.

Existing incinerators may request from the Department, and the Department may grant, an exemption for installing an interlock system, if it can be shown to the satisfaction of the Department that such a system would not allow sufficient flexibility in operation, or that significant technical or economic constraints would prevent retrofitting.

(4) Air Locks. All infectious waste facilities with mechanically fed incinerators shall be designed and operated with an air lock control system to prevent opening the incinerator to the room environment. The volume of the loading system must be designed so as to prevent overcharging to assure complete combustion of the waste.

(5) Flue Gas Outlet Temperature. Each incinerator shall be designed and operated such that the flue gas temperature at the outlet from the primary control device does not exceed 350°F.

unless it can be demonstrated that a greater collection of condensible matter can be achieved at a higher outlet temperature.

(6) Combustion efficiency. Except during periods of startup and shutdown, all waste incinerators shall achieve a combustion efficiency of 99.9 percent based on a running eight-hour average, computed as follows:

$$CE = \frac{CO_2}{(CO_2 + CO)} \times 100$$

CO = Carbon monoxide in the exhaust gas, parts per million by volume (dry)

CO_2 = Carbon dioxide in the exhaust gas, parts per million by volume (dry)

(7) Stack Height. All incinerator stacks shall be designed in accordance with Good Engineering Practice (GEP) as defined in Title 40, Code of Federal Regulations, Parts 51.100(ii) and 51.118, in order to assure compliance with applicable air standards, and to avoid the flow of stack pollutants into any building ventilation intake plenum.

(8) Operator Training and Certification. Each incinerator shall be operated at all times under the direction of one or more individuals who have received training necessary for proper operation. A description of the training program shall be submitted to the Department for approval. A satisfactory training program shall consist of any of the following:

(a) Certification by the American Society of Mechanical Engineers (ASME) for solid waste incinerator operation; or

(b) For infectious waste incineration, successful completion of EPA's Medical Waste Incinerator Operator training course; or

(c) Other certification or training by a qualified organization as to proper operating practices and procedures, which has been pre-approved by the Department prior to enrollment. In addition, the owner or operator of an incinerator facility shall develop and submit a manual for proper operation and maintenance, to be reviewed with employees responsible for incinerator operation on an annual basis.

(9) In cases where incinerator operation may cause odors which unreasonably interfere with the use and enjoyment of property, the Department may require by permit the use of good practices and procedures to prevent or eliminate those odors.

Continuous Emission Monitoring

340-25-875 (1) All solid waste incinerators shall operate and maintain continuous monitoring for the following:

(a) Sulfur dioxide;
(b) Carbon monoxide;
(c) Opacity;
(d) Final Combustion Chamber Exit Temperature;
(e) Control Equipment Outlet Temperature;
(f) Oxygen; and
(g) Nitrogen Oxide - new facilities only (over 250 tons/day).

(2) All infectious waste incinerators shall operate and maintain continuous monitoring for the following:

(a) Carbon monoxide;

(b) Opacity; and

(c) Final Combustion Chamber Exit Temperature

(3) The Department may at any time following the effective date of these rules, require the installation of hydrogen chloride monitors for any solid and infectious waste incinerator, or sulfur dioxide monitors for any infectious waste incinerator, if the Department determines such monitoring is necessary, in order to demonstrate compliance with the hydrogen chloride emission limit.

(4) The monitors specified above shall comply with EPA performance specifications in Title 40, Code of Federal Regulations, Part 60, Appendix B., and the Department's CEM Manual. All monitoring equipment shall be located so as to accurately monitor emission levels, in order to demonstrate compliance with section 340-25-865 of these rules.

Reporting and Testing

340-25-880 (1) Reporting:

(a) Stack test results shall be reported to the Department within sixty (60) days of completion.

(b) All records associated with continuous monitoring data including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least one year and shall be furnished to the Department upon request.

(2) Source Testing:

(a) All waste incinerators subject to these rules must be tested to demonstrate compliance with the standards in these rules.

(b) Source testing shall be conducted at the maximum design rate using waste that is representative of normal operation. If requested by the owner/operator, source testing may be performed at a lower rate, however, permit limits will be established based on the lower rate of operation.

(c) Unless otherwise specified by the Department, each incinerator shall be tested at start-up and annually thereafter for particulate, hydrogen chloride, sulfur dioxide, and carbon monoxide emissions.

(3) Hazardous or Toxic Air Contaminant Source Testing. The Department may at any time after the effective date of this rule, conduct or require source testing and require access to information specific to the control, recovery, or release of hazardous or toxic air contaminants.

Compliance

340-25-885 (1) All existing waste incinerators must demonstrate compliance with the applicable provisions of these rules within five (5) years of the effective date of these rules, or by the date required by applicable federal guidelines adopted by the Environmental Protection Agency, whichever is sooner. Existing data such as that collected in accordance with the requirements of an Air

Contaminant Discharge Permit may be used to demonstrate compliance.

(2) All existing waste incinerators shall be subject to these rules upon demonstration of compliance pursuant to paragraph (1) of this section. Until compliance is demonstrated, existing sources shall continue to be subject to the provisions of OAR 340-21-025 and OAR 340-21-027 and all applicable permit conditions.

(3) New waste incinerators must demonstrate compliance with the emission limits and operating requirements of these rules in accordance with a schedule established by the Department before commencing regular operation.

(4) Compliance with these rules does not relieve the owner or operator of the source from the responsibility to comply with requirements of the Department's Solid and Hazardous Waste rules, Oregon Administrative Rules, Chapter 340, Division 61, regarding the disposal of ash generated from waste incinerators.

Crematory Incinerators

Emission Limitations

340-25-890 (1) No person shall cause to be emitted particulate matter from any crematory incinerator in excess of 0.080 grains per dry standard cubic foot of exhaust gases corrected to 7 percent O_2 at standard conditions.

(2) Opacity. The opacity as measured visually shall not exceed 10 percent for a period aggregating more than six minutes in any 60 minute period.

(3) Other Wastes. As defined in section 340-25-855 (4) of these rules, crematory incinerators may only be used for incineration of human and animal bodies. No other waste, including infectious waste as defined in section 340-25-855(10) of these rules, may be incinerated unless specifically authorized in the Department's Air Contaminant Discharge Permit.

Design and Operation

340-25-895 (1) Temperature and Residence Time. The temperature at the final combustion chamber of shall be 1800°F for new incinerators, and 1600°F for existing, with a residence time of at least one second. At no time while firing waste shall the temperature in the final chamber fall below 1400°F.

(2) Operator Training and Certification. Each crematory incinerator shall be operated at all times under the direction of individuals who have received training necessary for proper operation. A description of the training program shall be submitted to the Department for approval.

(3) Odors. In cases where incinerator operation may cause odors which unreasonably interfere with the use and enjoyment of property, the Department may require by permit the use of good practices and procedures to prevent or eliminate those odors.

Monitoring and Reporting

340-25-900 (1) All crematory incinerators shall operate and maintain continuous monitoring for final combustion chamber exit temperature.

(2) All records associated with continuous monitoring data including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least one year and shall be furnished to the Department upon request.

(3) All crematory incinerators must conduct testing to demonstrate compliance with these rules in accordance with a schedule specified by the Department.

Compliance

340-25-905 (1) All existing crematory incinerators must demonstrate compliance with the applicable provisions of these rules within three (3) years of the effective date of these rules. Existing data such as that collected in accordance with the requirements of an Air Contaminant Discharge Permit may be used to demonstrate compliance.

(2) All existing crematory incinerators shall be subject to these rules upon demonstration of compliance pursuant to paragraph (1) of this section. Until compliance is demonstrated, existing sources shall continue to be subject to the provisions of OAR 340-21-025 and all applicable permit conditions.

(3) New crematory incinerators must demonstrate compliance with the emission limits and operating requirements of these rules in accordance with a schedule established by the Department before commencing regular operation.

PLAN\AR1387

APPENDIX 10

OAR 340-20-140 through 340-20-160

and 340-20-220 through 340-20-276

(Air Contaminant Discharge Permit: applicability and procedures)

Air Contaminant Discharge Permits

Purpose

340-20-140 The purpose of these rules is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to ORS 468.310 to 468.330 and related statutes for stationary sources.

Stat. Auth.: ORS Ch.
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-86; Renumbered from 340-20-033.02

Definitions

340-20-145 As used in these rules, unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify, or operate specified facilities, conduct specified activities, or emit, discharge, or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(5) "Regional Authority" means Lane Regional Air Pollution Authority.

Stat. Auth.: ORS Ch.
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.04

Air Contaminant Discharge Permit Notice Policy

340-20-150 It shall be the policy of the Department and the Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least thirty (30) days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit. Public notice shall include the name and quantities of new or increased emissions for which permit limits are proposed, or new or increased emissions which exceed significant emission rates established by the Department.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.06; DEQ 13-1988, f. & cert. ef. 6-17-88

Permit Required

340-20-155 (1) No person shall construct, install, establish, develop or operate any air contaminant source which is referred to in Table 1, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

(2) No person shall modify any source covered by a permit under these rules such that the emissions are significantly increased without first applying for and obtaining a modified permit.

(3) No person shall modify any source covered by a permit under these rules such that:

(a) The process equipment is substantially changed or added to; or

(b) The emissions are significantly changed without first notifying the Department.

(4) Any source may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the application processing fee and/or annual compliance determination fee, provided by OAR 340-20-165, may be waived by the Department or Regional Authority.

(5) The Department may designate any source as a "Minimal Source" based upon the following criteria:

(a) Quantity and quality of emissions;

(b) Type of operation:

(c) Compliance with Department regulations; and

(d) Minimal impact on the air quality of the surrounding region. If a source is designated as a minimal source, the annual compliance determination fee, provided by rule 340-20-165, will be collected in conjunction with plant site compliance inspections which will occur no less frequently than every five (5) years.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.08; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 12-1987, f. & ef. 6-15-87

Multiple-Source Permit

340-20-160 When a single site includes more than one air contaminant source, a single permit may be issued including all sources located at the site. For uniformity such applications shall separately identify by subsection each air contaminant source included from Table 1.

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to

permit modification, revocation, suspension, or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to the permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and the Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

Stat. Auth.: ORS Ch.
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-003.10

New Source Review

Applicability

340-20-220 (1) No owner or operator shall begin construction of a major source or a major modification of an air contaminant source without having received an Air Contaminant Discharge Permit from the Department of Environmental Quality and having satisfied OAR 340-20-230 through 340-20-280 of these rules.

(2) Owners or operators of proposed non-major sources or non-major modifications are not subject to these New Source Review rules. Such owners or operators are subject to other Department rules including Highest and Best Practicable Treatment and Control Required (OAR 340-20-001), Notice of Construction and Approval of Plans (OAR 340-20-020 to 340-20-032), Air Contaminant Discharge Permits (OAR 340-20-140 to 340-20-185), Emission Standards for Hazardous Air Contaminants (OAR 340-25-450 to 340-25-480), and Standards of Performance for New Stationary Sources (OAR 340-25-505 to 340-25-545).

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81

Definitions

340-20-225 (1) "Actual emissions" means the mass rate of emissions of a pollutant from an emissions source:

(a) In general, actual emissions as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during the baseline period and which is representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that existing source-specific permitted mass emissions for the source are equivalent to the actual emissions of the source if they are within 10% of the calculated actual emissions.

(c) For any newly permitted emission source which had not yet begun normal operation in the baseline period, actual emissions shall equal the potential to emit of the source.

(2) "Baseline Concentration" means that ambient concentration level for a particular pollutant which existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for 1978. The following emission increases or decreases will be included in the baseline concentration:

(a) Actual emission increases or decreases occurring before January 1, 1978; and

(b) Actual emission increases from any major source or major modification on which construction commenced before January 6, 1975.

(3) "Baseline Period" means either calendar years 1977 or 1978. The Department shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.

(4) "Best Available Control Technology (BACT)" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of

production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event, shall the application of BACT result in emissions of any air contaminant which would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutants. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard shall, to the degree possible, set forth the emission reduction achievable and shall provide for compliance by prescribing appropriate permit conditions.

(5) "Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as Class I area. Class I areas are identified in OAR 340-31-120.

(6) "Commence" means that the owner or operator has obtained all necessary preconstruction approvals required by the Clean Air Act and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.

(7) "Construction" means any physical change (including fabrication, erection, installation, demolition, or modification of an emissions unit) or change in the method of operation of a source which would result in a change in actual emissions.

(8) "Emission Limitation" and "Emission Standard" mean a requirement established by a State, local government, or the Administrator of the U.S. Environmental Protection Agency which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

(9) "Emission Reduction Credit Banking" means to presently reserve, subject to requirements of these provisions, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.

(10) "Emissions Unit" means any part of a stationary source (including specific process equipment) which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

(11) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.

(12) "Fugitive Emissions" means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.

(13) "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new major sources and major modifications of sources.

(14) "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects: the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or the most stingent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event, shall the application of this term permit a proposed new or modified source to emit any air contaminant in excess of the amount allowable under applicable new source performance standards or standards for hazardous air pollutants.

(15) "Major Modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase (as defined in definition (25)) for any pollutant subject to regulation under the Clean Air Act. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases must take into account all accumulated increases and decreases in actual emissions occurring at the source since January 1, 1978, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations for that pollutant, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modification causing such increases become subject to the New Source Review requirements including the retrofit of required controls.

(16) "Major Source" means a stationary source which emits, or has the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate (as defined in definition (25)).

(17) "Nonattainment Area" means a geographical area of the State which exceeds any state or federal primary or secondary ambient air quality standard as designated by the Environmental Quality Commission.

(18) "Offset" means an equivalent or greater emission reduction which is required prior to allowing an emission increase from a new major source or major modification of a source.

(19) "Particulate Matter Emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods.

(20) "PM_{10} Emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted to the ambient air as measured by applicable reference methods.

(21) "Plant Site Emission Limit" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source.

(22) "Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted,

stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

(23) "Resource Recovery Facility" means any facility at which municipal solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing municipal solid waste for reuse. Energy conversion facilities must utilize municipal solid waste to provide 50% or more of the heat input to be considered a resource recovery facility.

(24) "Secondary Emissions" means emissions from new or existing sources which occur as a result of the construction and/or operation of a source or modification, but do not come from the source itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the source associated with the secondary emissions. Secondary emissions may include, but are not limited to:

(a) Emissions from ships and trains coming to or from a facility;

(b) Emissions from off-site support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.

(25) "Significant emission rate" means:

(a) Emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

Table 1: Significant Emission Rates for Pollutants Regulated Under the Clean Air Act

Pollutant	Significant Emission Rate
(A) Carbon Monoxide	100 tons/year
(B) Nitrogen Oxides	40 tons/year
(C) Particulate Matter*	25 tons/year
(i) TSP	25tons/year
(ii) PM_{10}	15 tons/year
(D) Sulfur Dioxide	40 tons/year
(E) Volatile Organic Compounds*	40 tons/year
(F) Lead	0.6 ton/year
(G) Mercury	0.1 ton/year
(H) Beryllium	0.0004 ton/year
(I) Asbestos	0.007 ton/year
(J) Vinyl Chloride	1 ton/year
(K) Fluorides	3 tons/year
(L) Sulfuric Acid Mist	7 tons/year
(M) Hydrogen Sulfide	10 tons/year
(N) Total reduced sulfur (including hydrogen sulfide)	10 tons/year
(O) Reduced sulfur compounds (including hydrogen sulfide)	10 tons/year

NOTE: *For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area, and the Klamath Falls Urban Growth Area, the Significant Emission Rates for particulate matter and volatile organic compounds are defined in Table 2.

(b) For pollutants not listed above, the Department shall determine the rate that constitutes a significant emission rate.

(c) Any emissions increase less than these rates associated with a new source or modification which would construct within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 ug/m^3 (24 hour average) shall be deemed to be emitting at a significant emission rate (see Table 2).

Table 2
(340-20-225)

Significant Emission rates for the Nonattainment Portions of the Medford-Ashland Air Quality Maintenance Area and the Klamath Falls Urban Growth Area

	Emission Rate					
	Annual		Day		Hour	
Air Contaminant	Kilograms	(tons)	Kilogram	(lbs)	Kilogram	(lbs)
Particulate Matter* (TSP or PM_{10})	**4,500	(5.0)	23	(50.0)	4.6	(10.0)
Volatile Organic Compound (VOC)	18,000	(20.0)	91	(200)	---	---

NOTE: ** For the Klamath Falls Urban Growth Area, the Significant Emission Rates for particulate matter apply to all new or modified sources for which permit applications have not been submitted prior to June 2, 1989; particulate emission increases of 5.0 or more tons per year must be fully offset, but the application of lowest achievable emission rate (LAER) is not required unless the emission increase is 15 or more tons per year. At the option of sources with particulate emissions of 5.0 or more but, less than 15 tons per year, LAER control technology may be applied in lieu of offsets.

Table 3
(340-20-225)

Significant Air Quality ambient air quality impact which is equal to or greater than:

	Pollutant Averaging Time				
Pollutant	Annual	24-Hour	8-hour	3-hour	1-hour
SO_2	1.0 ug/m^3	5 ug/m^3		25 ug/m^3	
TSP or PM_{10}	.2 ug/m^3	1.0 ug/m^3			
NO_2	1.0 ug/m^3				
CO			0.5 mg/m^3		2 mg/m^3

(26) "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than those set out in Table 3. For sources of volatile organic compounds (VOC), a major source or major modification will be deemed to have a significant impact if it is located within 30 kilometers of an ozone nonattainment area and is capable of impacting the nonattainment area.

(27) "Significant Impairment" occurs when visibility impairment in the judgment of the Department interferes with the management, protection, preservation, or enjoyment of the visual experience of visitors within a Class I area. The determination must be made on a case-by-case basis considering the recommendations of the Federal Land Manager; the geographic extent,

intensity, duration, frequency, and time of visibility impairment. These factors will be considered with respect to visitor use of the Class I areas, and the frequency and occurrence of natural conditions that reduce visibility.

(28) "Source" means any building, structure, facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.

(29) "Visibility Impairment" means any humanly perceptible change in visual range, contrast or coloration from that which would have existed under natural conditions. Natural conditions include fog, clouds, windblown dust, rain, sand, naturally ignited wildfires, and natural aerosols.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 14-1989, f. & cert. ef. 6-26-89

Procedural Requirements

340-20-230 (1) Information Required. The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under these rules. Such information shall include, but not be limited to:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, seasonal, and yearly rates, showing the calculation procedure;

(c) A detailed schedule for construction of the source or modification;

(d) A detailed description of the system of continuous emission reduction which is planned for the source or modification, and any other information necessary to determine that best available control technology or lowest achievable emission rate technology, whichever is applicable, would be applied;

(e) To the extent required by these rules, an analysis of the air quality and/or visibility impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and

(f) To the extent required by these rules, an analysis of the air quality and/or visibility impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth which has occurred since January 1, 1978, in the area the source or modification would affect.

(2) Other Obligations:

(a) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to these rules or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving an Air Contaminant Discharge Permit, shall be subject to appropriate enforcement action.

(b) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period upon satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(c) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state or federal law.

(3) Public Participation:

(a) Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted. The date of the receipt of a complete application shall be, for the purpose of this section, the date on which the Department received all required information.

(b) Notwithstanding the requirements of OAR 340-14-020, but as expeditiously as possible and at least within six months after receipt of a complete application, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:

(A) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(B) Make available for a 30-day period in at least one location a copy of the permit application, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(C) Notify the public, by advertisement in a newspaper of general circulation in the area in which the proposed source or modification would be constructed, of the application, the preliminary determination, the extent of increment consumption that is expected from the source or modification, and the opportunity for a public hearing and for written public comment.

(D) Send a copy of the notice of opportunity for public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency, any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification, and the Environmental Protection Agency.

(E) Upon determination that significant interest exists, or upon written requests for a hearing from ten (10) persons or from an organization or organizations representing at least ten persons, provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations. For energy facilities, the hearing may be consolidated with the hearing requirements for site certification contained in OAR Chapter 345, Division 15.

(F) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 working days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed source or modification.

(G) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(H) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source or modification.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 18-1984, f. & ef. 10-16-84; DEQ 13-1988, f. & cert. ef. 6-17-88

Review of New Sources and Modifications for Compliance With Regulations

340-20-235 The owner or operator of a proposed major source or major modification must demonstrate the ability of the proposed source or modification to comply with all applicable requirements of the Department of Environmental Quality, including New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, and shall obtain an Air Contaminant Discharge Permit.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Sources in Nonattainment Areas

340-20-240 New major sources and major modifications which are located in designated nonattainment areas shall meet the requirements listed below:

(1) Lowest Achievable Emission Rate. The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with the lowest achievable emission rate (LAER) for each nonattainment pollutant. In the case of a major modification, the requirement for LAER shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, the determination of LAER shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.

(2) Source Compliance. The owner or operator of the proposed major source or major modification must demonstrate that all major sources owned or operated by such person (or by an entity controlling, controlled by, or under common control with such person) in the state are in compliance or on a schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act.

(3) Growth Increment or Offsets. The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with any established emissions growth increment for the particular area in which the source is located or must provide emission reductions ("offsets") as specified by these rules. A combination of growth increment allocation and emission reduction may be used to demonstrate compliance with this section. Those emission increases for which offsets can be found through the best efforts of the applicant shall not be eligible for a growth increment allocation.

(4) Net Air Quality Benefit. For cases in which emission reductions or offsets are required, the applicant must demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-20-260 (Requirements for Net Air Quality Benefit) and that the reductions are consistent with reasonable further progress toward attainment of the air quality standards.

(5) Alternative Analysis:

(a) An alternative analysis must be conducted for new major sources or major modifications of sources emitting volatile organic compounds or carbon monoxide locating in nonattainment areas.

(b) This analysis must include an evaluation of alternative sites, sizes, production processes, and environmental control techniques for such proposed source or modification which demonstrates that benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

(6) Special Exemption for the Salem Ozone Nonattainment Area. Proposed major sources and major modifications of sources of volatile organic compounds which are located in the Salem Ozone nonattainment area shall comply with the requirements of sections (1) and (2) of this rule but are exempt from all other sections of this rule.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83

Growth Increments

340-20-241 The ozone control strategies for the Medford-Ashland and Portland Air Quality Maintenance Areas (AQMA) establish growth

margins for new major sources or major modifications which will emit volatile organic compounds. The growth margin shall be allocated on a first-come-first-served basis depending on the date of submittal of a complete permit application. In the Medford-Ashland AQMA, no single source shall receive an allocation of more than 50% of any remaining growth margin. In the Portland AQMA, no single source shall receive an allocation of more than 100 tons per year plus 25% of any remaining growth margin. The allocation of emission increases from the growth margins shall be calculated based on the ozone season (May 1 to September 30 of each year). The amount of each growth margin that is available is defined in the State Implementation Plan for each area and is on file with the Department.

[Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 5-1983, f. & ef. 4-18-83; DEQ 5-1986, f. & ef. 2-21-86

Requirements for Sources in Attainment or Unclassified Areas (Prevention of Significant Deterioration)

340-20-245 New Major Sources or Major Modifications locating in areas designated attainment or unclassifiable shall meet the following requirements:

(1) Best Available Control Technology. The owner or operator of the proposed major source or major modification shall apply best available control technology (BACT) for each pollutant which is emitted at a significant emission rate (OAR 340-20-225 definition (22)). In the case of a major modification, the requirement for BACT shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, the determination of BACT shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.

(2) Air Quality Analysis:

(a) The owner or operator of the proposed major source or major modification shall demonstrate that the potential to emit any pollutant at a significant emission rate (OAR 340-20-225 definition (22)), in conjunction with all other applicable emissions increases and decreases, (including secondary emissions), would not cause or contribute to air quality levels in excess of:

(A) Any state or national ambient air quality standard; or

(B) Any applicable increment established by the Prevention of Significant Deterioration requirements (OAR 340-31-110); or

(C) An impact on a designated nonattainment area greater than the significant air quality impact levels (OAR 340-20-225 definition (23)). New sources or modifications of sources which would emit volatile organic compounds which may impact the Salem ozone nonattainment area are exempt from this requirement.

(b) Sources or modifications with the potential to emit at rates greater than the significant emission rate but less than 100 tons/year, and are greater than 50 kilometers from a nonattainment area are not required to assess their impact on the nonattainment area.

(c) If the owner or operator of a proposed major source or major modification wishes to provide emission offsets such that a net air quality benefit as defined in OAR 340-20-260 is provided, the Department may consider the requirements of section (2) of this rule to have been met.

(3) Exemption for Sources Not Significantly Impacting or Contributing to Levels in Excess of Air Quality Standards or PSD Increment Levels:

(a) A proposed major source or major modification is exempt from OAR 340-20-220 to 340-20-270 if paragraphs (A) and (B) below are satisfied:

(A) The proposed source or major modification does not cause or contribute a significant air quality impact to air quality levels in excess of any state or national ambient air quality standard; or to air quality levels in excess of any applicable increment established by the Prevention of Significant Deterioration requirements (OAR 340-31-110); or on a designated nonattainment area;

(B) The potential emissions of the source are less than 100 tons/year for sources in the following categories or less than 250 tons/year for sources not in the following source categories:

(i) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input,

(ii) Coal cleaning plants (with thermal dryers),

(iii) Kraft pulp mills,

(iv) Portland cement plants,

(v) Primary Zinc Smelters,

(vi) Iron and Steel Mill Plants,

(vii) Primary aluminum ore reduction plants,

(vii) Primary copper smelters,

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day,

(x) Hydrofluoric acid plants,

(xi) Sulfuric acid plants,

(xii) Nitric acid plants,

(xiii) Petroleum Refineries,

(xiv) Lime plants,

(xv) Phosphate rock processing plants,

(xvi) Coke oven batteries,

(xvii) Sulfur recovery plants,

(xviii) Carbon black plants (furnace process),

(xix) Primary lead smelters,

(xx) Fuel conversion plants,

(xxi) Sintering plants,

(xxii) Secondary metal production plants,

(xxiii) Chemical process plants,

(xxiv) Fossil fuel fired boilers (or combinations thereof) totaling more than 250 million BTU per hour heat input,

(xxv) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,

(xxvi) Taconite ore processing plants,

(xxvii) Glass fiber processing plants,

(xxviii) Charcoal production plants.

(b) Major modifications are not exempted under this section unless the source including the modifications meets the requirements of

paragraphs (a)(A) and (B) above. Owners or operators of proposed sources which are exempted by this provision should refer to OAR 340-20-020 to 340-20-032 and OAR 340-20-140 to 340-20-185 for possible applicable requirements.

(c) A proposed major source or modification is exempted from the requirements for PM_{10} in OAR 340-22-220 to 340-20-270 if:

(i) The proposed source or modification received in Air Contaminant Discharge Permit prior to July 31, 1987, and meets all requirements of 40 CFR 52.21(i)(4)(ix), or

(ii) The proposed source or modification submitted a complete application for an Air Contaminant Discharge Permit prior to July 31, 1987, and meets all requirements of 40 CFR 52.21(i)(4)(x).

(4) Air Quality Models. All estimates of ambient concentrations required under these rules shall be based on the applicable air quality models, data bases, and other requirement specified in the "Guidelines on Air Quality Models (Revised)" EPA 450/2-78-027R, U.S.Environmental Protection Agency, September 1986, including Supplement A, July, 1987. Where an air quality impact model specified in the "Guideline on Air Quality Models (Revised)" (including Supplement A) is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment and must receive approval of the Department and the Environmental Protection Agency. Methods like those outlined in the "Interim Procedures for Evaluating Air Quality Models (Revised)" (U.S. Environmental Protection Agency, 1984) should be used to determine the comparability of models.

(5) Air Quality Monitoring:

(a)(A) The owner or operator of a proposed major source or major modification shall submit with the application, subject to approval of the Department, an analysis of ambient air quality in the area impacted by the proposed project. This analysis shall be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source or modification. As necessary to establish ambient air quality, the analysis shall include continuous air quality monitoring data for any pollutant potentially emitted by the source or modification except for nonmethane hydrocarbons. Such data shall relate to, and shall have been gathered over the year preceding receipt of the complete application, unless the owner or operator demonstrates that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of an ambient air quality standard or any applicable pollutant increment. Pursuant to the requirements of these rules, the owner or operator of the source shall submit for the approval of the Department, a preconstruction air quality monitoring plan.

(B) Air quality monitoring which is conducted pursuant to this requirement shall be conducted in accordance with 40 CFR 58 Appendix B, "Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring" and with other methods on file with the Department.

(C) The Department may exempt a proposed major source or major modification from monitoring for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that the concentrations of the pollutant in the area that the source or modification would impact are less than these amounts:

(i) Carbon monoxide — 575 ug/m^3, 8 hour average,

(ii) Nitrogen dioxide — 14 ug/m^3, annual average,

(iii) Particulate Matter:

(I) TSP — 10 ug/m^3, 24 hour average

(II) PM_{10} — 10 ug/m^3, 24 hour average

(iv) Sulfur dioxide — 13 ug/m^3, 24 hour average,

(v) Ozone — Any net increase of 100 tons/year or more of volatile organic compounds from a source or modification subject to PSD is required to perform an ambient impact analysis, including the gathering of ambient air quality data,

(vi) Lead — 0.1 ug/m^3, 24 hour average,

(vii) Mercury — 0.25 ug/m^3, 24 hour average,

(viii) Beryllium — 0.0005 ug/m^3, 24 hour average,

(ix) Fluorides — 0.25 ug/m^3, 24 hour average,

(x) Vinyl chloride — 15 ug/m^3, 24 hour average,

(xi) Total reduced sulfur — 10 ug/m^3, 1 hour average,

(xii) Hydrogen sulfide — 0.04 ug/m^3, 1 hour average,

(xiii) Reduced sulfur compounds — 10 ug/m^3, 1 hour average.

(D) When monitoring is required by subsections (5)(a)(A) through (C) of this rule, PM_{10} preconstruction monitoring shall be required according to the following transition program:

(i) Complete PSD applications submitted before May 31, 1988, shall not be required to perform new PM_{10} monitoring.

(ii) Complete PSD applications submitted after May 31, 1988, and before November 31, 1988 must use existing PM_{10} or other representative air quality data or collect PM_{10} monitoring data. The collected data may come from nonreference sampling methods. At least four months of data must be collected which the Department judges to include the season(s) of highest PM_{10} levels.

(iii) Complete PSD applications submitted after November 31, 1988, must use reference sampling methods. At least four months of data must be collected which the Department judges to include the season(s) of highest PM_{10} levels.

(b) The owner or operator of a proposed major source or major modification shall, after construction has been completed, conduct such ambient air quality monitoring as the Department may require as a permit condition to establish the effect which emissions of a pollutant (other than nonmethane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(6) Additional Impact Analysis:

(a) The owner or operator of a proposed major source or major modification shall provide an analysis of the impairment to, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification, the owner or operator may be exempted from providing an analysis of the impact on vegetation having no significant commercial or recreational value.

(b) The owner or operator shall provide an analysis of the air quality concentration projected for the area as a result of general commercial, residential, industrial and other growth associated with the major source or modification.

(7) Sources Impacting Class I Areas:

(a) Where a proposed major source or major modification impacts or may impact a Class I area, the Department shall provide written notice to the Environmental Protection Agency and to the appropriate Federal Land Manager within 30 days of the receipt of such permit application, at least 30 days prior to Department Public Hearings and subsequently, of any preliminary and final actions taken with regard to such application.

(b) The Federal Land Manager shall be provided an opportunity in accordance with OAR 340-20-230(3) to present a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality related values (including visibility) of any federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increment for a Class I area. If the Department concurs with such demonstration the permit shall not be issued.

[Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88)

Exemptions

340-20-250 (1) Resource recovery facilities burning municipal refuse and sources subject to federally mandated fuel switches may be exempted by the Department from requirements OAR 340-20-240 sections (3) and (4) provided that:

(a) No growth increment is available for allocation to such source or modification; and

(b) The owner or operator of such source or modification demonstrates that every effort was made to obtain sufficient offsets and that every available offset was secured.

NOTE: Such an exemption may result in a need to revise the State Implementation Plan to require additional control of existing sources.

(2) Temporary emission sources, which would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-20-240(1) and (2) or OAR 340-20-245(1), whichever is applicable, but are exempt from the remaining requirements of OAR 340-20-240 and OAR 340-20-245 provided that the source or modification would impact no Class I area or no area where an applicable increment in known to be violated.

(3) Proposed increases in hours of operation or production rates which would cause emission increases above the levels allowed in an Air Contaminant Discharge Permit and would not involve a physical change in the source may be exempted from the requirement of OAR 340-20-245(1) (Best Available Control Technology) provided that the increases cause no exceedances of an increment or standard and that the net impact on a nonattainment area is less than the significant air quality impact levels. This exemption shall not be allowed for new sources or modifications that received permits to construct after January 1, 1978.

(4) Also refer to OAR 340-20-245(3) for exemptions pertaining to sources smaller than the Federal Size-Cutoff Criteria.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81

Baseline for Determining Credit for Offsets

340-20-255 The baseline for determining credit for emission offsets shall be the Plant Site Emission Limit established pursuant to OAR 340-20-300 to 340-20-320 or, in the absence of a Plant Site Emission Limit, the actual emission rate for the source providing the offsets. Sources in violation of air quality emission limitations may not supply offsets from those emissions which are or were in excess of permitted emission rates. Offsets, including offsets from mobile and area source categories, must be quantifiable and enforceable before the Air Contaminant Discharge Permit is issued and must be demonstrated to remain in effect throughout the life of the proposed source or modification.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Net Air Quality Benefit

340-20-260 Demonstrations of net air quality benefit must include the following:

(1) A demonstration must be provided showing that the proposed offsets will improve air quality in the same geographical area affected by the new source or modification. This demonstration may require that air quality modeling be conducted according to the procedures specified in the "Guideline on Air Quality Models (Revised)" (including Supplement A). Offsets for volatile organic compounds or nitrogen oxides shall be within the same general air basin as the proposed source. Offsets for total suspended particulate, PM_{10} sulfur dioxide, carbon monoxide and other pollutants shall be within the area of significant air quality impact.

(2) For new sources or modifications locating within a designated nonattainment area, the emission offsets must provide reductions which are equivalent or greater than the proposed increases. The offsets must be appropriate in terms of short term, seasonal, and yearly time periods to mitigate the impacts of the proposed emissions. For new sources or modifications locating outside of a designated nonattainment area which have a significant air quality impact (OAR 340-20-225 definition (23)) on the nonattainment area, the emission offsets must be sufficient to reduce impacts to levels below the significant air quality impact level within the nonattainment area. Proposed major sources or major modification which emit volatile organic compounds and are located within 30 kilometers of an ozone nonattainment area shall provide reductions which are equivalent or greater than the proposed emission increases unless the applicant demonstrates that the proposed emissions will not impact the nonattainment area.

(3) The emission reductions must be of the same type of pollutant as the emissions from the new source or modification. Sources of respirable particulate (less than ten micrometers) must be offset with particulate in the same size range. In areas where atmospheric reactions contribute to pollutant levels, offsets may be provided from precursor pollutants if a net air quality benefit can be shown.

(4) The emission reductions must be contemporaneous, that is, the reductions must take effect prior to the time of startup but not more than one year prior to the submittal of a complete permit application for the new source or modification. This time limitation may be extended as provided for in OAR 340-20-265 (Emission Reduction Credit Banking). In the case of replacement facilities, the Department may allow simultaneous operation of the old and new facilities during the startup period of the new facility provided that net emissions are not increased during that time period.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88)

Emission Reduction Credit Banking

340-20-265 The owner or operator of a source of air pollution who wishes to reduce emissions by implementing more stringent controls than required by a permit or by an applicable regulation may bank such emission reductions. Cities, counties or other local jurisdictions may participate in the emissions bank in the same manner as a private firm. Emission reduction credit banking shall be subject to the following conditions:

(1) To be eligible for banking, emission reduction credits must be in terms of actual emission decreases resulting from permanent continuous control of existing sources. The baseline for determining emission reduction credits shall be the actual emissions of the source or the Plant Site Emission Limit established pursuant to OAR 340-20-300 to 340-20-320.

(2) Emission reductions may be banked for a specified period not to exceed ten years unless extended by the Commission, after which time such reductions will revert to the Department for use in attainment and maintenance of air quality standards or to be allocated as a growth margin.

(3) Emission reductions which are required pursuant to an adopted rule shall not be banked.

(4) Permanent source shutdowns or curtailments other than those used within one year for contemporaneous offsets as provided in OAR 340-20-260(4) are not eligible for banking by the owner or operator but will be banked by the Department for use in attaining and maintaining standards. The Department may allocate these emission reductions as a growth increment. The one year limitation for contemporaneous offsets shall not be applicable to those shutdowns or curtailments which are to be used as internal offsets within a plant as part of a specific plan. Such a plan for use of internal offsets shall be submitted to the Department and receive written approval within one year of the permanent shutdown or curtailment. A permanent source shutdown or curtailment shall be considered to have occurred when a permit is modified, revoked or expires without renewal pursuant to the criteria established in OAR 340-14-005 through 340-14-050.

(5) The amount of banked emission reduction credits shall be discounted without compensation to the holder for a particular source category when new regulations requiring emission reductions are adopted by the Commission. The amount of discounting of banked emission reduction credits shall be calculated on the same basis as the reductions required for existing sources which are subject to the new regulation. Banked emission reduction credits shall be subject to the same rules, procedures, and limitations as permitted emissions.

(6) Emission reductions must be in the amount of ten tons per year or more to be creditable for banking except as follows:

(a) In the Medford-Ashland AQMA emission reductions must be at least in the amount specified in Table 2 of OAR 340-20-225(20);

(b) In Lane County, the Lane Regional Air Pollution Authority may adopt lower levels.

(7) Requests for emission reduction credit banking must be submitted to the Department and must contain the following documentation:

(a) A detailed description of the processes controlled;

(b) Emission calculations showing the types and amounts of actual emissions reduced;

(c) The date or dates of such reductions;

(d) Identification of the probable uses to which the banked reductions are to be applied;

(e) Procedure by which such emission reductions can be rendered permanent and enforceable.

(8) Requests for emission reduction credit banking shall be submitted to the Department prior to or within the year following the actual emissions reduction. The Department shall approve or deny requests for emission reduction credit banking and, in the case of approvals, shall issue a letter to the

owner or operator defining the terms of such banking. The Department shall take steps to insure the permanence and enforceability of the banked emission reductions by including appropriate conditions in Air Contaminant Discharge Permits and by appropriate revision of the State Implementation Plan.

(9) The Department shall provide for the allocation of the banked emission reduction credits in accordance with the uses specified by the holder of the emission reduction credits. When emission reduction credits are transferred, the Department must be notified in writing. Any use of emission reduction credits must be compatible with local comprehensive plans, Statewide planning goals, and state laws and rules.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83

Fugitive and Secondary Emissions

340-20-270 Fugitive emissions shall be included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary emissions shall not be included in calculations of potential emissions which are made to determine if a proposed source or modification is major. Once a source or modification is identified as being major, secondary emissions must be added to the primary emissions and become subject to these rules.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81

Stack Heights

340-20-275 [DEQ 25-1981, f. & ef. 9-8-81; Repealed by DEQ 5-1983, f. & ef. 4-18-83]

Visibility Impact

340-20-276 New major sources or major modifications located in Attainment, Unclassified or Nonattainment Areas shall meet the following visibility impact requirements:

(1) Visibility impact analysis:

(a) The owner or operator of a proposed major source or major modification shall demonstrate that the potential to emit any pollutant at a significant emission rate (OAR 340-20-225, definition (22)) in conjunction with all other applicable emission increases or decreases (including secondary emissions) permitted since January 1, 1984, shall not cause or contribute to significant impairment of visibility within any Class I area.

(b) Proposed sources which are exempted under OAR 340-20-245(3), excluding paragraph (3)(a)(A) are not required to complete a visibility impact assessment to demonstrate that the sources do not cause or contribute to significant visibility impairment within a Class I area. The visibility impact assessment for sources exempted under this section shall be completed by the Department.

(c) The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or demonstration required by these rules pursuant to OAR 340-20-230(1).

(2) Air quality models. All estimates of visibility impacts required under this rule shall be based on the models on file with the Department. Equivalent models may be substituted if approved by the Department. The Department will perform visibility modeling of all sources with potential emissions less than 100 tons/year of any individual pollutant and locating closer than 30 Km to a Class I area, if requested.

(3) Determination of significant impairment: The results of the modeling must be sent to the affected land managers and the Department. The land managers may, within 30 days following receipt of the source's visibility impact analysis, determine whether or not impairment of visibility in a Class I area would result. The Department will consider the comments of the Federal Land Manager in its consideration of whether significant impairment will result. Should the Department determine that impairment would result, a permit for the proposed source will not be issued.

(4) Visibility monitoring:

(a) The owner or operator of a proposed major source or major modification which emit more than 250 tons per year of TSP, SO_2 or NO_2 shall submit with the application, subject to approval of the Department, an analysis of visibility in or immediately adjacent to the Class I area impacted by the proposed project. As necessary to establish visibility conditions within the Class I area, the analysis shall include a collection of continuous visibility monitoring data for all pollutants emitted by the source that could potentially impact Class I area visibility. Such data shall relate to and shall have been gathered over the year preceding receipt of the complete application, unless the owner or operator demonstrates that data gathered over a shorter portion of the year for another representative year, would be adequate to determine that the source of major modification would not cause or contribute to significant impairment. Where applicable, the owner or operator may demonstrate that existing visibility monitoring data may be suitable. Pursuant to the requirements of these rules, the owner or operator of the source shall submit, for the approval of the Department, a preconstruction visibility monitoring plan.

(b) The owner or operator of a proposed major source or major modification shall, after construction has been completed, conduct such visibility monitoring as the Department may require as a permit condition to establish the effect which emissions of pollutant may have, or is having, on visibility conditions with the Class I area being impacted.

(5) Additional impact analysis: The owner or operator of a proposed major source or major modification subject to OAR 340-20-245(6)(a) shall provide an analysis of the impact to visibility that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or

major modification.

(6) Notification of permit application:

(a) Where a proposed major source modification impacts or may impact visibility within a Class I area, the Department shall provide written notice to the Environmental Protection Agency and to the appropriate Federal Land Manager within 30 days of the receipt of such permit application. Such notification shall include a copy of all information relevant to the permit application, including analysis of anticipated impacts on Class I area visibility. Notification will also be sent at least 30 days prior to Department Public Hearings and subsequently of any preliminary and final actions taken with regard to such application.

(b) Where the Department receives advance notification of a permit application of a source that may affect Class I area visibility, the Department will notify all affected Federal Land Managers within 30 days of such advance notice.

(c) The Department will, during its review of source impacts on Class I area visibility pursuant to this rule, consider any analysis performed by the Federal Land Manager that is provided within 30 days of notification required by subsection (a) of this section. If the Department disagrees with the Federal Land Manager's demonstration, the Department will include a discussion of the disagreement in the Notice of Public Hearing.

(d) The Federal Land Manager shall be provided an opportunity in accordance with OAR 340-20-230(3) to present a demonstration that the emissions from the proposed source of modification would have an adverse impact on visibility of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source of modification would not cause or contribute to concentrations which would exceed the maximum allowable increment for a Class I area. If the Department concurs with such demonstration, the permit shall not be issued.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85

APPENDIX 11

OAR 340-120

(Transfer, Storage and Disposal Facility regulations)

HAZARDOUS WASTE MANAGEMENT

DIVISION 120

ADDITIONAL SITING AND PERMITTING REQUIREMENTS FOR HAZARDOUS WASTE AND PCB TREATMENT AND DISPOSAL FACILITIES

Purpose and Applicability

340-120-001 (1) To protect the public health and safety and the environment, the Commission finds that it is in the state's best interest to more fully regulate and review proposals to treat or dispose of hazardous waste and PCB. The purpose of this Division is to establish a supplemental siting and permitting procedure for most types of hazardous waste and PCB treatment and disposal facilities.

(Comment: Under Federal law hazardous waste incineration and other treatment techniques are considered "treatment" and PCB incineration and other treatment techniques are considered "disposal". To be consistent, Division 120 utilizes the same definitions).

(2) All parts of ths Division apply to new:

(a) Hazardous waste and PCB treatment and disposal facilities located off the site of waste generation (off-site); and

(b) Hazardous waste and PCB land disposal facilities located on the site of waste generation (on-site).

(3) Facilities described in section (2)(a) of this rule that receive less than 50% of waste on a weekly basis from off the site may be located inside urban growth boundaries as defined by ORS 197.295 and therefore do not have to meet rules 340-120-010(d)(A)(i) and 340-120-015(1)(a).

(4) New hazardous waste and PCB treatment and disposal facilities, other than land disposal facilities, located on the site of waste generation (on-site), are only subject to these parts of Division 120:

(a) 340-120-010(2)(c) – Technology and Design;
(b) 340-120-010(2)(e) – Property Line Setback;
(c) 340-120-010(2)(g) – Owner and Operator Capability;
(d) 340-120-010(2)(h) – Compliance History;
(e) 340-120-020 – Community Participation;
(f) 340-120-030 – Permit Application Fee.

(5) For the purposes of this Division, a facility can receive, with the Department approval, as much as 10% of waste on a weekly basis from off the site and be an on-site facility.

(6) For the purposes of this Division, a new facility means:

(a) A facility for which an original permit application was submitted after the effective date of this Division; or

(b) A facility where a different type of treatment or disposal is being proposed (i.e., adding incineration at a facility utilizing disposal, or changing from chemical treatment to biological treatment at a facility).

(7) This Division does not apply to:

(a) Portable hazardous waste and PCB treatment and disposal facilities that are located on a single site of generation (on-site) less than 15 days each year;

(b) Hazardous waste and PCB treatment or disposal sites involved in remedial action under ORS 466 or closing under Divisions 100 through 110 of this chapter;

(c) Facilities treating hazardous waste pursuant to the recycling requirements of 40 CFR 261.6;

(d) Emergency permits issued by the Director according to 40 CFR 270.61; and

(e) Facilities permitted by the Department to manage municipal or industrial solid waste, if the hazardous waste the facilities treat or dispose of is excluded from regulation by 40 CFR 261.5.

(8) The requirements of this Division are supplemental to those of Divisions 100 through 110 of this Chapter. The definitions of OAR 340-100-010 and 340-110-003 apply to this Division.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Permitting Procedure

340-120-005 (1) A three step permitting procedure is required for facilities listed in rule 340-120-001(2). The three steps are:

(a) Submit a request for and obtain an Authorization to Proceed from the Department;

(b) Submit a request for and obtain a Land Use Compatibility Statement from the local government with land use jurisdiction or as applicable, from the Department; and

(c) Submit a complete application for and obtain a treatment or disposal permit pursuant to Divisions 105, 106 and 110 of this Chapter from the Department, or as applicable, from the Commission.

(2) An initial period is established during which the Department shall accept requests for an Authorization to Proceed. The initial period begins May 15, 1986 and ends January 1, 1987. The Department shall wait until at least the end of the initial period before approving or denying any of the requests.

(3) Requests for an Authorization to Proceed received by the Department after January 1, 1987 must include information to allow the Commission to find there is a need for a new facility. The Department cannot approve an Authorization to Proceed request received after January 1, 1987 until the Commission makes this finding.

(4) Each request for an Authorization to Proceed will be reviewed for completeness by the Department within 90 days of its receipt. If an applicant fails to correct deficiencies within 90 days of written notice from the Department, the Department may deny the request.

(5) After obtaining an Authorization to Proceed and a Land Use Compatibility Statement, an applicant may apply for a hazardous waste or PCB treatment or disposal permit pursuant to Divisions 105, 106 and 110 of this Chapter.

(6) To retain an Authorization to Proceed, an applicant shall:

(a) Submit a request to the appropriate planning jurisdiction for the Land Use compatibility Statement within 90 days of issuance of the Authorization to Proceed;

(b) Submit an application for a treatment or disposal permit to the Department within 6 months of issuance of the Land Use Compatibility Statement.

(7) If the Department or Commission denies the permit, the Authorization to Proceed is revoked.

(8) The owner of an existing facility with an effective permit must reapply according to the provisions of rule 340-105-010(4) before the expiration of the existing permit. Upon reapplication:

(a) The applicant of a facility described in rule 340-120-001(2) shall demonstrate the criteria of rule 340-120-010(2)(a)(A), (b)(B), (b)(C), (c), (e), (g) and (h) and 340-120-025 are being met.

(b) The applicant of a facility described in rule 340-120-001(4) shall demonstrate that the Property Line Setback criterion of rule 340-120-010(2)(e) is being met.

(9) The Property Line Setback criterion of rule 340-120-010(2)(e) shall apply to the existing Chem-Security Systems, Inc. hazardous waste and PCB disposal facility eight years from the effective date of this rule.

(Comment: Section 9 of this rule does not pertain to or determine the duration of any permit issued by the Commission to Chem-Security in response to the application for a permit pending before the Commission on the effective date of this rule.)

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Contents of an Authorization to Proceed Request

340-120-010 (1) An Authorization to Proceed request shall demonstrate that the proposed facility meets the criteria presented in section (2) of this rule. If the facility does not meet all of the criteria, the Department shall deny the request.

(2) Criteria that must be met to obtain an Authorization to Proceed:

(a) *Need:*

(A) The facility is needed because:

(i) Of a lack of adequate current treatment or disposal capacity to handle hazardous waste or PCB generated by Oregon companies; or

(ii) Its operation would result in a higher level of protection of the public health and safety or environment; or

(iii) Its operation will significantly lower treatment or disposal costs to Oregon companies, excluding transportation costs within states that are parties to the Northwest Interstate Compact on Low-Level Radioactive Waste Management as set forth in ORS 469.930.

(B) The facility shall significantly add to the range of the hazardous waste or PCB handled or to the type of technology already employed at a permitted treatment or disposal facility in states that are parties to the Northwest Interstate Compact on Low-Level Radioactive Waste Management.

(C) Notwithstanding the provisions of section (2)(a)(A) of this rule, the Department may deny an Authorization to Proceed request if the Department finds that capacity at other treatment or disposal facilities negate the need for a particular facility in Oregon.

(b) *Capacity:*

(A) The facility shall not be sized less than what is needed, in conjunction with existing facilities in the Northwest Compact States, to treat or dispose of all hazardous waste or PCB generated, or reasonably projected to be generated over the next 10 years, in Oregon.

(B) The facility shall not be sized greater than needed to treat or dispose of all hazardous waste or PCB generated, or reasonably projected to be generated over the next 10 years, in states that are parties to the Northwest Interstate Compact on Low-Level Radioactive Waste Management.

(C) If the facility is sized to treat or dispose of more hazardous waste or PCB generated outside Oregon than hazardous waste or PCB generated in Oregon, the applicant must demonstrate to the Department that the additional size is needed to make the proposed facility economically feasible.

(D) If all of the criteria of rule 340-120-010(2) are met, the Commission may give preference to a proposed facility which is sized more closely to what is needed to treat or dispose of hazardous waste or PCB generated in Oregon.

(c) *Technology and Design.* The facility shall use the best available technology as determined by the Department for treatment and disposal of hazardous waste and PCB. The facility shall use the highest and best practicable treatment and/or control as determined by the Department to protect public health and safety and the environment.

(d) *Location:*

(A) The facility shall be sited at least one mile from:

(i) Areas within urban growth boundaries as defined by ORS 197.295;

(ii) Wilderness, parks, and recreation areas as designated or identified (if appropriate) in the applicable local comprehensive plan or zoning maps;

(iii) Schools, churches, hospitals, nursing homes, retail centers, stadiums, auditoriums and residences except those owned by the applicant and necessary for the operation of the facility.

(B) The Department may consider a lesser distance for subparagraphs (2)(d)(A)(ii) and (2)(d)(A)(iii) if the applicant demonstrates that the lesser distance adequately protects the public health and safety and the environment.

(e) *Property Line Setback:*

(A) Hazardous waste and PCB treatment and disposal facilities, other than land disposal facilities, on the site of waste generation shall have at least a 250 foot separation between active waste management areas and facilities, and property boundaries.

(B) Hazardous waste and PCB treatment and disposal facilities off the site of waste generation and land disposal facilities on the site of waste generation shall have at least a 1,000 foot separation between active waste management areas and facilities, and property boundaries.

(f) *Groundwater Protection:*

(A) Using the Groundwater Quality Protection Evaluaton Matrix as shown in Table 2 of this Division:

(i) Surface impoundments, land treatment facilities and waste piles shall only be located on an area rated as 2 or 3;

(ii) Landfills shall only be located on an area rated as 3.

(B) Hazardous waste and PCB facilities not listed in subparagraphs (2)(f)(A)(i) or (2)(f)(A)(ii) need not meet this criterion to obtain an Authorization to Proceed.

(g) *Owner and Operator Capability.* The owner, any parent company of the owner and the operator must demonstrate adequate financial and technical capability to properly construct and operate the facility. As evidence of financial capability, the following shall be submitted:

(A) Financial statements of the owner, any parent company of the owner, and the operator audited by an independent certified public accountant for three years immediately prior to the application;

(B) The estimated cost of construction and a plan detailing how the construction will be funded; and

(C) A three year projection, from the date the facility is scheduled to begin operating, of revenues and expenditures related to operating the facility. The projection should have sufficient detail to determine the financial capability of the owner, any parent company of the owner and the operator to properly operate the facility.

(h) *Compliance History:*

(A) The compliance history in owning and operating other similar facilities, if any, must indicate that the owner, any parent company of the owner and the operator have an ability and willingness to operate the proposed facility in compliance with the provisions of ORS 466 and any permit conditions that may be issued by the Department or Commission. As evidence of ability and willingness, the following shall be submitted:

(i) A listing of all responses to past actual violations identified by EPA or the appropriate state regulatory agency within the five years immediately preceding the filing of the request for an Authorization to Proceed at any similar facility owned or operated by the applicant, owner, any parent company of the owner or operator during the period when the actions causing the violations occurred; and

(ii) Any written correspondence from EPA and the appropriate state regulatory agency which discusses the present compliance status of any similar facility owned or operated by the applicant, owner, any parent company of the owner or operator.

(B) Upon request of the Department, the applicant shall also provide responses to the past violations identified prior to the five years preceding the filing of an Authorization to Proceed and the specific compliance history for a particular facility owned or operated by the applicant, any parent company of the owner or operator.

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Land Use Compatibility Findings

340-120-015 (1) For facilities listed in rule 340-120-001(2), the land use compatibility statement of rule 340-105-013 must include findings that at least considered the following criteria:

(a) To assure low density populations around a facility, the facility shall be sited at least the following distances from an acknowledged urban growth boundary:

(A) One mile from areas within an urban growth boundary containing a population of 2500 people or less;

(B) Two miles from areas within an urban growth boundary containing a population between 2500 and 10,000 people; and

(C) Three miles from areas within an urban growth boundary containing a population of 10,000 people or greater.

(b) The facility shall be sited at least one mile from the following, as designated or identified (if appropriate) in the comprehensive plan or on zoning maps:

(A) Schools, churches, hospitals, nursing homes, retail centers, stadiums, auditoriums or residences not owned by the applicant;

(B) Wilderness, parks, and recreation areas;

(C) Scenic view sites;

(D) Federal and state scenic waterways;

(E) Destination resorts;

(F) Rural communities and rural residential areas;

(G) Public airports.

(c) The facility shall be sited at least one quarter mile from the following, as designated or identified (if appropriate) in the comprehensive plan or on zoning maps:

(A) Perennial surface water (including rivers, streams, lakes, oceans, and reservoirs), estuaries and wetlands;

(B) Historic and cultural areas;

(C) Ecologically and scientifically significant natural areas;

(D) Municipal watersheds;

(E) Flood hazard areas;

(F) Slide hazard areas;

(G) Willamette River Greenway;

(H) Coastal shorelands, beaches and dunes;

(I) Active seismic faults.

(d) The proposed facility is allowable in the applicable zone and will comply with all applicable development standards in the local land use regulations.

(e) The facility shall not prevent the use of adjacent lands for uses permitted or otherwise allowed in the applicable zone.

(f) Emergency services, including medical care, to respond to and address emergencies and accidents at the facility or involving wastes traveling on local transportation routes to the facility have been identified and their adequacy has been assessed.

(g) The facility shall have more than one transportation highway to it.

(h) The appropriate city, county and state highway or transportation departments have reviewed the local transportation routes to the facility for safety and their recommendations for improvements shall be implemented prior to first waste receipt at the facility.

(2) The findings made by the local government with land use jurisdiction according to section (1) of this rule shall state if the applicant requested an exception to any criteria, or if the local government did not consider any of the criteria. An exception may be approved by the local government or by the Department if the applicant demonstrates that the public health and safety and the environment are adequately protected by allowing the exception or if the exception provides substantially equivalent protection as compared to the criterion. The findings shall give a detailed justification for each exception allowed by local government or the Department.

(3) The local government with land use jurisdiction should act on a land use compatibility request within 180 days after a complete request was submitted by the applicant. If local government does not wish to act on the compatibility request or address any of the criteria of section (1) of this rule, the Department shall act on the request or prepare findings for the criteria. The Department is ultimately responsible for determining compliance with state land use goals for the purpose of issuing a permit.

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Community Participation

340-120-020 (1) The Commission finds that local community participation is important in the siting and in reviewing the design, construction and operation of hazardous waste and PCB treatment and disposal facilities.

(2) To encourage local participation in the siting of a proposed facility described in rule 340-120-001(2), the Director shall appoint and utilize a committee comprised at least partly of residents living near to, or along transportation routes to, the facility site. The committee shall be appointed as soon as feasible after the Department receives an Authorization to Proceed request. At least one half of the appointments shall be from a list of nominees submitted by the local government with land-use jurisdiction. The Director shall appoint the chairperson of the committee.

(3) The Director may appoint a committee to review a proposed facility described in rule 340-120-001(4).

(4) The Director may continue a committee authorized in section (2) and (3) of this rule or appoint a new committee to review the operation of a facility once it is located and constructed.

(Comment: The committee shall provide a forum for citizen comments, questions and concerns about the site and facility and promote a dialogue between the community of the proposed facility and the company interested in siting the facility. The committee shall prepare a written report summarizing local citizen concerns and the manner in which the company is addressing these concerns. The report shall be considered by the Department and Commission and local government during the consideration of the proposed facility.)

(5) The Department recommends that the local government and applicant consider negotiating an agreement appropriate for the proposed facility's potential local impact. The agreement might consider these and other issues:

(a) Training and equipping local fire, police and health department personnel to respond to accidents, spills and other emergencies;

(b) Special monitoring both on and off-site for worker and community health status;

(c) Road improvements and maintenance to assure safe transportation of waste to the site;

(d) Possible changes in property values near the site due to the proposed facility;

(e) A plan to resolve conflicts or disagreements that might develop between the facility operator and the community.

(6) When issuing a treatment or disposal permit pursuant to Divisions 105, 106 and 110 of this Chapter, the Department, or as applicable, the Commission, may impose requirements addressing the issues described in section (5) of this rule or other similar issues to protect the public health and safety and the environment.

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Off-Site Transportation Emergencies

340-120-025 An emergency response team owned by or under contract to the owner or operator of the facility shall be located within 25 miles of the facility. The team shall be capable of immediately responding to spills, occurring within 50 miles of the facility, of waste traveling to the facility.

Stat. Auth.: ORS Ch. 466 & 468
Hist.: DEQ 12-1986, f. & ef. 5-20-86

Permit Application Fee

340-120-030 [DEQ 12-1986, f. & ef. 5-20-86; Repealed by DEQ 14-1987, f. & ef. 7-28-87]