

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF APPROVING THE) RESOLUTION NO. 84-462
FY 1985 UNIFIED WORK PROGRAM (UWP))
) Introduced by the Joint
) Policy Advisory Committee on
) Transportation

WHEREAS, The Unified Work Program (UWP) describes all federally-funded transportation/air quality planning activities for the Portland/Vancouver metropolitan area to be conducted in FY 1985; and

WHEREAS, The FY 1985 UWP indicates federal funding sources for transportation/air quality planning activities carried out by the Metropolitan Service District (Metro), Regional Planning Council of Clark County (RPC), the Oregon Department of Transportation (ODOT), Tri-Met and the local jurisdictions; and

WHEREAS, Approval of the FY 1985 UWP is required to receive federal transportation planning funds; and

WHEREAS, The FY 1985 UWP is consistent with the proposed Metro budget submitted to the Tax Supervisory and Conservation Commission; and

WHEREAS, The FY 1985 UWP has been reviewed and agreed to by the Transportation Policy Alternatives Committee (TPAC), the Joint Policy Advisory Committee on Transportation (JPACT) and the RPC; now, therefore,

BE IT RESOLVED,

1. That the FY 1985 work program goals are:

- a. to refine the Transit Development Plan in light of the adopted RTP and Tri-Met's fiscal position; and


b. to identify the total transportation funding needs and outline alternative funding approaches for the region.

2. That the FY 1985 UWP is hereby approved and pertinent portions of the FY 1984 UWP amended.

3. That the FY 1985 UWP is consistent with the continuing, cooperative and comprehensive planning process and is hereby given positive Intergovernmental Project Review action.

4. That the Metro Executive Officer is authorized to apply for, accept and execute grants and agreements specified in the UWP.

ADOPTED by the Council of the Metropolitan Service District
this 3rd day of May, 1984.



Presiding Officer

KT/srb
8112B/283
04/17/84

DRAFT
FY 1985
UNIFIED WORK PROGRAM

February 15, 1984

Metropolitan Service District
Tri-Met
Oregon Department of Transportation
Regional Planning Council of Clark County

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OREGON

REGIONAL TRANSPORTATION PLAN: REFINEMENT

The adopted Regional Transportation Plan (RTP) provides the region a comprehensive policy and investment blueprint for an effective long-range transportation system. In order to maintain continuous relevance of the RTP to the changing transportation needs of the region, an ongoing effort to identify, study and resolve outstanding issues is required.

Program Objectives:

1. Process requests for minor amendments to the RTP as needed and adopt the 1984/85 update to reflect changes agreed to date.
2. Review local comprehensive plans for consistency with the RTP; implement a program to obtain consistency during the local jurisdiction's or RTP's next review or update process.
3. Define the Minor Arterial and Collector system consistent with local comprehensive plans. Identify inconsistencies, perform technical analysis (as required), and coordinate resolution of interjurisdictional disagreements.
4. Complete the Cornell/Barnes-Burnside assessment and coordinate development of consistent classification and improvement strategy.
5. Provide review and technical analysis as required to evaluate the Tri-Met Five-Year Transportation Development Plan (TDP) for consistency with the adopted RTP.

Relation to Previous Work:

RTP adopted July 1, 1982.

RTP FY 1983 update adopted October 1983.

Products:

1. FY 1985 RTP Update.
2. Status Report(s) on Local Comprehensive Plan consistency with RTP.
3. Minor Arterial/Collector system amendment to RTP.
4. Documentation of Cornell/Barnes-Burnside assessment and improvement strategy.
5. Adoption of key elements of TDP into RTP.

Expenses:

Metro: Personnel	\$41,400
M & S	0
TOTAL	<u>\$41,400</u>

Revenues:

FY 85 PL/ODOT	\$21,100
FY 85 Sec. 8	16,240
Metro Match	<u>4,060</u>
TOTAL	<u>\$41,400</u>

REGIONAL TRANSPORTATION PLAN: MAJOR UPDATE

The adopted RTP provides the region with a comprehensive policy and investment blueprint for an effective long-range transportation system. As a result of demographic and economic events since the original adoption of the RTP, the basic assumptions of the Plan need to be re-evaluated to ensure the most cost-effective mix of transit, highway and rideshare programs are included.

Program Objectives:

1. Update Basic Planning Assumptions

- a. Update 20-year population/employment growth patterns.
- b. Update basic assumptions affecting travel patterns including gas price, parking cost, inflation rates, transit fare, etc.
- c. Verify that travel-forecasting model adequately replicates existing travel patterns using current traffic counts and ridership information (to be conducted under Model Refinement program).

2. Update Adopted RTP Travel Forecasts

Based upon above, produce updated 20-year traffic and transit ridership forecasts for the "RTP" and "No Build" alternatives to use for detailed project development and design activities.

3. RTP Re-evaluation

- a. Re-evaluate the RTP rideshare "target" to ensure it is feasible; evaluate the potential of telecommunications to reduce long-range travel demands; determine the effect of these programs on reducing travel demand and minimizing the need for public improvements.
- b. Evaluate a range of alternative transit system concepts and sizes to ensure the most cost-effective service plan is included in the RTP.
- c. Taking into consideration the preferred level of transit ridership, ridesharing and telecommunications, identify additional highway projects needed to serve long-range traffic demands (particularly on the Minor Arterial and Collector system).
- d. Based upon the transit system concept developed under (a) above, determine whether any segments of the Light Rail Transit (LRT) system will be cost-effective within 20 years and merit inclusion in the RTP and the segments that should proceed to the EIS stage within 20 years.

4. Cost/Financing

Document capital and operating costs of the various components of the preferred RTP defined under #3 above and assess the degree to which existing transportation funding sources will meet these needs.

Relation to Previous Work:

RTP adopted July 1, 1982.

RTP FY 1984 update adopted October 1983.

Products:

1. Updated 20-year population/employment growth forecasts (by June 30, 1984).
2. Technical memo documenting basic assumptions to be used in travel forecasts.
3. Updated 20-year traffic and transit ridership forecasts for the "RTP" and "No Build" alternatives.
4. Technical memo documenting RTP rideshare "target" assumption.
5. Technical memo documenting RTP telecommunications assumptions vis-a-vis travel demand.
6. Technical memo evaluating a range of transit/highway system alternatives.
7. Updated RTP including most cost-effective mix of 20-year transportation investments.

Note: The above process is being initiated in FY 1984 and will require more than one budget year to complete. The schedule is particularly subject to the extent and techniques for public involvement.

Expenses:

Metro: Personnel	\$114,000
M & S	<u>10,552</u>
TOTAL	\$124,552

Revenues:

FY 85 PL/ODOT	\$ 49,411
FY 85 Sec. 8	56,113
Metro Match	7,014
Tri-Met Match	7,014
FY 84 Sec. 8 Carryover	2,000
Metro Match	500
FY 84 PL/ODOT	<u>2,500</u>
TOTAL	\$124,552

REGIONAL TRANSPORTATION PLAN: FINANCING

Program Objective:

The major open issue in the RTP is financing. The Metropolitan Service District (Metro) staff will work with Transportation Policy Alternatives Committee (TPAC) to identify priority financing issues and build a regional consensus on solutions.

Relation to Previous Work:

This is a carryover project from FY 1984 and 1983 and focuses on the unfunded portions of the RTP. Minor modifications to the scope as described below represent an amendment to the FY 1983-84 UWP.

Products:

1. Survey of Financing Techniques - There will be a series of analyses and reports as defined by TPAC on new rules, guidelines and trends in transportation financing. The report series may cover:
 - Federal Legislation
 - State Legislation
 - Private Sector Financing
2. Local Case Studies - A technical group will share case studies from the Portland region. This group will produce analyses and recommendations on specific financing strategies.
3. Technical Assistance - Technical assistance will be provided on a request-basis to provide data, information and regional coordination that are a necessary complement to the financing efforts of the local jurisdictions.
4. Regional Consensus Building on RTP Financing Policies/Mechanisms - As options, policies or financing mechanisms are identified which receive local government support, staff will take all administrative and public involvement steps necessary to amend the RTP.

Expenses:

Metro: Personnel	\$59,922
M & S	0
TOTAL	\$59,922

Revenues:

FY 83 (e) (4)	\$32,710
FY 84 (e) (4)	18,224
Metro Match	8,988
TOTAL	\$59,922

PHASE I ALTERNATIVES ANALYSIS - SOUTHERN/BI-STATE/BARBUR CORRIDORS

Program Objectives:

1. Phase 1: Complete the decision process for Phase 1 of the Regional LRT System Plan (Southern and Bi-State Corridors), including: a) adoption of the McLoughlin Boulevard highway and transit improvement program and staging plan; b) allocation of the McLoughlin Boulevard Interstate Transfer Reserve; and c) adoption of the Bi-State Transit Improvement program.
2. Phase 2: Determine the cost and feasibility of LRT in the following corridors: a) I-5 South/Barbur Boulevard; b) Sunset LRT extension from Beaverton to Tigard; c) S.W. 185th Avenue to Hillsboro; d) Tigard to Tualatin; e) Macadam Avenue; and f) McLoughlin LRT extension from Milwaukie to Lake Oswego.
3. Phase 3: Determine the cost and feasibility of LRT in the following Clackamas County corridors: a) Milwaukie to Oregon City via McLoughlin Boulevard; b) Milwaukie to Clackamas Town Center; and c) I-205 from Gateway to Clackamas Town Center to Oregon City.
4. Finalize the LRT operation concept in downtown Portland based upon results of each corridor.
5. Based upon 1 and 2 above, eliminate LRT corridors which are not cost-effective from the RTP and compile a comparison of each cost-effective segment to establish a system staging plan.
6. In conjunction with the RTP update, based upon decisions made on the overall transit system concept and size, determine whether any segments will be cost-effective within 20 years and, of those, whether any will be adopted as a 20-year plan.
7. Determine whether to proceed with a Phase II Alternatives Analysis for any of the corridors reviewed.

Relation to Previous Work:

The Regional LRT System Plan Scope of Work (approved in FY 1983) serves as an overall guide for the Regional LRT System Plan project phases. This Scope of Work provides a context for following the federal process for a Phase I and Phase II Alternatives Analysis. The first geographic area of analysis, which is comprised of the Southern Corridor, the Bi-State Corridor (I-5 North and I-205 North) and the Central Portland study area, was begun in FY 1983. All of the technical work is scheduled for completion prior to FY 1985. A supportive consulting engineering effort was also begun in FY 1984, in accordance with the Regional LRT System Plan Scope of Work.

The Barbur Corridor/Westside Branches is the second geographic area identified for evaluation in the "Regional LRT System Plan Scope of Work," adopted in FY 1983. All work in this area will be built upon the results of the Westside Corridor Project Draft Environmental Impact Statement (DEIS) (March 1982) and Preferred Alternatives Report (January 1983).

Phase 3 of the Regional LRT System Plan will review extensions to the Eastside LRT System in Clackamas County, building upon the results of Phase 1 (Southern and Bi-State Corridors).

Products:

1. McLoughlin Corridor Highway/Transit Staging Plan and Financing Strategy, together with the allocation of the McLoughlin Corridor Interstate Transfer Reserve.
2. Phase I Alternatives Analysis recommendations and resulting amendments to RTP.
3. A 20-year LRT plan, and a staging plan for those corridors proven to be cost-effective.
4. Decision on whether to proceed with a Phase II Alternatives Analysis in any of these corridors and a "Promising Alternatives" report, documenting analysis performed thus far.

Note: This work element and a portion of the budget will carry over into FY 1986.

Responsibilities:

Metro is responsible for the overall conduct of the study, coordination of the Oregon decisions, Oregon public involvement, technical analysis associated with travel forecasts, impact analysis and cost-effectiveness evaluation.

Tri-Met is responsible for definition of alternatives including engineering analysis, capital costing and operating costing.

The Regional Planning Council of Clark County (RPC) is responsible for coordinating Washington decisions for the Bi-State Study.

Portland will provide input on impact analyses and provide technical supervision of traffic impact analyses in Portland.

Expenses :

Metro: Personnel	\$201,997
M & S	30,000
	<u>\$231,997</u>
Tri-Met: Personnel	\$ 48,418
M & S	99,000
	<u>147,418</u>
Portland: Personnel	\$15,000
M & S	0
	<u>\$15,000</u>
TOTAL	<u>\$394,415</u>

Revenues :

FY 85 (e) (4)	\$179,560
Metro Match	24,549
Tri-Met Match	7,138
Phase I AA (29-9008)	52,500
Portland Match	1,500
FY 85 Phase I	80,000
Tri-Met In-Kind Match	13,368
Portland Match	750
OR-90-0003	1,760
Tri-Met Match	440
FY 85 Sec. 9	26,280
Tri-Met Match	6,570
	<u>\$394,415</u>

SOUTHWEST CORRIDOR STUDY

The adopted RTP recognized several outstanding transportation issues in the Southwest Corridor. Begun in FY 1984, this study will identify, evaluate and define the effects of different transportation investments and policies in the Corridor and designate the arterial and transit trunk route elements of the regional transportation system in the Corridor.

Program Objectives:

1. Document a year 2000 travel-demand forecast on the committed system and identify problems that need to be resolved.
2. Document the evaluation of a "modest-cost" alternative targeted at a minimum set of highway improvements, transit service expansion and demand management programs.
3. Document the evaluation of a scenario consisting of additional highway improvements on existing facilities to provide an adequate level of service.
4. Document the evaluation of alternative improvement strategies beyond improvements to the existing facilities (bypasses, LRT, etc.).
5. Determine the relationship between planned high-density land uses along Kruse Way and transit service.
6. Determine the need for I-5 access improvements to Wilsonville and/or Tualatin.
7. Determine the relationship between LRT feasibility and other potential improvements in the Corridor.
8. Identify highway and transit service improvements needed in the Corridor.
9. Define the preferred regional highway and transit corridor improvement strategy in the I-5/99W Corridor between Portland and Tigard.

Relation to Previous Work:

1. The RTP recognized many unresolved issues in the Southwest Corridor.
2. The Oregon Department of Transportation (ODOT) (Southwest Traffic Analysis) and adopted local comprehensive plan recommended projects that have not achieved consensus by affected local jurisdictions.

3. Tri-Met's TDP identifies a Tualatin transit station but not an I-5 corridor trunk route.
4. ODOT's 1983 Origin/Destination Survey in the Corridor.

Products:

RTP amendments to incorporate arterial and trunk route designations and additional improvements in highway and transit service.

Expenses:

Metro: Personnel	\$ 98,500
M & S	<u>8,000</u>
TOTAL	\$106,500

Revenues:

FY 85 PL/ODOT	\$ 25,552
FY 85 (e) (4)	68,806
Metro Match	4,551
Tri-Met	4,550
ODOT	<u>3,041</u>
TOTAL	\$106,500

ELDERLY AND HANDICAPPED PLANNING

Program Objectives:

1. Evaluate alternative public and private strategies for providing special services.
2. Evaluate alternative funding responsibilities and strategies.
3. Coordinate input from the elderly and handicapped community, public and private operators and local jurisdictions.
4. Adopt an Elderly and Handicapped Services element of the RTP.

Relation to Previous Work:

1. 1977 - Interim Special Transportation Plan.
2. 1980 - Sec. 504 Transition Plan.
3. Miscellaneous Transportation Improvement Program (TIP) amendments particularly for 16(b)(2) funds.
4. Sec. 9(A) - funded Elderly and Handicapped Planning.

Products:

1. Revise Tri-Met Special Needs Transportation Plan.
2. RTP Amendment to incorporate Special Needs Transportation Plan.

Responsibilities:

Tri-Met will act as program coordinator; Metro will provide a supportive role and amend the RTP with pertinent conclusions.

Expenses:

Metro: Personnel	\$ 9,500
Tri-Met: Personnel	<u>15,000</u>
TOTAL	\$24,500

Revenues:

FY 85 Sec. 8	\$ 7,600
Tri-Met Match	1,900
FY 84 Section 9	12,000
Tri-Met Match	<u>3,000</u>
TOTAL	\$24,500

TRANSPORTATION IMPROVEMENT PROGRAM

The TIP is a federally required document setting forth funding for transportation improvements identified in the RTP, including project length, termini, estimated total costs, federal funds to be obligated by program year, identification of recipient and state and local agencies responsible for carrying out the project.

Program Objectives:

1. Allocate available federal funding for the program year by establishing project priorities and individual jurisdiction budgets.
2. Monitor funding status of applicable federal funds including project authorizations and obligations. Major emphasis will be placed on Interstate Transfer funds (highway and transit), Urban Mass Transportation Administration (UMTA) grants and Federal Aid Urban funds. Maintain overall status of the above by clear distinction of: UMTA (e)(4) grants broken into Banfield and all other; highway and transit by jurisdiction; and UMTA grants set forth under the UMTA Act.
3. Adopt the FY 1985 TIP annual update including the assessment of air quality conformity (October 1984).
4. Publish quarterly TIP updates.
5. Provide input at the state and federal level of regional transportation funding needs.
6. Provide generalized support to state and local jurisdictions by conducting specialized cost studies.
7. Update the Federal Aid Urban boundary as required.

Relation to Previous Work:

TIP updates and ongoing project priority setting.

Products:

1. FY 1985 TIP and periodic updates.
2. FY 1985 funding priorities.

Expenses:

Metro: Personnel	\$102,000
M & S	1,850
TOTAL	<u>\$103,850</u>

Revenues:

FY 85 PL/ODOT	\$ 16,854
FY 85 (e) (4)	51,634
Metro Match	2,058
Tri-Met Match	2,058
ODOT Match	4,996
FY 85 Sec. 8	21,000
Metro Match	2,625
Tri-Met	2,625
TOTAL	<u>\$103,850</u>

TECHNICAL ASSISTANCE

Program Objective:

Provide travel analysis and forecasts as needed by local agencies and jurisdictions.

Relation to Previous Work:

This is an ongoing service which has been provided to member jurisdictions on a request basis.

Products:

1. Metro assistance for
 - Staff Assistance
 - Computer Usage
 - Training
2. Technical Assistance to the jurisdictions will be based on a budget allocation as follows:

Portland	\$18,113
Multnomah County	9,533
Washington County	11,726
Clackamas County	8,294
Port	4,766
Tri-Met	9,534
ODOT	9,534
	<u>\$71,500</u>

Requests for services must be made by the appropriate TPAC members; suburban jurisdictions should channel their request through the TPAC representative in the cities of that county.

Expenses:

Metro: Personnel	\$64,500
M & S	7,000
TOTAL	<u>\$71,500</u>

Revenues:

FY 85 PL/ODOT	\$40,000
FY 85 Sec. 8	25,200
Metro Match	2,275
Tri-Met Match	2,275
ODOT	1,750
TOTAL	<u>\$71,500</u>

BANFIELD LIGHT RAIL TRANSIT RIDERSHIP ANALYSIS

Program Objectives:

Assess whether there is an "intrinsic attractiveness" of LRT to increase transit ridership; document and modify travel-forecasting models if necessary.

Evaluate the transportation characteristics of Banfield LRT service which are currently taken into consideration when forecasting ridership (population, land use, travel time and cost factors) to determine if there is an "intrinsic attraction factor" in travel behavior to use LRT. If so, document and quantify to incorporate in model.

Relation to Previous Work:

This study would draw upon current transit forecasting premises and utilize developed forecasting techniques to determine potential travel behavior and patterns on the Banfield light rail.

Proposed Program:

This program involves the following major activities:

1. Pre-Banfield LRT Behavior Survey - Prior to completion of the LRT, conduct a regionwide travel behavior survey with a higher density sample size in the LRT corridor; estimate models based upon the survey and calibrate to actual traffic counts and transit ridership levels.
2. Post-Banfield LRT Behavior Survey - After completion of the LRT, conduct another travel behavior survey within the Banfield LRT corridor; estimate models based upon the survey including definition of an LRT attraction factor if one exists and calibrate to actual traffic counts and transit ridership levels.
3. 1987 LRT Ridership Evaluation - Apply the pre- and post-Banfield models to determine what ridership level would be expected with and without the LRT attraction factor; define the proportion of ridership that is attributable to the characteristics of the transportation system versus the bias in the population's travel behavior to use LRT.
4. 2000 LRT Ridership Forecast - Apply updated models to revise year 2000 ridership projections; compare to previous year 2000 projections holding all other variables constant.
5. Document results.

Note: Travel behavior survey data will be provided through the Tri-Met work program--for the region as a whole in FY 1985 (see page ____) and more detail within the corridor in the FY 1986 UWP.

Expenses:

Metro:

Personnel	\$ 90,000-140,000
M & S	10,000
TOTAL	<u>\$100,000-150,000</u>

Revenues:

Sec. 8 Discr.	\$ 80,000-120,000
Metro Match	10,000-15,000
Tri-Met Match	10,000-15,000
TOTAL	<u>\$100,000-150,000*</u>

*This task is programmed to be funded with discretionary UMTA funds and is subject to receipt of such funds. A more detailed scope of work will be necessary if UMTA indicates there is a possibility of discretionary funding. Budget shown is for a three-year period.

WESTSIDE CORRIDOR PROJECT

Program Objectives:

1. Complete PE of a Sunset LRT line between Portland and Washington County; calculate construction costs.
2. Prepare an updated operating plan for the Sunset LRT line, indicating which headways, hours and miles, number of vehicles required and operating costs.
3. Prepare a Final Environmental Impact Statement (FEIS), according to current UMTA guidelines, detailing the reasons for choice of this alternative and answers to questions raised in the DEIS process.
4. Prepare Westside Corridor Project financing package for regional review.
5. Continue Westside Corridor Project consensus building process with key public interests.

Relation to Previous Work:

By July 1, 1983, the Westside Corridor Project had completed the (a) alternatives analysis, (b) DEIS, (c) public hearings, (d) selection of preferred alternatives, and (e) the PE/FEIS grant application. The process over the next two to three years is intended to produce material for review by the participating agencies as adopted in August 1983 including:

- a. The Final Environmental Impact Statement.
- b. A Sunset LRT Conceptual Design which addresses the environmental concerns and design suboptions raised during local jurisdiction public hearings.
- c. A detailed funding and phasing plan which includes commitments from appropriate federal and other agencies to provide new funds for the Sunset LRT.
- d. A one-year assessment of actual Banfield LRT operations.
- e. A cost-effectiveness analysis based upon the newly prepared data.

Products:

1. Analysis of Tri-Met's cash-flow position over the next 15 years as it relates to the feasibility of constructing and operating the Westside Corridor Project.

2. Engineering drawings at 1" - 50' of the Sunset LRT alignment and detailed site plans and designs of stations.
3. Cost estimates of right-of-way, track construction, overhead wires, signals, stations, vehicles and maintenance facilities.
4. LRT operating plan including string charts and labor build-up staffing tables.
5. FEIS for the chosen alternative.
6. Analysis of federal funding opportunities and prospects for Westside Corridor Project.
7. Analysis of state funding opportunities and prospects for Westside Corridor Project including state bonding.
8. Analysis of tax benefit-leveraged lease back financing opportunities for Westside Corridor Project.
9. Analysis of vendor financing opportunities for Westside Corridor Project including export tax credits, turnkey operations, etc.
10. Analysis of land donation opportunities for Westside Corridor Project.
11. Analysis of special taxation district opportunities for Westside Corridor Project.
12. Analysis of LRT operating nonprofit (63-20) corporation opportunities for Westside Corridor Project.
13. Continued public involvement.
14. Translation of funding opportunities into specifications for PE.

Expenses:

Metro: Personnel
M & S

Tri-Met: Personnel
M & S

TOTAL

Revenues:

Westside Phase II AA/DEIS
(OR-29-9004) \$ 35,946
Metro Match 6,343
Tri-Met Match
FY 85 Sec. 9 546,552
Tri-Met Match 136,638
Section 9A 35,955
Tri-Met Match 8,989
FY 84 (e)(4)
OR-29-9002 446,250
Tri-Met Match 78,750
TOTAL \$1,295,423

AIR QUALITY PLAN ASSESSMENT

Program Objectives:

Assist the Department of Environmental Quality (DEQ) in assessing whether or not progress is being made toward attainment of the implementation plans for ozone and carbon monoxide.

Relation to Previous Work:

This assessment continues monitoring the State Implementation Plans (SIP) that were approved by the Environmental Protection Agency (EPA).

Products:

1. Travel forecasting and air quality models to produce 1984 and 1987 estimate of hydrocarbon emissions from automobiles for submittal to DEQ.
2. Assist DEQ in SIP compliance assessment to determine whether or not the ozone growth cushion for new industrial sources can be maintained. The assessment also will include the status of projects in the SIP.
3. Assist DEQ and Portland in evaluating alternatives for Downtown Portland carbon monoxide compliance.
4. Provide limited technical assistance to DEQ in evaluating potential transportation control strategies.

Expenses:

Metro: Personnel	\$17,000
M & S	
TOTAL	<u>\$17,000</u>

Revenues:

FY 85 PL/ODOT	\$ 1,000
EPA 105	12,000
Metro	<u>4,000</u>
TOTAL	<u>\$17,000</u>

COORDINATION AND MANAGEMENT

Program Objectives:

1. Internal management of the Transportation Department toward implementation of the Unified Work Program (UWP).
2. Provide support to various Metro committees; coordinate with ODOT, Tri-Met and local jurisdictions.
3. Provide documentation to Federal Highway Administration (FHWA) and UMTA of departmental activities, including Intergovernmental Project Review, monthly and quarterly progress reports.
4. Continue to update Title VI documentation as 1980 Census data becomes available.
5. Provide for staff development through performance evaluations and training.

Relation to Previous Work:

This work element is ongoing and carries over each year.

Products:

1. FY 1986 UWP.
2. Execution and monitoring of various pass-through agreements.
3. Required documentation to FHWA and UMTA.
4. Monthly progress reports to the TPAC.
5. Quarterly progress and financial reports to UMTA and ODOT.
6. Minutes, agendas and documentation.
7. Management of department staff time, budget and products.
8. Interdepartmental coordination.
9. Periodic review with FHWA and UMTA on UWP progress.
10. Respond to changes in FHWA/UMTA planning requirements.

Expenses:

Metro: Personnel	\$85,000
M & S	8,000
TOTAL	<u>\$93,000</u>

Revenues:

FY 85 PL/ODOT	\$28,326
FY 85 Sec. 8	51,739
Metro Match	8,623
Tri-Met Match	<u>4,312</u>
TOTAL	<u>\$93,000</u>

MODEL REFINEMENT

Program Objectives:

1. Maintain an up-to-date travel forecasting model based on changes in projects in land use and projected highway and transit investments.
2. Continue refinement and enhancement of travel-forecasting models with input from the regional modeling committee, selected from the list of enhancements needed.
3. To improve access to data and methods of data retrieval and display and development of applications software.

Relation to Previous Work:

This is a continuing process to improve travel modeling and forecasting for the region.

Products: The following refinement activities have been identified; priorities will be established with input from the Travel Analysis Committee.

1. Develop trip purpose factors to produce a.m. peak and off-peak trip tables for assignment.
2. Develop automated ability to convert peak-hour assignments to all day.
3. Produce EMME/2 plots for highway capacity.
4. Produce highway v/c plots.
5. Refine level-of-service measure to account for level-of-service "E" for peak 20 minutes.
6. Update document constant dollar cost base from 1977 to current (1984).
7. Refine mode split model to eliminate or reduce K factors for non-downtown and Eastside trips.
8. Refine logit formula in trip distribution and mode split models to calibrate to impedances based upon a finer zone system.
9. Refine volume/delay functions to better match Portland area conditions (based upon either primary data--counts and speed surveys--or secondary data--experiences elsewhere and trial and error).
10. Ongoing development capability for outside connections for EMME/2 operations.

11. Complete evaluation report on EMME/2 and the Pixel and conversion procedures from UTPS.
12. Documentation of procedure for downloading from a mainframe to micro and procedures for using windowing techniques for detailed travel forecasts within subareas based upon micro computer-based travel models.

Expenses:

Metro: Personnel	\$91,000
M & S	<u>6,000</u>
TOTAL	\$97,000

Revenues:

FY 85 PL/ODOT	\$26,436
FY 85 Sec. 8	42,051
Metro Match	10,513
FY 84 Sec. 8	14,400
Metro Match	<u>3,600</u>
TOTAL	\$97,000

DATA AND MONITORING

Program Objectives:

1. Provide technical assistance on the collection and analysis of socio-economic and land use data to member jurisdictions.
2. Publish annual "Development Trends" report and "Regional Fact Book."
3. Update and maintain files on population, employment, building permits, dwelling units and household characteristics.
4. Serve as a "data clearinghouse" for member jurisdictions and other data users for information exchange, etc., and as a forum for achieving common regional data objectives.
5. Develop five-year population/employment forecasts.

Relation to Previous Work:

1. Published 1983 Building Permit Report.
2. Published annual Development Trends report.
3. Computerized data base material for employment, population and building permits to allow easier updating, retrieval and customizing information for particular needs.

Products:

1. Annual Development Trends report.
2. Regional Fact Book.
3. Custom services for in-house usage, member jurisdictions and the private sector.
4. Update of year 2000 population/employment forecasts.

Expenses:

Metro: Personnel	\$113,288
M & S	17,500
TOTAL	<u>\$130,788</u>

Revenues:

FY 85 PL/ODOT	\$ 20,336
FY 85 Sec. 8	24,216
Metro Match	78,036
Sales	<u>8,200</u>
TOTAL SALES	<u>\$130,788</u>

ODOT PLANNING ASSISTANCE

Program Objectives:

Major accomplishments for FY 85 by the Metro/Region Branch include supporting Metro and other agencies in the RTP Update. Major assistance emphasis will also be given to the Tualatin Valley Access Management Plan. Work activities will include:

FY 85 HPR Program

1. Continued support of the southwest subarea analysis.
2. Tualatin Highway Access Plan coordination and support.*
3. Westside subarea update, including calibrate and review base year "update" traffic (1980-1983).
4. External traffic update at approximately 15 stations.
5. Commercial traffic update.
6. Light Rail Corridor Study support.
7. Local land use development and traffic impact reviews.
8. RTP update including update of the various subarea analysis.
9. Transit station and park and ride developmental reviews.
10. Small City transportation analysis.
11. State/City of Portland highway jurisdictional study.
12. Policy and technical coordination with Regional Planning, local agencies, TPAC, the Joint Policy Advisory Committee on Transportation (JPACT), RPC, Washington County Transportation Coordinating Committee (WCTCC), East Multnomah County Committee and coordination of administration of programs with Metro.

Expenses:

ODOT: Personnel	\$125,000
M & S	26,000*
TOTAL	<u>\$151,000</u>

*\$19,000 anticipated carryover for Washington County Access Management Planning.

KT/srb
8075B/347
03/21/84

Transit Development Program (TDP) Revision

Program Objectives:

1. Review TDP in light of: (1) changing financial resource availability and (2) ridership response to service reductions which were implemented in 1984.
2. Revise TDP to appropriate service levels and capital requirements.

Relation to Previous Work:

Follow-on to TDP completion in Spring of 1984.

Products:

TDP report updates

Expenses:

Tri-Met	\$26,500
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Revenues:

OR-90-0003	\$ 800
FY '85 Sec 9	20,400
Tri-Met	<u>5,300</u>
	\$26,500

Capital Development Program Planning

Program Objectives:

The objectives of the Capital Development Program are:

1. Prepare a short term and long term capital acquisition program for Tri-Met.
2. Provide an annual prioritization of required capital items for grant funding.
3. Coordinate the scheduling and funding of Tri-Met's capital program with other jurisdictions.

Relation to Previous Work:

The development of the capital program is an iterative process that builds on each year's acquisition of required projects. Each year's proposed capital budget refines the previous projects. Due to different agency needs, the projected capital program is often updated and revised. It is crucial, however, to be able to predict the agency's requirements for large capital acquisitions.

Products:

1. Refined transit capital improvements program.
2. Annual Tri-Met capital budget.
3. Input to state and federal capital grant applications.

<u>Expenses</u>		<u>Revenues</u>	
Tri-Met	\$36,250	OR-90-0003	\$20,000
		FY '85 Sec 9	9,000
		Tri-Met	7,250
			<u>\$36,250</u>

Transit Service Efficiency Program (TSEP)

Program Objectives:

1. Reduce the amount of low productivity services and hours and strengthen the system as a whole.
2. Develop new Technical Methods and Tools including review of available hardware and software for interactive Schedules Making Tool.
3. Establish and document a standardized procedure by which route changes are evaluated and made.
4. Develop the service evaluation process as an important element in a larger transit service information system.
5. Apply TSEP standards to existing lines.

Relation to Previous Work:

This expands upon the work began last year. There is an exceptionally large carryover, however, because two program objectives have experienced substantial delays:

1. The development of the interactive Schedule Making Tool (SMT) has been delayed because of delays in upgrading of the in-house IBM 4341 which is necessary before RUCUS can be moved to that environment. The development of system specifications for the software for the SMT is now underway.
2. Because of the major service reductions which have been required, the detailed work of applying TSEP standards to existing lines (objective 5) has been delayed. This work will begin in the second half of next fiscal year.

Products:

1. Service Cut packages for each major sign-up.
2. Analysis and summarization of Passenger Counter-related software and reports.
3. Inter-active Schedule Making Tool.
4. Report documenting the service evaluation process and its information needs.
5. An on-going evaluation of existing service and proposals for service changes.

6. A standardized procedure for responding to and evaluating new service requests.

Expenses:

Tri-Met \$190,000

Revenues:

OR-90-0003	\$128,000
FY '85 Sec 9	24,000
Tri-Met	<u>38,000</u>
	\$190,000

Transit Performance Analysis

Program Objectives:

1. Improve productivity by providing a timely and accurate Monthly Performance Report that analyzes significant trends, factors, and occurrences in Tri-Met operations.
2. Improve scheduling efficiency and cost effectiveness of service provided by maximizing the utility of the Route Performance Report. This report identifies lines showing substandard productivity.
3. Improve the quality, quantity, and timeliness of ridership data through the application of the Automatic Passenger Counter (APC) System data in the Quarterly Line Performance Reports.
4. Improve effectiveness of transit service by gaining complete understanding of transit trip movements.
5. Use results of On-Board origin destination survey results as input to TDP process.
6. Determine reaction to route changes.
7. Establish a timeline analysis of all lines including information from 1977 & 1980 surveys.

Relation to Previous Work:

1. The Automatic Passenger Counter program has been implemented and data is now becoming available. This work element will improve rider count sampling techniques and will apply the APC data into reports showing line (by time period) ridership profiles and on-time performance.
2. The On-Board origin destination survey has been taken and compiled into computerized data files. Although some ridership (trip movement) analysis is now being done, this work element will extend this effort by actually loading transit the data onto a coded network to determine in detail bus loadings, transfer movements, and trip length frequency distributions.

Products:

1. Monthly Performance Reports that systematically compare current results with previous results, and provide analyses of key indicators.
2. Route Performance Reports that track the performance of individual routes through the use of a route performance ranking procedure.

3. Ridership profiles for each route (generated through the APC system) that will provide the needed input data for efficiently scheduling service.
4. Summary report of comparison of 1977, 1980 & 1983 On-Board origin destination surveys.
5. Summary report of primary travel movements.

Expenses:

Tri-Met \$51,250

Revenues:

OR-90-0003	\$12,800
FY '85 Sec 9	28,200
Tri-Met	<u>10,250</u>
	\$51,250

Labor Management and Productivity Analysis

Program Objectives:

1. Using the automated runcutter, determine the most efficient level of manpower and work assignments to effect given levels of service.
2. Increase operator and maintenance productivity by means of improved absenteeism analyses reporting, including tracking costs associated with absenteeism.
3. Improve operator safety performance through the development of an analytical information reporting system on accidents and injuries.

Relation to Previous Work:

1. The automated scheduling runcutter has been adapted and is in production use for assigning work to operators. This FY '84 work element will extend use of this tool to analysis of alternative runcut assignments (under various assumptions) to better optimize costs.
2. During FY '83-'84, the operator absentee reporting system was established. This work element will extend absentee reporting to maintenance.
3. The new accident and injury tracking system is now being designed. This work element will fund coding, testing, and implementation of this design.

Products:

1. Specific reports on manpower leveling and manpower costs of new service levels or policy changes.
2. A reporting system that tracks absenteeism trends, identifies strategies for reducing absenteeism, and provides management with special analytical reports as required.
3. Accident monitoring module that produces timely responses to informational requests from various users throughout the agency.

Expenses:

Tri-Met \$28,000

Revenues:

OR-90-0003	\$ 4,400
FY '85 Sec 9	18,000
Tri-Met	<u>5,600</u>
	\$28,000

Management Information System Development

Program Objectives:

1. Expand the central Data Base Management System (on Tri-Met's Mainframe computer) to include primary data bases in area of scheduling, employee records, and maintenance.
2. Provide support to users in developing microcomputer based information systems in areas such as Customer Assistance, Safety Management, Grants and Contracts, etc.
3. Establish training programs for users on primary applications development software packages.
4. Complete telecommunications link between microcomputers and mainframe data base.

Relation to Previous Work:

This work builds upon three work elements completed in prior fiscal year. They are:

1. Completion of design of relational Data Base Management System using SQL (Structured Query Language);
2. Establishment of a Microcomputer support center and acquisition of associated hardware and software; and
3. Completion of an inventory of information systems needs.

Products:

1. Expanded DBMS with ready access to users.
2. Users familiar with techniques of applying microcomputer-based software to develop their information systems.
3. Telecommunications link from mainframe to microcomputer.

Expenses:

Tri-Met	\$50,750
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Revenues:

OR-90-0003	\$13,600
FY '85 Sec 9	27,000
Tri-Met	<u>10,150</u>
	\$50,750

Maintenance Management Information Applications

Program Objectives:

Develop a complete Maintenance Management Information System (MMIS) to perform specific analyses which aid in maximizing labor productivity, optimize maintenance cycles, determine cost effective bus procurement schedules, reduce inventory costs resulting in improved cost-effectiveness of maintenance activities and optimal use of scarce operating and capital funds.

Relation to Previous Work:

The enhancement and conversion of the old MMIS is still on-going. The completion of products identified in the prior fiscal year is dependent upon the new MMIS being operational. The actual products of the prior fiscal year involved work related to developing and designing the new MMIS. They were:

1. Review of MMIS needs and assessment.
2. Review and modification of MMIS Fleet Maintenance Functional Specifications.
3. Development of Request for Proposals for MMIS purchasing and inventory control software.
4. Initial detailed design work for the MMIS Fleet Maintenance System.

The products identified for this fiscal year include those from the prior year (their completion is dependent upon a functioning MMIS) as well as two additional products.

Products:

1. MMIS Fleet Maintenance Design: Finalize detailed MMIS Fleet Maintenance data base design, screen designs, and program specifications. This work will lay the foundation for the final software development.
2. Development of a Maintenance Plan: This activity will revise and formalize Tri-Met's maintenance Plan. The key aspect of the plan will be goals and objectives definition and specifications. These goals and objectives will address such areas as: vehicle life, road call incidence, and failure rates.
3. Maintenance Absenteeism Analysis: As part of the MMIS, this project will develop a system for maintenance absenteeism on an individual level and by division, shift and worker specification. Results will compare absenteeism to overtime hours to identify any trends. The

trends. The system will track sick, comp, excused, unexcused, and approved absences. This system will help reduce absenteeism and associated costs identify more efficient ways to assign work loads.

4. Labor Distribution Analysis: As a subsystem of the MMIS, this activity will track the distribution of maintenance labor and how many hours are spent on specific tasks and what bus fleets they are associated with. The productivity by fleet type and type of maintenance activity will be analyzed to identify costly activities, work alternatives (contract work out, replace expensive equipment), assist in defining work schedules and operate more efficiently.
5. Preventive Maintenance Analysis: This activity will develop a system to determine optimum preventive maintenance programs for buses. The results should minimize both unnecessary and unscheduled repairs and also keep track of repairs on all buses, fleets and repair frequency. This should reduce road calls, limit severity of bus failures and provide efficient work schedules.
6. Bus Procurement Analysis: This activity will examine history and trends for each bus fleet and determine optimum replacement schedule, overhaul schedule, or need for modifications on each of the bus fleets.

Expense

Tri-Met

\$46,250

Revenues

OR-90-0003	\$ 4,000
FY '85 Sec 9	33,000
Tri-Met	9,250
	<u>\$46,250</u>

Financial Forecasting

Program Objectives:

1. Continue development and refinement of forecasting models which accurately simulate cash flow (costs and revenues) in the agency. Apply microcomputer based financial forecasting model.
2. Support financial policy decisions by providing management with financial consequences of alternative policy decisions.
3. Refine and apply an econometric model for forecasting payroll tax receipts.

Relation to Previous Work:

1. The Tri-Met financial forecasting model has undergone several major improvements this FY. Most notable are: (1) direct interface to the accounting (MSA) general ledger data; (2) development of formatted data input screens for rapid entering/editing of data; and (3) development of several new statistical reports. This work element will improve maintenance cost forecasting in conjunction with MMIS development.
2. This work element will also test, adapt and apply a more flexible, more accurate microcomputer based financial forecasting models (UBUCKS) as they continue to be developed and refined by UMTA.
3. The development and application of the econometric model was not included in any previous UWP work element.

Products:

1. Improvements to financial forecasting models.
2. Financial forecasting reports which depict probable cash flow in response to proposed changes in service levels, fares, productivity and economic conditions.

Expenses:

Tri-Met \$42,250

Revenues:

OR-90-0003	\$ 800
FY '85 Sec 9	33,000
Tri-Met	<u>8,450</u>
	\$42,250

City and Eastside Transportation Improvement Program (CETIP) Evaluation

Program Objectives:

1. Conduct a study to examine changes in travel behavior resulting from CETIP changes.
2. Prepare/publish an Executive Summary assessing the impact of CETIP.
3. Prepare/publish a report detailing the impact of CETIP.
4. Develop recommendations for adjustments to CETIP routes based on results of evaluation and analysis.
5. Analyze rider complaints and compliments regarding CETIP changes.
6. Prepare/publish a summary report of rider response to the CETIP changes.

Relation to Previous Work:

Preliminary results from the rider and non-rider survey conducted by an outside consultant were studied. The completed survey has yet to be delivered, though information regarding special questions can be attained. Staff time with this project to date has been consumed discussing the preliminary results with the consultant and studying the information made available. The completed evaluation of CETIP will be accomplished when this survey and Tri-Met's on-board origin-destination survey are made available for analysis.

Products:

1. CETIP evaluation - an Executive Summary
2. CETIP evaluation - a thorough analysis
3. Technical memoranda comparing rider travel patterns to level and orientation of service provided.
4. Summary report of rider response to CETIP route and schedule changes.

Expenses

Tri-Met \$42,000

Revenues

OR-90-0003 \$33,600
Tri-Met 8,400
 \$42,000

Transit Center and TSM Development

Program Objectives:

1. Identify locations for bus preemption measures which can result in operational savings; complete engineering design and cost estimates on such facilities.
2. Undertake more detailed planning of bus transit centers, including design and cost estimates and identification of local funding opportunities.

Relation to Previous Work:

Preliminary plans for permanent transit centers and/or park-and-ride lots in the cities of Oregon City, Milwaukie, Lake Oswego and Hillsboro were developed and pursued with the respective planning commissions and city councils. A park-and-ride lot proposal in the Parkrose area is in the final stages of approval.

The Project Development staff is continuously involved in technical committees with local jurisdictions and the Oregon Department of Transportation to identify, design, and develop funding strategies for TSM projects.

Products:

1. Transit center layouts.
2. Bus lane locations and design drawings.
3. Signal preemption locations and operational plans.

4. Park-and-ride lot locations and site plans.

Expenses:

Tri-Met \$25,000

Revenues:

FY '85 Sec. 9	\$ 2,400
Tri-Met Match	600
OR-90-0003	11,200
OR-09-0020	6,400
Tri-Met Match	4,400
	<u>\$25,000</u>

Civil Rights Planning

Program Objectives:

1. Complete a thorough analysis of W/DBE participation in Tri-Met contracts.
2. Identify areas of strength in the program which can be capitalized upon and areas of weakness which can be targeted for special efforts to resolve problems.
3. Develop a procedure to be used in establishing realistic project-specific W/DBE goals.
4. Revise and update as necessary Tri-Met's W/DBE policy statement.
5. Review and update annual submission of information relative to minorities in the urbanized area as required by UMTA Title VI Circular 1160.1.

Relationship to Previous Work:

The updated Title VI report is a required annual submission. Tri-Met submitted its 1983 Title VI report in September, 1983, was conditionally certified and will respond to comments by May, 1984. Revising and updating Tri-Met's MBE policy resulted in a revised W/DBE policy statement and Board approval of goals. The policy will require periodic updating to reflect current regulations and changing local conditions.

Products:

1. A program for improving Tri-Met's overall W/DBE level of participation in contracted services.
2. An annual update of W/DBE goals.
3. An updated annual Title VI report submitted to UMTA.

Expenses:

Tri-Met \$13,250

Revenues:

OR-90-0003	\$ 1,600
FY '85 Sec. 9	9,000
Tri-Met	2,650
	<u>\$13,250</u>

Program Administration

Program Objectives:

1. Monitor and ensure that Planning's program activities and expenditures conform with the UWP.
2. Ensure that appropriate grant file documentation of activities and expenditures is provided for.
3. Provide quarterly financial and progress reports for all UWP planning projects to UMTA and Metro.
4. Initiate requests for any required budget revisions, grant amendments, and UWP amendments.

Relation to Previous Work:

Grants administration is an ongoing process.

Products:

1. Quarterly financial and progress reports.
2. Budget revisions, grant amendments, UWP amendments.

Expenses:

Tri-Met \$5,750

Revenues:

OR-90-0003	\$1,600
FY '85 Sec. 9	3,000
Tri-Met	<u>1,150</u>
	\$5,750

Fare Policy Analysis

Program Objectives:

1. Provide a decision support system to senior management with analysis of probable consequences of fare policy options. These options include actions such as changing fare levels, offering special discounts, or changing fare zone methods.
2. Develop and apply analytical techniques to estimate the effects of fare pricing shifts on ridership and revenues.
3. Conduct a small sample on-board ridership survey (postcards) to update fare category distribution factors.

Relation to Previous Work:

This work will provide analytical support for fare policy under the non-self service fare collection (SSFC) fare system following the completion of the SSFC demonstration project.

Products:

1. Factors depicting the fare category distribution of ridership.
2. Analytical techniques for estimating fare category shifts in ridership due to changes in fare levels.
3. Fare policy decision support.

Expenses:

Tri-Met \$37,500

Revenues:

FY '85 Sec 9 \$30,000
Tri-Met 7,500
 \$37,500

EMME 2 Model Application

Program Objectives:

1. Begin using the EMME 2 model in service evaluation.
2. Continue to refine the capabilities of this model.
3. Determine the relative accuracy of the EMME 2 network simulation capability.
4. Establish EMME 2 as a fundamental component of the service evaluation process.
5. Use results of simulation for TDP

Relation to Previous Work:

The Tri-Met route network was coded onto this model during FY 83-84. The process of coding the transit network on this model required significant staff time as the model is new and requires a substantial learning period. Preliminary analysis of travel flows and trip assignments were also conducted during this time. The Title VI accessibility analysis represents one product of this preliminary analysis using EMME 2.

During FY 84-85 we intend to input our on-board origin-destination survey into the model and begin studying existing transit travel patterns. We also hope to continue work on refining the accuracy of EMME 2. Further, we will begin using EMME 2 for alternative network analysis when studying various service designs to feed the Banfield LRT.

Products:

1. Summary report evaluating the accuracy of the EMME 2 model.
2. TDP
3. Summary report on using EMME 2 as a critical element of the service evaluation process

Expenses:

Tri-Met \$11,250

Revenues:

FY '85 Sec 9	\$ 9,000
Tri-Met	2,250
	<u>\$11,250</u>

Service Development and Planning

Program Objectives:

1. Develop recommendations for service cuts systemwide (totaling 5000 weekly hours).
2. Identify alternative suppliers of service for those losing service.
3. Develop and cost service plan alternatives to feed LRT service on opening day.
4. Coordinate LRT and bus service operations plans.
5. Update 1982 downtown conceptual plan and analyze long range LRT plan impacts on bus service in downtown area.
6. Study and develop park and ride facilities in suburban areas where service cuts will significantly reduce bus service.
7. Develop an effective implementation plan for service changes.

Relation to Previous Work:

1. During FY 83-84 two major service changes were accomplished that reduced the number of weekly hours of service operated by Tri-Met by 4000 hours. Technical reports describing both of these service reduction plans are on file.

These service reductions were developed with the knowledge that more service would have to be cut in FY 84-85. Staff is prepared to build on the previous service reductions to develop those necessary for this fiscal year. A report will be prepared describing the FY 84-85 service cuts.

2. As a result of the service reductions, many neighborhoods will be left without transit service during certain times of the day. It is important to explore alternative modes of transportation for those having no alternative to public transportation. We intend to build on the analysis done during FY 83-84 on private sector participation, that identified several other potential providers of transit service at lower costs. Reports documenting these studies are on file.
3. As local service will be reduced in suburban communities, the use of park and ride facilities will become more important. We must investigate all possibilities for park and ride lots in conjunction with the service reductions, particularly in those outlying areas where local service might be completely eliminated.

It has been several years since Tri-Met aggressively attempted to locate park and ride lots regionwide. The suburban transit service project of 1979-80 represented the last of such efforts. Reports documenting this work are on file.

A report will be prepared summarizing all potential park and ride lot locations that could effectively supplement service reductions in outlying areas. This report will break down the cost of establishing such facilities and compare those to the operating savings reductions in local service.

4. Given the current financial realities at Tri-Met, and the forthcoming operation of the Banfield LRT, a bus service plan must be developed this fiscal year for bus service to the LRT stations. No detailed work on such a service plan has been done since the TDP was written five years ago. Given changes in land use and travel patterns and changes in Tri-Met's operating budget, an entirely new plan must be developed. Several alternative service plans will be evaluated. A report will be prepared summarizing the results of this evaluation and describing an implementation plan for feeder service to LRT stations.
5. The downtown conceptual plan for transit service and operations is now two years old. Several changes in the downtown area have occurred during that time that necessitate an update of the transit service and operations plan. The forthcoming operation of the Banfield LRT in downtown Portland and subsequent bus routing changes to better serve LRT stations in the downtown area must be planned for.

Copies of the 1982 downtown conceptual plan are on file. An update of this plan will be prepared during FY 84-85.

Products:

1. Service Reduction Plan and Implementation Plan
2. 1984 downtown transit service plan
3. Service plan for bus & rail interface
4. Assessment of supplemental park and ride space
5. Summary report of long-range LRT and bus service options in downtown

Expenses

Tri-Met \$102,250

Revenues

OR-90-0003	\$ 24,800*
FY 84 Sec 9	57,000
Tri-Met	<u>20,450</u>
	\$102,250

*New and Modified Service Planning and Development - carryover

Energy Contingency Planning

Program Objectives:

1. Develop the Portland area element of the Statewide Energy Contingency Plan.
2. In cooperation with Tri-Met determine transit, paratransit and rideshare operating strategies during a fuel shortage.
3. Determine costs and funding responsibility during a fuel shortage.
4. Establish responsibilities for communications during a fuel shortage.
5. Coordinate with Clark County jurisdictions.

Products:

. Portland area energy (gasoline) contingency plan.

Expenses

Tri-Met

\$5,000

Revenues

OR-09-0029

\$4,000

Tri-Met

1,000

\$5,000

Market Segmentation and Community Travel Behavior Study

Program Objectives:

1. Obtain traveling behavior characteristics that can be used for Metro modeling activities and Tri-Met measurement and analyses processes.
2. Initial step in developing a process to acquire accurate and timely information about the Portland community's travel behavior.
3. Serves as a data base to develop market segments of interest, market share information, and market potential indicators that can be used by various Divisions at Tri-Met for measurement and evaluation.
4. Serves as a data base for future planning purposes.

Relation to Previous Work:

This study is the next phase of a Segmentation and Potential Study and a CETIP Evaluation Study conducted by the Marketing Research Section at Tri-Met. It will provide a more detail information that can be used to segment markets geographically, by trip purpose and time of day using the trip, the person, or the family as the unit of analysis. It will also serve to update the data base METRO uses in its community travel models (i.e., CRAG, 1977). It is very possible C-Tran will become involved since this study will update their travel behavior information also, and the Rideshare Section could also use this information for updating various strategic plans. This information will supply effectiveness measures to the performance analysis and evaluation groups at Tri-Met.

Products:

A data base of detailed traveling behavior of the Portland Community.

Expenses

Tri-Met \$80,000

Revenues

FY '85 Sec 9 \$64,000
Tri-Met 16,000
 \$80,000

FY 85 FUNDING SUMMARY

federal funding

CARRY OVER

	FY 85 PL/ODOT	FY 85 Sec 8	85 Sec 8 Directry	FY 85 (e)(4)	EPA Sec 105	FY 85 Phase I	FY 85 Sec 9	FY 84 (e)(4) CR-29-9009	FY 84 Sec 8 09-0034	FY 84 PL/ODOT	FY 83 (e)(4) CR-29-9008	FY 83 (e)(4) CR-21-9001	Westside CR-29-9004	Westside PE (e)(4) CR-29-9002	FY 80 Sec 8 CR-09-0020	FY 82 Sec 8 CR-09-0029	Sec. 5A CR-90-0003	FY 84 HPR/ODOT	Local Match	Total
RTP Refinement-Metro	21,100	16,240																	4,060	41,400
RTP Update-Metro	49,411	56,113						18,224	2,000	2,500		32,710							14,528	124,552
RTP Financing-Metro																			8,908	59,922
Phase I LRT/So./Bi-State-Barbur																				
Metro				179,560		20,750													35,349	235,659
Tri-Met						55,000	26,280				44,000						1,760		24,481	151,521
Eastland						4,250					8,500								2,250	15,000
Southwest Corridor-Metro	25,552			68,806															12,142	108,500
Elderly & Handicapped																				
Metro		7,600					12,000												1,900	9,500
Tri-Met																			3,000	15,000
TIP - Metro	16,854	21,000		51,634															14,362	103,850
Technical Assistance-Metro	40,000	25,200																	6,300	71,500
Sanitaid Ridership Anal.-Metro			45,000																11,250	56,250
Westside Corridor Project																				
Metro													35,946						6,343	42,289
Tri-Met							548,552							446,250			35,955		224,377	1,253,114
Air Quality Plan-Metro	1,000				12,000														4,000	17,000
Coord. & Mgt.-Metro	28,326	51,739																	27,935	108,000
Model Refinement-Metro	26,436	42,051							14,400										14,113	97,000
Data & Monitoring-Metro	20,336	24,216																	86,236	130,788
ODOT Planning Assistance																		151,000	-	151,000
Tri-Met																				
Transit Center/TEH Dev.							2,400								6,400		11,200		5,000	25,000
Energy																4,000		1,000	5,000	
TDP Revision							20,400										800		5,300	26,500
Capital Develop. Prog.							9,000										20,000		7,250	36,250
TEEP							24,000										128,000		38,000	190,000
Transit Performance Analysis							28,200										12,800		10,250	51,250
Labor Mgt. & Prod. Anal.							18,000										4,400		5,600	28,000
Mgt. Info. System Dev.							27,000										13,600		10,150	50,750
Maint. Mgt. Info. Applic.							33,000										4,000		9,250	46,250
Market Seg./Travel Study							64,000												16,000	80,000
CETIP Evaluation & Analysis																	33,600		8,400	42,000
Financial Forecasting							33,000										800		8,450	42,250
Fare Policy Analysis							30,000												7,500	37,500
EPHSE 2 Model Application							9,000												2,250	11,250
Service Development & Planning							57,000										24,800		20,450	102,250
Civil Rights Planning							9,000										1,600		2,650	13,250
Program Administration							3,000										1,600		1,150	5,750
	229,015	244,159	45,000	300,000	12,000	80,000	951,832	18,224	16,400	2,500	52,500	32,710	35,946	446,250	6,400	4,000	294,915	151,000	660,264	3,583,115

Note: Amounts shown are federal share except PL and HPR.
PL is \$203,984 with match \$25,031 at 89.07/10.93% ratio.

80758/347-A

TM-23

WASHINGTON

FY 85 UNIFIED WORK PROGRAM

UWP Work Elements

1. Update Regional Transportation Plan
Based on the 123 zone distribution of year 2000 population and employment estimates, revise the year 2000 highway forecasts.

Staff Costs	\$10,000	-	Person Hours (475 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$10,000		
2. Year 2010 Highway Needs Analysis
Conduct a new 2010 highway needs analysis by factoring the year 2000 trip tables to reflect year 2010 population and employment estimates, or conduct a new 2010 transportation model distribution.

Staff Costs	\$23,000	-	Person Hours (1,095 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$23,000		
3. 1985-1989 Transit Development Program
The TDP will meet the UMTA requirements and identify a 5-year transit program of system needs, costs, and revenues.

Staff Costs	\$25,000	-	Person Hours (1,190 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$25,000		
4. Transit Ridership Survey
Conduct an on-board transit system survey (including survey instrument field work and analysis) to identify ridership characteristics.

Staff Costs	\$14,000	-	Person Hours (665 Hours)
Other Costs	<u>6,000</u>		Contract Labor
Total Costs	\$20,000		
5. Daily Transit Ridership Information
Tabular and graphic computerization of daily, weekly, monthly, and annual ridership data.

Staff Costs	\$ 6,000	-	Person Hours (285 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 6,000		

6. Comply with New UMTA "504" Regulations

Document certification requirements including service criteria, cost limitations, public participation, and monitoring.

Staff Costs	\$ 5,000	-	Person Hours (235 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 5,000		

7. Port of Vancouver Freight Movement Survey

Develop, conduct, and analyze a freight movement and survey of industries located in the Port of Vancouver area.

Staff Costs	\$ 3,000	-	Person Hours (140 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 3,000		

8. Identify and Map Ice and Snow Routes

Develop a highway/transit map indicating the routes where snow removal and/or sanding will occur first. Develop a model resolution for adoption by each Clark County jurisdiction having snow removal/sanding responsibilities.

Staff Costs	\$ 3,000	-	Person Hours (140 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 3,000		

9. Traffic Count Program

Collect, format, and publish traffic count information from the County-wide program.

Staff Costs	\$13,000	-	Person Hours (620 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$13,000		

10. Develop Year 2010 Population and Employment Forecasts

Reevaluate the year 2000 growth assumptions and incorporate the latest comprehensive land use plans, market trends, and historical growth rates to develop new 2010 forecasts. The Clark County forecasts would also be coordinated with the metropolitan area forecasts.

Staff Costs	\$10,000	-	Person Hours (475 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$10,000		

11. Transportation
Map Digitizing

Digitize highway functional
classification, highway network,
transportation analysis zone,
and transit maps.

Staff Costs	\$12,985	-	Person Hours (620 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$12,985		

12. Data Management

Improve access to the U.S. Census
information from the STF 3 and
UTPP files for transportation
analysis, development, and publi-
cation of selected statistical
transportation information.

Staff Costs	\$ 8,000	-	Person Hours (380 Hours)
Other Costs	<u>5,000</u>		Software
Total Costs	\$13,000		

13. Title VI and MBE

Complete the UMTA required
reports.

Staff Costs	\$ 2,700	-	Person Hours (125 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 2,700		

14. TIP and UWP

Complete and process all changes
for the Transportation Improve-
ment Program. Complete the an-
nual transportation planning
work program.

Staff Costs	\$10,000	-	Person Hours (475 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$10,000		

15. Public Information

Sponsor one to three transpor-
tation seminars open to technical
staff, policy makers, and citizens.
Publish and distribute quarterly
publications of the MPO Bulletin.

Staff Costs	\$12,600	-	Person Hours (600 Hours)
Other Costs	<u>2,400</u>		Printing
Total Costs	\$15,000		

16. Coordinate and Administer the Regional Transportation Planning Process

Provide the technical staff and policy forums to support the 3C transportation planning process (including CTAC, RPC, Bi-State, and other transportation planning committees). Provide the administrative support required to maintain the transportation planning process.

Staff Costs	\$20,000	-	Person Hours (950 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$20,000		

Contract Work Elements

17. SR-14 Study

WSDOT Study (carry-over from FY 84) to identify design needs through the year 2000 on SR-14 from I-5 to the East Clark County line.

Staff Costs	\$40,000	-	Person Hours (1,900 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$40,000		

Contract Work Elements

18. 179th Street/I-5 Highway Study

WSDOT Study to identify long-range needs for the 179th Street/I-5 interchange, SR-502 connection to 179th Street interchange, and feasibility of I-5/SR-502 interchange.

Staff Costs	\$35,000	-	Person Hours (1,665 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$35,000		

19. 164th Avenue/
East County Study

Clark County Study to determine arterial needs through the Fisher Basin area which result from proposed land use plans.

Staff Costs	\$ 6,000	-	Person Hours (285 Hours)
Other Costs	<u>-0-</u>		
Total Costs	\$ 6,000		

20. Whipple Creek Study Clark County Study to determine arterial needs resulting from proposed land use plan.
- | | | | |
|-------------|------------|---|--------------------------|
| Staff Costs | \$ 4,000 | - | Person Hours (190 Hours) |
| Other Costs | <u>-0-</u> | | |
| Total Costs | \$ 4,000 | | |
- 21: Salmon Creek Study Clark County Study to determine arterial needs resulting from proposed land use plan.
- | | | | |
|-------------|------------|---|--------------------------|
| Staff Costs | \$ 4,000 | - | Person Hours (190 Hours) |
| Other Costs | <u>-0-</u> | | |
| Total Costs | \$ 4,000 | | |
22. Rideshare Program A rideshare program would be conducted which maintained the employer contact list established through the I-5 Program and coordinate individual agency rideshare efforts.
- | | | | |
|-------------|--------------|---|--------------------------|
| Staff Costs | \$12,000 | - | Person Hours (570 Hours) |
| Other Costs | <u>3,000</u> | | Printing |
| Total Costs | \$15,000 | | |
23. Development for Regional Distribution Model Develop and calibrate an in-house gravity model for regionwide trip generation and distribution, including an O/D survey.
- | | | | |
|-------------|---------------|---|----------------------------|
| Staff Costs | \$25,000 | - | Person Hours (1,190 Hours) |
| Other Costs | <u>50,000</u> | | Survey Contract |
| Total Costs | \$75,000 | | |
24. SR-140 Pedestrian Access Design Study A preliminary design study would be completed in regard to pedestrian access along SR-140 for the purpose of improving the summer-time congestion problems associated with tourism.
- | | | | |
|-------------|------------|---|--------------------------|
| Staff Costs | \$ 7,500 | - | Person Hours (350 Hours) |
| Other Costs | <u>-0-</u> | | |
| Total Costs | \$ 7,500 | | |

Unfunded UWP - Work Elements

- | | |
|---|---|
| 25. Materials for County-Wide Highway Funding Program | Development of background data (highway needs, cost, and rationale) to support a County-wide highway bond.

In addition to development of data for the bond issue, a package of proposed highway funding alternatives could be assembled. |
| 26. Geocoding | Establish the computer link between the MPO and Consolidated Center computer systems. This link will be used to provide access to the County-wide geocoding system. |
| 27. Acquisition of a Census Mapping Program | This program would enhance and automate the mapping of Census information. |

CLARK COUNTY

SUMMARY OF EXPENDITURES
BY FUNDING SOURCE (\$000)

WORK ELEMENT	Base MPO Activities			Special MPO Contract Activities				TOTAL (000's)
	PL	UMTA Section 8	RPC Match	WDOT	C-TRAN	County	Other	
1. Regional Transportation Plan Revision	4.0		6.0					10.0
2. Year 2010 Highway Needs	10.0		13.0					23.0
3. Transit Development Program		10.0	3.0		12.0			25.0
4. Transit Survey		8.0	6.0		6.0			20.0
5. Ridership Information		4.8	1.2					6.0
6. "504" Requirements		4.0	1.0					5.0
7. Port of Vancouver Freight Study	2.0		1.0					3.0
8. Ice and Snow Routes	2.0		1.0					3.0
9. Traffic Count Program	10.0		3.0					13.0
10. Year 2010 Population and Employment Project	3.525	3.2	3.275					10.0
11. Map Digitizing			12.985					12.985
12. Data Management	2.0		11.0					13.0
13. Title VI and MBE Requirements		2.160	0.54					2.7
14. UWP and Transportation Improvement Programs	4.0	4.0	2.0					10.0
15. Public Information	5.0	5.0	5.0					15.0
16. Coordination/Administration	10.0	5.0	5.0					20.0
17. SR-14 Needs Study				40.0				40.0
18. Access Improvement, North I-5 Corridor				35.0				35.0
19. East County						6.0		6.0
20. Whipple Creek						4.0		4.0
21. Salmon Creek						4.0		4.0

22. Rideshare				15.0					15.0
23. Distribution Model							75.0 ¹		75.0
24. SR-140 Study							7.5 ²		7.5
TOTAL	\$52.525	\$46.16	\$75.00	\$90.00	\$18.00	\$14.00	\$82.50		\$378.185

¹Special HPR Demonstration Grant request.

²City of Washougal.

GH/DL/mf19.3A15

STAFF REPORT

Agenda Item No. 7.1

Meeting Date May 3, 1984

CONSIDERATION OF RESOLUTION NO. 84-462 FOR THE
PURPOSE OF APPROVING THE FY 1985 UNIFIED WORK
PROGRAM (UWP)

Date: March 21, 1984

Presented by: Andy Cotugno

PROPOSED ACTION

The first resolution would approve the UWP containing the transportation planning work program for FY 1985. The second resolution would certify compliance with federal requirements for the transportation planning process. Authorize the submittal of grant applications to the appropriate funding agencies.

FACTUAL BACKGROUND AND ANALYSIS

The FY 1985 UWP describes the transportation/air quality planning activities to be carried out in the Portland/Vancouver metropolitan region during the fiscal year beginning July 1, 1984. Included in the document are federally funded studies to be conducted by Metro, Regional Planning Council of Clark County (RPC), Tri-Met, the Oregon Department of Transportation (ODOT) and local jurisdictions.

The Oregon portion of the FY 1985 UWP major emphasis areas includes:

- RTP Update
- Southwest Corridor Study
- Regionwide Transitway Plan--Phase I
(Southern/Bi-State/Barbur)
- Section 9A - New funds being used for various elements of Tri-Met planning.
- Westside Corridor-Sunset LRT FEIS and Preliminary Engineering

The UWP matches the projects and studies reflected in the proposed Metro budget to be submitted to the Tax Supervisory and Conservation Commission.

A prerequisite for receipt of federal funds for construction is a planning process which meets various requirements. Until FY 1984, certification was performed by FHWA on a biannual basis. Now, the MPOs have been given responsibility for self-certification. Documentation of compliance is attached to the second resolution.

Approval will mean that grants can be submitted and contracts executed so work can commence on July 1, 1984, in accordance with established Metro priorities.

TPAC and JPACT have reviewed the UWP and recommend adoption of the Resolution.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of the Resolution.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On April 9, 1984, the Regional Development Committee unanimously recommended adoption of Resolution No. 84-462.

KT/srb
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04/17/84