

**WESTSIDE CORRIDOR PROJECT
TRAFFIC MANAGEMENT PLAN
BUDGET SUMMARY AND DISCUSSION SCENARIOS**

DRAFT: 3 AUGUST 1992

GOALS:

1. Keep traffic moving on Sunset Highway and Highway 217 during construction.
2. Discourage traffic from diverting through neighborhoods.
3. Permanently attract drivers from single occupant cars.

BASELINE SCENARIO:

Project duration
(\$ mil)

| | |
|---------------------------------------|---------|
| Mode Shift Strategies | |
| Park and Ride Lots..... | \$ 0.28 |
| Bus service..... | \$ 3.13 |
| Corridor focused carpool program..... | \$ 1.55 |
| Incentives to Shift Modes | |
| Highway management incentives..... | \$ 0.19 |
| Bus incentives..... | \$ 0.01 |
| Carpool incentives..... | \$ 0.47 |
| Traffic Flow Management | |
| Incident Management..... | \$ 0.01 |
| Capacity and flow improvements..... | \$ 0.00 |
| Neighborhood Impact Mitigation..... | \$ 0.14 |
| Marketing and Information | |
| Marketing programs..... | \$ 0.74 |
| Information and communication..... | \$ 0.06 |
| TOTAL: CORE (Baseline Scenario)..... | \$ 6.61 |
| ESTIMATE OF VEHICLES REMOVED..... | 852 |

REDUCED SCENARIO A:

Baseline Scenario
- one bus line (6 buses)
- newspaper advertising
+ additional neighborhood impact mitigation

NET TOTAL: CORE (Reduced Scenario A)..... \$ 5.59
ESTIMATE OF VEHICLES REMOVED

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BASELINE SCENARIO:

Project duration
(\$ mil)

| | |
|---------------------------------------|---------|
| Mode Shift Strategies | |
| Park and Ride Lots..... | \$ 0.28 |
| Bus service..... | \$ 3.13 |
| Corridor focused carpool program..... | \$ 1.55 |
| Incentives to Shift Modes | |
| Highway management incentives..... | \$ 0.19 |
| Bus incentives..... | \$ 0.01 |
| Carpool incentives..... | \$ 0.47 |
| Traffic Flow Management | |
| Incident Management..... | \$ 0.01 |
| Capacity and flow improvements..... | \$ 0.00 |
| Neighborhood Impact Mitigation..... | \$ 0.14 |
| Marketing and Information | |
| Marketing programs..... | \$ 0.74 |
| Information and communication..... | \$ 0.06 |
| TOTAL: CORE (Baseline Scenario)..... | \$ 6.61 |
| ESTIMATE OF VEHICLES REMOVED..... | 852 |

REDUCED SCENARIO A:

Baseline Scenario
- one bus line (6 buses)
- newspaper advertising
+ additional neighborhood impact mitigation

| | |
|---|---------|
| NET TOTAL: CORE (Reduced Scenario A)..... | \$ 5.59 |
| ESTIMATE OF VEHICLES REMOVED..... | 760 |

REDUCED SCENARIO B:

Reduced Scenario A
- one half of a bus line (3 buses)
- one half of the carpool program
+ additional neighborhood impact mitigation

| | |
|---|---------|
| NET TOTAL: CORE (Reduced Scenario B)..... | \$ 4.33 |
| ESTIMATE OF VEHICLES REMOVED..... | 559 |

INCREASED SCENARIO A:

Baseline Scenario
+ one bus line (6 buses)
+ discount bus pass for park and riders
+ cable TV advertising

| | |
|---|---------|
| NET TOTAL: CORE (Increased Scenario A)..... | \$ 8.32 |
| ESTIMATE OF VEHICLES REMOVED..... | 928 |

**WESTSIDE CORRIDOR PROJECT
TRAFFIC MANAGEMENT PLAN
DRAFT: 3 AUGUST 1992**

TMP GOALS: 1. Keep traffic moving on Sunset Highway and Highway 217 during construction.
2. Discourage traffic from diverting into neighborhoods.
3. Permanently attract drivers from single occupant cars.

| # | CORE STRATEGIES | DESCRIPTION AND NOTES | ESTIM TIME LINE | PK HR MODE SHIFT | TMP COST ESTIMATE OVER 5 YRS | OTHER FUNDING SOURCES |
|-----|--|---|-----------------------|------------------------|------------------------------------|-----------------------------|
| | FLATTEN PEAK | | | | | |
| A1 | Employee flex hours promotion (spread peak period) | Include in carpool/marketing programs w/ in direct mail contacts (see #A50) | 5/93 - 8/98 | 100 | \$0 | \$0 |
| A2 | Home based telecommuting (computer/telephone use) | Include in carpool/marketing programs w/ in direct mail contacts (see #A50) | 5/93 - 8/98 | * | \$0 | \$0 |
| | MODE SHIFT | | | | | |
| | PARK & RIDE LOTS | | | | | |
| A3 | Progress (Scholls/Hwy 217) interim park and ride lot | Interim 110 space gravel lot, to become permanent at a future date | 5/93 - perm. | ** | \$110,000 | \$0 |
| A4 | Cornelius Pass Road interim park and ride lot | Located on ODOT property SE of Sunset Highway: 75 space gravel lot | 9/93 - 9/97 | ** | \$75,000 | \$0 |
| A5 | 185th and Walker Rd leased park and ride lot | Lease 250 space lot on old Tektronics site. Lease \$60,000/yr + \$5,000 impr | 12/92 - 9/94 | ** | \$57,500 | \$57,500 |
| A6 | 185th Light Rail Station park and ride lot | Slight advance of existing schedule allows 400 space P&R use in fall 1994. | 9/94 - 9/97 | ** | \$0 | \$0 |
| A7 | Cedar Hills interim park and ride lot | 35 space lot S of Sunset @ Cedar Hills TC, replaced w/ Sunset TC lot ASAP | 5/93 - 9/97 | ** | \$35,000 | \$0 |
| A8 | Sunset Transit Center park and ride lot | Use of west end of STC site. 400 space interim lot. Need Barnes Rd access. | fall 94 | ** | \$0 | \$0 |
| | EXPRESS BUSES (see footnote) | | | | | |
| A9 | Progress Express bus (new) | 6 peak buses: Murray/Weir, Progress P&R, express to Portland | 5/93 - 9/97 | 97 | \$1,043,250 | \$0 |
| A10 | Walker Road Express bus (new) | 6 peak buses: From 185th Sta P&R, Walker, Sunset, express to Portland | 5/93 - 9/97 | 91 | \$1,043,250 | \$0 |
| A11 | Line #89: Rock Creek Express bus (expanded service) | 6 additional peak buses: Frequent 185th to Portland via interim Sunset P&I | 5/93 - 9/97 | 92 | \$1,043,250 | \$0 |
| | OTHER BUS SERVICES | | | | | |
| A12 | Fall 1993 scheduled bus service improvements | Service improvements to be a part of Tri-Met operation plan & budget | on-going | 133 | \$0 | oper budget |
| A13 | Line #60: Leahy Road bus (route change) | Reroute via Barnes/Burnside instead of Cedar Hills Transit Center | 5/93 - 9/97 | 16 | \$0 | \$0 |
| | CARPOOL PROGRAM | | | | | |
| A14 | Carpool study: consulting services | Background & program design study | 7/92 - 9/92 | *** | \$13,000 | \$0 |
| A15 | Corridor-focused carpool matching service & promo | \$521K yr 1, \$428K next 2 yrs, 4 mos estimate. \$1,535K estimated total cost | 5/93 - 9/96 | 300 | | \$0 |
| | computer matching software | Replaces the existing Tri-Met program, serves beyond the TMP | spring 93 | | \$55,000 | |
| | program administration | Carpool Coordinator, clerical, partial Service Planning/Marketing Mgrs | 5/93 - 9/96 | | \$385,467 | |
| | rideshare representatives | 4 to 5 marketing representatives | 5/93 - 9/96 | | \$670,133 | |
| | matching clerks | 2 to 3 carpool matching clerks | 5/93 - 9/96 | | \$270,667 | |
| | professional and technical support | Half time computer analyst / education and training | spring 93 | | \$53,200 | |
| | materials and services | Remote access development, postage, answering service, etc. | 5/93 - 9/96 | | \$100,000 | |
| A16 | Regional carpool matching service & promo | It is proposed that the corridor program transition into a regional program. | 5/93 - 8/98 | *** | \$0 | \$2-3 M/yr? |
| A17 | Cedar Hills Park & Pool lot conversion (see #A8 above) | 35 space lot available for carpools once park & ride is moved to Sunset TC. | 5/93 - 9/97 | *** | (see above) | \$0 |

Note: Bus routes identified above are subject to change. Those as noted are presented as examples of service that might be offered.

* supports overall TMP; ** supports bus program; *** supports carpool program; **** promotes traffic flow

| # | CORE STRATEGIES (continued) | DESCRIPTION AND NOTES | ESTIM TIME LINE | PK HR MODE SHIFT | TMP COST ESTIMATE OVER 5 YRS | OTHER FUNDING SOURCES |
|-----|--|--|-----------------------|------------------------|------------------------------------|-----------------------------|
| | INCENTIVES TO SHIFT MODE | | | | | |
| | HIGHWAY MANAGEMENT INCENTIVES | | | | | |
| A18 | Wilshire to Catherine La EB on-ramp queue jump lane | Bus & carpools. Part of ODOT P&R construction contract. Saves 4 min. | 5/93 | 8 | \$30,000 | \$0 |
| A19 | Parkview EB bound on-ramp queue jump lane | Bus & carpools. Part of ODOT P&R construction contract. Saves 4 min. | 5/93 | ? | \$30,000 | \$0 |
| A20 | Murray Boulevard E bound on-ramp queue jump lane | Serves carpools only. Part of on-going reconstruction work on Sunset. | fall 92 | *** | \$0 | ? |
| A21 | 185th eastbound on-ramp queue jump lane | For bus & carpools. Part of on-going reconstruction work. Saves 2.5 min. | fall 92 | 4 | \$0 | ? |
| A22 | Cornelius Pass Rd E bound on-ramp queue jump lane | For bus & carpools. Part of on-going reconstruction work. Saves 2.5 min. | fall 92 | ? | \$10,000 | ? |
| A23 | Beaverton-Hillsdale/Capitol/Bertha bypass lane | Inbound left turn intersection improvement—shoulder paving & markings. | 5/93 | ? | \$0 | \$50,000 |
| A24 | Sunset bus only lane: 185th to Cedar Hills Boulevard | Eastbound shoulder bus lane 185th to Cedar Hills. Constrained at overpass | 6/93 | 11 | \$100,000 | \$0 |
| A25 | Sunset bus only lane: Cedar Hills Blvd to Hwy 217 | Eastbound through bus lane from Cedar Hills overpass to 217 interchange | 5/94 | 0 | \$20,000 | \$0 |
| | BUS RIDING INCENTIVES | | | | | |
| A26 | Free bus introductory tickets w/ mailing | e.g. 10 ride tickets to all "corridor" residents, 2X. Loss of some fare revenue. | 2/93 – 2/94 | ** | \$2,000 | \$0 |
| A27 | Improved security at P&R and transit centers | Assumes 1.5 transit police@ \$50K/yr X 52 months plus 1 car@ \$15K. | 5/93 – 9/97 | **/** | \$0 | \$340,000 |
| | CARPOOL INCENTIVES | | | | | |
| A28 | Guaranteed ride home for carpool (& bus) users | Provides ride home when schedule shift forces missed carpool. Taxi service. | 5/93 – 8/98 | *** | \$50,000 | \$0 |
| A29 | Downtown Portland discounted / free parking program | City lots, Westside users only, \$75/mo x 100 spaces x 52 mos + 30K admin? | 5/93 – 9/97 | *** | \$420,000 | \$0 |
| | HIGHWAY TRAFFIC FLOW MANAGEMENT | | | | | |
| | HIGHWAY INCIDENT MANAGEMENT | | | | | |
| A30 | Disabled vehicle pullouts on Sunset / Hwy 217 | 5 potential locations at (Zoo / Sylvan / 217?) interchanges @ \$10,000 each. | 5/93 – 8/98 | **** | \$50,000 | \$0 |
| A31 | Disabled vehicle standby towing operation | Assumes contractor provided 3 tow trucks@ \$35,000/yr. | 5/93 – 9/97 | **** | \$0 | \$455,000 |
| A32 | Increased police supervision of traffic hot spots | Emergencies, HOV enforcement, neighborhoods & feedback. 2 officers & car | 5/93 – 8/98 | **** | \$0 | \$448,334 |
| | CAPACITY AND FLOW IMPROVEMENT | | | | | |
| A33 | Freeway ramp metering (on-ramp signal control) | To be installed at Murray, Cornell and 185th w/ current ODOT work. | fall 92 | **/** | \$0 | ? |
| A34 | Barnes Road: Catlin to hospital signal improvements | Traffic detection loops being installed 7/92, signal phasing needed. | summer 92 | **** | \$0 | \$25,000 |
| A35 | Barnes / Miller intersection improvement | Pave outbound right turn lane, provide inbound left turn signal phase. | spring 93 | 0 | \$0 | \$10,000 |
| A36 | Burnside / Skyline (east) signal installation | New signals being installed by City of Portland in spring '93 | 5/93 | 0 | \$0 | ? |
| A37 | Burnside / Old Barnes (Pittock M.) signal installation | New signals being studied for installation by C. of Portland | spring 93 | 0 | \$0 | ? |
| A38 | Burnside / Tichner / MacLae signal installation | New signals being studied for installation by C. of Portland | spring 93 | 0 | \$0 | \$120,000 |
| A39 | Burnside / 23rd Avenue intersection rebuilding | Intersection rebuilding / Westover realignment planned by C. of Portland | spring 93 | 0 | \$0 | ? |
| A40 | Canyon Road signal control replacement | Scheduled by ODOT for near future, Walker Rd to Canyon Drive. | 2/93 | **** | \$0 | ? |
| A41 | Canyon Rd/ Hwy 217/ BH Hwy lane redesignation | Redirecting turn/through lanes at 2 locations for better flow | spring 93 | **** | \$0 | ? |
| A42 | Added lane exit option from I-405 SB to Sunset | Add 2nd lane from I-405 S to Sunset WB. Restripe, add split impact barrier | 5/93–perm. | **** | \$0 | \$50,000 |
| | NEIGHBORHOOD IMPACT MITIGATION | | | | | |
| A43 | Local street traffic monitoring program | Periodic checking of volumes & speed on local streets with response plan | 5/93 – 8/98 | 0 | \$40,000 | \$0 |
| A44 | Provision for temporary local road traffic restrictors | Signs, barrel diverters, entry blockades as needed for cut-thru traffic | 5/93 – 8/98 | 0 | \$100,000 | \$0 |

* supports overall TMP; ** supports bus program; *** supports carpool program; **** promotes traffic flow

| # | CORE STRATEGIES (continued) | DESCRIPTION AND NOTES | ESTIM TIME LINE | PK HR MODE SHIFT | TMP COST ESTIMATE OVER 5 YRS | OTHER FUNDING SOURCES |
|-----|--|--|-----------------------|------------------------|------------------------------------|-----------------------------|
| | MARKETING AND INFORMATION | | | | | |
| | MARKETING PROGRAMS | | | | | |
| A45 | License plate survey (Sunset Highway) | Fall 1993 license plate survey on Sunset Hwy | fall 1992 | * | \$50,000 | \$0 |
| A46 | Radio: creative and production | 3 30-second spots using public service time / yr, \$10,500 + \$39,500 creative | 5/93 - 8/96 | * | \$50,000 | \$0 |
| A47 | Newspaper advertisements: creative / production | 5 col X 18" ad and 2 col X 2" ad creative/production work | 2/93 - 8/96 | * | \$17,500 | \$0 |
| A48 | Newspaper advertisements: Westside Oregonian | 3 insertions of 5 col X 18" ad & 24 of small 2 col X 2" ad / yr | 5/93 - 8/96 | * | \$106,750 | \$0 |
| A49 | Direct household & employer packet production | Production of mail-out packet supporting the TMP and incentive programs | 2/93 - 8/96 | * | \$399,350 | \$0 |
| A50 | Direct mailing of TMP promotional packet | Mailing to 40,000 residents 3X along bus routes & license plate survey / yr | 5/93 - 8/96 | * | \$50,400 | \$0 |
| A51 | Exterior bus advertisements | Production of 60 each of 4 different exterior boards / year | 5/93 - 8/96 | * | \$70,000 | \$0 |
| | INFORMATION AND COMMUNICATION | | | | | |
| A52 | Traffic advisory coordinated with local radio stations | ODOT/Tri-Met staff time needed to work with selected or all radio stations. | 5/93 - 8/98 | * | \$50,000 | \$0 |
| A53 | Fixed / standard directional / advisory road signs | Signs & installation @ \$100 X 50 signs, used as needed | 5/93 - 8/98 | * | \$5,000 | \$0 |
| A54 | Variable message road signs | 2 portable, electronic, variable message, roadside signs @ \$25,000 ea. | 5/93 - 8/98 | * | \$0 | \$50,000 |
| A55 | Park & Ride lot direction signs | Signs & installation @ \$100 X 50 signs to facilitate P&R access | 5/93 - 8/98 | * | \$5,000 | \$0 |
| A56 | Public and neighborhood meetings | Community Affairs function to inform community groups & obtain feedback | 5/93 - 8/98 | * | \$0 | CA budget |
| A57 | Construction/delay informational phone numbers | Easily added to the existing Tri-Met telephone information system | 5/93 - 9/97 | * | \$0 | \$0 |
| | SUBTOTAL: CORE TMP | | | 852 | \$6,610,717 | \$1,605,834 |

* supports overall TMP; ** supports bus program; *** supports carpool program; **** promotes traffic flow

| # | BACKUP STRATEGIES (to be implemented as needed) | DESCRIPTION AND NOTES | ESTIM TIME LINE | PK HR MODE SHIFT | TMP COST ESTIMATE OVER 5 YRS | OTHER FUNDING SOURCES |
|-----|--|---|-----------------------|------------------------|------------------------------------|-----------------------------|
| | MODE SHIFT | | | | | |
| | EXPRESS BUSES (see footnote) | | | | | |
| B1 | Shute Road interim park and ride lot | Loaned 50 space lot at TOK development at Shute & Evergreen (line #58) | 5/93-9/93 | ** | \$5,000 | \$0 |
| B2 | Line #58: Sunset Express bus (expanded service) | 6 additional peak buses: Serves Hillsboro, Cornelius Pass & Shute P&Rs | 5/93-9/97 | 76 | \$1,043,250 | \$0 |
| B3 | Hall Boulevard Express (line #78 variation) | 6 peak buses: Washington Square to Canyon, express to Portland | 5/93-9/97 | 102 | \$1,043,250 | \$0 |
| B4 | Line #88: SW 198th Avenue Express | 6 additional peak buses: Serve 185th Sta P&R, use Cornell 185-158th | 5/93-9/97 | 33 | \$1,043,250 | \$0 |
| B5 | Line #59: Cedar Hills Express | 5 peak buses: reroute to serve Cedar Hill/Sunset TC, express to Portland | 5/93-9/97 | 89 | \$869,375 | \$0 |
| B6 | Install bike racks at P&R lots & transit centers | Expands P&R capacity, attracts new users of transit | 5/93->>> | 10 | \$50,000 | \$0 |
| | OTHER BUS SERVICES | | | | | |
| B7 | Line #52: Farmington Road Express | 2 peak buses: Normal line 52 with express operation from BTC to Portland | 5/93-9/97 | 23 | \$347,750 | \$0 |
| B8 | Line #58 / 88 / 57X "reverse" Express | 6 additional peak buses: to Nike, Tektronix, Cornell Oaks, etc. | 5/93-9/97 | 0 | \$1,043,250 | \$0 |
| | CARPOOL/VANPOOL | | | | | |
| B9 | Carpool study: consulting services | Study to investigate transfer of expertise from other cities | 7/93-9/93 | *** | \$12,000 | \$0 |
| B10 | Additional preferential carpool parking (see #A19) | Add'l city lots, Westside only, \$75/mo x 100 spaces x 52 mos + 30K admin. | 5/93-9/98 | 0 | \$420,000 | \$0 |
| B11 | Employer based vanpools | Attractive if employer operated & funded, otherwise full program needed | 5/93-8/98 | 0 | \$0 | \$0 |
| B12 | Focused Barnes/Sunset car & van pool program | Focused on apts between Barnes & Sunset, need apt mgmnt assistance | 5/93-8/98 | 0 | \$10,000 | \$0 |
| B11 | Park & Pool carpool staging lots | However difficult, temporary, lease/informal sites may need to be found | 5/93-8/98 | 0 | \$100,000 | \$0 |
| | INCENTIVES TO SHIFT MODE | | | | | |
| | BUS RIDING INCENTIVES | | | | | |
| B12 | Discounted bus pass from / to selected P&R lots | 100 riders x \$39 x 52wks + admin. Concern over perception of existing riders | 5/93-9/97 | ** | \$220,000 | \$0 |
| | HIGHWAY MANAGEMENT INCENTIVES | | | | | |
| B13 | Westbound Sunset climbing lane-Jefferson to Zoo | Truck conflict. HOV by default. No incentive for autos. Stripe/sign as needed | 5/93-8/98 | 0 | | |
| B14 | Sunset Hwy early exit bus lanes | Serves in lieu of full, outbound HOV lanes on Sunset, logistical difficulties | 5/93-9/97 | 0 | \$500,000 | \$0 |
| | HIGHWAY TRAFFIC FLOW MANAGEMENT | | | | | |
| | NEIGHBORHOOD IMPACT MITIGATION | | | | | |
| B15 | Provision for temporary local road traffic restrictors | Provision for additional signs, speed humps, diverters, blockades as needed | 5/93-8/98 | 0 | \$100,000 | \$0 |
| | MARKETING AND INFORMATION | | | | | |
| | MARKETING PROGRAMS | | | | | |
| B16 | Television: creative and production | 2 60-second spots / yr | 2/93-8/96 | * | \$45,500 | \$0 |
| B17 | Television: air time | 60 second spots for 18 weeks with Columbia Cable / yr | 5/93-8/96 | * | \$350,000 | \$0 |
| B18 | Bus exterior ads for cooperating TMP businesses | 60 ea of 4 different exterior boards. Only if there are such businesses. | 5/93-9/97 | 0 | \$70,000 | \$0 |
| | SUBTOTAL: BACKUP TMP | | | 333 | \$7,272,625 | \$0 |
| | GRAND TOTAL: CORE PLUS BACKUP TMP | | | 1185 | \$13,883,342 | \$1,555,834 |

Note: Bus routes identified above are subject to change. Those as noted are presented as examples of service that might be offered.

* supports overall TMP; ** supports bus program; *** supports carpool program; **** promotes traffic flow

| # | STRATEGIES W/ IMPLEMENTATION PROBLEMS | DESCRIPTION AND NOTES | ESTIM TIME LINE | PK HR MODE SHIFT | TMP COST ESTIMATE OVER 5 YRS | OTHER FUNDING SOURCES |
|-----|---|--|-----------------------|------------------------|------------------------------------|-----------------------------|
| | MODE SHIFT | | | | | |
| | CARPOOL/VANPOOL | | | | | |
| C1 | Park & Pool carpool staging using existing P&R lots | Existing lots have no capacity for non-transit use. Use informal staging. | 5/93 - 8/98 | | | |
| C2 | Exclusive Park & Pool carpool staging lots | Sites for permanent lots are hard to find & are expensive | 5/93 - 8/98 | | | |
| C3 | Organized street side "hitchhiking" w/ ID tags | Easy carpooling w/o match system, tough to manage, uncertain potential | 5/93 - 8/98 | | | |
| | INCENTIVES TO SHIFT MODE | | | | | |
| | HIGHWAY MANAGEMENT INCENTIVES | | | | | |
| C5 | Extension of Canyon Road queue jump lane | No room for additional lane. At least doubles existing 4 min. savings | 5/93 - 8/98 | 26 | \$200,000 | \$0 |
| C6 | Sunset split 1:1 HOV lanes east of Hwy 217 | Would not be operationally possible & would be impossible to enforce | 5/93 - 8/98 | | | |
| C7 | HOV lanes on alternate non-Sunset route in peak hr | Tough to find room, accommodate turns & local traffic, time / dist too great | 5/93 - 8/98 | | | |
| C8 | Prohibit non-HOVs on selected critical hwy on-ramps | This would create major backups & detours & would not be popular | 5/93 - 8/98 | | | |
| | DISINCENTIVES TO HIGHWAY DRIVE ALONE | | | | | |
| C9 | Congestion pricing (highway tolls / parking fees) | No legislative precedent for tolls. Parking policy has regional implications | 5/93 - 8/98 | | | |
| | HIGHWAY TRAFFIC FLOW MANAGEMENT | | | | | |
| | NEIGHBORHOOD IMPACT MITIGATION | | | | | |
| C10 | Discourage semi & large trucks during peak | Legal / political issues in denying access. Signs, mailings and enforcement. | 5/93 - 8/98 | 0 | \$10,000 | \$0 |
| | CAPACITY AND FLOW IMPROVEMENT | | | | | |
| C11 | Reversible flip flop lanes (on Sunset/217?) | Would hurt reverse commute flow, logistically tough in construction setting | 5/93 - 8/98 | 0 | | |
| C12 | Optimize traffic management on I-5 | Does not really serve same corridor, though there could be marginal benefit | 5/93 - 8/98 | | | |
| | MARKETING AND INFORMATION | | | | | |
| | INFORMATION AND COMMUNICATION | | | | | |
| C13 | Variable message, permanent electronic road sign | 1 permanent, electronic, variable message sign @ \$150,000 | 5/93 - 8/98 | 0 | \$150,000 | \$0 |
| | SUBTOTAL: PROBLEM TMP STRATEGIES | | | 26 | \$210,000 | \$0 |



METRO

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(503) 221-1646
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August 13, 1992

Mr. Michael P. Hollern, Chair
Oregon Transportation Commission
c/o Brooks Resources
P.O. Box 6119
Bend, Oregon 97708

Dear Mike:

On behalf of the Joint Policy Advisory Committee on Transportation, we congratulate you on the completion of the Oregon Transportation Plan (OTP) and urge its adoption. We are encouraged by the Department's recognition of the multi-modal transportation needs of the state.

In so doing, we have the following comments:

1. We look forward to continuing to work with ODOT to establish the financing mechanisms to implement the OTP. It is important that this be done in a comprehensive manner to ensure that the different modes called for in the OTP can advance. It is also important that the financing strategies be structured in a manner to reinforce the changing policy direction to encourage alternative modes.
2. In the past, we have questioned the highway level-of-service standards and continue to feel that they are set too high for the metropolitan area. This leads to construction of excess capacity, too high an estimate of highway "needs" and improvement of a mode competitive to the called-for transit improvements. The OTP recognizes that this will be re-evaluated with an update to the Oregon Highway Plan. We look forward to resolving this issue at that time.
3. We support the roles called for in the OTP for metropolitan planning organizations (MPOs), local governments and the regional ODOT offices. A strong partnership between these parties is essential to address the state, regional and local transportation problems within the metropolitan areas. We appreciate ODOT's past involvement in regional transportation planning and support the intended partnership outlined in the OTP.

We understand that the Commission has determined that it lacks the authority to require regional and local governments to comply with OTP policies. As such, the

Executive Officer
Rena Cusma

Metro Council

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District 7

Janey Collier
District 9

Roger Buchanan
District 10

David Washington
District 11

Andi Hansen
District 12

Implementation Chapter presents "guidelines" rather than "requirements" for regional and local governments. We feel that this distinction needs further clarification since a series of policies in fact are presented as requirements (i.e., MPOs shall..., county and city transportation planning shall...). We would like the opportunity to discuss the specific changes needed to reflect this change before the Commission considers adoption of the OTP.

4. We understand that the section on "pricing" (i.e., road pricing, parking pricing) is intended as an illustration of the magnitude of effort required to meet the LCDC VMT/capita target. As you know, this target could be met through a variety of land use, demand management, transit, bike, pedestrian or pricing actions and that the specific action plan remains to be determined for each MPO area. We support the inclusion of this section as an illustration and look forward to the continued involvement of ODOT in this issue.
5. We urge ODOT to continue refinement of the Oregon Rail Passenger Policy and Plan taking into consideration the following:
 - a. Planning should be closely coordinated with the State of Washington and Vancouver, B.C. in order to produce a single Pacific Northwest strategy which decides the extent to which incremental rail improvements should be implemented and whether to pursue high-speed rail, when it should be implemented and with what technology.
 - b. The Portland Union Station should be recognized as the principal multi-modal center in the Portland region for intercity rail service. It already exists; funds are being spent for its upgrade; it is adjacent to the intercity bus terminal and connects to Tri-Met; and is centrally located for easy access.
 - c. Further consideration of a Willamette Valley/Columbia Gorge commuter rail system should be evaluated in the context of land use tradeoffs for growth within the metropolitan area versus in nearby satellite communities.
 - d. Financial commitments for incremental improvements to intercity rail services should take into consideration the availability of urban transit as a mode of access to the intercity rail service. Intercity rail ridership will be more successful if improved urban transit, including expanded LRT

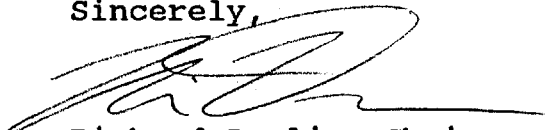
Mr. Hollern
August 13, 1992
Page 3

service, provides an attractive mode of access. As such, close attention needs to be paid to ensuring intercity rail is not funded at the expense of urban transit and LRT expansion.

6. The section on "State Modal, Intermodal and System Management Plans" needs clarification. In the section titled "Modal and Intermodal Plans," the term inter-modal is used when multi-modal appears to be the intent. The section on "System Management Plans" provides what we believe to be the current emphasis for intermodal plans, focusing on the terminals where passengers and freight connect from one mode to another, to and from statewide, national and international destinations outside urban areas.
7. We applaud the inclusion of bicycle and pedestrian level-of-service standards as a good initial step. Future updates should consider more comprehensive policies.
8. We encourage you to work with the Port of Portland on the issues of a new Willamette Valley International airport and a new Klamath Falls intermodal freight airport hub. You should take advantage of their expertise as the air freight and air passenger technologies evolve. Current and expected changes in technology will affect how existing facilities will be managed, thereby increasing their capacity. These changes should be taken into account as planning for new facilities is undertaken.

Thank you for the opportunity to participate and comment on the first Oregon Transportation Plan.

Sincerely,



Richard Devlin, Chair
Joint Policy Advisory
Committee on Transportation

RD:AC:lmk

METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

DRAFT

August 4, 1992

Mr. Michael P. Hollern, Chair
Oregon Transportation Commission
c/o Brooks Resources
P.O. Box 6119
Bend, Oregon 97708

Dear Mike:

On behalf of the Joint Policy Advisory Committee on Transportation, we congratulate you on the completion of the Oregon Transportation Plan (OTP) and urge its adoption. We are encouraged by the Department's recognition of the multi-modal transportation needs of the state.

In so doing, we have the following comments:

1. In the past, we have questioned the highway level-of-service standards and continue to feel that they are set too high for the metropolitan area. This leads to construction of excess capacity, too high an estimate of highway "needs" and improvement of a competitive mode for the called-for transit improvements. The OTP recognizes that this will be re-evaluated with an update to the Oregon Highway Plan. We look forward to resolving this issue at that time.
2. We support the roles called for in the OTP for metropolitan planning organizations (MPOs), local governments and the regional ODOT offices. A strong partnership between these parties is essential to address the state, regional and local transportation problems within the metropolitan areas. We appreciate ODOT's past involvements in regional transportation planning and support the intended partnership outlined in the OTP.

We understand that the Commission has determined that it lacks the authority to require regional and local governments to comply with OTP policies. As such, the Implementation chapter presents "guidelines" rather than "requirements" for regional and local governments. We feel that this distinction needs further clarification since a series of policies in fact are presented as requirements (i.e., MPOs shall..., county and city transportation planning shall...).

Mr. Hollern
August 4, 1992
Page 2

3. We understand that the section on "pricing" (i.e., road pricing, parking pricing) is intended as an illustration of the magnitude of effort required to meet the LCDRC VMT/capita target. As you know, this target could be met through a variety of land use, demand management, transit, bike, pedestrian or pricing actions and that the specific action plan remains to be determined for each MPO area. We support the inclusion of this section as an illustration and look forward to the continued involvement of ODOT in this issue.
4. We urge ODOT to continue refinement of the Oregon Rail Passenger Policy and Plan taking into consideration the following:
 - a. Planning should be closely coordinated with the State of Washington in order to produce a single Pacific Northwest strategy for incremental rail improvements leading to a common decision on high-speed rail.
 - b. The Portland Union Station should be recognized as the principal multi-modal center in the Portland region for intercity rail service. It already exists; funds are being spent for its upgrade; it is adjacent to the intercity bus terminal and connects to Tri-Met; and is centrally located for easy access.
 - c. Further evaluation of a Willamette Valley/Columbia Gorge commuter rail system should be evaluated in the context of land use tradeoffs for growth within the metropolitan area versus in nearby satellite communities.
 - d. Financial commitments for incremental improvements to intercity rail services should take into consideration the availability of urban transit as a mode of access to the intercity rail service. Intercity rail ridership should be more successful if improved urban transit, including expanded LRT service, provides an attractive mode of access. As such, close attention needs to be paid to ensuring intercity rail is not funded at the expense of urban transit and LRT expansion.
5. The section on "State Modal, Intermodal and System Management Plans" needs clarification. In the section

Mr. Hollern
August 4, 1992
Page 3

titled "Modal and Intermodal Plans," the term inter-modal is used when multi-modal appears to be the intent. The section on "System Management Plans" provides what we believe to be the current emphasis for intermodal plans, focusing on the terminals where passengers and freight connect from one mode to another.

6. We applaud the inclusion of bicycle and pedestrian level-of-service standards as a good initial step. Future updates should consider more comprehensive policies.
7. We look forward to receiving the Technical Document supporting the OTP and the necessary "Findings" documenting compliance with Oregon Revised Statutes, the Goal 12 Administrative Rule and the ODOT/LCDC State Agency Coordinating Agreement. We would appreciate the opportunity to review these documents before the Commission considers adoption at its September 15 meeting.

Thank you for the opportunity to participate and comment on the first Oregon Transportation Plan.

Sincerely,

Richard Devlin, Chair
Joint Policy Advisory
Committee on Transportation

RD:AC:lmk

August 11, 1992

FILE CODE:
PLA 16

CITIZENS OF OREGON

On behalf of the Oregon Transportation Commission, I am pleased to present the public hearing draft of the Oregon Transportation Plan (OTP). The OTP presents a challenging vision for Oregon's future and an aggressive, comprehensive transportation plan to move us toward that vision. Upon its adoption by the Commission, the OTP will become the state's transportation policy to guide transportation decisions into the 21st century.

Over the next 20 years, Oregon's population is projected to grow by approximately one million people. How we provide for our expanded transportation needs is crucial to the state's continued livability and economic strength. With this thought firmly in mind, the Commission initiated the development of the transportation plan in November, 1990. Since then, citizens from around the state have contributed their ideas on Oregon's transportation future as members of numerous advisory committees to the plan or participants in the nearly 50 public meetings. The Oregon Transportation Plan public hearing draft is the result of this process.

The Transportation Commission, in cooperation with the Department of Transportation, will hold a public hearing on the draft plan Tuesday, August 25, 1992, at 1:30 p.m. in the Bend Public Works Building, 1375 NE Forbes Road, Bend, Oregon. You are invited to participate in the hearing or to send written comments no later than Friday, August 28, 5:00 p.m. to the Strategic Planning Section, Room 405 Transportation Building, Salem, Oregon, 97310.

Thank you for sharing our interest in Oregon's future.



Mike Hollern, Chairman
Oregon Transportation Commission



PO Box 6119
Bend, OR 97708



OREGON TRANSPORTATION PLAN UPDATE

AUGUST 1992

Citizens Help Shape Oregon's Transportation Future

Corridors for freight traffic, improved air, rail and transit services for rural communities, better passenger connections, increased facilities for bicycles and pedestrians, less congestion in urban areas, and adequate funding for maintaining highways and other

summarized below, as they modified the System Element.

Growth and Direction of Resources:

- Use transportation improvements to assist rural economies.

Alternatives to the Automobile:

- Develop alternative modes so that people can be less dependent on the automobile.
- Assist the operation of rural inter-city bus lines and transit services.

Highways:

- Develop more east-west connections to link cities in southern Oregon.
- Re-examine the proposal for a tourism highway from Grants Pass to Gold Beach since it received mixed and unenthusiastic responses.
- Examine the impacts of measures to limit access to U.S. 101 and consider bypasses for through traffic.
- Improve incident management to assist traffic movement in urban areas.

See CONCERNS, Page 5

Citizens and public officials had many of the same concerns as those who had made comments in the fall.

transportation facilities were major concerns of those who spoke on the Multimodal System Element during the second round of public meetings on the Oregon Transportation Plan held in June.

ODOT administrators and staff conducted 23 public meetings around the state on the System Element. The Policy Element was the focus of 25 public meetings in November-December 1991. Although the meetings on the System Element generally were held in different cities than the earlier meetings, citizens and public officials had many of the same concerns as those who had made comments in the fall.

Supplementing the comments at the public meetings are over 63 letters from state and local jurisdictions, organizations and individuals. The staff has summarized these in the "Commentary" for the Oregon Transportation Plan Steering Committee and reproduced them in an appendix to the draft plan.

Steering Committee members considered these concerns and comments,

- Address transportation concerns of the aging population.
- Plan transportation improvements to shift growth to less populated parts of the state.
- Coordinate transportation planning in the Valley through a Willamette Valley Coordinating Committee.

Land Use:

- Coordinate land use patterns and transportation to facilitate walking, bicycling and transit. But how do we reconcile land use and transportation where land use zones are already established and may overload the highways?
- Use existing corridors and rights of way for transportation improvements in the Willamette Valley to preserve agricultural land.
- Re-evaluate the promotion of park and ride facilities since they conflict with mixed use and high density development at transit stations.

OTP Hearing

The Oregon Transportation Commission will hold a public hearing on the Oregon Transportation Plan on Tuesday, August 25, 1992, at 1:30 p.m. at the City of Bend Department of Public Works Building, 1375 NE Forbes Road.

The hearing record will remain open for written testimony until Friday, August 28 at 5:00 p.m. The commission welcomes comment on the plan.

The New Oregon Trail—the Oregon Transportation Plan

Executive Summary

The purpose of the Oregon Transportation Plan is to guide the development of a safe, convenient and efficient transportation system which promotes economic prosperity and livability for all Oregonians.

Oregonians are setting bold new directions for the state's future transportation system. The directions grew through the Oregon Progress Board's Benchmarks, the Land Conservation and Development Commission's (LCDC) Transportation Planning Rule, and now the goals and policies developed in the Oregon Transportation Plan. These directions respond to concerns about a growing population—from 2.8 million in 1990 to 3.8 million in 2012, increased congestion in urban areas, adequate services with limited resources, and transportation needed to enhance and serve a diversified economy.

The new directions call for increased use of alternatives to the automobile such as rail, public transit, bicycling and walking, increased intermodal connections, and increased links to national and international markets. These are reflected in the goals, policies and actions of the Policy Element, the first part of the Oregon Transportation Plan.

The Goals of the Oregon Transportation Plan

The Policy Element establishes four goals for Oregon's future transportation system:

GOAL 1 - SYSTEM CHARACTERISTICS

To enhance Oregon's comparative economic advantage and quality of life by the provision of a transportation system with the following characteristics:

- **Balance**
- **Efficiency**
- **Accessibility**
- **Environmental Responsibility**

- **Connectivity among Places**
- **Connectivity among Modes and Carriers**
- **Safety**
- **Financial Stability**

GOAL 2 - LIVABILITY

To develop a multimodal transportation system that provides access to the entire state, supports acknowledged comprehensive land use plans, is sensitive to regional differences, and supports livability in urban and rural areas.

GOAL 3 - ECONOMIC DEVELOPMENT

To promote the expansion and diversity of Oregon's economy through the efficient and effective movement of goods, services and passengers in a safe, energy efficient and environmentally sound manner.

GOAL 4 - IMPLEMENTATION

To implement the Transportation Plan by creating a stable but flexible financing system, by using good management practices, by supporting transportation research and technology, and by working cooperatively with federal, regional and local governments, Indian tribal governments, the private sector and citizens.

The second part of the OTP, the System Element, is a strategy to implement the OTP policies as well as the Benchmarks, Transportation Planning Rule, and the federal Intermodal Surface Transportation Efficiency Act (ISTEA).

The OTP Steering Committee chose the Preferred Plan after examining three funding alternatives: (1) an alternative with funding that does not increase with inflation, (2) an alternative that contains current funding with increases for inflation, and (3) an alternative that emphasizes economic development and livability. Even by changing funding priorities to emphasize alternative modes to the automo-

bile, both of the first two alternatives would result in increased congestion and reduced transit services. The Preferred Plan maximizes the economic development and livability goals and policies of the Policy Element.

The System Element

The Preferred Plan for the System Element meets the goals of the Policy Element in eight ways:

1. It identifies a multimodal system including air, rail, auto, truck, bus, bicycle, pedestrian, waterway and marine transportation, and pipelines to be implemented within the next 20 years.
2. It establishes minimum levels of service to be achieved by each mode of transportation.
3. It identifies other needed major improvements.
4. It identifies the transportation corridors and facilities which serve statewide and interstate functions.
5. It relies on transportation system and facility management processes including demand management and pricing that reflect usage. User fees might include peak period pricing on congested highways and increased parking fees in urban areas.
6. It identifies land use policies that must be put into effect to achieve the goals of the transportation plan. The plan requires close coordination between land use and transportation and assumes that urban growth boundaries will be maintained and that the development of mixed use, pedestrian friendly neighborhoods and commercial areas will reduce demands for automobile trips and support transit services.
7. It identifies local, state and federal roles in implementing the plan and sets planning and perfor-

mance guidelines for state modal plans and local and regional transportation plans.

- It estimates the financial requirements to implement the plan.

Under the Preferred Plan, illustrated on the map, the Steering Committee expects that by 2012 there should be:

- A transportation system that helps maximize economic opportunities and quality of life, as measured by the Oregon Benchmarks;
- Hourly intercity passenger service established in the Willamette Valley along I-5 between Eugene and Portland;
- A sevenfold increase in the use of telecommunications over 1990 use;
- High occupancy vehicle (HOV) lanes and peak period congestion pricing established on freeways and arterials in metropolitan areas;
- Intelligent Vehicle Highway System (IVHS) networks in metropolitan areas and on I-5 and I-84;
- Walking and bicycle trips at double the present rate, and transit at double the base case forecast in metro areas;
- Intercity bus or commuter bus service available to cities of over 2,500 population;

- Urban transit service available in communities over 25,000 population;
- Intermodal passenger terminals established in Portland, Salem, Eugene, Medford, and Bend;
- Enhanced rural commercial air service, particularly to Baker City and the La Grande area;
- International port improvements and maintained rail service on the lower Columbia River and Coos Bay;
- Improved intermodal freight hub facilities in Portland, Eugene, Klamath Falls, Umatilla/Boardman and in Idaho near Ontario;
- Additional major highway freight corridors on non-Access Oregon Highways;
- Additions to the statewide functional highway system;
- Natural gas pipelines developed to Coos Bay and Tillamook to help industrial development and make alternative transportation fuel available;
- Full implementation of the LCDC Transportation Rule;
- Establishment of a Willamette Valley Transportation System Coordination Area.

If the Preferred Plan cannot be implemented in its entirety, land use and

system management strategies will still be implemented to the fullest extent possible.

The plan depends on the cooperation and actions of federal, state, regional, and local governments, the private sector and citizens. The LCDC Transportation Planning Rule requires regional and local governments to be consistent with the state transportation plan, and the state will adopt regional transportation plans when they meet established criteria. The state will also work with federal land management agencies to coordinate transportation plans and projects.

Rail Passenger Plan Recommends Improvements

The Oregon Rail Passenger Policy and Plan, developed by the Rail Passenger Advisory Committee, is recommending a set of staged improvements for rail passenger service in the state. When the Oregon Transportation Commission adopts the recommendations in September, they will become part of the Oregon Transportation Plan.

Major recommendations include extending the Mt. Rainier train from Seattle to Portland south to Eugene; making incremental improvements to the mainline rail tracks so that speeds can increase to 110-125 mph; and designating Eugene to Vancouver, B.C. as a high speed corridor.

Oregon Transportation Plan Request Form

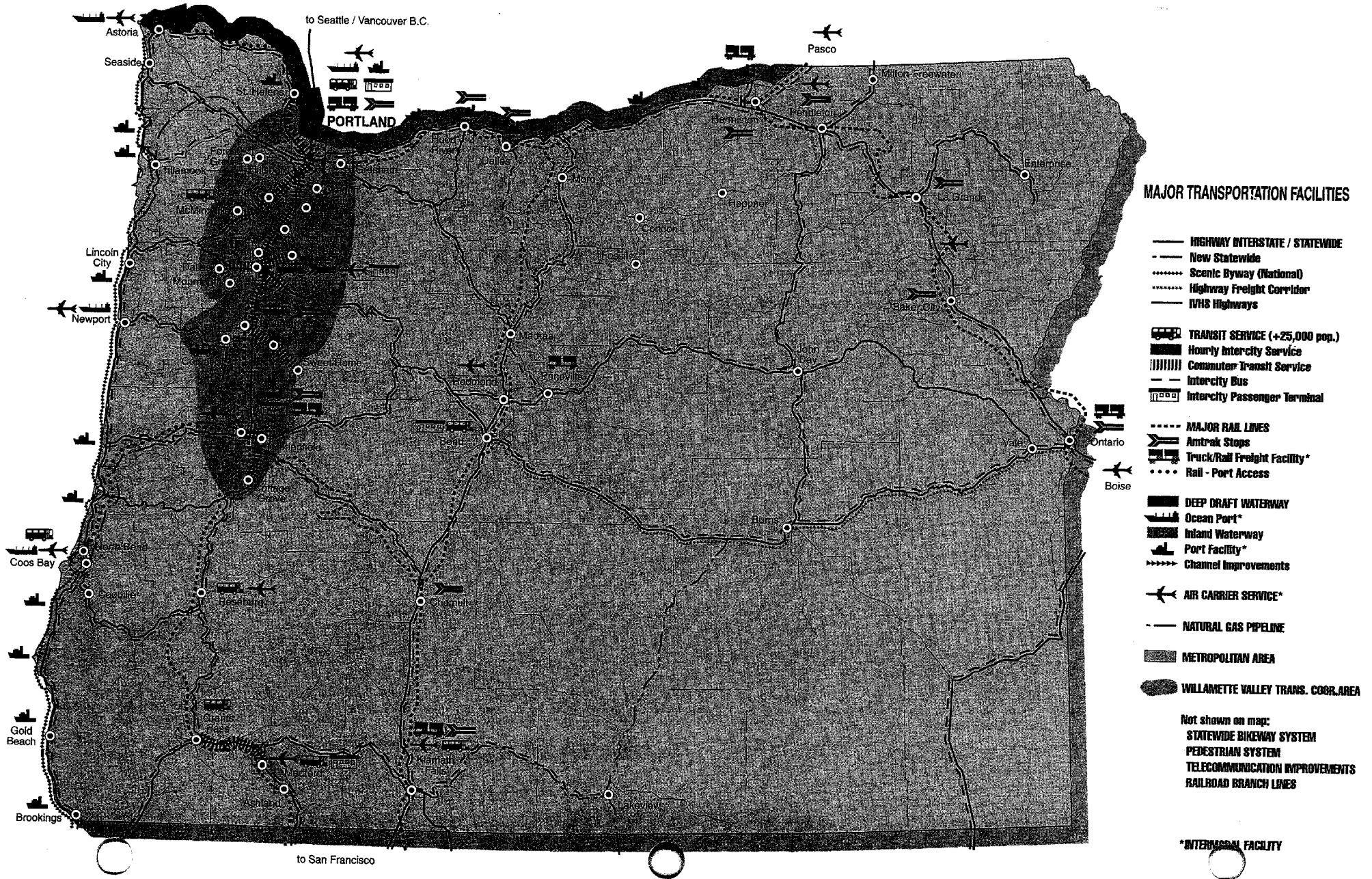
Copies of the OTP draft combining the Policy Element and System Element and the subject of the public hearing will be sent only to state, regional and local jurisdictions, port districts and those who have previously requested copies. If you would like a copy of the draft, please return this form to Carolyn Gassaway, Strategic Planning, Rm. 405, Transportation Building, Salem, OR 97310-1354 or call (503) 373-7571.

Name _____

Organization _____

Mailing Address _____

PREFERRED TRANSPORTATION SYSTEM BY THE YEAR 2012



Concerns, Ideas Considered

(Continued from Page 1)

- Facilitate freight movements in eastern Oregon through improvements to U.S. 97 and 395, and Hwy. 78.

Transit:

- Set higher transit minimum levels of service in the Oregon Transportation Plan (OTP).
- Link smaller cities with transit services to larger urban areas to provide transportation for the aging and disadvantaged.
- Improve specialized transit services, such as senior vans, to serve the general public.
- Develop better transit services for people on the coast and in central Oregon.
- Develop a super-bus traveling in the Willamette Valley which makes direct connections to bus services in urban areas along its route.
- To make congestion pricing in metro areas work, develop a good transit alternative.

Bicycles - Pedestrians:

- Increase the projected percentage of trips in the OTP taken by bicyclists and pedestrians.
- Emphasize and set minimum levels of service in the OTP for bicycling and pedestrians.
- Develop better facilities for bicyclists: bike lanes or separated bike paths, bike racks on transit and rail, and secure bicycle storage at destinations.

Rail:

- Develop a higher speed intercity rail system in the Willamette Valley for passenger service, and per-

haps interurban rail to McMinnville.

- Develop a rail passenger shelter at Chemult.
- Coordinate rail plans with California.
- Preserve rail lines for future transit needs.

Air:

- Enhance air service to the La Grande or Baker City airports.
- Develop air freight at Coos Bay and other southern and eastern Oregon cities.
- Enhance the present international airports instead of building a new one in the Willamette Valley.

Intermodal Connections:

- Develop more passenger interconnections between urban areas and within urban areas.
- Establish long-term parking at major bus and train connections.
- Develop more intermodal connections at airports.

Telecommunications:

- Make ODOT a leader in the relationship of telecommunications to transportation.

- Develop facilities in metro areas where people can meet with people in Salem via telecommunications. Their use will decrease the amount of travel to Salem for meetings.

Pipeline:

- Develop a natural gas pipeline to Burns and more reliable pipelines to Medford.

Finance:

- Have funding equity for all regions of the state.
- From some—use highway funds for highway uses. From others—open the gas tax for more flexibility and use the new federal approach to funding modes.
- Allocate enough funds for maintenance of facilities.
- Be aware that local governments may not have funds for local match for transportation development because of Measure 5.
- Establish toll roads and use parking fees to support alternatives to the automobile.
- Consider the impacts of congestion pricing on lower income families and on businesses dependent on frequent trips in metro areas.

Financing Strategy Underway

The OTP Finance Policy Advisory Committee, led by OTC chairman Mike Hollern, is continuing to discuss financing needs and options. The discussion is being coordinated with the Governor's Task Force on Motor Vehicle Emissions Reduction in the Portland metropolitan area and with Transportation '93, a coalition of over 40 transportation interest groups.

Concepts currently being discussed include development of an intergovernmental "transportation bank,"

modifications to the state constitutional limitation on the use of the gas tax, and maintaining the constitutional limit with the addition of new, more flexible revenue sources for all modes of transportation.

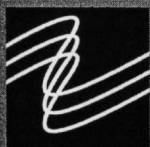
Financing concepts will be the subject of afternoon discussions at the Transportation Symposium on Sept. 18 and of further committee meetings this fall. The Transportation Commission plans to recommend a financing package to the legislature in November.

Steering Committee Recommends Plan for Hearing

At its July meeting, the OTP Steering Committee voted to send the Oregon Transportation Plan to public hearing and set the date and place for Tuesday, August 25, 1992, at 1:30 p.m. at the City of Bend Department of Public Works Building, 1375 NE Forbes Road.

The Steering Committee guiding the development of the plan is composed of the five members of the Oregon Transportation Commission, six state legislators, and representatives of the Governor's office, cities, counties and Tri-Met.

The hearing record will remain open for written testimony until Friday, August 28 at 5:00 p.m. Send testimony to Strategic Planning Section, Rm. 405, Transportation Building, Salem, OR 97310-1354.



Transportation Symposium set for Sept. 18

What is transportation's future nationwide and in our state? How is Oregon planning to take advantage of the federal Intermodal Surface Transportation Efficiency Act? How will the Oregon Transportation Plan change transportation in Oregon? How can we finance our transportation system?

National and state speakers will focus on these and other issues at the Oregon Transportation Symposium on Friday, September 18 from 8:30 a.m. to 3:00 p.m. in Portland.

For information and reservations, call Liz Griffin, Oregon Transit Association, 636-8188, or Dianne Marsh, ODOT, 378-3669.

Roads Financing Making Progress

The 1993 Oregon Roads Financing Study is on track, with a final report to be published in October. Lead consultant Booz, Allen and Hamilton said that research on statewide road system needs and revenue projects for the next 20 years is completed, and the year-long study is into the final stages of preparation.

Sponsored by the Oregon Department of Transportation, the Association of Oregon Counties and the League of Oregon Cities, the study will establish a new, comprehensive picture of the condition and unmet funding needs of Oregon's state highways, county roads and city streets.

Recommendations based on the results will go before the 1993 Legislature in coordination with recommendations from the Oregon Transportation Plan.

Keep your organization up-to-date on the future of transportation. Guest speakers are available on the Oregon Transportation Plan. Contact Dave Bishop, OTP Manager at 373-7571.

Oregon

DEPARTMENT OF TRANSPORTATION

Strategic Planning Section
Rm 405, Transportation Building
Salem, Oregon 97310-1354

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OREGON TRANSPORTATION PLAN FINDINGS OF COMPLIANCE WITH THE STATEWIDE PLANNING GOALS

SAC Program Requirements

ODOT's certified State Agency Coordination (SAC) Program and Oregon Administrative Rules Chapter 31, Division 15 describe the procedures that ODOT will follow when developing and adopting plans to assure that they comply with the statewide planning goals and are compatible with acknowledged comprehensive plans. The SAC Program recognizes that planning occurs in stages and that compliance and compatibility obligations depend on the stage of planning being undertaken. The SAC Program describes the step-wise process as follows:

ODOT's program for assuring compliance and compatibility recognizes the successive stages of transportation planning and establishes a process that coordinates compliance and compatibility determinations with the geographic scale of the plan and the level of detail of information that is available. At each planning stage, some compliance and compatibility issues come into focus with sufficient clarity to enable them to be addressed. These issues shall be resolved at that time. Other issues may be apparent but not seen clearly enough to determine compliance and compatibility. These issues shall be resolved in subsequent planning stages and any plan decisions that depend on their resolution shall be contingent decisions. The result of this successive refinement process shall be the resolution of all compliance and compatibility issues by the end of the project planning stage of the transportation planning program.

The department's coordination efforts at the transportation policy plan and modal systems plan stages will be directed at involving metropolitan planning organizations, local governments and others in the development of statewide transportation policies and plans. Since these plans have general statewide applicability and since ODOT has the mandate under ORS 184.618 to develop such plans, compatibility with the comprehensive plan provisions of specific cities and counties will not be generally established. However, compatibility determinations shall be made for new facilities identified in modal systems plans that affect identifiable geographic areas. Compliance with any statewide planning goals that specifically apply will be established at these planning stages.

The focus of the department's efforts to establish compatibility with acknowledged comprehensive plans will be at the facility planning and project planning stages of the planning program. At these stages, the effects of the department's plans are more regional and local in nature, although some statewide effects are also present.

The Oregon Transportation Plan is the transportation policy plan as defined in the SAC Program. As such, the department is following the coordination requirements for the policy plan. The department has done the following to comply with those requirements:

- At the beginning of the planning process, the ODOT Strategic Planning Section organized five policy advisory committees to identify key transportation issues and develop draft goals and policies to address the issues. The 70 members on the committees

were selected to represent diverse interests including private business and industry transportation users and providers, state agencies, regional and local governments, public interest groups, public transportation agencies and citizen advocates. In monthly meetings held in the spring of 1991 and February-March 1992, the committees drafted the OTP goals, policies and action statements that formed the Policy Element. Each committee was chaired by a transportation commission member and provided with technical support by ODOT staff and private consultants.

- The Strategic Planning Section also organized a state agency technical advisory committee to work in tandem with the policy advisory committees and in each stage of the planning process. The 17-member state agency TAC included representatives of all major divisions of ODOT, and other state and federal agencies including the state departments of Land Conservation and Development, Energy, Agriculture, Environmental Quality, Economic Development, and the Public Utility Commission. The TAC identified important transportation issues, suggested ways to coordinate the plan with other agency plans and reviewed and commented on the various drafts of the OTP.
- The Oregon Transportation Plan Steering Committee provided input and direction for the development of the System Element of the plan and reviewed and revised the Policy Element based on public comments. The 15-member committee included the five transportation commissioners, six state legislators, and representatives of the governor's office, cities, counties and transit districts.
- Two series of statewide public meetings totaling 48 meetings were held during the development of the OTP. A draft of the Policy Element was distributed in advance of 25 public meetings held in the fall of 1991, and a draft of the System Element was distributed in advance of 23 public meetings held in the spring of 1992. The meetings were publicized through the local media, two OTP newsletters, and two brochures that served as executive summaries for each element. The meetings were kept informal to encourage citizen participation. Written and oral comments were summarized by ODOT staff and presented in the form of commentary on the draft plan elements to assist advisory committee deliberations.
- The Strategic Planning Section sought input and support from regional and local governments throughout the planning process. ODOT's Local Officials Advisory Committee provided input periodically. Prior to statewide public meetings, drafts of the Policy Element and the System Element were distributed to all cities, counties, and metropolitan planning organizations, and input was sought during the 1991 annual conventions of the League of Oregon Cities and Associations of Oregon Counties. Plan development has included numerous consultations with MPO boards and staff members.
- The draft findings of compliance with statewide planning goals are being distributed with the draft OTP for public hearing review.
- The Transportation Commission in coordination with the Department is conducting a public hearing on the OTP on Tuesday, August 25, 1992. The hearing record will remain open for additional written public comment until Friday, August 28, 1992, 5:00 p.m. The Commission is scheduled to consider possible changes to the OTP based on the public hearing record and adopt the OTP on Tuesday, September 15, 1992.

- The findings of compliance with statewide planning goals will be adopted as part of the final OTP.
- Copies of the adopted OTP will be distributed to DLCD, cities, counties, MPOs, and participating state agencies, as well as to all interested persons and agencies who request copies.

Transportation Planning Rule

The Land Conservation and Development Commission adopted the Transportation Planning Rule (OAR 660-12) to implement Statewide Planning Goal 12 (Transportation) and "to explain how local governments and state agencies responsible for transportation planning demonstrate compliance with other statewide planning goals."

The Transportation Planning Rule describes transportation planning as follows (Section 010):

(1) As described in this division, transportation planning shall be divided into two phases: transportation system planning and transportation project development. Transportation system planning establishes land use controls and a network of facilities and services to meet overall transportation needs. Transportation project development implements the TSP by determining the precise location, alignment, and preliminary design of improvements included in the TSP.

Section 15 of the Transportation Planning Rule recognizes that ODOT's transportation system plan (TSP) is composed of a number of elements as described in the Department's State Agency Coordination (SAC) Program.

(1)(a) The state TSP shall include the state transportation policy plan, modal systems and transportation facility plans as set forth in OAR 731, Division 15.

The OTP is ODOT's policy plan. The policy plan is described in the SAC Program as follows:

This is the policy plan for the state transportation system, encompassing all modes of transportation. It addresses matters such as overall direction in the allocation of resources, coordination of the different modes of transportation, the relationship of transportation to land use, economic development, the environment and energy usage, public involvement in transportation planning, coordination with local governments and other agencies, transportation financing, and management of the Department.

As can be seen from this description, the OTP is intended to be broad in scope and general in nature. The contents of the plan are described in the introduction. More detailed transportation system planning is done in modal system plans (e.g. Highway Plan) and in facility plans (e.g. corridor plans).

Section 15 of the TPR describes ODOT planning responsibilities under the statewide planning goals.

(1) ODOT shall prepare, adopt and amend a state TSP in accordance with ORS 184.618, its program for state agency coordination certified under ORS 197.180, and OAR 660-12-030, 035, 050, 065 and 070. The state TSP shall identify a system of transportation facilities and services adequate to meet identified state transportation needs.

Following are findings relating to each of the sections of the TPR that apply to ODOT.

Section 030 - Determination of Transportation Needs

Section 030 identifies the basic requirements for determining transportation needs as follows:

- (1) The TSP shall identify transportation needs relevant to the planning area and the scale of the transportation network being planned including:
 - (a) State, regional and local transportation needs.
 - (b) Needs of the transportation disadvantaged.
 - (c) Needs for movement of goods and services to support industrial and commercial development planned for pursuant to OAR 660-09 and Goal 9 (Economic Development).

Since this plan is at a statewide scale, it addresses needs for transportation between regions of the state and between the state and other states and countries. Forecasts are projected at the county and metropolitan area levels. Identified corridors and facilities are those that serve a statewide function. Local and regional systems are addressed only where they serve a statewide function as a whole. In such cases, needs are addressed in the aggregate. Other elements of ODOT's TSP (modal and facility plans) will address transportation needs in more detail.

The plan addresses the needs of the transportation disadvantaged including the new requirements of the Americans with Disabilities Act. (See policy 1C and the corresponding actions.)

The plan also addresses the needs for the movement of goods and services. (Also see policies 1E, 1F, 3A, 3B, 3C, 3D, 3E and the corresponding actions. Also see base case forecasts for employment growth and identification of major ports, mainline rail lines and commercial air carrier service airports of statewide function.)

This section also contains the following additional requirements for identifying transportation needs in urban and MPO areas:

- (3) Within urban growth boundaries, the determination of local and regional transportation needs shall be based upon:

- (a) Population and employment forecasts and distributions which are consistent with the acknowledged comprehensive plan, including those policies which implement Goal 14, including Goal 14's requirement to encourage urban development on urban lands prior to conversion of urbanizable lands. Forecasts and distributions shall be for 20 years and, if desirable, for longer periods.

- (b) Measures adopted pursuant to 660-12-045 to encourage reduced reliance on the automobile.

- (4) In MPO areas, calculation of local and regional transportation needs also shall be based upon accomplishment of the requirement in 660-12-035(4) to reduce reliance on the automobile.

The OTP addresses these needs on an aggregate basis. The assumptions on which the need forecasts are based are consistent with the requirements above. The following are assumptions included in the OTP:

- Regional and local governments will continue to contain development within established urban growth boundaries.
- Urban areas will use compact and mixed use development patterns to enhance livability and preserve open space. These patterns will support transit and other alternatives to the automobile.
- State, regional and local governments will cooperate to achieve the vehicle miles traveled reduction standard in the LCDC Transportation Rule.

The forecasts for regional and local travel in the MPO areas are consistent with a 10% reduction in per capita vehicle miles travelled by automobile during the period from 1995 (when MPO plans must be adopted) to 2015.

Section 035 - Evaluation and Selection of Transportation System Alternatives

Section 035 contains requirements for evaluating and selecting transportation system alternatives.

(1) The TSP shall be based upon evaluation of potential impacts of system alternatives that can reasonably be expected to meet the identified transportation needs in a safe manner and at a reasonable cost with available technology. The following shall be evaluated as components of system alternatives:

- (a) Improvements to existing facilities and services;
- (b) New facilities and services, including different modes or combinations of modes that could reasonably meet identified transportation needs;
- (c) Transportation system management measures;
- (d) Demand management measures; and
- (e) A no-build system alternative required by the National Environmental Policy Act of 1969 or other laws.

The system alternatives identified in the System Element of the OTP include all of the components listed above. They also address new technology that is expected to be feasible and reasonable as well as existing technology. (Please see description of alternatives and Table 4.)

This section of the TPR also contains the following standards for evaluating transportation system alternatives:

- (3) The following standards shall be used to evaluate and select alternatives:
 - (a) The transportation system shall support urban and rural development by providing types and levels of transportation facilities and services appropriate to serve the land uses in the acknowledged comprehensive plan.
 - (b) The transportation system shall be consistent with state and federal standards for protection of air, land and water quality including the State Implementation Plan under the Federal Clean Air Act and State Water Quality Management Plan.
 - (c) The transportation system shall minimize adverse economic, social, environmental and energy consequences.
 - (d) The transportation system shall minimize conflicts and facilitate connections between modes of transportation.

(e) The transportation system shall avoid principal reliance on any one mode of transportation and shall reduce principal reliance on the automobile. In MPO areas this shall be accomplished by selecting transportation alternatives which meet the requirements in 660-12-035(4).

Table 4 shows the evaluation of alternatives. The evaluation criteria address the TPR standards. In addition:

- The preferred alternative is based on supporting urban and rural land uses with appropriate types and levels of service. (See policies 2A and 2B, discussion of assumptions above, and minimum levels of service.)
- The OTP addresses consistency with state and federal air and water quality standards. (See actions 1D.4 and 1D.5)
- The OTP address minimization of conflicts and facilitation of connections between modes. (See policies 1F, 3A and 3D and their actions.)
- The preferred is based on the principle of avoiding principal reliance on any one mode of transportation and reducing principal reliance on the automobile as described above. It is also based on the achievement of the VMT reduction goal in the rule. (See assumptions, minimum levels of service, and system management and pricing.)

Section 050 - Transportation Project Development

This section contains requirements for transportation project development and references ODOT's administrative rule for state agency coordination OAR 731 Division 15. It does not apply to the OTP.

Section 065 - Transportation Improvements on Rural Lands

This section includes requirements for making transportation improvements on rural lands. The OTP does not identify specific improvements in rural areas. It does, however, address such improvements in policies. (See policies 2A, action 2A.6 and policy 2F and its actions.)

This section of the TPR will be addressed in corridor plans.

Section 070 - Exceptions for Transportation Improvements on Rural Lands

Section 070 applies to exceptions to goals 3, 4, 11 and 14 for transportation facilities on rural lands. It does not apply to the OTP for the reasons mentioned above.

Statewide Planning Goals

Goal 1 (Citizen Involvement) and Goal 2 (Land Use Planning) are addressed by ODOT's SAC Program. ODOT has complied with these goals by following its SAC Program procedures as described above.

The SAC Program describes a process of going from the general to the specific. The OTP is a general plan which addresses systemwide management strategies and policies. It does not identify specific areas that would be affected by highway improvements. Accordingly, several land specific goals do not apply. These include:

- Goal 3 (Agricultural Land)
- Goal 4 (Forest Lands)
- Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources)
- Goal 7 (Areas Subject to Natural Disasters and Hazards)
- Goal 15 (Willamette River Greenway)
- Goal 16 (Estuarine Resources)
- Goal 17 (Coastal Shorelands)
- Goal 18 (Beaches and Dunes)

According to the SAC Program these goals will be addressed during the development of facility plans such as corridor plans and project plans when specific future improvements and geographic impacts are identified.

Several goals relate only indirectly to the OTP. These are:

- Goal 8 (Recreational Needs)
- Goal 10 (Housing)

In general, the OTP supports Goal 8 by laying out a plan which improves accessibility to recreational areas of the state. Policy 3E states the policy to improve access to recreational areas of the state. Similarly, the plan supports Goal 10 by establishing policies for improving mobility within urban areas.

A number of the goals do affect systemwide planning. These include:

- Goal 6 (Air, Water and Land Resources Quality)
- Goal 9 (Economic Development)
- Goal 11 (Public Facilities and Services)
- Goal 12 (Transportation)
- Goal 13 (Energy Conservation)
- Goal 14 (Urbanization)

These goals are all addressed by TPR requirements.



OREGON TRANSPORTATION PLAN

Public Hearing Draft

August 1992

Policy and System Elements

THE NEW OREGON TRAIL

Leading into the 21st Century

DRAFT

OREGON TRANSPORTATION PLAN POLICY AND SYSTEM ELEMENTS

Public Hearing Draft

Oregon Department of Transportation
Strategic Planning Section

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August 1992

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The deadline for submitting comments as part of the hearing record on this document is
Friday, August 28 at 5:00 p.m.

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PREFACE

The **Oregon Transportation Plan (OTP)** is intended to meet the requirements of ORS 184.618(1):

As its primary duty, the [Transportation] Commission shall develop and maintain a state transportation policy and a comprehensive, long-range plan for a multimodal transportation system for the state which encompasses economic efficiency, orderly economic development, safety and environmental quality. The plan shall include, but not be limited to aviation, highways, mass transit, pipelines, ports, rails and waterways. The plan shall be used by all agencies and officers to guide and coordinate transportation activities and to ensure transportation planning utilizes the potential of all existing and developing modes of transportation.

The OTP also meets the requirements of the Land Conservation and Development Commission (LCDC) Goal 12: Transportation Planning Rule regarding the System Plan, the State Agency Coordination Program and the federal Intermodal Surface Transportation Efficiency Act requirements for a state transportation plan.

The first part of the plan, the **Policy Element**, defines goals, policies and actions for the state over the next 40 years. It gives direction to the coordination of transportation modes; the relationship of transportation to land use, economic development, the environment and energy use; the coordination of transportation with federal, state, regional and local plans; transportation financing; transportation safety and related matters.

The **System Element**, the second part, identifies a coordinated multimodal transportation system, a network of facilities and services for air, rail, highways, public transit, pipeline, waterways, marine transportation, bikeways and other modes to be developed over the next 20 years in order to implement the goals and policies of the plan. The System Element includes an inventory of existing facilities and services, a base forecast of transportation demands, identification of corridors and transportation facilities of statewide significance, a description of minimum levels of service, and an implementation strategy. This document summarizes the data that form the basis of the System Element; the Multimodal System Element Technical Report contains the basic data.

Five advisory committees involving over 70 citizens participated in developing the goals and policies. The public reviewed this Policy Element in November and December 1991. The OTP Steering Committee, made up of members of the Oregon Transportation Commission, state legislators and representatives of local governments, has guided the development of the System Element. After examining three alternative approaches to providing transportation facilities and services, the committee chose a preferred system. The committee

distributed a draft of the System Element for public review in late spring 1992. The review included 23 public meetings throughout the state, meetings with local governments and business and civic organizations and written testimony.

After the public hearing on August 25 in Bend, the Oregon Transportation Commission expects to consider and adopt the OTP, including both the Policy and System Elements, at its September 15 meeting. Changes in transportation policies, financing and other legislation required for implementation of the plan will be introduced to the legislature in January 1993.

The deadline for submitting comments as part of the hearing record on this document is Friday, August 28 at 5:00 p.m.

EXECUTIVE SUMMARY

Introduction

Oregon's transportation system continues to be crucial to the state's livability and development. Opportunities and challenges facing the state require a strong and efficient transportation system to serve the needs of commerce and personal mobility.

Oregon's population is expected to grow faster than the nation's for most of the next 40 years. According to forecasts by the Oregon Department of Transportation (ODOT), Oregon's population is projected to increase from 2.8 million in 1990 to 3.8 million in 2012. After that Oregon's growth rate will slow, reflecting national trends. Most of this growth is projected to take place in the Willamette Valley, especially in its suburban areas; the Valley's population densities will approach those of more urban states.

At the same time, the population in eastern Oregon will also increase. Growth pockets on the coast and in central and southern Oregon will probably lead growth outside of the Willamette Valley.

Increased demands for transportation services will be most prevalent in the Willamette Valley where congestion will become an increasing problem, especially in the Portland metropolitan area. Air quality and energy conservation will continue to be important concerns. New forms of land development will be required to avoid the type of urban sprawl that has reduced the livability of many American cities and limited opportunities for public transit, bicycling and walking.

As the state's economy develops more diversity, high value manufacturing and services will be important industries along with wood products, agriculture and tourism. Links to international and national markets must be developed and improved in order to take advantage of the new economic trends.

Rural areas will increasingly need access to services and markets. Links between rural and urban areas must be maintained and enhanced in order to serve both areas and the economy of regions outside the Willamette Valley.

New technology should help make travel more efficient. Intelligent Vehicle Highway Systems (IVHS) will allow traffic to flow more efficiently, while high speed rail offers the potential to divert trips from air. But the state also needs to improve linkages between transportation and land use so that each supports the other.

In anticipation of these challenges, Oregonians have set bold new directions for the state's future transportation system through the Oregon Benchmarks, the Land Conservation and Development Commission's (LCDC)

Transportation Planning Rule, and the goals and policies developed in the Oregon Transportation Plan's (OTP) Policy Element. These form the basis for the System Element.

The Goals of the Oregon Transportation Plan

The purpose of the Oregon Transportation Plan is to guide the development of a safe, convenient and efficient transportation system which promotes economic prosperity and livability for all Oregonians.

The Transportation Commission drafted this purpose statement during development of the Policy Element of the Transportation Plan. The Policy Element establishes four goals for Oregon's future transportation system.

GOAL 1 - SYSTEM CHARACTERISTICS

To enhance Oregon's comparative economic advantage and quality of life by the provision of a transportation system with the following characteristics:

- **Balance**
- **Efficiency**
- **Accessibility**
- **Environmental Responsibility**
- **Connectivity among Places**
- **Connectivity among Modes and Carriers**
- **Safety**
- **Financial Stability**

The transportation system must be designed and developed so that people have transportation choices in going from place to place. In urban areas people should be able to choose to commute, for example, by carpool, public transit or bicycle as well as by auto. Freight shippers need competitive services to hold down rates and encourage innovation.

The system must be efficient. Transportation agencies need to make decisions about whether to add lanes to freeways or to build light rail lines based on their full costs, including the costs to the environment and the community. User charges, such as gas taxes and vehicle registration fees, must reflect the cost of reducing air pollution in addition to road construction and maintenance.

Transportation services must be reliable and accessible to all potential users, including the young, the elderly and the disabled. Public transportation and transportation for special groups, like the elderly, must be coordinated to provide more effective service.

The system must be environmentally responsible. Vehicle emission standards and efforts to reduce the vehicle miles traveled per capita will improve air quality and reduce energy consumption. Routing plans will improve the transportation safety of hazardous materials.

Statewide transportation corridors must provide access for people and goods to all areas of the state, nation and the world. Travelers must be able to transfer easily from public transit to rail or plane. Freight must be easily shifted from truck to rail to ship or plane to take advantage of the most efficient mode.

Safety standards must target roadway design and education for drivers of all types of vehicles and for pedestrians. Increased law enforcement is needed to reduce accidents related to excessive speed, alcohol and drug use.

The transportation system must have financial stability. Investments in highways, transit, and other transportation infrastructure must be protected, and transportation services must be reliable.

GOAL 2 - LIVABILITY

To develop a multimodal transportation system that provides access to the entire state, supports acknowledged comprehensive land use plans, is sensitive to regional differences, and supports livability in urban and rural areas.

Oregon's transportation system must support statewide land use goals and regional, city and county land use plans. Transportation facilities and services need to support development of compact urban areas. Land use developments need to be designed so that people can live, work and shop in the same area. Walkways and bikeways should make walking and bicycling safe and convenient, and provide access to public transit. Access controls on intercity routes should be used to reduce congestion.

The state must define and assure appropriate minimum levels of transportation service to provide access to all parts of the state. In rural communities, bus services need to be stimulated, and rural highways and bicycle routes need to be improved to provide safe travel. Since areas of Oregon vary greatly in their needs, transportation solutions need to be tailored to specific areas.

Supports for environmental quality and economic development, including scenic vistas and aesthetic values, must be included in the design and improvement of transportation corridors.

GOAL 3 - ECONOMIC DEVELOPMENT

To promote the expansion and diversity of Oregon's economy through the efficient and effective movement of goods, services and passengers in a safe, energy efficient and environmentally sound manner.

To foster economic development, people and goods must travel by the most efficient means possible. One mode must be connected with others through intermodal hubs which allow goods to move from truck to rail to ship or plane. Passenger terminals must be developed to allow efficient and convenient movement of people between modes.

Adequate facilities for rail service, air freight and marine transportation must be maintained. Air connections need to link all parts of Oregon to all parts of the nation and the world. Waterways and marine ports need to increase Oregon's ability to compete in international trade. Since the ports on the Columbia River share the river system, the state needs to maintain strong working relationships with Washington and Idaho Columbia/Snake River communities.

GOAL 4 - IMPLEMENTATION

To implement the Transportation Plan by creating a stable but flexible financing system, by using good management practices, by supporting transportation research and technology, and by working cooperatively with federal, regional and local governments, Indian tribal governments, the private sector and citizens.

Transportation financing must be both stable and flexible. The finance system must provide equity among alternative transportation modes, state, regional and local jurisdictions, all regions of the state and individuals and businesses.

The transportation system must be managed so that steps are taken to ease the demands on the system before new facilities are constructed. For highways this can be done by reducing peak period travel, improving the traffic flow and encouraging the use of transit, bicycling and walking. In the future, congestion pricing or toll systems may be an important element of urban freeway management.

The state will support the development of innovative management practices, new technologies and other techniques that help to carry out the implementation of the Transportation Plan. Partnerships with universities and private industry will promote transportation research.

Further refinement and implementation of the Transportation Plan will depend on the cooperation of federal, regional and local governments, the private sector and the citizens of Oregon. The Land Conservation and Development Commission Transportation Planning Rule requires regional and local governments to be consistent with the state transportation plan, but the state will also adopt regional transportation plans when they meet established criteria. The state will work with federal land management agencies and Indian tribal governments to coordinate transportation plans and projects. The goal is a coordinated and complementary transportation system.

The Transportation Plan depends on the full involvement of the citizens and the private sector in Oregon. Many of the policies and actions will require private investment. Most depend on public consensus for change.

The Role of the System Element

The Preferred Alternative for the System Element meets the goals of the Policy Element in eight ways:

1. It identifies a multimodal system including air, rail, auto, truck, bus, bicycle, pedestrian, waterway and marine transportation, and pipelines to be implemented within the next 20 years.
2. It establishes minimum levels of service to be achieved by each mode of transportation.
3. It identifies other major improvements beyond minimum levels of service.
4. It identifies the transportation corridors and facilities which serve statewide and interstate functions.
5. It identifies transportation system and facility management processes that must be put into place, including local transportation demand management and financing principles.
6. It identifies land use patterns that must be put into effect to achieve the goals of the transportation plan.
7. It identifies local, state and federal roles in implementing the plan and sets planning and performance criteria for modal implementation plans and local and regional transportation plans.
8. It estimates the financial requirements to implement the plan.

The Alternatives

The System Element envisions the facilities and services which would be put in place within the next 20 years. Because of the length of time required to implement transportation projects and changes in technologies, it also envisions those major issues and projects which may be necessary in the next 20 to 40 years.

To place the possibilities in perspective, the Steering Committee examined four funding alternatives:

1. Funding decline with status quo program,
2. Continuation of existing program,
3. Continuation of existing program with modal shifts, and
4. Economic development and livability approach.

In each alternative, state and local governments will (a) use system management techniques to handle traffic growth and protect facilities from congestion and (b) coordinate transportation plans with land use plans, emphasizing compact development and maintenance of urban growth boundaries.

A Funding Decline would not support expansion and improvement of the existing system illustrated on Map 1. The following consequences would result:

- No expansion of current service levels since efforts would be limited to preservation of existing infrastructure;
- Increased traffic congestion;
- Decline in intercity bus, rail, specialized transit, aviation, marine transportation, and pipeline services;
- Some increased transit ridership in the Portland metropolitan area where traffic congestion would significantly increase and a decline in transit ridership in other areas due to lack of funding;
- No improvements at intermodal passenger and freight facilities.

2012 Continuation of Existing Programs (Map 1) shows how the system would look if existing transportation programs at state and local levels were continued with funding increases for inflation, but without any change in emphasis or major funding enhancements. This is referred to as the base case. Under this alternative there would be:

- Unmet minimum levels of service standards for highways, transit, rail, aviation, marine transportation and pipelines;
- Limited expansion of state highway capacity;
- Growth in transit ridership and intercity passenger patronage at the same rate as population growth but a reduced number of intercity bus routes;
- Limited number of new citywide transit systems established, such as in Bend;
- Enhanced air service in Astoria, Newport and Roseburg;
- National scenic byways developed along the entire length of U.S. 101 and in the Columbia River Gorge national scenic area;
- New specialized elderly and disadvantaged transit services;
- Increased VMT per capita between 0.3 percent per capita in metropolitan areas and 1.5 percent per capita statewide;
- Little change in ridesharing as a percent of work trips and average trip length; dispersal of new jobs to suburban areas offset by increased congestion and more compact suburban development;
- Continuation of the bicycle and pedestrian facility construction program;
- Designation of Corvallis/Albany as a new metropolitan planning area.

2012 Continuation of Existing Programs with Modal Shifts (Map 2 without any of the highway-related improvements shown) shows how the transportation system would look with implementation of all non-highway programs as in the next alternative, but with the same highway programs as in the Funding Decline. Under this alternative, it is expected by 2012 there would be:

- Increased traffic congestion and deterioration of highway conditions;
- Hourly intercity passenger service established in the Willamette Valley between Eugene and Portland;

- A sevenfold increase in the use of telecommunications over 1990 use;
- High occupancy vehicle (HOV) lanes and peak period congestion pricing established on freeways and arterials in metropolitan areas;
- Walking and bicycle trips at double the present rate, and transit at double the base case forecast in metro areas;
- Intercity bus or commuter bus service available to cities of over 2,500 population;
- Urban transit service available in communities over 25,000 population;
- Intermodal passenger terminals established in Portland, Salem, Eugene, Medford, and Bend;
- Enhanced rural commercial air service, particularly to Baker City and the La Grande area;
- International port improvements and maintained rail service on the lower Columbia River and Coos Bay;
- Natural gas pipelines developed to Coos Bay and Tillamook to encourage industrial development and make alternative transportation fuel available;
- Full implementation of the LCDC Transportation Rule;
- Establishment of a Willamette Valley Transportation System Coordination Area.

Livability Approach: Minimum Levels of Service - Plus Preferred Transportation System (Map 2) shows how the transportation system would look with full implementation of the economic development and livability alternative. Under this alternative, it is expected there should be by 2012:

- A transportation system that helps maximize economic opportunities and quality of life, as measured by the Oregon Benchmarks;
- Hourly intercity passenger service established in the Willamette Valley along I-5 between Eugene and Portland;
- A sevenfold increase in the use of telecommunications over 1990 use;
- High occupancy vehicle (HOV) lanes and peak period congestion pricing established on freeways and arterials in metropolitan areas;

- Intelligent Vehicle Highway System (IVHS) networks in metropolitan areas and on I-5 and I-84;
- Walking and bicycle trips at double the present rate, and transit at double the base case forecast in metro areas;
- Intercity bus or commuter bus service available to cities of over 2,500 population;
- Urban transit service available in communities over 25,000 population;
- Intermodal passenger terminals established in Portland, Salem, Eugene, Medford, and Bend;
- Enhanced rural commercial air service, particularly to Baker City and the La Grande area;
- International port improvements and maintained rail service on the lower Columbia River and Coos Bay;
- Improved intermodal truck/rail freight hub facilities in Portland, Eugene, Klamath Falls, Umatilla/Boardman and in Idaho near Ontario;
- Additional major highway freight corridors on non-Access Oregon Highways;
- Additions to the statewide functional highway system;
- Natural gas pipelines developed to Coos Bay and Tillamook to help industrial development and make alternative transportation fuel available;
- Full implementation of the LCDC Transportation Rule;
- Establishment of a Willamette Valley Transportation System Coordination Area.

Willamette Valley Detail (Map 3) provides more detail for the Preferred Plan as it affects the Valley.

Long-Range Transportation Possibilities (Map 4) illustrates a number of possible future developments worthy of discussion, but that are either too far in the future or too uncertain to be included in this plan in a meaningful way. These possibilities include:

- High-speed rail service in the Willamette Valley with connections to Seattle;

- A Willamette Valley/Columbia Gorge interurban rail service which could be a way of serving commuter travel needs on the west side of the Willamette Valley and in the Columbia Gorge;
- A Klamath Falls intermodal air freight hub;
- A new international airport in the Willamette Valley which may be needed if Portland International Airport reaches capacity;

The OTP Steering Committee selected the Livability Approach as the Preferred Plan for adoption. Development of the plan will require cooperation and implementation by federal, state, regional and local governments and private providers. Jurisdictional roles and the financing program for the plan are still being formulated. The Transportation Commission plans to recommend a specific financing program in November 1992.

INTRODUCTION

The purpose of the Oregon Transportation Plan is to develop a safe, convenient and efficient transportation system which promotes economic prosperity and livability for all Oregonians.

A strong, efficient transportation system has been crucial to Oregon's development. From the first pioneers to traverse the Oregon Trail to the early river boat service on the Willamette and Columbia Rivers, to the ports, railroads and highway system that link the state to the nation and the world, Oregon has relied upon its transportation system.

Today Oregon's local roads and urban transit systems are relatively efficient and uncongested by comparison to many other areas of the nation. A well-developed highway system provides efficient access to many areas of the state for residents, businesses and visitors. Competitive transcontinental rail service and an interstate highway system provide access to all parts of North America, while Oregon's waterways and marine ports and airports provide access to the nation and the world. This transportation system has served Oregon's economic objectives and has helped to contribute to the state's quality environment and lifestyle.

Today Oregonians are facing a crossroads with respect to our transportation systems. The interstate highway system has been completed. Transportation deregulation, begun in the 1970s, has eliminated most of the economic regulation from rail, trucking and aviation. The federal government no longer pays 100 percent of the costs associated with navigational projects. The 1991 federal transportation legislation--the Intermodal Surface Transportation Efficiency Act--is moving the country toward a more flexibly funded, multimodal transportation system.

Opportunities exist to improve the serviceability of our urban and rural transportation systems, to link transportation and land use planning more effectively, and to develop land use patterns that enhance the quality of life for the almost four million people who are projected to live in Oregon in 2030. Opportunities exist to further develop our rail, waterway and marine transportation, highways and aviation systems, to expand markets for Oregon products, to link all parts of the state more effectively, and to improve the efficiency with which goods and people move between Oregon and the nation and the world.

In addition to opportunities, Oregon faces serious threats to its quality of life and economic future if we do not continue to develop and improve our transportation systems. Just the projected population growth, almost one million people by 2012, will further congest the highway system. Auto emissions already endanger air quality in metropolitan areas, and yet commuters have little choice for transportation except the use of private automobiles. Many rural areas lack adequate air, rail or intercity bus services. Current state and local funds for transportation facilities and service improvements are insufficient.

The basis of the Oregon Transportation Plan is that we can solve these problems and realize a new vision for transportation.

A VISION TO GUIDE THE OREGON TRANSPORTATION PLAN

What kind of future do we want to build as a state and how can transportation contribute to that future?

The Oregon Transportation Plan envisions a transportation system that moves people and goods in a way that provides for livability and economic prosperity for all Oregonians. The system provides Oregonians and visitors with access to goods, services, jobs and recreation, while providing Oregon industry access to national and international resources and markets. To most effectively meet the state's needs, the transportation system takes advantage of the inherent efficiencies of each transportation mode and encourages interconnection between modes.

Transportation is a part of the vision for Oregon articulated in the Land Conservation and Development Commission's (LCDC) Statewide Planning Goals and Guidelines and in the Oregon Benchmarks. The statewide planning goals reflect the concerns of hundreds of citizens who participated in public meetings held throughout the state in the 1970s and who have participated in updating them since then. The Oregon Progress Board developed the Oregon Benchmarks in 1990 after a series of public meetings and the legislature adopted them as state objectives in 1991.

The statewide planning goals directly relating to transportation envision a safe, convenient and economic transportation system that maintains and improves air and water quality, satisfies recreational needs, conserves energy, protects estuaries, protects natural and scenic resources, and provides adequate opportunities throughout the state for a variety of economic activities. The goals require planning and developing a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

The LCDC Goal 12 Transportation Planning Rule calls for developing land uses and transportation facilities that are mutually supportive. In urban areas, it relies on increased use of transit, bicycling and walking.

The Benchmarks envision Oregon as a place with an exceptional people, an outstanding quality of life and a diverse, robust economy: Oregon's natural environment is clean, beautiful and accessible. Oregon's communities are attractive, workable, affordable, safe and enriching places to live and work. The state is moving toward a diversified economy which generates productive jobs and higher incomes for all Oregonians. Some of the Benchmarks have specific implications for the OTP, especially the System Element, and are included in the analysis and development of the plan. (See Table 1, page 15.)

In working toward this vision of livable communities, economic prosperity and the transportation system that will serve them, we must consider where we are going and what the implications are for transportation.

Population and Transportation Projections - Preparing for Changing Needs

Oregon's population will grow faster than the nation's for most of the next 40 years. According to ODOT's forecasts, Oregon's population is projected to increase from 2.8 million in 1990 to 3.8 million in 2012 and to almost 4.0 million in 2030. Most of this growth will take place in the Willamette Valley, where population densities will approach those of more urban states. Much of the state's growth will take place in suburban areas.

At the same time, the declining population growth in eastern Oregon will be reversed, and eastern and southern Oregon will have healthy, more diverse economies. Growth pockets on the coast and in central and southern Oregon will likely lead growth outside of the Willamette Valley.

Transportation Implications - Increased demands for transportation services will be most prevalent in the Willamette Valley and the Portland metropolitan area in particular. Congestion will become an increasing problem, especially in the Portland metropolitan area. Links to rural areas must be maintained and enhanced in order to serve both those areas and the economy of regions outside of the Willamette Valley.

Nationally, personal transportation use--the number of private vehicle trips, vehicle miles traveled (VMT) and vehicles owned per household--has increased faster than population. If present VMT growth trends continue unchanged, VMT will double over the next 20 years. However, several factors could diminish this rapid growth: The boom in additional workers, especially the addition of women to the work force, is over. The possession of driver's licenses among adults is at saturation levels. The population is aging, and people over 45 traditionally drive less. Oregon's coordinated land use and transportation planning processes will have a positive impact on urban form and travel needs and patterns. In the Portland, Salem, Eugene and Medford metropolitan areas, the LCDC Transportation Planning Rule requires a 20 percent reduction in VMT per capita within the next 30 years.

Economic Development - Expanding Access to a World Economy

During the next 40 years, the Oregon economy will continue to diversify. While the natural resource-based industries (particularly wood products and

TABLE 1
OREGON BENCHMARKS AFFECTING TRANSPORTATION

| BENCHMARK | 2010 TARGET |
|--|------------------------|
| Urban Mobility: Percentage of Oregonians who commute to and from work during peak hours by means other than a single occupancy vehicle | 60%* |
| Air Quality: Percentage of Oregonians living where the air meets government ambient air quality standards | 100% |
| Livability Benchmarks | |
| Percentage of Oregonians who commute (one-way) within 30 minutes between where they live and where they work | 88% |
| Percentage of miles of limited access highways in Oregon urban areas that are not heavily congested during peak hours | 60% |
| Transit hours per capita per year in Oregon metropolitan areas | 1.7 hours |
| Economic Prosperity Benchmarks | |
| Percentage of Access Oregon Highways built to handle traffic at a steady 55 mile-per-hour rate | 90% |
| Percentage of Oregonians living in communities with daily scheduled intercity passenger bus, van or rail service | No target set |
| Percentage of Oregonians living within 50 miles of an airport with daily scheduled air passenger service | 75% |
| Number of United States, Canadian and Mexican metropolitan areas of over one million population served by non-stop flights to and from any Oregon commercial airport | 26 |
| Number of international cities of over one million population (outside of Canada and Mexico) served by direct and non-stop air service to and from any Oregon commercial airport | 12 |
| Backlog of city, county and state roads and bridges in need of repair and preservation | 5% |
| Percentage of the 50 largest ports outside the United States served with direct service from the Port of Portland | 80% |

* The severity of the measures required to achieve this target would defeat the achievement of other livability and economic development goals. ODOT has recommended a target consistent with the Transportation Planning Rule's 20 percent reduction of VMT.

agriculture) will continue to be important, our economy will move toward greater reliance upon a more diversified mix of manufacturing industries and services. Agriculture and wood products will look far different than they do today, as higher value products are introduced. Tourism will continue to play an important economic role in many areas of the state.

One aspect of the Oregon economy that will not change is its dependence on distant markets to sell its products. The state's specialized wood and agricultural products are marketed throughout the world. These two industries will continue to foster close ties with the Pacific Rim nations. In the areas of professional services and tourism, Oregon could be a major beneficiary of open European markets.

Transportation Implications - All Oregon businesses need access to markets for buying and selling goods, but the connections of all modes to the international economy will be a significant requirement of this vision of Oregon's economic future. The commodities that travel to other states and nations will be of higher value. Thus, they may need a different type of service and infrastructure from today's railway and marine transportation systems, which have been dominated by bulk commodities, agricultural and forest products. Air and intermodal freight services will become increasingly important. Local delivery of goods will still rely on trucks and the highway system, but rail, marine transportation and airport systems will become increasingly important because of their ability to link to distant markets.

To achieve a more diversified economy, the Benchmark objectives adopted by the 1991 Legislature direct us (1) to greatly increase the access of direct air and marine transportation to cities and ports nationwide and worldwide, (2) to maintain and improve our roads and bridges, and (3) to increase the availability of intercity transportation on highways, airports and public ground transportation.

The Environment - Protecting Oregon's Quality of Life

Oregonians will continue to prize the beauty of the landscape and the quality of the environment. We respect the natural systems that make up the environment and are dedicated to their enhancement. We enjoy the state's natural and scenic resources including its waterways, recreational areas and historic sites. We want our communities to be attractive, secure places, accessible to the natural and cultural attractions of the state.

But, in spite of efforts to reduce air pollution, a number of areas in Oregon do not at all times meet federal air quality standards. While auto emission devices have decreased pollution levels, the increased use of automobiles and increased congestion in recent years are reversing the decline in carbon monoxide and ozone levels.

Concentrations in the atmosphere of certain gases, including carbon dioxide, are warming the Earth's surface, possibly resulting in changes to the climate. In Oregon, transportation contributes about 54 percent of the state's carbon dioxide emissions. The oil-dependent transportation system also makes the economy vulnerable to disruptions in the oil market and to long-term shortages in supply.

Protection of water quality, wetlands, estuaries and endangered species is becoming increasingly difficult as the population grows and competition among land uses increases. Handling and disposal of hazardous materials is also growing more complex.

Transportation Implications - Transportation services and facilities will have to comply with an increasing number of federal and state statutes and regulations to protect environmental quality.

The 1990 Clean Air Act requires that areas in violation of federal air quality standards meet stringent emission reduction targets and prove that transportation plans and programs contribute to the attainment of air quality standards. The reduction of auto emissions, particularly in metropolitan areas, will require one or more of the following: reduction of travel, increased use of more fuel efficient modes, use of more fuel efficient vehicles, and/or substitution of petroleum with less polluting fuels.

The Benchmark objectives adopted by the 1991 Legislature also call for air quality to be improved, the use of single occupant vehicles reduced, and the use of transit increased. The objectives would greatly increase the number of commuters who travel to work by means other than single occupant vehicles, but maintain or reduce commuting time in urban areas.

The LCDC Transportation Rule likewise calls for Oregonians to use transit and other transportation alternatives increasingly as vehicle miles of travel per capita in metropolitan areas are reduced by 10 percent in the next 20 years and 20 percent in the next 30 years.

The Clean Water Act, the Endangered Species Act and other federal legislation and regulations protecting wetlands, historic sites, parks and recreational areas and game refuges will continue to be major factors in transportation planning and project development. State protection of estuaries will also continue to be important. Since highways, airports, railroads and marine traffic create a significant amount of noise, noise abatement will remain an important part of transportation-related pollution control.

Land Use - Changing Development Patterns

Land use policy will continue to be the primary tool used by Oregonians to guide development of the state while protecting its resources and livability and developing its economy.

Although urban growth boundaries have discouraged urban development in rural areas, metropolitan areas have developed at a level of density and in patterns that often discourage the use of public transit, bicycles and pedestrian walkways. Low density development has resulted in the kind of sprawl that creates congestion and air pollution. Often transportation facilities have not supported local land use plans and vice versa.

To create more livable communities and to encourage the use of transportation alternatives to the single occupant vehicle, land use policies are changing to support:

- Downtown cores that maintain healthy central hubs for commerce within an urban region.
- Increased density and in-fill development for efficient use of urban land balanced by open space areas and better residential site design for privacy and safety.
- Improved circulation systems for pedestrians, bicycles and transit that allow for their exclusive use in some areas and provide safety where they come into contact with autos.
- Mixed use developments where housing, daycare, schools, commercial areas and employment can be close together to minimize travel.

The vision is for compact cities surrounded by farm and forest land and open space. Even the so-called suburbs will have small city atmospheres with many more people living in the same suburb where they work.

In rural communities of the state, land use planning will become a tool to promote development through the logical planning and extension of public infrastructure and services necessary to support new industry and development. Scenic attractions will enhance the tourist industry.

Transportation Implications - For transportation, this view of land use has two significant implications. First, transportation policy should favor more compact, mixed use, pedestrian friendly developments, both because they make transportation more efficient and because they accomplish a more desirable pattern of development. Designing land use and transportation patterns where conflicts among pedestrians, bicycles, automobiles and transit

are minimized will also make the system safer. Second, facilities must be designed in such a way as to support locally adopted comprehensive plans.

In rural areas, enhanced levels of transportation and connections between modes will improve access and economic development. Concern for scenic vistas and access to outdoor recreation sites will enhance the tourist industry and the travel experiences of Oregonians and visitors to the state.

Technology - Innovations for Use Today and Tomorrow

During most of the next 40 years, transportation facilities and equipment will appear surprisingly similar to the way they do today. However, on closer inspection, there will be some interesting differences.

Telecommunications, data processing and electronic control systems may have a tremendous impact on transportation in two ways. First, many jobs may be performed at home or in small local offices away from major office complexes. The ability to perform most non-manual functions from remote locations will give rise to small electronically sophisticated offices which will replace large centralized offices. This may affect transportation by reducing commuting distances for many people and by adding to the economic stability of some rural and suburban communities. However, those who work at home may make more day-time trips to run errands and provide transportation for children.

Advanced electronics also will improve the efficiency and comfort of every type of transportation system. Automobiles may operate in self-guided modes on freeways, or "smart highways," while onboard computers do everything from adjusting engine performance to recommending travel routes based on information about road conditions and congestion.

Another aspect of transportation technology that is expected to continue far into the next century is the gain in efficiency. This may be achieved without dramatic reduction in the size of passenger vehicles due to new lighter materials, improvements to fuels and ignition systems, and more efficient operation through the use of smart highways and better traffic control. Traffic management devices will be able to restrict vehicle use during peak periods and charge drivers according to the time and distance of their use.

These same factors will improve the operation of other modes as well. Advanced train communications and control systems can improve the speed, capacity and safety of the rail system. These gains in efficiency will also improve the prospect for high speed rail, although its use will continue to be limited to very high density corridors connecting major metropolitan areas.

Technology will also help improve traffic safety. Vehicle improvements that prevent crashes and injury in crashes, such as airbags, anti-roll devices and speed governors, are possible now. In the future, monitors similar to airline "black boxes" will be able to record and transmit vehicle operation patterns to police or others for review of driver behavior, particularly behavior related to speed or alcohol and drug use.

The drive for greater productivity and fuel efficiency will not only improve performance of surface transportation vehicles, but has already resulted in dramatic increases in the size and speed of aircraft and ocean vessels. These will add to the efficiency of international trade and travel but will require changes in marine transportation and airport infrastructure.

Transportation Implications - Although there does not appear to be anything on the horizon that will make a fundamental change in the basic kinds of transportation, Oregonians will experience a fundamental change in the way we use our transportation systems. Many of the most prominent innovations being considered, like self-guided cars, will have the effect of making existing modes of transportation, including highway travel, much more efficient and reduce many of the detrimental side effects. A second implication of these technologies is that many of the most significant innovations will be introduced by the private sector. Government will have to work with the private sector to provide public infrastructure that captures the benefits of these innovations. It is the public that owns the airports, highways and marine ports but largely the private sector that operates the transportation equipment and services which use the facilities.

THE PLANNING PROCESS

The planning process for the Oregon Transportation Plan (OTP) began in November 1990 when the Oregon Transportation Commission directed the Oregon Department of Transportation's strategists to "develop and maintain a state transportation policy and a comprehensive, long-range plan for a multimodal transportation system for the state," as required in the Oregon statutes.

In the spring of 1991, five policy advisory committees met to develop goals, policies and actions focusing on urban mobility, rural accessibility, freight productivity, safety and finance. Each of the five committees was headed by a member of the Transportation Commission and assisted by consultants and ODOT staff members. Members represented public transportation agencies and users, private transportation providers and industry users, local governments, special transit districts, and state agencies. Each member brought a wide range of experience and expertise to the committee.

The Urban Mobility Committee was concerned with land use and transportation links and methods of dealing with congestion while the Rural Accessibility Committee wrestled with ways to assure minimum levels of service and encourage economic development in rural areas. The Freight Productivity Committee identified policies to make freight movement more efficient and improve access to national and international markets. The Safety Committee considered ways to make all transportation modes safer. The Finance Committee developed funding principles and is developing funding methods that will be proposed to the legislature. The committees' work was the basis of the Policy Element.

The ODOT staff presented the Policy Element for review at 25 public meetings throughout the state in November and December 1991 as well as at numerous meetings with regional and local officials, business and civic organizations and others. The OTP's State Agency Technical Advisory Committee and Metro's Transportation Policy Advisory Committee also commented.

The revised Policy Element formed the basis for the System Element. The System Element implements the goals and policies by identifying a coordinated transportation system, a network of facilities and services for air, rail, highways, transit, pipeline, marine and waterways transportation, bikeways and other modes to be developed over the next 20 years. The OTP Steering Committee, made up of members of the Oregon Transportation Commission, the governor's office, state legislators and representatives of local governments, has guided its development.

Both the Policy Element and the System Element are also designed to implement the Oregon Benchmarks and the LCDC Goal 12 Transportation Planning Rule. Even though the plan was well underway prior to passage of the federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), it incorporates the Act's requirements for statewide planning.

The Steering Committee examined several alternative transportation systems and levels of funding and chose the Livability Approach. It calls for continued preservation and maintenance of the highway system and increased expenditures for other modes of transportation.

The financing program for the system will be developed after the Oregon Transportation Commission adopts the Policy and System Elements in September. The financing program and any legislation needed to implement the plan will be submitted to the 1993 Legislature.

The Transportation Commission views the policies and the preferred system as a whole as important to serve livability and economic development needs in both urban and rural areas. The commission, therefore, is not prioritizing goals, policies or transportation facilities and improvements.

GOALS AND POLICIES FOR OREGON TRANSPORTATION IN THE 21ST CENTURY

GOAL 1 : CHARACTERISTICS OF THE SYSTEM

To enhance Oregon's quality of life and comparative economic advantage by the provision of a transportation system with the following characteristics:

- **Balance**
- **Efficiency**
- **Accessibility**
- **Environmental Responsibility**
- **Connectivity among Places**
- **Connectivity among Modes and Carriers**
- **Safety**
- **Financial Stability**

The vision for Oregon's future calls for setting new priorities in transportation planning, financing and development. To clearly chart new directions for the 21st Century, Oregonians must decide what the basic characteristics of the transportation system should be. The desire to improve the quality of life and economy suggests that the transportation system should provide a variety of modal choices balanced by the knowledge that some modes are by nature more efficient for a particular purpose than others. Goods should be able to move by truck, rail, barge or airplane, but bulk goods going long distances may move more efficiently on one mode than on others. The system should serve its users efficiently and, at the same time, be environmentally responsible. The system should be safe to use, be accessible to all groups of society, and connect places and various modes together in an integrated network. Finally, to be effective, the transportation system should be financed in an equitable and stable manner.

Although the goal is to provide an overall transportation system that displays all of these characteristics, decisions on specific facilities and services will require balancing some characteristics with others particularly when other goals require specific transportation improvements which are inherently inconsistent with one or more characteristics. For example, the policy of user paying full costs for transit may undermine urban areas' goals for clean air, accessibility for all citizens and neighborhood livability.

POLICY 1A - Balance

It is the policy of the State of Oregon to provide a balanced transportation system. A balanced transportation system is one that provides transportation options at appropriate minimum service standards, reduces reliance on the single occupant automobile where other modes or choices can be made available, particularly in urban areas, and takes advantage of the inherent efficiencies of each mode.

ACTION 1A.1

Design systems and facilities that accommodate multiple modes within corridors, where appropriate, and encourage their integrated use in order to provide users with cost-effective choices of travel and shipping within corridors.

POLICY 1B - Efficiency

It is the policy of the State of Oregon to assure provision of an efficient transportation system. The system is efficient when (1) it is fast and economic for the user; (2) users face prices that reflect the full costs of their transportation choices; and (3) transportation investment decisions maximize the net full benefits of the system. (Full benefits and costs include social and environmental impacts, as well as the benefits of mobility to users, and construction, operations and maintenance costs.)

ACTION 1B.1

Employ economic, social, energy and environmental impacts as a part of the transportation planning and project design process. This should be done on a total system basis rather than optimizing the cost effectiveness of one mode at the expense of another.

ACTION 1B.2

Develop pricing programs that charge road users commensurately with the total costs of operations and improvements. Such programs might include:

- Automobile emissions charges based on vehicle miles traveled (VMT) and relative vehicle emissions.
- Road access pricing for major traffic generators.
- Employee parking charges in urban areas.
- User charges, e.g. toll, fuel and weight-mile taxes.

ACTION 1B.3

Use demand management techniques to reduce vehicle miles traveled in single occupant automobiles, especially during peak hours of highway use. These measures include the use of alternative modes such as transit, bicycling and walking, ridesharing, vanpooling, telecommuting and projects that promote efficient urban design.

ACTION 1B.4

Preserve corridors for future transportation development. Consider obtaining, developing and using those abandoned rail rights-of-way that are in the public interest for transportation system improvements. Consider using abandoned rail corridors for bicycle and walking trails and for utility and communication corridors as interim uses.

POLICY 1C - Accessibility

It is the policy of the State of Oregon to promote a transportation system that is reliable and accessible to all potential users, including the transportation disadvantaged, measured by availability of modal choices, ease of use, relative cost, proximity to service and frequency of service.

ACTION 1C.1

Cooperatively define acceptable levels of accessibility through the establishment of standards in transportation system plans for minimum levels of service and system design for passengers and freight for all modes.

ACTION 1C.2

Encourage multimodal accessibility to employment, shopping and other commerce, medical care, housing and leisure, including adequate public transit access for the transportation disadvantaged.

ACTION 1C.3

Implement the accessible transportation requirements established by the Americans with Disabilities Act of 1990.

ACTION 1C.4

Develop public transit, bicycle and pedestrian systems in urban and rural areas.

ACTION 1C.5

Assure that the services of private and public transportation providers are coordinated. Integrate public and special purpose transportation services.

POLICY 1D - Environmental Responsibility

It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation of natural resources.

ACTION 1D.1

Minimize transportation-related energy consumption through improved vehicle efficiencies, use of clean burning motor fuels, and increased use of fuel efficient modes which may include railroads, transit, carpools, vanpools, bicycles and walking.

ACTION 1D.2

Cooperate with the Oregon Department of Energy to carry out transportation-related provisions of the state Energy Plan.

ACTION 1D.3

Positively affect both the natural and built environments in the design, construction and operation of the transportation system. However, where adverse impacts cannot be avoided, minimize or mitigate their effects on the environment.

ACTION 1D.4

Cooperate with the Oregon Department of Environmental Quality in carrying out the transportation-related requirements of the federal and state clean air standards consistent with the long-term air quality goals of the Oregon Benchmarks.

ACTION 1D.5

Cooperate with the Oregon Department of Environmental Quality and local government authorities in carrying out federal and state surface and groundwater protection programs.

ACTION 1D.6

Assure the safe, efficient transport of hazardous materials within Oregon. For the purposes of this action, the definition of hazardous materials includes radioactive materials.

- Work with federal agencies, the Public Utility Commission, the Oregon Department of Energy, and local governments to assure consistent laws and regulations for the transport of hazardous materials, including the development of standards for containment and crash-proofing such transport and the development of requirements for the visible signing of contents of carriers.
- Participate in the work of the state Interagency Hazard Communication Council.
- Require that local, regional and state transportation systems plans provide for safe routing of hazardous materials consistent with federal guidelines, and provide for public involvement in the process.
- Develop hazardous materials accident and spill management skills to deal with potential accidents.

ACTION 1D.7

Minimize transportation-related noise impacts through improved enforcement of noise regulations, facility design and compatible land use; and cooperate with regulatory agencies.

POLICY 1E - Connectivity among Places

It is the policy of the State of Oregon to identify and develop a statewide transportation system of corridors and facilities that ensures appropriate access to all areas of the state, nation and the world.

ACTION 1E.1

Identify a multimodal network of facilities to meet requirements for the movement of people, goods and services throughout Oregon and develop a plan to implement that system.

ACTION 1E.2

Identify significant out-of-state corridors or areas where Oregonians need access and encourage their development. Identify transportation needs that extend beyond state borders in order to promote solutions that will increase

multimodal connections to state systems, to meet the needs of residents and businesses located near state borders, and to encourage interstate access to major tourist destinations within Oregon.

ACTION 1E.3

Develop and promote service in statewide transportation corridors by the most appropriate mode including intercity bus, truck, rail, airplane, passenger vehicle and bicycle.

ACTION 1E.4

Complete the Access Oregon Highways Program.

ACTION 1E.5

In cooperation with local governments and federal agencies, develop a rural areas transportation access plan for state and federal lands and recreation areas.

POLICY 1F - Connectivity among Modes and Carriers

It is the policy of the State of Oregon to provide a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems.

ACTION 1F.1

Require local and regional transportation plans to identify (a) major transportation terminals and facilities and (b) routes and modes connecting passenger and freight facilities with major highways and intermodal facilities.

ACTION 1F.2

Encourage development of a system of open access passenger facilities throughout the state to expedite transfers between modes, routes and carriers.

ACTION 1F.3

Encourage development of efficient intermodal freight facilities, open to access to all where feasible, to encourage effective shifts among modes.

POLICY 1G - Safety

It is the policy of the State of Oregon to improve continually the safety of all facets of statewide transportation for system users including operators, passengers, pedestrians, recipients of goods and services, and property owners.

ACTION 1G.1

Develop a Transportation Safety Action Plan addressing air, land and water transportation to reduce fatal, injury, and property damage accidents among system users.

ACTION 1G.2

Improve the enforcement of transportation safety laws and regulations intended to reduce injury and property damage. Emphasize enforcement of laws and regulations involving excessive speed, alcohol and other drug use, use of safety belts, and use of helmets for motorcycle drivers and passengers.

ACTION 1G.3

Develop and deliver a comprehensive safety awareness, education and training program for all system users.

ACTION 1G.4

Improve the safety in design, construction and maintenance of new and existing systems and facilities for the users and benefactors including the use of techniques to reduce conflicts between modes using the same facility or corridor. Target resources to dangerous routes and locations in cooperation with local and other state agencies.

ACTION 1G.5

Improve the delivery of emergency medical services to transportation-related accidents.

ACTION 1G.6

Increase interagency cooperation among federal, state and local governments and private enterprises in order to implement more effective community-based safety programs.

ACTION 1G.7

Develop and implement a comprehensive and coordinated transportation records and accident reporting program to manage and evaluate transportation safety.

ACTION 1G.8

Develop effective efforts to reduce the number of alcohol and other drug impaired and high-risk operators.

ACTION 1G.9

Build, operate and regulate the transportation system so that users feel safe and secure as they travel.

ACTION 1G.10

Promote high safety standards for trucks and truck operators.

- Work with national transportation organizations to accurately determine the safety implications of alternative truck sizes, weights and configurations.
- Expand the truck inspection program and have strong sanctions for consistent violators of trucking regulations. Continue to develop and institute a mobile enforcement plan to provide more effective size and weight enforcement utilizing weigh-in-motion, automatic vehicle identification and other Intelligent Vehicle Highway System technologies.
- Take action to minimize conflicts between trucks, automobiles and recreational vehicles.

ACTION 1G.11

Promote high safety and compliance standards for operation, construction and maintenance of the rail system.

ACTION 1G.12

Cooperating with the U.S. Coast Guard, reduce navigational conflicts on waterways between commercial and recreational users, including windsurfers.

POLICY 1H - Financial Stability

It is the policy of the State of Oregon to ensure a transportation system with financial stability. Funding programs should not bias transportation decision making.

ACTION 1H.1

Provide balanced funding for transportation facilities and services and seek legislative and voter approval where necessary.

ACTION 1H.2

Assure a transportation system which optimizes the total cost of the system for the approved level of service including cost of improvements and cost for operation and maintenance systems.

ACTION 1H.3

Give priority to funding those transportation needs identified in state, regional and local transportation system plans.

GOAL 2: LIVABILITY

To develop a multimodal transportation system that provides access to the entire state, supports acknowledged comprehensive land use plans, is sensitive to regional differences, and supports livability in urban and rural areas.

LAND USE

Oregon's population is projected to grow by 1.2 million people over the next 40 years. This is the equivalent of 12 cities the size of Salem or 60 cities the size of Bend. Oregon's land use development has tended to separate residential areas from employment and commercial centers requiring people to drive almost everywhere they go. The result has been increased congestion, air pollution and sprawl in the metropolitan areas and diminished livability.

In order to accommodate this population growth and protect our livability, Oregonians will increasingly use land use policy as the primary tool to guide development of the state. Since transportation systems and facilities heavily influence land development patterns, future transportation plans prepared by all levels of government will be designed to support adopted comprehensive land use plans that comply with statewide land use goals.

Transportation systems development will need to support concepts of mixed use land development, compact cities, and connections among various transportation modes to make walking, bicycling and the use of public transit easier. In turn, land use plans and development need to support the policies and objectives of the transportation system plans.

The State Agency Coordination Agreement between the Department of Transportation (ODOT) and the Land Conservation and Development Commission (LCDC) requires state transportation plans to comply with statewide planning goals and state transportation facility plans to be compatible with acknowledged comprehensive plans. The Transportation Planning Rule (660-12), prepared by ODOT and LCDC, encourages reduced use of the automobile and requires planning for the use of alternative modes of transportation in urban areas. In rural areas, the Rule limits some access and transportation improvements to be consistent with rural uses and densities.

Coordination with federal lands agencies and with Indian tribes in Oregon is required by state land use goals and is essential for their implementation. About fifty percent of the state is in federal ownership and over 1 percent is under tribal jurisdiction. The federal lands include timber and grazing areas

as well as national recreation areas, and wild and scenic rivers. The U.S. Forest Service, the Bureau of Land Management and other federal agencies have management plans that guide the use of federal lands and have road systems that require integration with state and local systems to serve economic and recreational needs.

POLICY 2A - Land Use

It shall be the policy of the State of Oregon to develop transportation plans and policies that implement Oregon's Statewide Planning Goals, as adopted by the Land Conservation and Development Commission.

ACTION 2A.1

Support local land use planning with system plans that implement this policy, with the objective of providing the needed level of mobility while minimizing automobile miles traveled and number of automobile trips taken per capita.

ACTION 2A.2

Require that the transportation system plans adopted by a state, regional or local jurisdiction be sufficient to accommodate planned development within the respective jurisdiction.

ACTION 2A.3

Coordinate state transportation planning with local and regional land use plans as described in the certified ODOT/LCDC State Agency Coordination Agreement.

ACTION 2A.4

Provide technical assistance to local and regional governments in the implementation of Oregon Administrative Rule 660-12 that sets forth the requirements for transportation planning within the state.

ACTION 2A.5

Coordinate with federal lands agencies to ensure that federal land plans, programs and projects and state transportation plans are compatible.

ACTION 2A.6

Restrict access from state facilities for incompatible activities and development where land use plans call for rural or resource developments.

URBAN ACCESSIBILITY

The state attempts to assure accessibility to all areas of Oregon. Because intercity, interstate and international transportation services and facilities need to connect with urban transportation services and facilities, urban transportation services and facilities are a state concern. Within urban areas, individuals need access to homes, businesses, medical facilities, recreation and other destinations.

The automobile is generally the most convenient mode of travel within urban areas. Vehicle miles traveled (VMT) per capita, in fact, has risen faster than the growth in numbers of people.

But rush hour traffic causes traffic jams on major roads. Auto use also is a major factor in violations of air quality standards. As highways have provided easy access between places in an urban area, strip development along the highway has created traffic hazards and slowed through traffic. Adding capacity to highways to maintain high speeds for interurban traffic within urban areas has often contributed to sprawl development.

Because of these problems and concern for energy conservation, LCDC and ODOT adopted the Transportation Rule; it requires urban area plans which reduce the use of the automobile and plan for alternative types of transportation, including public transit, bicycling and walking. In the Portland, Salem, Eugene and Medford metropolitan areas, the rule requires a 20 percent reduction of vehicle miles traveled per capita in the next 30 years.

The rule requires cities and counties (unless exempted by LCDC) to adopt land use and subdivision ordinances that protect transportation facilities for their identified functions and that support the use of alternative modes. Compact cities that make it easy to walk or use a bicycle or ride a bus do this.

The Urban Accessibility policies are applicable to both metropolitan areas and cities with urban growth boundaries. The Rural Accessibility policies are also applicable to small cities located away from metropolitan areas and other central cities as well as to non-metropolitan unincorporated areas and communities.

POLICY 2B - Urban Accessibility

It is the policy of the State of Oregon to define minimum levels of service and assure balanced, multimodal accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas.

ACTION 2B.1

Cooperate with local governments and metropolitan planning organizations to develop integrated transportation plans for urban areas that meet the needs for urban mobility, and intercity, interstate and international travel within and near each urban area.

ACTION 2B.2

Give preference to projects and assistance grants that support compact or infill development or mixed use projects.

ACTION 2B.3

Increase the availability and use of transit, walking, bicycling and ridesharing. Promote the design and development of infrastructure and land use patterns which encourage alternatives to the single occupant automobile.

POLICY 2C - Relationship of Interurban and Urban Mobility

It is the policy of the State of Oregon to provide interurban mobility through and near urban areas in a manner which minimizes adverse effects on land use and urban travel patterns.

ACTION 2C.1

Plan and design interurban corridors in and near urban areas to preserve their utility for interurban travel. Appropriate means to manage highways might include ramp metering, limited interchanges, high occupancy vehicle lanes, access control, separated express lanes for through traffic and tolls. Appropriate means for other modes might include station and stop locations. The State of Oregon shall avoid highway capacity improvements which primarily serve commuters from outside of urban growth boundaries.

ACTION 2C.2

Promote alternative modes and preservation and improvement of parallel arterials so that local trips have alternatives to the use of intercity routes.

ACTION 2C.3

Encourage regional and local transportation system plans and land use plans to avoid dependence on the state highway system for direct access to commercial, residential or industrial development adjacent to the state highway.

ACTION 2C.4

Promote the development of interurban bus and rail passenger service to improve urban accessibility and achieve land use goals.

POLICY 2D - Facilities for Pedestrians and Bicyclists

It is the policy of the State of Oregon to promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments.

ACTION 2D.1

Make walkways, pedestrian shelters and bikeways an integral part of the circulation pattern within and between communities to enhance safe interactions between motor vehicles and pedestrians and bicyclists, using techniques such as:

- Renovating arterials and major collectors with bike lanes and walkways and designing intersections to encourage bicycling and walking for commuting and local travel.
- Developing all transit centers near residential areas to be safely and expeditiously accessible to pedestrians and bicyclists.

RURAL ACCESSIBILITY

Autos, trucks, airplanes, trains and buses are the dominant modes of transportation in rural Oregon. Highways and roads provide the only access to many rural places, and connections between rural and urban areas are primarily by highway as well. Highway capacity in rural areas is strained not so much by the volume of traffic, as by the interaction of trucks, buses, recreational vehicles, autos and bicycles, each traveling at varying speeds.

Improvements to rural highways are needed in order to provide corridors where different sized vehicles, traveling at different speeds and for different purposes, can move safely and efficiently. Additional passing lanes, fewer curves and improved signage can do much to improve such conditions. Intercity bus, rail and air service must also be retained and expanded, especially along corridors where fast movement of goods and people is desirable and where distances are vast or corridors are already congested.

As Oregon's economy adjusts to changes in timber- and agriculture-based industry, many rural communities are struggling to retain existing institutions and provide basic transportation services for current residents. The increasing proportion in rural communities of retired persons and lower income people is increasing the need for available and affordable transportation services. These changes mean many rural communities depend on the state to assure a minimum level of transportation service for accessibility to other parts of the state.

POLICY 2E - Minimum Levels of Service

It is the policy of the State of Oregon to define and assure minimum levels of service to connect all areas of the state.

ACTION 2E.1

Define appropriate minimum levels of service for all modes and for all potential users.

POLICY 2F - Rural Mobility

It is the policy of the State of Oregon to facilitate the movement of goods and services and to improve access in rural areas.

ACTION 2F.1

Improve rural highways, minimizing the interaction of passenger vehicles, bicycles, recreational vehicles and freight vehicles by providing passing lanes and paved shoulders, wherever practical.

ACTION 2F.2

Implement a statewide system of bikeways using current rights-of-way and creating new paths along rail beds, open spaces, and other public and private lands held by cooperating landowners.

ACTION 2F.3

Encourage modal alternatives to the automobile and truck where feasible in rural areas.

ACTION 2F.4

Revise regulatory systems in order to stimulate the provision of transportation services by private companies in rural areas.

ACTION 2F.5

Consider acquiring and upgrading low density rail lines where current owners are seeking to sell or abandon them.

POLICY 2G - Regional Differences

It is the policy of the State of Oregon to provide a transportation system consistent with, yet recognizing differences in, local and regional land use and economic development plans.

AESTHETIC VALUES

Scenic highways and transportation corridors are important to both Oregonians and out-of-state visitors. They enhance tourist attractions and contribute to traveling safety. The Aesthetic Values policy recognizes the importance of scenic qualities, the quality of what we see as we travel, so that when highways and other transportation corridors are designed and managed, scenic qualities are preserved and enhanced. It also recognizes that protecting aesthetic values must be balanced with maintaining the transportation function of the facility.

POLICY 2H - Aesthetic Values

It is the policy of the State of Oregon to protect and enhance the aesthetic value of transportation corridors in order to support economic development and preserve quality of life.

GOAL 3: ECONOMIC DEVELOPMENT

To promote the expansion and diversity of Oregon's economy through the efficient and effective movement of goods, services and passengers in a safe, energy efficient and environmentally sound manner.

Oregon's economy is highly dependent on its transportation system for the circulation of goods, services and passengers. An efficient transportation system promotes new business and encourages existing business to flourish. Because of Oregon's location and the multiplicity of transportation services converging in Oregon, transportation is itself a significant part of the Oregon economy.

Federal and state governments have a long history of investing in transportation systems, from corduroy roads in colonial times to waterways and rail service during the western expansion, the interstate highway system beginning in the 1950's, and space exploration today. Government now invests in virtually every mode of freight and passenger transportation. Oregon laws direct the Transportation Commission to look specifically at economic development in the Oregon Transportation Plan instructing the commission to "give economic development and the provision of industrial site services priority in fund allocation decisions" (ORS 184.618(4)).

The goal of an efficient transportation system for goods, services and passengers is one of balance characterized by:

- Better understanding of the costs of each mode, so that relative efficiencies of each can be evaluated. An understanding of the full costs of each mode must be developed even if such issues as safety, environmental quality, time and human comfort have to be quantified.
- Public investment targeted at more efficient modes. Such investments could include technology transfer activities, capital facilities and subsidies.
- More choices for the shipper according to the characteristics of the goods to be shipped.

Oregonians respect the free market system, and they want private interests served by the transportation system. However, those interests have to be balanced with a commitment to the maintenance of a high quality of life which itself contributes to Oregon's comparative advantage as a place to do business.

In the future, the state can contribute to economic development by facilitating the development of intermodal freight hubs. These hubs can encourage transfer of freight from one mode to another, using the efficiencies of particular modes for each part of a freight trip. Examples of intermodal transfer facilities include marine ports where ships and barges load and unload to trucks, trains and pipelines. Airlines use intermodal hubs to transfer goods from planes to trucks and other modes.

POLICY 3A - Balanced and Efficient Freight System

It shall be the policy of the State of Oregon to promote a balanced freight transportation system which takes advantage of the inherent efficiencies of each mode.

ACTION 3A.1

Identify the present level of local, state and federal support for each of the various modes of freight transportation, including taxation, regulation, capital investment, and operating subsidy. Develop and maintain statistics on the characteristics of each mode as they affect the state.

ACTION 3A.2

Assure ODOT in-house expertise in the economics, management and potential of each available major freight mode: trucking, rail, water transportation, air and bus express.

ACTION 3A.3

Work with the Oregon Public Utility Commission to take the actions necessary to ensure that its policies or practices are not directly or indirectly favoring interstate shippers over Oregon intrastate shippers.

ACTION 3A.4

Work with local, state and federal governments to permit efficient transportation operations consistent with environmental or safety goals.

ACTION 3A.5

Provide more efficient railroad service through the reduction of conflicts at busy railroad crossings and rail yard areas by means of grade separations and development of alternative motor vehicle circulation routes.

POLICY 3B - Linkages to Markets

It is the policy of the State of Oregon to assure effective transportation linkages for goods and passengers to attract a larger share of international and interstate trade to the state.

ACTION 3B.1

Provide a direct, convenient and physically suitable system for goods movement to transportation facilities and commercial and industrial areas to ensure the timely delivery of goods.

ACTION 3B.2

Promote the growth of intercity bus, rail passenger and commuter air services to link all areas of the state with national and international transportation facilities and services.

ACTION 3B.3

Maintain, preserve and improve the highway system in order to provide infrastructure for the efficient movement of goods by truck and bus.

ACTION 3B.4

Promote the retention of desirable rail service and rights of way through existing railroad ownership or alternative private or public ownership.

ACTION 3B.5

Promote the growth of air freight business in the state. Maintain and improve strategic regional air freight terminals and their links with surface transportation systems.

ACTION 3B.6

Encourage public and private investment in facilities and marketing and provide match funding for priority federal projects in conjunction with ports to enhance their competitiveness in international trade and domestic commerce.

ACTION 3B.7

Maintain adequate container handling facilities to support the state's participation in international markets, and develop other cargo business such as break bulk, bulk and auto.

ACTION 3B.8

Work with port districts, state and federal agencies to enhance the river and ocean system in an efficient and environmentally responsible manner. This could include deepening the Columbia River or Coos Bay channels as well as carrying out other shallow and deep draft projects.

POLICY 3C - Expanding System Capacity

It is the policy of the State of Oregon to expand the capacity of Oregon's freight industry by facilitating increased cooperation among the providers of transportation facilities and services.

ACTION 3C.1

Promote shipper associations among producers of goods with similar characteristics and marketing requirements.

ACTION 3C.2

Strengthen working relationships with Washington and Idaho river communities in planning and marketing programs for Columbia/Snake River ports.

ACTION 3C.3

Promote the coordination and cooperation of Oregon ports so that the strengths and potential of each will be optimized while the combination of their efforts increases Oregon's role in international trade.

ACTION 3C.4

Ensure that Oregon's comparative economic advantages in providing air freight are well understood and communicated by national and international trade missions and other marketing efforts.

ACTION 3C.5

Work with railroads, shippers and the federal government to remove barriers to convenient and efficient shipping by rail by promoting mutually-beneficial track sharing, interlining and shared use of terminals.

POLICY 3D - Intermodal Hubs

It is the policy of the State of Oregon to promote intermodal freight and passenger transportation hubs to enhance competitiveness, improve rural access and promote efficient transportation.

ACTION 3D.1

Facilitate development and operation of transportation hubs with statewide, interstate and international functions, as identified in the state transportation system plan.

ACTION 3D.2

Recognize the role of ports as intermodal hubs.

ACTION 3D.3

Continue to support Portland's role as a major freight hub for goods transported by air, highway, rail, barge and ship.

POLICY 3E - Tourism

It is the policy of the State of Oregon to develop a transportation system that supports intrastate, interstate and international tourism and improves access to recreational destinations.

ACTION 3E.1

Develop a tourism transportation action plan to identify facilities and services to serve tourism and incorporate in state and local transportation plans.

ACTION 3E.2

Identify certain transportation corridors as scenic routes and consider scenic values in corridor planning, improvements and maintenance.

GOAL 4: IMPLEMENTATION POLICIES

To implement the Transportation Plan by creating a stable but flexible financing system, by using good management practices, by supporting transportation research and technology, and by working cooperatively with federal, regional and local governments, Indian tribal governments, the private sector and citizens.

FINANCE

The current structure and level of transportation funding in Oregon is inadequate to meet the needs of either the individual publicly-funded modes of transportation or the system as a whole. This deficiency hampers the state's ability to meet transportation objectives.

While considerable progress has been made in the recent past in increasing funding for state and local investments in transportation, in many cases this progress has merely maintained the previous level of underfunding and has not closed the gap. In order to meet the existing needs of the transportation system, not to mention the new emerging needs as the state undergoes growth and economic transition, a new funding structure will be needed. This funding structure will have to be approved by the state legislature and the voters.

The finance policies will guide the development and allocation of state funding for transportation services, facilities and projects.

POLICY 4A - Adequate Funding

It is the policy of the State of Oregon to develop and maintain a transportation finance structure that provides adequate resources for demonstrated and proven transportation needs. This funding package should incorporate federal, state, local and private funding and should provide adequate funding for all transportation modes and jurisdictions.

POLICY 4B - Efficient and Effective Improvements

It is the policy of the State of Oregon to develop and maintain a transportation finance structure that promotes funding by the state and local governments of the most appropriate improvements in a given situation, and promotes the most efficient and effective operation of the Oregon transportation system.

POLICY 4C - Cost and Benefit Relationships

It is the policy of the State of Oregon to modernize and extend the user pays concept to reflect the full costs and benefits of uses of the transportation system and to reinforce the relationship between the user fees and uses of the related revenues.

POLICY 4D - Flexibility

It is the policy of the State of Oregon to change the structure of the transportation finance system to provide more flexibility in funding, investment and program options.

POLICY 4E - Achievement of State Goals

It is the policy of the State of Oregon to plan and manage the transportation finance structure to contribute to the accomplishment of the state's environmental, land use and economic goals and objectives.

POLICY 4F - Equity

It is the policy of the State of Oregon to develop a transportation finance system which consciously attempts to provide equity among competing users, payers, beneficiaries, providers of the transportation system and regions of the state.

MANAGEMENT PRACTICES

Good management practices are essential to an effective and efficient transportation system. The management practices policy and actions reflect the fact that Oregon's basic transportation systems--its highway, railroad, airport and port systems--are largely in place. High priority is placed on preserving and maintaining these systems in order to protect the investments in them and avoid the higher costs of deferred maintenance.

The main purpose of some statewide highways and railways is to carry traffic long distances to large and small cities and major economic centers. When intense development occurs along the highway or railway and access to the development is not controlled, through traffic and local traffic needs conflict. Access management is one way to maintain the through function of the highway. Controlling the number of grade crossings is a way to protect the function of the railway.

Congestion is another management problem. An alternative to adding new facilities to a highway is to manage the timing or the kind of transportation demand. Demand management techniques spread traffic volumes and encourage motorists to use public transit or other transportation alternatives and to use alternative routes or travel times. Similar good management techniques can be applied to relieve congestion at airports and marine ports.

Larger cities are developing new techniques for transportation management. Federal and state-funded training programs can extend information about these techniques to small cities and private transportation providers and operators.

POLICY 4G - Management Practices

It is the policy of the State of Oregon to manage effectively existing transportation infrastructure and services before adding new facilities.

ACTION 4G.1

Place priority on preserving, maintaining and improving the transportation infrastructure and services that are of statewide significance.

ACTION 4G.2

Manage such factors as the number, spacing, type and location of accesses, intersections and signals in order to operate the transportation system at reasonable levels of service and in a cost-effective manner.

ACTION 4G.3

Use demand management and other transportation systems operation techniques that reduce peak period single occupant automobile travel, that spread traffic volumes away from the peak period, and that improve traffic flow. Such techniques include HOV (high occupancy vehicle) lanes with express transit service, carpools, parking management programs, peak period pricing, ramp metering, motorist information systems, route diversion strategies, incident management, and enhancement of alternative modes of transportation including bicycling and walking.

ACTION 4G.4

Protect the integrity of statewide transportation corridors and facilities from encroachment by such means as controlling access to state highways, minimizing rail crossings and controlling incompatible land use around airports.

ACTION 4G.5

Continue to provide and support a strong policy of size and weight enforcement which will protect and preserve the existing infrastructure.

ACTION 4G.6

Consider the use of life-cycle costs in the design and engineering of bridges, tunnels and pavement.

ACTION 4G.7

Develop, establish and implement management systems for highway pavement, bridges, public transportation facilities and equipment, and intermodal transportation facilities and systems.

ACTION 4G.8

Provide management training and technology-sharing for public and private transportation providers and operators.

RESEARCH AND TECHNOLOGY TRANSFER

Although the infrastructure for the transportation system of the 21st Century is largely in place, the system must be managed more efficiently as it is managed more intensely. Innovative management practices, land use patterns, and new technologies need to be researched and evaluated. Oregon needs to create a research and evaluation agenda that will reveal workable techniques.

POLICY 4H - Research and Technology Transfer

It is the policy of the State of Oregon to promote the development of innovative management practices, technologies and regulatory techniques and safety measures that will further implementation of the Oregon Transportation Plan and lead to new approaches to meeting mobility needs.

ACTION 4H.1

Form a partnership with Oregon and/or Pacific Northwest universities and private industry to promote transportation research.

ACTION 4H.2

Broaden the Oregon Department of Transportation's research responsibilities to include research for all modes.

ACTION 4H.3

Prepare and implement a transportation research agenda for the State of Oregon which includes analysis of the relative costs of implementation measures put forth in this plan.

ACTION 4H.4

Promote the transfer of emerging transportation technologies and planning and management practices to state, regional, and local governments and the private sector. Support the Technology Transfer Center.

ACTION 4H.5

Establish a demonstration program to encourage alternatives to the use of the automobile.

INTERGOVERNMENTAL RELATIONSHIPS

The planning and development of Oregon's transportation system will require joint effort by federal, state, regional and local governments. In the past, each level of government has had its role defined largely by tradition, federal funding requirements and state legislative mandates. Sometimes roles have simply been assumed. Other times they have been consciously determined through a deliberative policy-making process. In the future, transportation planning and development will become even more complex as the state's population grows and fiscal and environmental constraints call for new approaches to meeting Oregon's mobility needs. Cooperation among federal, state, regional and local governments will be essential.

The LCDC Transportation Planning Administrative Rule (OAR 660-12) outlines the governmental roles within Oregon and is reflected in the policies below. The rule separates governmental responsibilities into three types: state, regional (metropolitan planning organization (MPO) or county), and local (cities and counties).

POLICY 4I - State Responsibilities

It is the policy of the State of Oregon that the Oregon Department of Transportation shall define a transportation system of statewide significance that

- **Accommodates international, interstate and intercity movements of goods and passengers that move into and through urban and rural areas;**
- **Accommodates connections between different parts of the system, including intermodal transfers of goods and passengers on the system;**
- **Provides a minimum level of mobility within the state, including access to the system;**
- **Recognizes that maintaining an acceptable level of transportation mobility in Oregon's four metropolitan planning organization (MPO) regions is a matter of special statewide concern.**

ACTION 4I.1

Establish criteria in the Oregon Transportation Plan and Modal Plans for MPO and other regional transportation plans.

ACTION 4I.2

Adopt MPO and other regional plans when they meet established criteria.

ACTION 4I.3

Carry out Oregon Department of Transportation responsibilities for transportation planning and development as described in the Land Conservation and Development Commission's Transportation Planning Administrative Rule (OAR 660-12).

POLICY 4J - MPO and Other Regional Responsibilities

It is the policy of the State of Oregon that

- **MPOs and counties outside of MPOs shall define a transportation system of regional significance adequate to meet identified needs for the safe movement of people and goods between and through communities and to regional destinations within their jurisdictions; and**
- **Regional transportation plans shall be consistent with the adopted elements of the state transportation system plan.**

ACTION 4J.1

Regional transportation plans shall establish criteria for applicable local government transportation plans. MPOs and counties shall

- **Ensure local plans conform to state and regional system plans; and**
- **Assure consistency and appropriate linkages of local plans with regional plans to meet local needs.**

ACTION 4J.2

MPOs and counties shall carry out their responsibilities for transportation planning and development as described in the LCDC Transportation Rule (OAR 660-12).

POLICY 4K - Local Government Responsibilities

It is the policy of the State of Oregon that

- **Local governments shall define a transportation system of local significance adequate to meet identified needs for the movement of people and goods to local destinations within their jurisdictions; and**
- **Local government transportation plans shall be consistent with regional transportation plans and adopted elements of the state transportation system plan.**

ACTION 4K.1

Cities and counties shall adopt regional and local transportation plans as part of their comprehensive plans.

ACTION 4K.2

Local governments shall carry out their responsibilities for transportation planning and development as described in the LCDC Transportation Rule (OAR 660-12).

POLICY 4L - Federal and Indian Tribal Governmental Relationships

It is the policy of the State of Oregon that

- **The state shall coordinate its transportation planning and project development with local federal land managers when such plans and projects are on or adjacent to federal lands;**
- **Federal land managers should consult with the Oregon Department of Transportation in planning and project development which impact the state transportation system; and**
- **The state shall cooperate with representatives of Indian tribal governments in transportation planning and project development when such plans and projects are on or adjacent to Indian reservations.**

PRIVATE/PUBLIC PARTNERSHIP

The state recognizes that most transportation services are provided by the private sector and private interests will provide many of the innovative ideas and technology that will be necessary to accomplish the goals of the Oregon Transportation Plan. The state also recognizes the need to allow the economic marketplace to accomplish its most efficient level of operation. However, the public provides much of the transportation infrastructure and has a specific interest in assuring adequate levels of service. Given the state interest and level of investment in the transportation system, the state must work with private business and industry in planning and implementing transportation goals.

POLICY 4M - Private/Public Partnership

It is the policy of the State of Oregon to involve the private sector to the fullest practical extent in the planning and implementation of the Oregon Transportation Plan.

ACTION 4M.1

Establish private sector participation in the transportation policy and systems plans at all levels of government in Oregon.

ACTION 4M.2

Employ a variety of incentives, established in concert with private interests, to private participation in the implementation of this plan in preference to directives and/or regulation.

ACTION 4M.3

Provide stable, consistent funding for the implementation of this plan to encourage the private sector to commit similarly long-term investments.

PUBLIC PARTICIPATION, INFORMATION AND EDUCATION

This Transportation Plan calls for greater commitments to environmental quality, energy conservation and land use patterns that support alternatives to the use of single occupancy vehicles, and efficient ways to move people and their goods. The policies have evolved from discussions among citizens, the private sector, local governments and state agencies, but they cannot be implemented without widespread public understanding and support.

To understand and support these policies, Oregonians need good information and opportunities to participate in the further development and implementation of the Transportation Plan. To achieve these transportation goals, Oregonians must make major changes in habits--using carpools, riding buses and walking more often, allowing higher densities and mixed uses in neighborhoods, and looking at the energy and environmental costs of transportation choices. Participation in transportation choices and changes cannot end with the adoption of this plan.

POLICY 4N - Public Participation

It is the policy of the State of Oregon to develop programs that ensure the opportunity for citizens, businesses, local governments, and state agencies to be involved in all phases of transportation planning processes.

ACTION 4N.1

When preparing and adopting a transportation plan, transportation plan element, modal plan, facility plan or transportation improvement program, conduct and publicize a program for citizen, business, local government and state agency involvement that clearly defines the procedures by which these groups will be involved.

ACTION 4N.2

Make information about proposed transportation policies, plans and programs available to the public in an understandable form.

POLICY 40 - Public Information and Education

It is the policy of the State of Oregon to provide a program of public information and education for the implementation of the Oregon Transportation Plan.

ACTION 40.1

Implement a public information strategy for the Transportation Plan, including educational and informational programs on

- Land use choices and development pattern issues, targeting architects, planners, developers and financiers;
- Transportation choices and the ways to use them;
- Transportation-related maintenance requirements and benefits;
- Economic and environmental benefits and costs of transportation alternatives, targeting school children;
- Bicycle use and safety, targeting both vehicle drivers and bicyclists;
- Pedestrian safety issues, targeting the under 25 and over 65 age groups in their roles both as vehicle drivers and pedestrians.

ACTION 40.2

Through the Safety Action Plan and other means, expand public awareness of travel safety to reduce transportation-related accidents. Provide information on the primary causes of accidents including drug and alcohol abuse, driver error, and vehicle maintenance neglect, and their results in deaths, injuries and economic loss.

DEVELOPMENT OF THE SYSTEM ELEMENT

The System Element implements the goals and policies by identifying a coordinated multimodal transportation system for air, rail, highways, public transit, waterways and marine transportation, bikeways, pedestrians, and pipelines to be developed over the next 20 years. It includes a summary inventory of the system, forecasts of transportation demands, an examination of alternative approaches to system planning, a description of the preferred plan and an implementation strategy.

INVENTORY OF THE SYSTEM

The "Summary Technical Report" for the OTP System Element, Appendix A, contains an inventory of the multimodal and modal services in the state. Basic information on the existing facilities and services are contained in the "Statewide Transportation Plan Overview 1988." For OTP planning purposes some of the information contained in the "1988 Overview" was updated in the technical report. Other primary sources of inventory information for the Oregon Transportation Plan include the statewide aviation, bikeway, highway, intercity passenger, port and rail plans; "1993-1998 Six-Year Transportation Improvement Program;" and local metropolitan transportation, transit and port plans. (See Appendix C for complete list.)

FORECASTS

Transportation trends over the next 20 years were forecast by estimating population and employment increases and the increased use of major types of transportation.

The System Element is built on a statewide base forecast which is allocated to counties and metropolitan areas. Each of the planning alternatives was initially developed and evaluated on this base forecast. However, recognizing that unforeseen changes can have profound impacts on decisions, two contingency forecasts were also developed. These are a super growth forecast, which predicts the impacts of unexpectedly high rates of population growth, and an eco-catastrophe forecast, which predicts the impact of an unforeseen environmental or economic catastrophe that severely constrains future growth and development.

BASE FORECASTS

ODOT's October 1991 report, "Demographic and Economic Forecasts 1990-2030," projects that population will increase in Oregon at a rate of 1.35 percent per year from 1990 to 2010 and employment will increase at 1.62 percent per year. The 1970-90 Oregon population growth rate was 1.55 per year.

In the future, employment growth is expected to exceed the population growth rate by 20 percent because of the West Coast's generally favorable location (climate, natural resources, and access to rapidly growing Pacific Rim economies) and because of a continuing increase in the proportion of the population between ages 15 and 65 until about 2005. (See Appendix A for county projections.)

TABLE 2
U.S. AND OREGON POPULATION AND EMPLOYMENT (1970-2030)
(IN THOUSANDS)

| | <u>1970</u> | <u>1990</u> | <u>2010</u> | <u>2030</u> | <u>Rate</u> <u>1970-1990</u> | <u>Rate</u> <u>1990-2010</u> | <u>Rate</u> <u>2010-2030</u> |
|------------------------|----------------|----------------|----------------|----------------|---------------------------------|---------------------------------|---------------------------------|
| U.S. Population | 211,349 | 245,807 | 282,050 | 297,537 | 0.69% | 0.92% | 0.27% |
| Ore. Population | 2,092 | 2,847 | 3,725 | 3,933 | 1.55% | 1.35% | 0.27% |
| U.S. Employment | 75,957 | 129,229 | 155,776 | 150,776 | 2.44% | 1.25% | -0.16% |
| Ore. Employment | 709 | 1,248 | 1,723 | 1,664 | 2.87% | 1.62% | -0.17% |

U.S. data are for 1973-1988 and 1988-2010 rather than 1970-1990 and 1990-2010. Rates are the compound annual rate of growth.

Using the population and employment forecasts, planners estimated the amount of travel anticipated through existing plans. These base case forecasts are the result of review and adaption of existing ODOT forecasts included in the "1991 ODOT Highway Plan" and in the "1989 ODOT Aviation Plan," Metro forecasts in the "Regional Transportation Plan: 1989 Update," the Portland Metro forecasts prepared for 2010 since the 1989 Plan, public transit agency forecasts and forecasts by other planning agencies. Table 3 summarizes base case forecasts for travel trends.

TABLE 3
TRANSPORTATION TRENDS
BASE CASE FORECASTS*

| | 1990 Estimate | Growth Rate/ Year | 2010 Forecast |
|--------------------|---------------------|----------------------|------------------|
| Highway Total | 27 billion vmt** | 2.5% | 44 billion vmt |
| Highway Metro | 9 billion vmt** | 2.9% | 15 billion vmt |
| Transit Total | 65 million/yr *** | 2.6% | 108 million/yr |
| Transit Metro | 55 million/yr | 2.9% | 97 million/yr |
| Intercity Bus | 0.66 million/yr | 1.0% | 0.81 million/yr |
| Amtrak | 0.56 million/yr | 1.0% | 0.68 million/yr |
| Airplane | 3.9 million/yr | 5.2% | 10.8 million/yr |
| Truck | 1.1 billion vmt | 2.5% | 1.8 billion vmt |
| Rail | 136 million tons | 2.5% | 223 million tons |
| Pipeline | 62 million b/yr**** | 1.0% | 76 million b/yr |
| Ports - Inland | 11 million tons | 2.5% | 18 million tons |
| Ports - Export | 21 million tons | 2.5% | 34 million tons |
| Ports-Import | 3 million tons | 5.0% | 8 million tons |
| Bicycle-Pedestrian | Not available | 1.35% | Not available |

* Forecasts are base case and do not assume LCDC Rule 12 constraints

** Vehicle miles traveled

*** Million passengers per year

**** Barrels per year

SUPER GROWTH

A more rapid rate of population growth in Oregon, such as 2.3 percent per year, would cause severe deficiencies in the capacity of the state's transportation system, particularly in the metropolitan areas. Unless denser residential patterns occur or infill development in the metropolitan areas takes place, new residents would be forced to move to areas outside the urban growth boundaries that are not well served by transportation modes other than the automobile and may not have adequate highway capacity. This would result in longer trips by automobile and the need to widen highways and provide more access to the highway system.

On the other hand, a benefit of this high growth rate would be greater revenues to support transportation enhancements. If land use objectives could be maintained under the super growth forecast, additional resources that become available could be used to enhance transportation services. Higher densities in

urban areas would create demands for more rapid shifts to public transportation options, and environmental and livability objectives would continue to be met.

ECO-CATASTROPHE

An eco-catastrophe involves environmental and natural resource events that also would affect the state's economy. Economic restrictions could also affect environmental conditions and regulations.

These events could include:

- severe drought
- severe recession
- severe climate changes, such as global warming and ozone depletion
- a prolonged energy crisis

Any of these events would result in changes in demands for the transportation system. Clearly, limitations on personal mobility would result in people making fewer trips and shorter trips, or shifting to other modes for travel. Changes in the manner in which business is conducted, such as reduced demand for Oregon products or reduced output due to environmental considerations, would affect both freight movement and employee travel.

Environmental catastrophes, such as severe drought and acid rain conditions, could dramatically reduce the employment in and quantity and quality of products of the state's forestry, agriculture and fishing industries. An energy crisis, global warming or ozone depletion could result in restriction in the amount of fossil fuel used. If restrictions were made in Oregon, but not in other states, businesses and residents might be encouraged to move to other states. Or if restrictions were made in other states but not in Oregon, greater highway demands might result.

A severe recession, changes in the demand for Oregon exports and new freight equipment requirements (such as ships with deeper draft channel requirements) would influence employment in the state. These kinds of events could lead to a focus on new industries and a relaxing of the number and impact of environmental regulations.

ALTERNATIVE APPROACHES

In the process of determining the preferred level of service to carry out the Transportation Plan's goals and policies, the OTP Steering Committee examined four investment approaches to managing and improving Oregon's transportation system to the year 2012:

1. **Funding Decline** -- A plan which continues current funding levels without adjustments for inflation or new programs;
2. **Continuation of Existing Programs** -- A plan which maintains current programs and increases revenues and expenditures to account for inflation;
3. **Continuation of Existing Programs with Modal Shifts** -- A plan which increases revenue to account for inflation, but shifts additional resources to non-highway modes; and
4. **Livability Approach** -- A plan which attempts to maximize the impacts of transportation investments and programs on both livability and economic development to achieve the OTP goals, Oregon Benchmarks and the Goal 12 Transportation Rule.

The four approaches result in different kinds and levels of economic development and livability. The first two approaches are proposals against which the preferred alternative may be evaluated. However, they also have some value in themselves because they provide a basis for development of contingencies if the preferred alternative cannot be fully implemented.

1. Funding Decline

Under this approach, the only expenditures are those needed to preserve the existing infrastructure and maintain, but not expand, current services.

This approach has reduced expenditures in comparison to continuation of current programs because real dollar expenditures on transportation are assumed to decline with inflation. Transportation modes not now receiving public funding would not receive public funding in the future.

This alternative does not contribute to improved air quality or improved availability of public transit, bicycle paths and pedestrian walkways. Land uses can be controlled and development channeled although no supporting transportation investments, such as public transit, would be financially feasible. Increases in congestion, declines in infrastructure investment, declines in levels of service and increases in operating costs would negatively affect economic growth.

Public transportation service levels cannot be expanded beyond current commitments. Amtrak ridership should grow with population, although no new services would be added. Air travel will likely grow with population. Intercity bus services are likely to continue to decline in both ridership and services.

Highway conditions would not deteriorate, but congestion would increase. No initiatives would be possible for improved intermodal facilities for passengers or freight.

2. Continuation of Existing Program Levels

This alternative plan (Map 1) provides for a continuation of the same state and regional transportation programs as anticipated through 1995 through the entire 20-year period to 2012. Many planned projects at the state and regional levels require additional funding if the programs are to be carried out. Current revenue sources are assumed to be adjusted for inflation so the buying power of the revenue sources does not change. For sources such as gasoline taxes and weight-distance taxes, rates of taxation will have to be periodically adjusted in order to keep pace with inflation.

Highway pavement conditions would continue to improve slightly, but levels of congestion would increase. Intercity rail ridership should grow with population, while intercity bus ridership would decline as intercity bus services continue to be eliminated (most corridors had only one or two trips per day in 1991). Ridership on urban transit and specialized elderly and handicapped services should grow about the same as highway travel. Air travel would grow more rapidly than other modes.

3. Continuation of Existing Programs with Modal Shifts

This alternative (Map 2 with none of the highway-related improvements shown on the map) holds highway expenditures at the level of the Funding Decline and implements all the other programs for other modes that are included in the Livability Approach. Current revenue sources are assumed to be adjusted for inflation or new funding sources are found, and all new net revenues go to alternative (non-highway) modes. Government expenditures are slightly higher for this alternative than for the Continuation of Existing Programs alternative. The major funding shift under this alternative would result in highway conditions and service levels being about the same as with the Funding Decline alternative.

Within urban areas, this alternative would apply the pricing, transit, and land use policies of the Livability Approach. Highway levels of service would be worse than with the Livability Approach since the same vehicle miles of travel would occur on a road system in much poorer condition and with less capacity. Transit ridership would be the same as for the Livability Approach, but bus

services and bus riders would also suffer from slower travel times and poor road conditions.

4. Livability Approach

Under this alternative plan (Map 2), transportation investments and programs would be oriented to the economic and livability goals of the OTP Policy Element, the LCDC Transportation Rule and the Oregon Benchmarks. This option is a consolidation of two options, one which maximizes economic development and one which maximizes land use and environmental benefits. These were combined because they cannot be approached separately.

This alternative depends heavily on the concept of minimum levels of service within each transportation mode to assure appropriate transportation alternatives to all areas of the state. Development of this alternative is described in detail in the Preferred Plan section.

EVALUATION OF THE ALTERNATIVES

Table 4 compares the four alternatives based on 13 criteria:

- Highway VMT
- Transit trips
- Telecommuting trips
- Private cost per year
- Public cost per year
- Total cost per year
- Economic efficiency
- Economic development
- Environment
- Land use
- Alternative modes and technologies
- Consistency with Oregon policies
- Safety

Table 4 clearly indicates that the Livability alternative is best on virtually all criteria. It provides positive benefits in terms of economic development and efficiency as well as the environment, land use and safety. Highway vehicle miles of travel (VMT) would increase the least under the Livability alternative because of the implementation of the LCDC Transportation Rule. This alternative will meet the 10 percent per capita reduction of VMT in the metropolitan areas required by the Transportation Planning Rule.

The total cost to the public of operating and using the transportation system is a very important factor in selecting the Preferred Plan. Traditionally, the public costs for providing the system have been the primary issue. But public costs amount to only 5 percent of the total cost of using the transportation system. Much more important are the private costs to the user including vehicle ownership, value of travel time, fees and fares. The provision of a poor quality transportation system will significantly raise the total costs to the users because of the value of time lost in increased congestion and the increased vehicle ownership and operation costs.

Examination of variations in modal expenditures for alternative plans shows that all except the Preferred Plan have inadequate funding. There is no desirable alternative levels of transportation funding that will provide reasonable mobility or lower total travel costs other than the Preferred Plan. It is the overall level of investment and supportive policies which will be the prime determinant of the performance of the alternatives.

With the Preferred Plan, the public and private transportation costs combined should save Oregon about \$700 million per year as compared to continuing the same path. (See Appendix B for more cost detail.)

TABLE 4
DETAIL - SUMMARY EVALUATION OF POTENTIAL ALTERNATIVE APPROACHES

| Criteria | 1990 | Funding Decline | 2012 Alternatives | | Continue With Modal Shift | Livability Approach | Best Plan |
|--------------------------------|--------|------------------------------------|-------------------------|--|--|--|------------------|
| | | | Continue | | | | |
| Patronage | | | | | | | |
| Hwy. VMT* | | | | | | | |
| Urban | 13,100 | 25,100 | 25,100 | | 19,800*** | 19,800*** | |
| Rural | 13,900 | 19,300 | 19,300 | | 19,300 | 19,300 | |
| Total | 27,000 | 44,400 | 44,400 | | 39,100 | 39,100 | Shift/Livability |
| Transit Trips* | | | | | | | |
| Urban | 64.7 | 109 | 108 | | 212 | 212 | Shift/Livability |
| Intercity | 1.2 | 1.4 | 1.6 | | 3.0 | 3.0 | Shift/Livability |
| Telecommute Trips* | 11.1 | 38.2 | 39.4 | | 74.9 | 74.9 | Shift/Livability |
| Cost Per Year** | | | | | | | |
| Private | \$18.8 | \$33.4 | \$32.6 | | \$33.1 | \$31.6 | Livability |
| Public | \$1.2 | \$1.1 | \$1.2 | | \$1.2 | \$1.7 | Funding Decline |
| Total Cost | \$20.0 | \$34.5 | \$33.8 | | \$34.3 | \$33.3 | Livability |
| Funding Levels* | | | | | | | |
| Highways**** | | \$17,733 | \$20,300 | | \$17,733 | \$25,880 | |
| Rail Pass./Freight | | N/A | N/A | | \$620 | \$620 | |
| Marine-Ports | | N/A | N/A | | \$135 | \$135 | |
| Aviation | | \$18 | \$27 | | \$83 | \$83 | |
| Intercity Bus | | N/A | N/A | | \$120 | \$120 | |
| Transit | | \$3,316 | \$3,716 | | \$6,228 | \$6,228 | |
| Total | | \$21,067 | \$24,043 | | \$24,919 | \$33,066 | |
| Sketch Plan Assumptions | | | | | | | |
| Funding | | Declines w/inflation | Level w/inflation | | Mixed | All modes- Increase | |
| Urban Growth | | | | | | | |
| Boundaries | | Success | Success | | Success | Success | |
| Goal 12 - VMT | | No | No | | Success | Success | |
| New Programs | | None | None | | Minus highway plus others | Those with positive return | |
| Levels of Service | | Major Decline | Modest Decline | | Major Decline Hwy. Stable or Better-others | Stable or Better | |
| -all modes | | | | | | | |
| Technology/Innovation | | | | | | | |
| Traffic System Management | | Low cost TSM key freight corridors | TSM in key corridors | | TSM + recreational and other corridors | TSM + recreational and other corridors | |
| Pricing | | | | | Peak period pricing | Peak period pricing | |
| Transit System Management | | | | | Real time passenger information | Real time passenger information | |
| Intermodal Facilities | | | | | Major public/private investment | Major public/private investment | |
| High speed ground | | | Cooperative development | | Leadership in development | Leadership in development | |
| Other Criteria | | | | | | | |
| Economic Efficiency | | Worse than 1990 | Same as 1990 | | Worse than 1990 | Better Than 1990 | Livability |
| Economic Development | | Worse than 1990 | Same as 1990 | | Worse than 1990 | Better Than 1990 | Livability |
| Environment | | Negative | Negative | | Negative | Positive | Livability |
| Land Use | | Neutral | Neutral | | Positive | Positive | Livability |
| Alternative Modes/Technologies | | Neutral | Neutral | | Positive | Positive | Shift/Livability |
| Consistent w/Oregon Policies | | Not | Not | | Not | Yes | Livability |
| Safety | | Worse than 1990 | Same as 1990 | | Worse Than 1990 | Better Than 1990 | Livability |
| SUMMARY | | Worse than 1990 | Same as 1990 | | Mixed | Better Than 1990 | Livability |

* Millions

** Billions

***This represents a 10 percent VMT per capita reduction from projected 1995 levels as required in the Transportation Planning Rule

****Subject to change upon approval of 1992 Oregon Roads Finance Study

N/A= Not available or minimal amounts

DESCRIPTION OF THE PREFERRED PLAN

The Livability Approach or the Preferred Plan is comprehensive in its approach. It describes service levels for transportation modes, land use coordination needs, jurisdictional responsibilities, and pricing and investment strategies.

It identifies a multimodal system including air, rail, auto, truck, bus, bicycle, pedestrian and marine transportation, telecommunications, and pipelines to be implemented within the next 20 years. It establishes minimum levels of service to be achieved by each of these transportation modes and identifies other major improvements needed beyond the minimum levels.

The Preferred Plan relies on transportation system and facility management processes, including demand management and transportation pricing that reflects usage. It also depends on land use policies to carry out transportation plan goals. It meets the objectives and carries out the requirements of the LCDC Transportation Planning Rule.

To help define the responsibilities of state, regional and local jurisdictions, the plan identifies transportation corridors and facilities which serve statewide and interstate functions, and it sets transportation planning and performance guidelines for local, regional and state implementation of the plan. Finally, it describes the financial investments needed to implement the plan.

ASSUMPTIONS

The Preferred Plan incorporates certain fundamental assumptions about the future. While the plan is not totally dependent on these assumptions for its implementation, and while it would be a valid approach to transportation planning even without these assumptions, the effectiveness of the plan would be limited if these assumptions were not realized.

1. Regional and local governments will continue to contain development within established urban growth boundaries.
2. Urban areas will use compact and mixed use development patterns to enhance livability and preserve open space. These patterns will also support transit and other alternatives to the automobile.
3. The transportation system will achieve the transportation-related economic and livability standards of the Oregon Benchmarks, but not the Urban Mobility Benchmark.

4. State, regional and local governments will cooperate to achieve the vehicle miles traveled reduction standard in the LCDC Transportation Rule.
5. In rural areas automobiles will continue to be the dominant transportation alternative available for most purposes although transit, intercity bus and rail options will grow.
6. Telecommunications will develop substantially because of costs to motor vehicles. It will provide a significant alternative to making transportation trips.
7. The price for transportation services can reflect full costs and lead to expanded use of alternatives to the single occupant vehicle.
8. Most transportation services, other than public transit, will be provided by the private sector.
9. If the Preferred Plan cannot be implemented in its entirety, land use and system management strategies will still be implemented to the fullest extent possible.

MINIMUM LEVELS OF SERVICE

Minimum levels of service standards describe the performance for each mode that must be achieved in order to meet the goals of the Oregon Transportation Plan and carry out the policies for balance and accessibility. Achievement of these minimum levels of service would accomplish the following:

1. Interconnect the various passenger and freight modes to allow travelers and shippers to move between modes and take advantage of the benefits of each.
2. Connect the various areas of the state by linking each community to the nearest Oregon city with a larger population and economy and by connecting areas outside of the Willamette Valley to the Valley.
3. Connect passengers and freight from all areas of the state to the national and international transportation.
4. Provide alternatives to private passenger cars in each local area and region of the state.

The minimum levels of service provide performance objectives to apply to the state, regional and local transportation systems. These performance objectives apply to overall system performance, intermodal facilities, and modal facilities and systems. They describe the system that is expected to be in place within the next 20 years.

STATEWIDE INTERCITY PASSENGER SERVICES

Specialized transportation services, airport, and intercity common carrier services must be planned as an integrated system to provide accessibility between communities. Minimum levels of service for intercity passenger services are defined in terms of required minimum connectivity between various parts of the state.

Minimum levels of multimodal intercity passenger service are set at the following levels:

- Hourly intercity passenger services should be available to major cities along I-5 in the Willamette Valley.
- Market areas over 50,000 in population and over 70 miles from Portland should have at least three minimum round trip connections to Portland available per day via intercity passenger modes (e.g., Astoria, Newport, Eugene, Coos Bay/North Bend, Bend/Redmond, Medford, Roseburg, Klamath Falls, Pendleton).
- East-west and north-south connections to places outside the state should be provided based on travel density in Oregon's interstate corridors.
- Local public transit services and elderly and disadvantaged service providers should regularly connect with intercity passenger services.
- Intercity passenger terminals should be subject to public control in order to assure open access to all intercity carriers (all of the state, but especially at main transfer locations including Portland, Eugene, Medford, Bend/Redmond).
- To the extent possible, direct interconnections should be available between intercity bus, air, rail, airport limousine services, and local transit services (e.g., Portland, Eugene, Coos Bay/North Bend, Medford, Klamath Falls, Bend/Redmond, Pendleton).
- Services shall be provided in compliance with the Americans with Disabilities Act (ADA) requirements for all modes and transfer facilities.

Intercity bus minimum levels of services

- Intercity passenger service should be available for an incorporated city or groups of cities within five miles of one another having a combined population of over 2,500, and located 20 miles or more from the nearest Oregon city with a larger population and economy. Services should

allow a round trip to be made within a day (e.g., Astoria-Portland, Tillamook-Portland, Newport-Corvallis, Brookings-Coos Bay, Lakeview-Klamath Falls, Burns-Bend, John Day/Canyon City-Bend, Enterprise/Joseph-La Grande).

- Local transit and elderly and disadvantaged services should be coordinated with intercity bus services.
- Bus passenger terminals should be publicly controlled to ensure all carriers have access to the terminals under open access terms (e.g., Portland, Eugene, Coos Bay/North Bend, Medford, Klamath Falls, Bend/Redmond, Pendleton).

Rail passenger minimum levels of services

The Oregon Rail Passenger Policy and Plan identifies a set of staged improvements for rail passenger service in the state. The rail mode has a particularly viable role in the Willamette Valley as a part of a regional system linking Eugene, Portland, Tacoma, Seattle, and Vancouver, B.C. The Rail Plan also addresses potential opportunities for rail passenger development in other parts of the state.

- The regional rail service should offer frequent schedules, through trains, extensive feeder bus networks with convenient connections, and an aggressive marketing and passenger amenities program to stimulate changes in transportation preferences and a per capita reduction in highway travel.
- Intercity rail service through Oregon should provide reliable on-time arrivals within fifteen minutes of published schedules.
- The existing Seattle to Portland Mt. Rainier train should be extended south to Eugene as a cost-effective first step in creating a Seattle - Portland - Eugene passenger rail corridor. This extension can be implemented quickly with minimum capital investment. Premium hourly intercity bus service between Eugene and Portland should be inaugurated to complement the train. This would provide the needed frequencies to attract riders in sufficient numbers to justify the operation. As traffic volumes increase, more trains should be added.
- Incremental physical improvements to existing mainline railroad tracks should be used to increase passenger speeds up to 110-125 mph where there is the potential for high rider volumes.
- Oregon should cooperate with adjacent states to assure concurrence and cooperation when developing rail projects tied to the regional network.

- Intercity bus lines and local transit services should be coordinated with intercity rail services to provide for timely and convenient connections (e.g., Portland, Salem, Corvallis/Albany, Eugene, Coos Bay/North Bend, Medford, Bend/Redmond, Klamath Falls).
- Advanced intercity passenger services should be developed within Oregon after technologies and cost requirements have been demonstrated and financial support provided for Oregon services.

Intercity air service minimum levels of services

The minimum level of service for commercial airports has been defined as the availability of an airport with commercial service where the population is greater than 50,000 and the distance to the nearest other commercial air service is greater than 70 miles. This standard has generally been met within the state, but leaves some more sparsely populated areas without commercial air service. These areas should have access to air taxi services.

- Air service connections between Portland, or other West Coast hubs, and other areas of Oregon should be provided whenever commercially viable (three round trip planes per day of 19 passengers as a minimum measure of commercial viability) or whenever intercity air connections are more economic than providing operating assistance to other modes (e.g., Astoria, Eugene, Newport, Coos Bay/North Bend, Roseburg, Bend/Redmond, Medford, Klamath Falls, Pendleton).
- Basic commercial air service should be available to isolated urban areas. These areas are isolated because of topographic constraints, severe weather conditions and distance from Portland. The areas which must have airport service are areas with a population of more than 25,000, a central urban area of more than 15,000, and a location more than 50 miles from other commercial air services and more than 100 miles from a metropolitan area (e.g., La Grande/Baker City).

STATEWIDE FREIGHT SERVICE

Freight intermodal and port minimum levels of services

Major intermodal hub facilities serve as transfer points from or to truck, air, rail, and marine transportation and should be identified and supported as a method for improving Oregon's access to national and international markets. Marine ports and airports by nature are intermodal hubs.

- Connections to major port facilities should be available under open access terms to all major railroads and trucking lines in the nearby vicinity of maritime port terminals where feasible (e.g., Astoria, Portland, Coos Bay).
- To the extent possible, major intermodal rail/truck facilities should exist on rail mainlines with a service area of 150 miles (e.g., Portland, Eugene, Klamath Falls, Umatilla/Boardman, Ontario). Intermodal facilities are to be encouraged at other locations.
- Ports and port systems handling substantial quantities of international and national freight (more than 3,000,000 tons) should have multimodal connections, be able to operate in the international marketplace and have access to rail freight service (e.g., the lower Columbia River, Coos Bay).
- Sufficient port facilities and channels should exist to support international and interstate shipping (e.g., lower Columbia River and Coos Bay channels).
- Sufficient port capacity including waterside and landside facilities to provide safe access to open seas for fishing, recreation and commerce should be available.

Highway freight minimum levels of services

Highway levels of service standards are defined in the Oregon Highway Plan for peak hours (see Appendix D). In addition to peak hour level of service, standards are proposed to allow the movement of traffic on highways of statewide function.

- Highway freight accessing intermodal truck/rail terminals or moving within Oregon should experience level of service C or better on Oregon highways during off-peak periods (e.g., Portland, Eugene, Klamath Falls, Umatilla/Boardman).
- Highways which have a high percentage of trucks, provide regional freight access, and handle long-distance traffic to out-of-state destinations should be designated as primary freight corridors and incorporated into corridor plans and projects (e.g., U.S. 97 Madras to Biggs, U.S. 20 Bend to Ontario).

Rail freight minimum levels of service

- Branch rail lines within Oregon should be maintained to allow a minimum speed of operation of 25 miles per hour whenever upgrading can be achieved with a favorable benefit-cost ratio.

- Rail mainlines within Oregon should provide convenient ramp, terminal and reload facilities for transfers from truck to rail for long haul movement of freight. High quality highway access should be provided to these sites (mainlines, Oregon Trunk, Siskiyou branch).
- Priority rights of way should be preserved for potential public use or ownership when abandonment proceedings are initiated (e.g., corridors where there are future alternative uses, especially in the Willamette Valley).
- Reload facilities should be encouraged and, if warranted, supported where they provide the most cost efficient and environmentally effective response to branchline abandonment.
- Open access should be provided to and from all reload facilities and to major ports (lower Columbia River, Coos Bay, Portland, Eugene, Klamath Falls, Umatilla/Boardman).

Pipeline/natural gas minimum levels of service

- In order to make alternative fuel widely available to the transportation user and to support regional economic development opportunities, natural gas should be available every 100 to 150 miles on major interstate/statewide transportation corridors throughout the state (e.g., Tillamook, Coos Bay/North Bend).

INTERSTATE AND STATEWIDE HIGHWAYS

- Minimum levels of service and minimum tolerable conditions for state highways are included in the Oregon Highway Plan.*
- Intelligent Vehicle Highway Systems (IVHS) should be established on I-5, I-84 and within metropolitan areas to increase system capacity, improve motorist information and improve travel efficiency on interstate, statewide, regional and local highways.

- Highway system management techniques such as access management, transportation demand management (TDM) and congestion pricing shall have a substantial role in enabling the metropolitan areas to meet the LCDC Goal 12 Transportation Rule for reduction of per capita vehicle miles of travel.
- A comprehensive statewide program to identify and manage a system of scenic transportation corridors should be established.

**These minimum levels of service will be revised in an updated statewide Highway Plan.*

REGIONAL/LOCAL SERVICES

Bicycle and pedestrian minimum levels of service

- Bicycle and pedestrian networks should be developed and promoted in all urban areas to provide safe, direct and convenient access to all major employment, shopping, educational and recreational destinations in a manner that would double person trips by bicycle and walking.
- Secure and convenient bicycle storage available to the public should be provided at all major employment and shopping centers, park and ride lots, passenger terminals and recreation destinations.
- Statewide and regional bicycle systems should be integrated with other transportation systems in urban and rural areas to accommodate commuting and other trips by bicycle. Safe, direct and continuous bikeways free of unnecessary delays should be provided along all urban arterial and major collector routes. Paved shoulders should be provided on highways in rural areas.

Urban transit system minimum levels of service for Metropolitan Planning Organization (MPO) areas of over one million population (Portland)**

- Urban transit services should be increased to assure that transit has a substantial role in enabling metropolitan areas to meet LCDC Goal 12 Transportation Rule requirements for reduction of per capita vehicle miles of travel.
- Urban transit services should be provided in all parts of the urbanized area.

- High capacity transit services with separate rights-of-way or priority treatments for transit vehicles should be provided in all interstate corridors and other highway corridors of statewide function in which level of service E or worse is experienced or anticipated.
- Service frequencies for all routes should be no less frequent than one half hour at peak periods.
- Service should be provided at no less than one hour frequencies for off-peak services on all routes, or a guaranteed ride home program should be available and publicized.
- Park and Ride facilities along major rail or busway corridors should be provided to meet reasonable peak and off-peak demand for such facilities.
- Urban transit services should provide regular, convenient connections to all intercity passenger modes and terminals.
- Service levels provided to transit-oriented developments should be sufficient to achieve the transit-related usage goals of the development.
- Urban areas of 2,500 population or more within 20 miles of the metropolitan central city should have at least peak hour transit service to the metropolitan area (e.g., Newberg, Scappoose).

Urban transit minimum levels of service in MPO areas of less than one million population (Salem, Corvallis/Albany, Eugene, Medford)**

- Urban transit services should be increased to assure that transit has a substantial role in enabling metropolitan areas to meet LCDC Goal 12 Transportation Rule requirements for reduction of per capita vehicle miles of travel.
- Urban transit services should be provided in all parts of the urbanized area.
- High quality transit services should be provided in all interstate corridors and other highway corridors of statewide function in which level of service E or worse is experienced or anticipated.
- Service frequencies for all routes should be no less frequent than one-half hour at peak periods.
- Service should be provided for off-peak mid-day services on all routes, or a guaranteed ride home program should be available and publicized.

- Park and Ride facilities along major rail or busway corridors should be provided to meet reasonable peak and off-peak demand for such facilities.
- Urban transit services should provide convenient connections to all intercity passenger modes and terminals.
- Urban areas of 2,500 population or more within 20 miles of the metropolitan central city should have at least peak hour transit service to the metropolitan area (e.g., Cottage Grove, Lebanon, Mt. Angel, Silverton, Dallas, Monmouth, Stayton).

Urban transit minimum levels of services for urban areas of over 25,000 persons (e.g., McMinnville, Coos Bay/North Bend, Grants Pass, Bend/Redmond, Klamath Falls)**

- Urban transit services should be available to the general public to provide a modal alternative to automobile travel.

***These minimum levels of service will be revised in a future statewide transit plan.*

Regional and local highways and streets

Minimum levels of service and minimum tolerable conditions for local city and county roads are included in the Oregon Roads Finance Study. The minimum levels of service and minimum tolerable conditions vary based upon functional class, terrain and traffic volume.

ADDITIONAL PROJECTS AND PROGRAMS

PROJECTS INCLUDED IN THE PREFERRED PLAN

Three additional improvements that would be necessary to achieve the plan go beyond the minimum levels listed above. (See Maps 2 and 3.)

1. Deepening the Columbia and Coos Bay channels

These projects will be necessary to preserve the competitiveness of Oregon ports for international transportation. The Corps of Engineers is undertaking a feasibility study to deepen the Columbia channel to 43 feet and has completed a feasibility study to deepen the Coos Bay channel to 36 feet.

2. Implementation of Intelligent Vehicle Highway Systems (IVHS)

IVHS systems allow vehicles to exchange information about the road system and have the potential to enhance the efficiency and safety of highways by giving drivers information necessary to select routes. They control vehicle operations in such a way as to maximize use of facilities while minimizing congestion. This capability will be particularly valuable on the interstate highways and in metropolitan areas. In metropolitan areas IVHS will also be critical to implementation of management and pricing strategies discussed below. IVHS is now in its infancy in terms of application, but should be implemented during the next 20 years.

3. Expanded urban transit in metropolitan areas

The level of service prescribed for metropolitan areas in the minimum levels of service was that required to meet the accessibility and balance goals in the OTP for individual travelers. However, this level will not be sufficient to reduce the per capita VMT necessary to meet the LCDC Transportation Goal. This plan also envisions additional investments to meet that goal.

LONG-RANGE TRANSPORTATION POSSIBILITIES

Four improvements are being considered which are not in the plan. They are long-range possibilities which need further study and development. These are illustrated on Map 4 and include:

1. High speed rail

The Oregon Rail Passenger Policy and Plan is considering the potential for high-speed rail service in the Willamette Valley. The establishment of this service will depend on the potential for adequate ridership levels and ties north to Seattle and possibly to Vancouver, B.C. Establishment would be the next phase beyond improvements to Amtrak to 125 mph and should be considered as a long-range tradeoff to major capacity additions to I-5.

2. Willamette Valley/ Columbia Gorge interurban rail service

An interurban rail service is being investigated in the Willamette Valley and in the Columbia Gorge as a way of serving commuter travel needs. With adequate ridership, such service could support community development and possibly reduce needs for highway improvement. It should be examined further in the context of land use and transportation options for the areas.

3. Klamath Falls intermodal freight airport hub

Because of topography, climate and compatible land use, the Klamath Falls area has an opportunity for an intermodal freight airport. This facility could become a reality as the market develops for a major West Coast air freight center to relieve congestion at Los Angeles, Seattle and Vancouver, B.C.

4. New international airport in the Willamette Valley

Beyond 2012, a new international airport in the Willamette Valley could be needed if Portland International Airport reaches capacity. A new airport would enable Oregon to have an international hub that would provide major economic development opportunities, especially if other international airports in the Pacific Northwest also reach capacity. Oregon's land use system could be a major advantage in locating and preserving such a facility.

SYSTEM MANAGEMENT AND PRICING

MAINTENANCE AND OPERATION

Maintaining and operating existing facilities and services are fundamental to Oregon's future transportation system. Highways, roads and streets must be preserved and improved to provide the basic infrastructure for movements by automobile, truck, public transit, intercity bus, bicycle and walking. Rail, air, waterway and pipeline facilities must also be maintained as needed for the economic transport of freight and passengers.

DEMAND MANAGEMENT

One of the basic concepts in the OTP is that managing the transportation system may be just as important as constructing and operating it. For example, demand management in the form of metered freeway ramps has already improved operation of freeways in the Portland metropolitan area. Installation of IVHS within interstate highways will have a significant role in increasing existing highway capacities.

PRICING

The Preferred Plan creates incentives to choose the more efficient and environmentally responsible modes of transportation by using fees and managing the transportation system to encourage these choices. A rational pricing strategy for transportation services, including use of the highway system, will be developed to encourage patterns of travel and land use which are consistent with livability goals.

In the short term, a rational pricing strategy may involve incremental increases to Oregon's current highway and other user fees such as parking fees and charges for environmental costs such as vehicle emissions. Such a strategy should lead to higher fees for use of more congested highways and other facilities, particularly during peak periods--an approach known as congestion pricing. To have the desired effect of reducing travel, the user should directly feel these fees and pay out-of-pocket as much as possible. Revenues from such a pricing program should be applied to infrastructure preservation and alternative transportation improvements which foster economic growth and are consistent with the livability goals.

User fees are useful in managing the transportation system and are essential to the achievement of the LCDC Transportation Rule. That rule calls for a 20 percent per capita reduction in VMT in metropolitan areas over the next 30 years. Studies of transportation demand indicate that this cannot be achieved with public transportation and land use changes alone, but must be accompanied by some combination of peak period tolls on roads and parking charges.

To be effective in reducing VMT, the level of fees would have to be substantial. Estimates by consultants place the level of fees at \$1,250 in new fees per vehicle annually or \$.15 per mile in metro areas. (See Summary Technical Report, Appendix B.) Half of the increase could come from mileage congestion fees, and the remainder from employee parking and non-work parking charges. These fees could be phased in during the 20-year planning periods.

POLICY CHOICES

The methods for achieving the VMT per capita reduction required by the LCDC Transportation Rule have yet to be chosen in each metropolitan planning area. These will likely include a combination of system maintenance, demand management, pricing and land use changes.

LAND USE COORDINATION

Full implementation of this plan requires close coordination between land use policy and transportation management and investments. The plan makes three fundamental assumptions with respect to land use policy. First, urban growth boundaries will be maintained in substantially their present positions for the next 20 years. If boundaries do not hold, then public transportation and other alternatives to the single occupant automobile cannot be effective in serving the sprawling low density developments that will likely result. Additional highway investments will be required to serve those living in areas that are outside existing urban growth boundaries, creating increased auto dependency in opposition to livability goals.

Second, the plan calls for transportation investments that support the development of mixed use, pedestrian friendly neighborhoods and commercial districts and high density development within walking distance to transit to reduce demands for automobile trips and increase the ability to provide effective transit services.

Third, the plan assumes that local land use plans can be effective in minimizing conflicts between transportation facilities and other development. Otherwise, major transportation systems, such as urban arterial highways, will not function at the projected levels of service and will require additional investment in capacity or mitigation of conflicts with residential and commercial developments.

Coordination of land use and transportation is a major goal of the LCDC Transportation Rule and is included in the transportation planning and performance guidelines section of the plan.

CORRIDORS, FACILITIES AND SYSTEMS SERVING STATEWIDE AND INTERSTATE FUNCTIONS

The responsibility of different levels of government for transportation facilities and services within Oregon will differ by the type of function the service or facility performs. As a step toward establishing governmental responsibilities, transportation corridors, facilities, and systems must be defined according to their functions.

The transportation system of statewide function is determined by the importance of particular elements of the system in terms of

- connecting major cities or urban areas within or outside Oregon;
- volumes of passengers and freight;
- contribution to important environmental, land use and development goals;
- accessibility provided to regions of the state, other states and nations.

The corridors, facilities, and systems of interstate and statewide function form the backbone of Oregon's transportation system. They provide the framework for identifying state government concerns and responsibilities for the implementation of the Oregon Transportation Plan. While these transportation features are not necessarily owned and operated by the state, the state does have a special interest in their preservation because of their importance to the entire transportation system. Therefore, protection and development of these corridors, facilities and systems will be included in planning and performance criteria for state modal plans, and regional and local transportation plans. (See Planning and Performance Guidelines, p. 88)

Corridors serving statewide functions are defined as broad bands through which various modal links provide important connections for passenger or freight services. **Facilities** of statewide function are individual modal or multimodal terminals which, even by themselves, are of a sufficient level of importance to be of statewide function. **Systems** of statewide function are collections of links, services or terminals, which taken as a whole, are of statewide function even though individual corridors, facilities or services which make up the systems are not a statewide function.

MULTIMODAL CORRIDORS

The multimodal corridors of statewide function, which currently move people and goods by several modes, include the Columbia River corridor including I-84, the north-south I-5 corridor through the Willamette Valley, the north-south

route east of the Cascades, and Access Oregon Highway corridors. Although some of these corridors are served only by highways today, they should be analyzed as multimodal corridors in further planning and project development.

HIGHWAY CORRIDORS AND SYSTEMS

Highways connect Oregon with other states and places within the state. They provide for the movement of people and goods around the state. Highways of interstate and statewide levels of importance were identified in the 1991 Oregon Highway Plan. The highways identified as the interstate system, Access Oregon Highways and statewide highways in the Highway Plan are considered of statewide function. However, the federal Intermodal Surface Transportation Efficiency Act requires reevaluation of these highway classifications.

Other state highways not classified as a statewide function are of importance to the state in terms of their conditions, levels of service, and access management. The Oregon Transportation Plan incorporates the minimum levels of service, minimum tolerable conditions, and access management policies presented in the Oregon Highway Plan. (See Appendix D for minimum levels of service.)

The level of service and condition of major county and city street systems, including arterial and collector systems, taken as a whole are of statewide function.

URBAN AND INTERCITY PASSENGER CORRIDORS AND SYSTEMS

Each of the metropolitan transit district systems, transit systems serving communities over 25,000 population, connecting providers and paratransit services, taken as a whole, is of statewide function.

The Amtrak services through Oregon are a statewide function. Future intercity rail service in Oregon will be a statewide function.

Each of Oregon's commercial air carrier service airports is a statewide function. Although the individual general aviation airports are not of statewide function, the performance of, and condition of, the system of general aviation airports in the state as a whole is a statewide function.

All intercity bus lines connecting places of 25,000 or more are a statewide function, and the system taken as a whole is a statewide function. In addition, intercity bus lines connecting places of 2,500 or more, which are 20 miles or more from intercity passenger services, are also a statewide function. The system of intercity services, including specialized van services for the elderly and disadvantaged, as a whole is a statewide function.

Intercity passenger terminals serving as major connecting points for an individual mode or for intermodal connections taken as a whole are a statewide function.

The statewide bicycle route system is, as a whole, a statewide function.

FREIGHT SYSTEMS AND SERVICES

Highways play a critical role for intermodal transfers, long distance, regional and local freight distribution. The highways classified as interstate and statewide levels of service in the 1991 Oregon Highway Plan are considered a statewide function.

Waterways are also important carriers of interstate and international freight. The lower Columbia River ports, the Columbia/Snake River system, and the Oregon International Port of Coos Bay are considered a statewide function. The intermodal connections to those ports, including connections between ocean going vessels, barges, railroads, and trucks are a statewide function. Other marine ports which provide statewide, interstate, or international transportation services are considered as a whole to be a statewide function.

Approximately four locations around Oregon should be selected to act as major intermodal transfer locations. These major non-marine intermodal transfer facilities are a statewide function.

The mainline rail lines through Oregon (the Burlington Northern, Southern Pacific, and Union Pacific), connecting lines (Oregon Trunk and Siskiyou branch), and rail access to statewide function marine facilities (lower Columbia River and Coos Bay) are each a statewide function. Although individual rail branch lines are not a statewide function, the services provided by branch lines as a whole are a statewide function; the state has an interest in assuring the connections served by rail branchlines continue to be served without adverse environmental consequences.

The major oil and natural gas pipelines traversing Oregon are a statewide function.

REGIONAL AND LOCAL CORRIDORS AND FACILITIES

Corridors, facilities and systems which are not a statewide or interstate function are primarily the concern and responsibility of regional and local governments and are highly important to the achievement of regional and local transportation objectives. Therefore, the state of Oregon is also interested in the achievement of performance objectives for transportation facilities and services of regional and local function.

IMPLEMENTATION

THE AUTHORITY OF THE OTP

The Oregon Transportation Plan (OTP) is intended to meet the requirements of ORS 184.618(1):

As its primary duty, the [Transportation] Commission shall develop and maintain a state transportation policy and a comprehensive, long-range plan for a multimodal transportation system for the state which encompasses economic efficiency, orderly economic development, safety and environmental quality. The plan shall include, but not be limited to aviation, highways, mass transit, pipelines, ports, rails and waterways. The plan shall be used by all agencies and officers to guide and coordinate transportation activities and to ensure transportation planning utilizes the potential of all existing and developing modes of transportation.

The OTP is part of an on-going transportation planning process within the Oregon Department of Transportation and provides for integration of existing and future more detailed modal and intermodal plans. It is a means of enhancing coordination and cooperation between the various transportation modes, state and federal agencies, regional and local governments, and private industry. It provides a framework for prioritizing transportation improvements and funding requirements by the Transportation Commission and the Oregon Legislature.

ORS 184.618(1) requires state agencies to use the OTP "to guide and coordinate transportation activities. . . ." but it does not give the Transportation Commission authority to impose OTP goals, policies and performance guidelines on other than state agencies. However, the OTP operates in the legal context of the State Agency Coordination Program (OAR 731-15) and the LCDC Transportation Planning Rule (OAR 660-12) from which it derives additional requirements and authority.

THE STATE AGENCY COORDINATION PROGRAM

State agency coordination programs describe what agencies will do to comply with Oregon's land use planning program. The Oregon Transportation Commission's most recent coordination program with the LCDC was adopted in September 1990.

ORS 197.180 and the ODOT State Agency Coordination Program require all of the Department of Transportation's programs affecting land use to be carried out in compliance with the statewide planning goals in a manner compatible with city, county and regional acknowledged comprehensive plans.

The Oregon Transportation Plan and the modal plans (see below) must comply with the coordination program and statewide planning goals. If modal plans and other ODOT plans affect specific geographic areas, they must be compatible with the affected regional and local acknowledged comprehensive plans. (See Figure 1.)

THE TRANSPORTATION PLANNING RULE

LCDC's Transportation Planning Rule, which implements Goal 12 (Transportation), requires ODOT to identify a system of transportation facilities and services adequate to meet identified state transportation needs and prepare a transportation system plan (TSP). The Oregon Transportation Plan, including the Policy and System Elements, and adopted modal and facility plans are intended to meet the requirements for the state TSP.

The rule also requires Metropolitan Planning Organizations (MPOs) and counties to prepare regional TSPs consistent with the adopted state TSP; cities and counties must prepare local TSPs consistent with both regional and state TSPs. The planning process is intended to assure that comprehensive plans provide for a network of transportation improvements sufficient to meet local, regional and state transportation needs.

The OTP will be an adopted element of the state transportation system plan. Therefore, regional and local plans must be consistent with the OTP through the authority of the rule.

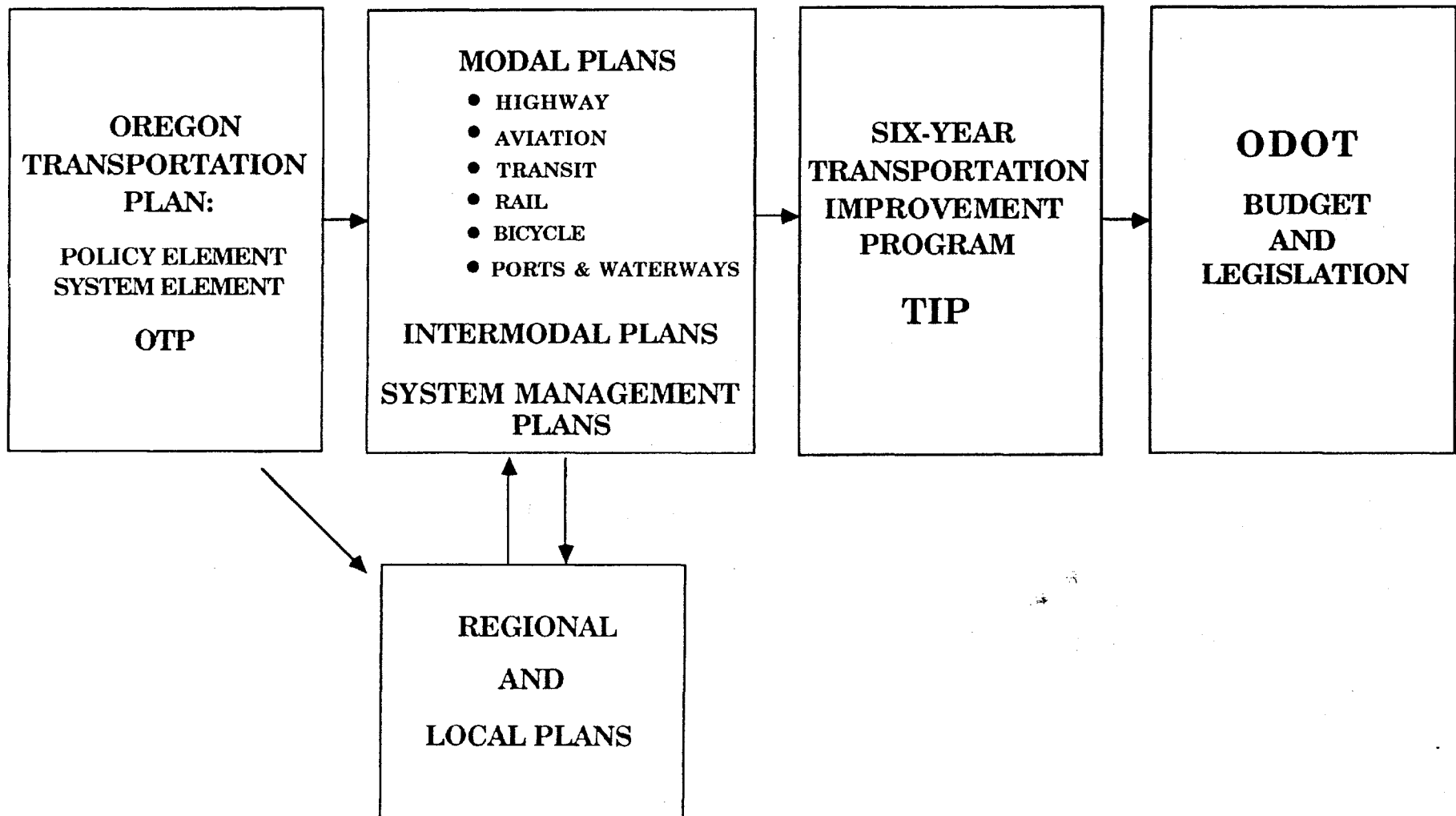
AMENDING THE OTP

The development and maintenance of the OTP is a continuous and dynamic process. To keep current with changes in transportation needs, modes, management methods and state and federal requirements, the Transportation Commission intends to update the Oregon Transportation Plan every six years or whenever specific problems that require policy changes arise. The commission will amend modal plans and facility plans for each transportation mode to conform to changes in the OTP. These amendments may also require changes in MPO and local transportation plans.

The regular six-year major updating process will include opportunities for involvement of state and federal agencies, metropolitan planning organizations, cities, counties, special districts, businesses and interested citizens. The ODOT State Agency Coordination Program describes the amendment process in detail.

FIGURE 1

INTEGRATED TRANSPORTATION PLANNING



STATE, REGIONAL AND LOCAL PLANNING

The Oregon Transportation Plan (OTP) must be implemented through integrated state, regional and local planning and the private sector if it is to guide Oregon's transportation future effectively. The OTP leads this process by identifying in general terms the statewide transportation system and the minimum levels of service which should be achieved. Further planning activities will provide the details of the transportation system to be developed over time in accordance with the OTP and other laws, regulations and policies.

The elements of integrated transportation planning and system management statewide will include

- Modal and intermodal plans developed by ODOT and other state agencies;
- System management plans developed by ODOT and other state agencies;
- Metropolitan area plans developed through Metropolitan Planning Organization (MPO) planning processes in conformity with state and federal laws, plans, policies and rules;
- Plans developed by local governments and special districts.

STATE MODAL, INTERMODAL AND SYSTEM MANAGEMENT PLANS

The state transportation planning process will include the periodic development or refinement of modal plans (e.g. transit, highway, bicycle, rail, aviation), intermodal plans and system management plans which carry out or amplify the Oregon Transportation Plan. ODOT has been reorganized on an intermodal basis to facilitate the integration of planning for all the modes. ODOT and other state agencies involved in transportation planning will develop these plans in conformity to all applicable federal and state laws, rules and policies. The ISTEA specifically requires consideration of certain elements in the transportation planning process.

Modal and Intermodal Plans

Modal plans identify system needs, classify facilities and establish policies for their operation, improvement and financing. ODOT's State Agency Coordination Agreement and ORS 184.618 require consideration of the following modal elements:

- Aviation
- Highways
- Mass transit
- Pipelines
- Rail
- Waterways and ports

Intermodal planning elements will include

- Corridor plans
- Willamette Valley plan prepared in cooperation with MPOs and local governments
- Safety action plan
- Rural areas transportation access plan for state and federal lands and recreation areas
- Tourism transportation action plan

ODOT and other state agencies will employ an integrated planning and development process which includes appropriate consideration for each alternative mode and for all intermodal concerns when developing modal plans, programs, and projects. Modal plans shall

- Be consistent with the Oregon Transportation Plan and its revisions;
- Identify opportunities to utilize other modes and to integrate recommended modal programs with those of other modes;
- Evaluate the complementary actions among and tradeoffs between investments in the modal plan, program or project and other transportation investment opportunities;
- Evaluate the consistency of the modal plan with the Oregon Transportation Plan, the LCDC Transportation Planning Rule, the Oregon Benchmarks, the State Implementation Plan under the Clean Air Act Amendments, the planning requirements of the ISTEA, and regional MPO plans;
- Recommend financing mechanisms to address any unmet needs;
- Identify a process to produce a capital improvement program.

To evaluate the tradeoffs between modes, modal and intermodal plans shall

- Identify future transportation needs. This includes an analysis of needs of particular travel movements in sufficient detail to evaluate alternative needs;
- Determine whether anticipated needs require a major improvement or increase in capacity over the next 20-30 years;
- Where major improvements are needed, determine whether there are feasible alternative ways of meeting these travel needs;
- Evaluate alternatives using the criteria in the Oregon Transportation Plan and the LCDC Transportation Planning Rule.

System Management Plans

ODOT will develop an integrated management system to assure consistency of bridge management, pavement management, safety management, congestion management, transit equipment and facilities management and intermodal transportation facilities and systems. The system will be consistent with requirements of the ISTEA and will incorporate procedures for evaluating the costs and benefits of infrastructure investment and management decisions.

In carrying out its obligation to provide management plans, ODOT will emphasize

- Intermodal passengers
- Intermodal freight
- Demand management including congestion pricing

ODOT expects MPOs to participate in planning related to air quality and congestion management and will cooperate with MPOs in the implementation of system management plans.

METROPOLITAN AREA PLANS (REGIONAL PLANS)

Metropolitan planning organizations and their member agencies have a major role in meeting the objectives of the various transportation planning guidelines. MPOs shall coordinate preparation of the regional transportation system plan with ODOT. MPO plans shall be consistent with the Oregon Transportation Plan, the LCDC Transportation Planning Rule, the State Implementation Plan under the Clean Air Act Amendments, and the planning requirements of the ISTEA.

COUNTY AND CITY PLANS

County and city transportation planning shall be consistent with the Oregon Transportation Plan, the LCDC Transportation Planning Rule, the State Implementation Plan under the Clean Air Act Amendments and the regional transportation system plan.

PLANNING AND PERFORMANCE GUIDELINES

The Planning and Performance Guidelines below help implement the OTP by providing a structure for further transportation planning and programming for regional and local agencies. Achievement of these guidelines is considered necessary to carry out the LCDC Transportation Plan. The guidelines will operate in conjunction with the Transportation Rule, which already specifies planning considerations and procedures to be applied to regions or urban places of different sizes. The role of the OTP planning guidelines is to supplement but not replace already established requirements of the Transportation Rule and the federal ISTEA.

To assist regional and local government consistency with the Oregon Transportation Plan, the following outline suggests the type of jurisdiction to which OTP policies and actions apply. These guidelines assume that the OTP action statements associated with policies are an integral part of the goals and policies of the plan. The Minimum Levels of Service standards are intended to be implemented during the next 20 years by federal, state, regional and local governments and the private sector.

I. ALL JURISDICTIONS

A. Policy Guidelines. The following Policy Guidelines apply to all MPOs and local governments:

1. Provide a balanced transportation system. (Policy 1A)
 - a. Design systems and facilities that accommodate multiple modes within corridors where appropriate. (Action 1A.1)
2. Preserve corridors for future transportation development. (Action 1B.4)
3. Promote a transportation system that is reliable and accessible to all potential users measured by availability of modal choices, ease of use, relative cost, proximity to service and frequency of service. (Policy 1C)

- a. Provide transportation services in compliance with the Americans with Disabilities Act (ADA) requirements for all modes and transfer facilities. (Actions 1C.3)
 - b. Assure that services of private and public transportation providers are coordinated. (Action 1C.5)
4. Provide a transportation system that is environmentally responsible and encourages conservation of natural resources. (Policy 1D)
 - a. Minimize transportation-related energy consumption through improved vehicle efficiencies, use of clean burning motor fuels, and increased use of fuel efficient modes which may include railroads, transit, carpools, vanpools, bicycles and walking. (Action 1D.1)
 - b. Positively affect both the natural and built environments in the design, construction and operation of the transportation system. Where adverse impacts cannot be avoided, minimize or mitigate their effects on the environment. (Action 1D.3)
 - c. Cooperate with state and local agencies which regulate air quality, water quality, energy conservation, noise abatement, and transportation of hazardous materials. (Actions 1D.2, .4, .5, .6, and .7)
5. Provide a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems. (Policy 1F)
 - a. In local and regional transportation plans, identify (a) major transportation terminals and facilities, and (b) routes and modes connecting passenger and freight facilities with major highways and intermodal facilities. (Action 1F.1)
6. Promote the safety of the transportation system.
 - a. Cooperate with state agencies to target resources to dangerous routes and locations. (Action 1G.4)
 - b. Increase cooperation with other governments and private enterprises to implement effective community-based safety programs. (Action 1G.6)
 - c. Build, operate, and regulate the transportation system so that users feel safe and secure as they travel. (Action 1G.9)

7. Develop transportation plans and policies that implement Oregon's statewide planning goals. (Policy 2A)
 - a. Support local land use planning with transportation plans that provide the needed level of mobility while minimizing automobile miles traveled and number of automobile trips taken per capita. (Action 2A.1)
 - b. Develop transportation system plans sufficient to accommodate planned development. (Action 2A.2)
 - c. Restrict access from state facilities for incompatible activities and development where land use plans call for rural or resource developments. (Action 2A.6)
8. Provide for interurban mobility through and near urban areas in a manner which minimizes adverse effects on land use and urban travel patterns. (Policy 2C)
 - a. In transportation system plans and land use plans, avoid dependence on the state highway system for direct access to commercial, residential, or industrial development adjacent to the state highway. (Action 2C.3)
9. Promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments. (Policy 2D)
10. Encourage modal alternatives to the automobile and truck where feasible in rural areas. (Action 2F.3)
11. Protect and enhance the aesthetic value of transportation corridors in order to support economic development and preserve quality of life. (Policy 2H)
12. Provide more efficient railroad service through the reduction of conflicts at busy railroad crossings and rail yard areas by means such as grade separations and development of alternative motor vehicle circulation routes. (Action 3A.5)
13. Provide a direct, convenient, and physically suitable system for goods movement to transportation facilities and commercial and industrial areas to ensure the timely delivery of goods. (Action 3B.1)
14. Develop a transportation system that supports tourism and improves access to recreational destinations. (Policy 3E)

- a. Incorporate tourist facilities and services that are identified in a state tourism plan in the local transportation plan. (Action 3E.1)
- 15. Manage effectively existing transportation infrastructure and services before adding new facilities. (Policy 4G)
 - a. Protect the integrity of statewide transportation corridors and facilities from encroachment by such means as controlling access to state highways, minimizing rail crossings and controlling incompatible land use around airports. (Action 4G.4)
- 16. Coordinate transportation projects and activities involving federal lands agencies with those agencies. (Action 2A.5 and Policy 4L)
- 17. Establish private sector participation in transportation policy and systems plans. (Action 4M.1)
- 18. Develop programs that ensure the opportunity for citizens, businesses and state agencies to be involved in all phases of the transportation planning processes. (Policy 4N)
 - a. Make information about proposed transportation policies, plans and programs available to the public in an understandable form. (Action 4N.2)
- 19. Accommodate international, interstate and statewide movements of goods and passengers that move through the jurisdiction.
- B. Minimum Levels of Service.** In cooperation with state government, MPOs and local governments should
 - 1. Coordinate intercity elderly and disadvantaged services with intercity bus and van services which are open to the general public.
 - 2. Connect intercity bus services to local transit and elderly and disadvantaged services.
 - 3. Preserve priority railroad rights of way for potential public use or ownership when abandonment proceedings are initiated.
 - 4. Encourage and support reload facilities where they provide the most cost efficient and environmentally efficient and effective response to branchline abandonment.

II. JURISDICTIONS WITH URBAN AREAS OVER 25,000 THAT ARE OUTSIDE MPO AREAS

A. Policy Guidelines. In addition to the Policy Guidelines for all jurisdictions, the following apply:

1. Cooperatively define acceptable levels of accessibility through the establishment of standards in transportation system plans for minimum levels of service and system design for passengers and freight for all modes. (Action 1C.1)
2. Encourage multimodal accessibility to employment, shopping and other commerce, medical care, housing and leisure, including adequate public transit access for the transportation disadvantaged. (Action 1C.2)
3. Define minimum levels of service and assure accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas. (Policy 2B)
 - a. Give preference to projects and assistance grants that support compact or infill development or mixed use projects. (Action 2B.2)
 - b. Increase the availability and use of transit, walking, bicycling and ridesharing. Promote the design and development of infrastructure and land use patterns which encourage alternatives to the single occupant automobile. (Action 2B.3)
4. Promote alternative modes and preservation and improvement of parallel arterials so that local trips have alternatives to the use of intercity routes. (Action 2C.2)
5. Make walkways, pedestrian shelters and bikeways an integral part of the circulation pattern within and between communities to enhance safe interactions between motor vehicles and pedestrians and bicyclists. (Action 2D.1)

B. Minimum Levels of Service. In cooperation with state government, local governments should

1. Make urban transit services available to the general public to provide a modal alternative to automobile travel.
2. Connect local public transit services and elderly and disadvantaged service with intercity passenger terminals.

3. Through public control, provide open access to intercity passenger terminals for all intercity carriers.
4. Coordinate local transit services with intercity rail services to provide for timely and convenient connections.
5. Identify and support major intermodal hub facilities to serve as transfer points from or to truck, air, rail, and marine transportation as a method for improving Oregon's access to national and international markets. Connections to major intermodal facilities should be available under open access terms where feasible.
6. Provide high quality highway access to freight intermodal and reload facilities.

III. MPOs AND JURISDICTIONS WITHIN MPO AREAS

A. Policy Guidelines In addition to the Policy Guidelines that apply to all jurisdictions and to jurisdictions with urban areas over 25,000 outside of MPO areas, the following apply:

1. Make transportation investment decisions which maximize the net full benefits of the system and allow users to face prices which reflect the full costs of their transportation choices. (Policy 1B)
 - a. Employ economic, social, energy and environmental impacts as a part of the transportation planning and project design process. This should be done on a total system basis rather than optimizing the cost effectiveness of one mode at the expense of another. (Action 1B.1)
 - b. Develop pricing programs that charge road users commensurately with the total costs of operations and improvements and use. (Action 1B.2)
 - c. Use demand management techniques to reduce vehicle miles traveled in single occupant automobiles, especially during peak hours of highway use. These measures include the use of alternative modes such as transit, bicycling and walking, ridesharing, vanpooling, telecommuting and projects that promote efficient urban design. (Action 1B.3)
2. Develop public transit, bicycle, and pedestrian systems. (Action 1C.4)

3. Identify significant out-of-state corridors or areas where Oregonians need access and encourage their development. (Action 1E.2)
4. Assure effective transportation linkages for goods and passengers to attract a larger share of international and interstate trade to the state. (Policy 3B)
5. Use demand management and other transportation systems operation techniques that reduce peak period single occupant automobile travel, that spread traffic volumes away from the peak period and that improve traffic flow. Such techniques include HOV (high occupancy vehicle) lanes with express transit service, carpools, parking management programs, peak period pricing, ramp metering, motorist information systems, route diversion strategies, incident management and enhancement of alternative modes of transportation including bicycling and walking. (Action 4G.3)

B. Minimum Levels of Service in MPO Areas of Less Than One Million Population. In cooperation with state government, MPOs and jurisdictions within MPOs should

1. Provide urban transit services in all parts of the urbanized area.
2. Provide high quality transit services in all interstate corridors and other highway corridors of statewide function in which level of service E or worse is experienced or anticipated.
3. Develop transit service frequencies for all routes no less frequent than one-half hour at peak periods.
4. Provide transit service for off-peak midday hours on all routes, or make a guaranteed ride home program available.
5. Provide park and ride facilities along major rail or busway corridors to meet reasonable peak and off-peak demand for such facilities.
6. Provide convenient connections between urban transit services and all intercity passenger modes and terminals.
7. For urban areas of 2,500 population or more within 20 miles of the metropolitan central city, provide at least peak hour transit service to the metropolitan area.

C. Minimum Levels of Service for MPO Areas of Over One Million Population.
In cooperation with state government, MPOs and jurisdictions within MPOs should

1. Have same requirements for metropolitan jurisdictions under one million plus,
2. Provide high capacity transit services with separate rights-of-way or priority treatments for transit vehicles in all interstate corridors and other highway corridors of statewide function in which level of service E or worse is experienced or anticipated.
3. Provide transit service at no less than one hour frequencies for off-peak services on all routes, or make a guaranteed ride home program available.
4. Provide service levels to transit-oriented developments sufficient to achieve the transit-related usage goals of the development.

IV. INTERGOVERNMENTAL COOPERATION

A. ODOT, in cooperation with regional and local governments, should

1. Define criteria for adoption of MPO plans for the four metropolitan areas as a regional element of the OTP based upon satisfactory achievement of state, regional and local interests, including consideration of trade-offs between such factors as
 - a. Support of regional urban growth goals and objectives and local comprehensive plans in the most effective manner;
 - b. Consistency with standards for intercity, interstate, and international routes;
 - c. Consistency with OTP goals and policies;
 - d. Consistency with regional mobility objectives;
 - e. Compliance with standards affecting air quality;
 - f. Compliance with Progress Board Benchmarks;
 - g. Compliance with requirements of the LCDC Transportation Planning Rule;

- h. Cost-effectiveness; and
 - i. Environmental consequences.
2. Participate with regional and local governments and represent the state interest in the monitoring of urban travel patterns.
 3. Participate with the regional and local governments in developing the financing element of the MPO plan.
 4. Cooperate with MPO area jurisdictions, assist in developing the metropolitan area plan for regional mobility.
 5. Integrate the ODOT corridor planning process with the MPO planning process.
- B. ODOT will carry out its role in the urban area in the following manner:
1. ODOT will participate in the MPO policy committee to ensure that regional actions can be supported by the Oregon Transportation Commission.
 2. ODOT regional staff will be empowered to participate on a regular basis to represent the state interest in regional and local plans.
 3. ODOT will implement its project responsibilities in a manner compatible with the regional transportation plan.

V. ODOT ADOPTION OF MPO PLAN

Upon satisfactory completion of the MPO transportation plan, the Oregon Transportation Commission will:

- A. Adopt the metropolitan area plan as a regional element of the Oregon Transportation Plan including:
1. The system for intercity, interstate, and international travel, including key passenger and freight terminals, as defined by ODOT.
 2. The regional system required to meet regional mobility objectives as defined by the region in cooperation with ODOT (i.e., all "regional arterials," "regional transit routes," "regional bike routes," etc.)

- B. Adopt the improvement strategy (i.e., corridor plan) in the metropolitan area for the system of intercity and interstate, and international routes and the improvements that directly benefit this system (such as transportation demand management, arterials, transit, access control and land use actions).
- C. Certify that the MPO's plan includes an adequate improvement and financing strategy to meet regional mobility objectives and satisfy other criteria for acceptance of the MPO plan.

In summary, this implementation approach involves the following actions:

| | <u>ODOT</u> | <u>MPOs</u> | <u>Local Governments</u> |
|---|------------------|--------------------|--------------------------|
| Intercity/Interstate System System/Terminal Definition Improvement Plan | Adopt Adopt | Adopt Adopt | Adopt Adopt |
| Regional System System Definition Improvement Plan | Adopt Certify | Adopt Adopt | Adopt Adopt |
| Local System System Definition Improvement Plan | None None | Certify Certify | Adopt Adopt |

VI. EVALUATION OF PLANNING PROGRESS

The Oregon Department of Transportation will periodically evaluate progress made by all jurisdictions toward implementing the elements of the Oregon Transportation Plan. ODOT will develop standards of evaluation in consultation with MPOs and local governments. ODOT will be responsible for evaluating MPO and local government transportation plans based on the standards. MPOs and local governments will participate in the evaluation process.

INVESTMENT REQUIREMENTS

According to preliminary needs estimates, implementation of the Preferred Plan will require an additional \$9.6 billion in funding of state and local transportation over the next 20 years.

Table 5 compares continuation of existing program levels with the Preferred Plan and presents the estimated additional dollars necessary to implement the plan. Almost 77 percent of the total dollars in the Preferred Plan are for roads, streets, and highways. Much of this amount is to maintain the existing infrastructure. However, less than 58 percent of the additional dollars will go for roads, streets, and highways because there will be major new investments in railroads (passenger and freight), marine ports, aviation, intercity bus and, especially, transit. This will be a major change in state direction and responsibility for the development and funding of the Oregon transportation system.

These estimates are based on preliminary funding assumptions which were made in order to describe, develop and evaluate the alternative plans. Major improvements in these estimates will be possible as the results of the Oregon Roads Finance Study, Oregon Rail Passenger Policy and Plan, and transit needs studies become available.

Financing Program

The financing program for the Oregon Transportation Plan is still being formulated. The Transportation Commission plans to recommend a specific financing program in November 1992.

The financing program will carry out the finance policies in the Policy Element which include stability, flexibility, efficiency, equity, and adequacy. The program will be structured to achieve state goals and improve the cost/benefit relationship.

TABLE 5
COMPARISON OF PLAN ALTERNATIVES
(MILLIONS OF 1991 DOLLARS)

| Criteria | 20 Year | | Additional Cost to Implement Preferred Plan | |
|------------------------------|--------------------------------|-------------------|---|--------|
| | Continuation Program Levels | Preferred Plan | 20 Year | Annual |
| Highways* | \$20,300 | \$25,880 | \$5,580 | \$279 |
| Railroad** | | | | |
| Capital | N/A | 400 | 400 | 20 |
| Operating | N/A | 220 | 220 | 11 |
| Marine-Ports (Capital)*** | | | | |
| Navigation Improvements | N/A | 90 | 90 | 5 |
| Landside Improvements | N/A | 45 | 45 | 2 |
| Aviation**** | | | | |
| Passenger | 27 | 83 | 56 | 3 |
| Intercity Bus (Operating) | 0 | 120 | 120 | 6 |
| Transit***** | | | | |
| Operating | 2,516 | 3,828 | 1,312 | 66 |
| Capital | 1,200 | 2,400 | 1,200 | 60 |
| Pipelines | 0 | ? | ? | ? |
| TOTAL | N/A | \$33,066 | \$9,023 | \$452 |

Note: Federal revenues will be major portion of most modes' funds.

N/A = Not available or minimal amount.

* Highway needs will be refined by Roads Finance Study.

** Railroad needs are from preliminary results of the Oregon Rail Passenger Policy and Plan and rail freight needs estimates in 1993-8 Preliminary T.I.P.

*** Extrapolation from Maritime Navigation Improvement Fund memo and Oregon Public Ports Association information. Does not include at this time landside improvement needs for the Lower Columbia.

**** Aviation needs are extrapolation of estimates from the 1993-8 T.I.P. Further information will be developed in the Financial Element OASP fall 1993.

***** Transit needs include Tri-Met Strategic Plan and extrapolation of estimates from 1993-98 Transportation Improvement Program.

DEFINITIONS

This document uses key words and phrases as having the following definitions:

Access Management: Measures regulating access to streets, roads and highways from public roads and private driveways. Measures may include but are not limited to restrictions on the siting of interchanges and restrictions on the type and amount of access to roadways to reduce impacts of approach road traffic on the main facility.

Accessibility: The ability to move easily from one mode of transportation to another mode or to a destination, for example, from a bicycle to a bus or from a bus to an office. Accessibility places emphasis on being able to get to a desired destination.

Alternative Modes: Modes such as rail, transit systems, bicycles and walking that provide transportation alternatives to the use of single occupant automobiles.

Balanced Transportation System: A system that provides appropriate transportation options and takes advantage of the inherent efficiencies of each mode.

Demand Management: Actions which are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. Methods may include but are not limited to the use of alternative modes, ride-sharing and vanpool programs and trip-reduction ordinances.

Efficient: An activity is efficient if a desired amount of an output is produced using the least cost combination of resources. A transportation system is efficient when (1) it is fast and economic for the user; (2) users face prices that reflect the full costs of their transportation choices; and (3) transportation investment decisions maximize the net full benefits of the system.

Full Costs: Costs that include social and environmental impacts as well as construction, operations and maintenance costs.

Intermodal Hub: A facility where two or more modes of transportation interact so that people and/or goods can be transferred from one mode to another, for example, from a bus to an airplane or from a truck to a train. Intermodal hubs include commercial airports and marine ports.

ISTEA: The federal Intermodal Surface Transportation Efficiency Act of 1991 which funds the national highway system and gives state and local governments more flexibility in determining transportation solutions. It requires states and MPOs to cooperate in long-range transportation planning.

"It is the policy of the State of Oregon to provide...": State government provides leadership to achieve the stated quality. The policy may be achieved by both public and private actions at all levels of society to be identified as part of the continuing transportation planning process.

LCDC: Land Conservation and Development Commission

Metropolitan Planning Organization (MPO): An organization located within the state of Oregon and designated by the governor to coordinate transportation planning in an urbanized area of the state. MPOs exist in the Portland, Salem, Eugene-Springfield, and Medford areas. (The Longview-Kelso-Rainier MPO is not considered an MPO for the purposes of the OTP.)

Mixed Use Development: A development or center having a mix of uses which may include office space, commercial activity, residential uses, parks and public places, and supporting public facilities and services. The development is designed so that the need to travel from one activity to another is minimized.

Mobility: Being able to move easily from place to place.

Mode of Transportation: A means of moving people and/or goods. In this plan transportation modes include motor vehicles, public transit, railroads, airplanes, ships/barges, pipelines, bicycles and pedestrian walkways.

ODOT: Oregon Department of Transportation.

Public Transit: Bus, van and light rail transportation systems open to the general public which operate frequently and on predetermined routes and schedules. Public transit does not include car pools or senior van services, but may include intercity bus and rail services if the service is frequent.

Rural Areas: Unincorporated areas, unincorporated communities and incorporated cities, characterized by both low levels of population and remoteness from metropolitan areas and other central cities.

Transportation Corridors: Major or high volume routes for moving people, goods and services from one point to another. They may be multimodal or single modal as an air corridor.

Transportation Needs: Means estimates of the movement of people and goods consistent with an acknowledged comprehensive plan and the requirements of the Transportation Rule (OAR 660-12). Needs are typically based on projections of future travel demand resulting from a continuation of current trends as modified by policy objectives, including those expressed in Statewide Planning Goal 12 (Transportation) and the Transportation Rule, especially those for avoiding principal reliance on any one mode of transportation.

Transportation Needs (State): Needs for movement of people and goods between and through regions of the state and between the state and other states and other countries.

Transportation Planning Rule: Administrative rule (OAR 660-12) adopted in April 1991 by the Land Conservation and Development Commission in cooperation with ODOT to implement Statewide Planning Goal 12: Transportation.

Transportation System: A network of facilities and services for moving people, goods and services from one place to another; it includes roads, streets and highways, public transit, demand-response transportation, airports, railroads, waterway and marine transportation facilities, bicycle paths and pedestrian walkways.

Transportation System Management Measures: Techniques for increasing the efficiency, safety, capacity or level of service of a transportation facility without increasing its size. Examples include traffic signal improvements, traffic control devices including installing medians and parking removal, channelization, access management, ramp metering and restriping for high occupancy vehicle (HOV) lanes.

Transportation System Plan (TSP): A plan for one or more transportation facilities that are planned, developed, operated and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas.

Urban: Those areas within urban growth boundaries acknowledged under the Land Conservation and Development Commission's land use planning compliance process.

OREGON TRANSPORTATION PLAN

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APPENDIX A

POPULATION AND EMPLOYMENT FORECASTS BY COUNTY

Demographic and economic changes among counties occur at different rates and are of differing absolute magnitudes. The table presents county projections of population and employment from 1990 to 2012. It depicts the wide diversity among counties with regard to the various rates of socioeconomic change. County population projections in 2012 range from a high of 711,385 for Multnomah County to a low of 1,638 for Gilliam County. Employment levels range from a high of 485,842 for Multnomah County to a low of 383 for Wheeler County.

Alphabetical County Population and Employment (1990-2012)

| COUNTY | Population Change | | | | Employment Change | | | |
|--------------|-------------------|------------------|------------------|--------------|-------------------|------------------|------------------|--------------|
| | 1990 | 2000 | 2012 | % Change | 1990 | 2000 | 2012 | % Change |
| Baker | 15,300 | 17,163 | 19,051 | 24.5% | 4,802 | 5,651 | 6,084 | 26.7% |
| Benton | 71,200 | 81,739 | 95,027 | 33.5% | 31,550 | 38,031 | 45,658 | 44.7% |
| Clackamas | 279,500 | 345,574 | 425,854 | 52.4% | 89,267 | 116,424 | 156,532 | 75.4% |
| Clatsop | 33,500 | 38,261 | 44,326 | 32.3% | 13,882 | 16,270 | 19,338 | 39.3% |
| Columbia | 37,700 | 43,771 | 49,448 | 31.2% | 9,704 | 11,174 | 12,994 | 33.9% |
| Coos | 60,100 | 63,143 | 62,718 | 4.4% | 19,661 | 21,565 | 21,703 | 10.4% |
| Crook | 14,100 | 15,817 | 17,403 | 23.4% | 5,215 | 6,149 | 7,020 | 34.6% |
| Curry | 19,400 | 21,897 | 25,128 | 29.5% | 5,728 | 6,745 | 7,949 | 38.8% |
| Deschutes | 75,600 | 99,847 | 112,286 | 48.5% | 32,748 | 43,425 | 47,517 | 45.1% |
| Douglas (C) | 7,070 | 7,851 | 8,330 | 17.8% | 2,647 | 3,001 | 3,200 | 20.9% |
| Douglas (NC) | 87,630 | 99,718 | 107,256 | 22.4% | 31,319 | 37,782 | 41,952 | 33.9% |
| Gilliam | 1,750 | 1,741 | 1,638 | -6.4% | 513 | 531 | 510 | -0.6% |
| Grant | 7,900 | 8,886 | 9,968 | 26.2% | 2,819 | 3,317 | 3,823 | 35.6% |
| Harney | 7,100 | 7,969 | 8,959 | 26.2% | 2,436 | 2,866 | 3,304 | 35.6% |
| Hood River | 16,800 | 19,331 | 21,851 | 30.1% | 7,570 | 9,095 | 10,582 | 39.8% |
| Jackson | 146,400 | 165,563 | 191,351 | 30.7% | 54,693 | 66,386 | 74,438 | 36.1% |
| Jefferson | 13,700 | 17,818 | 19,465 | 42.1% | 4,882 | 6,629 | 7,454 | 52.7% |
| Josephine | 62,800 | 73,341 | 82,305 | 31.1% | 18,553 | 22,352 | 25,661 | 38.3% |
| Klamath | 57,800 | 60,718 | 63,447 | 9.8% | 20,949 | 23,655 | 25,127 | 19.9% |
| Lake | 7,200 | 7,683 | 7,892 | 9.6% | 2,376 | 2,705 | 2,798 | 17.8% |
| Lane (C) | 13,121 | 15,223 | 17,822 | 35.8% | 5,850 | 6,798 | 7,959 | 36.0% |
| Lane (NC) | 270,369 | 310,311 | 361,236 | 33.6% | 113,442 | 136,308 | 162,098 | 42.9% |
| Lincoln | 38,900 | 46,197 | 55,197 | 41.9% | 13,902 | 16,748 | 20,564 | 47.9% |
| Linn | 91,000 | 99,029 | 104,703 | 15.1% | 33,482 | 39,237 | 44,441 | 32.7% |
| Malheur | 26,000 | 29,183 | 32,806 | 26.2% | 9,694 | 11,406 | 13,144 | 35.6% |
| Marion | 229,500 | 262,647 | 302,406 | 31.8% | 97,667 | 116,577 | 136,995 | 40.3% |
| Morrow | 7,650 | 9,159 | 10,842 | 41.7% | 2,376 | 2,844 | 3,346 | 40.8% |
| Multnomah | 583,500 | 651,918 | 711,385 | 21.9% | 401,142 | 442,177 | 485,842 | 21.1% |
| Polk | 49,700 | 56,274 | 64,041 | 28.9% | 11,458 | 13,527 | 15,685 | 36.9% |
| Sherman | 1,950 | 1,902 | 1,730 | -11.3% | 564 | 574 | 537 | -4.8% |
| Tillamook | 21,500 | 24,358 | 28,486 | 32.5% | 6,171 | 7,278 | 8,716 | 41.2% |
| Umatilla | 59,000 | 66,495 | 74,444 | 26.2% | 21,080 | 24,803 | 28,582 | 35.6% |
| Union | 23,600 | 26,548 | 29,648 | 25.6% | 9,111 | 10,719 | 12,352 | 35.6% |
| Wallowa | 6,950 | 7,823 | 8,825 | 27.0% | 2,275 | 2,677 | 3,085 | 35.6% |
| Wasco | 21,700 | 22,743 | 22,985 | 5.9% | 7,641 | 8,474 | 8,892 | 16.4% |
| Washington | 313,000 | 401,982 | 518,476 | 65.6% | 128,853 | 180,164 | 263,326 | 104.4% |
| Wheeler | 1,400 | 1,574 | 1,751 | 25.1% | 282 | 332 | 383 | 35.9% |
| Yamhill | 65,600 | 75,959 | 88,824 | 35.4% | 21,796 | 26,459 | 31,623 | 45.1% |
| State | 2,846,990 | 3,307,156 | 3,809,309 | 33.8% | 1,248,100 | 1,490,856 | 1,771,216 | 41.9% |

SOURCE: Oregon Department of Transportation
Strategic Planning Office
October 9, 1991

APPENDIX B
OPERATING AND TIME COSTS OF ALTERNATIVE APPROACHES
(BILLIONS OF DOLLARS ANNUALLY)

| Criteria | 1990 | 2012 Alternatives | | | |
|----------------------|----------|-------------------|-----------|---------------------------|---------------------|
| | | Funding Decline | Continue | Continue With Modal Shift | Livability Approach |
| METROPOLITAN AREAS | | | | | |
| Highway Costs | | | | | |
| Out-of-Pocket | \$1.23 | \$2.11 | \$2.11 | \$1.66 | \$1.66 |
| Ownership | \$4.77 | \$8.19 | \$8.19 | \$6.80 | \$6.80 |
| Travel Time | \$4.31 | \$9.66 | \$8.97 | \$7.03 | \$6.39 |
| Fees | \$0.22 | \$0.38 | \$0.63 | \$3.47 | \$3.47 |
| Subtotal | \$10.53 | \$20.34 | \$19.90 | \$18.96 | \$18.32 |
| Transit Costs | | | | | |
| Operating Costs | \$0.10 | \$0.17 | \$0.17 | \$0.39 | \$0.33 |
| Travel Time | \$0.28 | \$0.49 | \$0.48 | \$1.14 | \$0.95 |
| Subtotal | \$0.38 | \$0.66 | \$0.65 | \$1.53 | \$1.28 |
| Total | \$10.90 | \$21.00 | \$20.55 | \$20.49 | \$19.59 |
| RURAL AREAS | | | | | |
| Highway Costs | | | | | |
| Mileage | \$5.035 | \$7.900 | \$7.900 | \$7.900 | \$7.900 |
| Time | \$2.729 | \$4.282 | \$4.282 | \$4.282 | \$4.282 |
| Benefits | \$0.000 | \$0.000 | (\$0.385) | \$0.000 | (\$0.771) |
| Fees | \$0.076 | \$0.119 | \$0.198 | \$0.198 | \$0.356 |
| Subtotal | \$7.840 | \$12.301 | \$11.994 | \$12.380 | \$11.767 |
| Intercity Bus Costs | | | | | |
| Fares | \$0.007 | \$0.007 | \$0.008 | \$0.020 | \$0.020 |
| Time | \$0.013 | \$0.014 | \$0.016 | \$0.032 | \$0.032 |
| Subsidy | \$0.000 | \$0.000 | \$0.000 | \$0.006 | \$0.006 |
| Subtotal | \$0.020 | \$0.021 | \$0.024 | \$0.058 | \$0.058 |
| Intercity Rail Costs | | | | | |
| Fares | \$0.017 | \$0.018 | \$0.021 | \$0.053 | \$0.053 |
| Time | \$0.033 | \$0.035 | \$0.041 | \$0.082 | \$0.082 |
| Subsidy | \$0.000 | \$0.000 | \$0.000 | \$0.011 | \$0.011 |
| Subtotal | \$0.050 | \$0.053 | \$0.062 | \$0.145 | \$0.145 |
| Total | \$7.909 | \$12.375 | \$12.080 | \$12.583 | \$11.970 |
| STATE TOTAL COSTS | \$18.812 | \$33.372 | \$32.632 | \$33.073 | \$31.563 |
| Savings * | \$0.000 | \$0.000 | \$0.740 | \$0.299 | \$1.809 |

*Compared to Funding Decline
Numbers may not add up due to rounding.

APPENDIX C

PLAN INVENTORY SOURCES

Bicycle Master Plan, Highway Division, Oregon Department of Transportation (ODOT), March, 15, 1988

Commercial Air Service and Facility Needs Study. Oregon Aviation System Plan, Aeronautics Division, ODOT, August 23, 1991

Demographic and Economic Forecasts, 1990-2030, Strategic Planning Section, ODOT, October, 1992

Making the Right Turn: Progress Report. Protecting the Public Investment in Oregon's Roads and Bridges, Barney and Worth, February, 1991

1988 Oregon Public Transportation Study, Public Transit Division, ODOT, April 1989

1989 Inventory, 1990-2000 Forecasts. Oregon Aviation System Plan, Aeronautics Division, ODOT, 1990

1991 Oregon Highway Plan, Highway Division, ODOT, June 1991

"1991 Traffic Volume Tables," Transportation Research Section, ODOT, June 1992

1993-1998 Six-Year Transportation Improvement Program, Highway Division, ODOT, January 1992

Oregon Aeronautics Division Strategic Plan, Aeronautics Division, ODOT, January 1992

Oregon Port Assessment, Booz-Allen & Hamilton, October 1986

Oregon Ports Development Study, Economic Development Department, April 1989

Oregon Rail Plan 1986 Update, Policy and Planning, ODOT, 1986

Oregon Rail Plan 1986 Update: 1990 Supplement, "Chapter 4 - Supplement Light Density Branch Line Analysis," Strategic Planning Section, ODOT, 1990

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State Agency Coordination Program, Highway Division Planning Section,
ODOT, December 1990

Statewide Transportation Plan Volume 2: Intercity Passenger Services Study
1984, ODOT

Statewide Transportation Plan: Overview 1988, ODOT

"Transportation Planning Rule," Oregon Department of Conservation and
Development, May 9, 1991

Tri-Met Strategic Plan, Pursuing a Shared Vision, Discussion Draft, Tri-Met,
April 1992

APPENDIX D

OPERATING LEVEL OF SERVICE STANDARDS FOR THE STATE HIGHWAY SYSTEM

LEVELS FOR DESIGN HOUR OPERATING CONDITIONS THROUGH A 20-YEAR HORIZON (1)

| Level of Importance | Type of Area Highway Is In | | | | Special Considerations | |
|---------------------|---|-----------------------------|--|-----------------|----------------------------------|------------------------------------|
| | Urban (2) Parts of Metropolitan Areas (3) | Urban Parts of Other Cities | Urbanizing (4) Areas and Rural Development Centers (5) | Rural Areas (6) | Special Transportation Areas (7) | Within Exclusive Transit Corr. (8) |
| Interstate | D | C | C | B | NA | D/E (9) |
| Statewide | D | C | C | B | E | E |
| Regional | D | D | C | C | E | E |
| District | E | D | D | C | E | E |

Notes:

- 1) Operating standards are not design standards. Operating standards are used by the department when making operating decisions, such as access management decisions. Design standards, which are used to guide the design of highway improvements, are often higher to provide acceptable operating conditions in the future.
- 2) Urban areas are those areas within an urban growth boundary that are generally developed at urban intensities as allowed by the comprehensive plan.
- 3) Metropolitan areas include the Portland, Salem, Eugene, Medford and Rainier (part of Longview-Kelso) urban areas.
- 4) Urbanizing areas are those within an urban growth boundary that are undeveloped or are developing. They may include vacant lands and areas

developed well below urban intensities as allowed by the local comprehensive plan.

- 5) Rural development centers are concentrations of development outside of urban growth boundaries. Included are rural unincorporated communities.
- 6) Rural areas are areas outside of urban growth boundaries but not including rural development centers.
- 7) Special Transportation Areas (STAs) are compact areas in which growth management considerations outweigh this policy. STAs include central business districts, transit-oriented development areas and other activity or business centers oriented to non-auto (principally pedestrian) travel. They do not apply to whole cities or strip development areas along individual highway corridors.
- 8) Exclusive transit corridors are corridors

APPENDIX D (Con't.)

within which the highway runs generally parallel to an exclusive transitway, such as a light rail line or exclusive busway.

- 9) LOS 'D' applies when the facility is located in an urbanizing area. LOS 'E' applies in an urbanized area.

General:

Where a highway section is severely constrained by intensive land use or other physical or environmental limitations, and where service levels are substandard, the

division's objective will be to maintain the current service levels.

On highway sections that are not constrained, but are substandard and not scheduled for improvement, the division objective will be to maintain and, to the extent possible, improve the level of service.

Levels of service are to be determined based on the 1985 Highway Capacity Manual. The cumulative effects of a series of signals should be considered in determining the LOS for a section of roadway.

Motor Vehicle Emission Reduction Needs

Transportation system and Ozone modelling specific for the Portland area has been completed using the parameters selected by the Task Force at the 6/25 meeting.

Base Case Motor Vehicle Emission Reduction Needs

- In order to assure attainment of the ozone standard through 2010, the following emission reduction will be needed:

Needed Emission Reductions

| | Total Airshed Emissions* | On-Road Vehicles Only |
|------------|---------------------------------|------------------------------|
| VOC | 13% | 44% |
| NOx | 8% | 25% |

- Figure 4.1 shows the expected changes in ozone precursor emissions for all human caused sources over the 1990-2010 period. The potential to further control emissions from sources other than on-road vehicles is discussed below.
- The needed emission reductions are based on the following:

Assumptions in Calculating Needed Emission Reductions

- VMT growth rate expected in Metro's revised RTP of 2.2%/year.**
- Most ozone conducive meteorology that has occurred in the last 20 years reoccurring again (equivalent to 95% confidence limit).**
- Emission growth allowance for major new or modified industries equal to historical rate of 1%/yr.**
- Existing industrial emission increases proportional to expected population growth.
- Full implementation of fuel volatility and stage II vapor recovery rule requirements.
- Continued phase in of cleaner new vehicles including Tier I Clean Air Act vehicles schedule to be marketed in 1994.
- Area source emission growth in proportion to expected population growth with reductions assumed from anticipated new federal requirements and state rules.
- Off Road vehicle emission growth in proportion to expected population increase.

* Human caused only. ** Parameters selected by Task Force at 6/25 meeting

- **On Road Vehicle Emissions**

- The large reduction in VOC emissions from 1991 to 1992 is the result of implementation of fuel volatility and stage II vapor recovery requirements.

- **Non-Road Vehicle Emissions**

- These emissions are primarily from lawn/garden and pleasure boat sources as show in Figure 4.2.
- California is pursuing emission standards for new lawn mowers, but requires a waiver from EPA to implement them. EPA is in the early stages of evaluating national standards for lawn mowers. No emission reduction credits are available for maintenance plans at this time and such a program will take a long time to become effective since it relies on attrition of old mowers.
- EPA is evaluating other non-road vehicle control options, but it is not yet clear what proposals, if any, will emerge. No emission reduction credits are available for maintenance plans at this time.
- Other regions, notably Los Angeles, have considered banning gasoline powered lawn mowers and barbecue lighter fluid as emission reduction strategies. Banning motorized pleasure boat use on days above 90 degrees would be a parallel approach to the lawn mower strategy. These strategies would have severe social repercussions that have not been saleable in any community as yet.

- **Area Source Emissions**

- These emissions come from a variety of smaller sources as shown in Figure 4.2.
- Some of the area source categories are expected to be controlled in more severe nonattainment areas under new requirements of the Clean Air Act. The emission reduction needs calculated for the Portland-Vancouver area assume DEQ will adopt these requirements for at least the Portland area. If this emission reduction strategy is not adopted an additional 22% reduction will be needed from on-road vehicles. The difference in controlled and noncontrolled area sources is shown in figure 4.3. No other emission reduction strategies are known for this source category at this time.

- **Point Source Emissions**

- These emissions come from existing major industrial sources plus the 1%/year growth allowance for new and expanding industries as show in Figure 4.4.
- These sources have had reasonable available control technology applied to them under Clean Air Act requirements. Further reductions are possible through application of state of the art control technology. It is anticipated that the resulting emission reductions would be low and the costs very high. Quantitative cost/effectiveness data will be sent to the Task Force by the August meeting.

Example Safety Margin Motor Vehicle Emission Reduction Needs

- In order to provide a safety margin that would be equivalent to a 2.9%/yr VMT growth rate (parameter selected by the Task Force at the 6/25 meeting) the following emission reduction will be needed:

Needed Emission Reductions

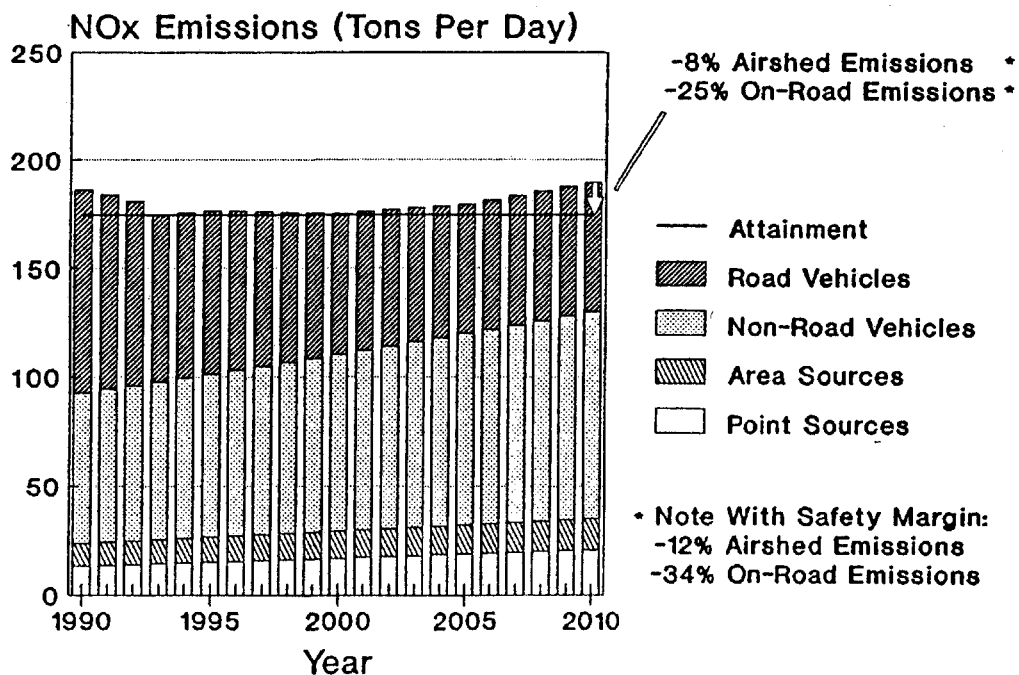
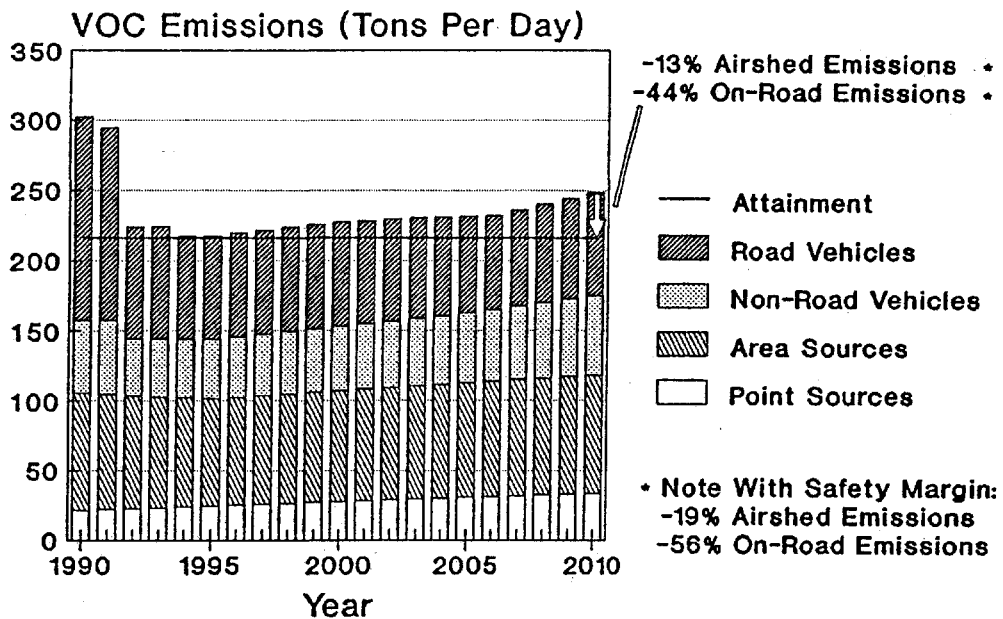
| | Total Airshed Emissions* | On-Road Vehicles Only |
|------------|---------------------------------|------------------------------|
| VOC | 6% | 12% |
| NOx | 4% | 9% |

Note: The safety margin provided by the above emission reductions would actually be 3.7% compared to the preliminary estimate of 3% presented at the June 25 meeting.

* Human caused only.

Figure 4.1

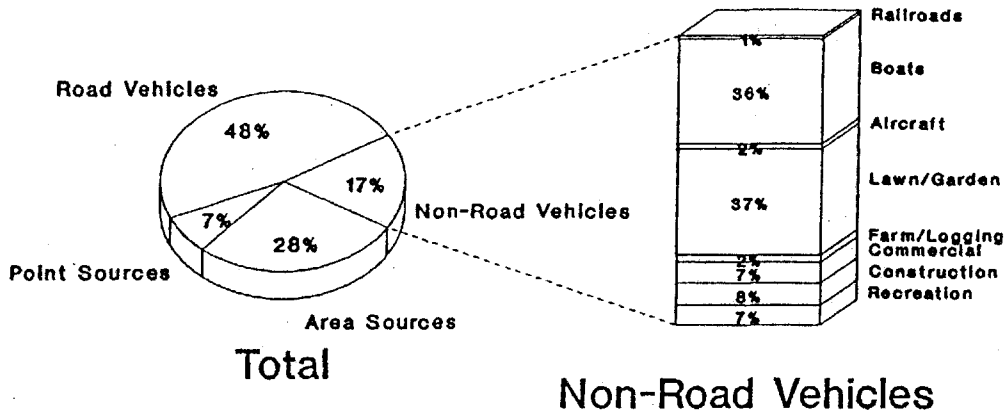
Portland-Vancouver Ozone Precursors Human-Caused Emissions: 1990 to 2010



Base Case Projection

Figure 4.2

Portland VOC Emissions in 1990 Base Year



Portland NOx Emissions in 1990 Base Year

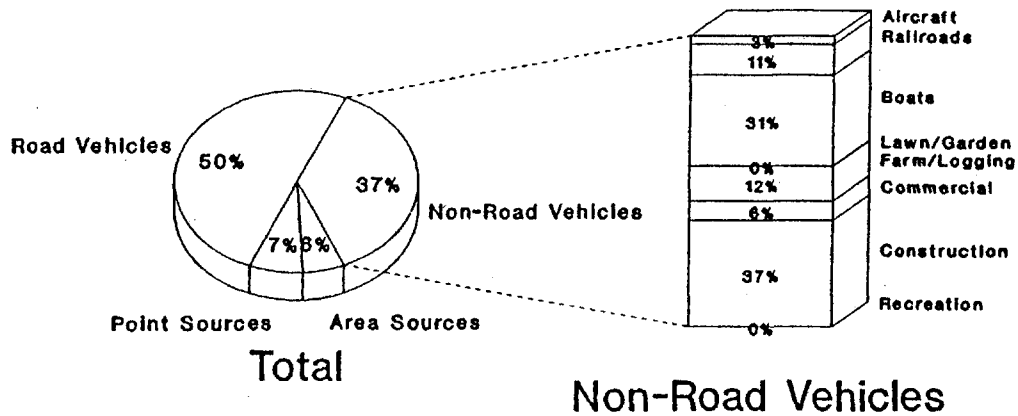
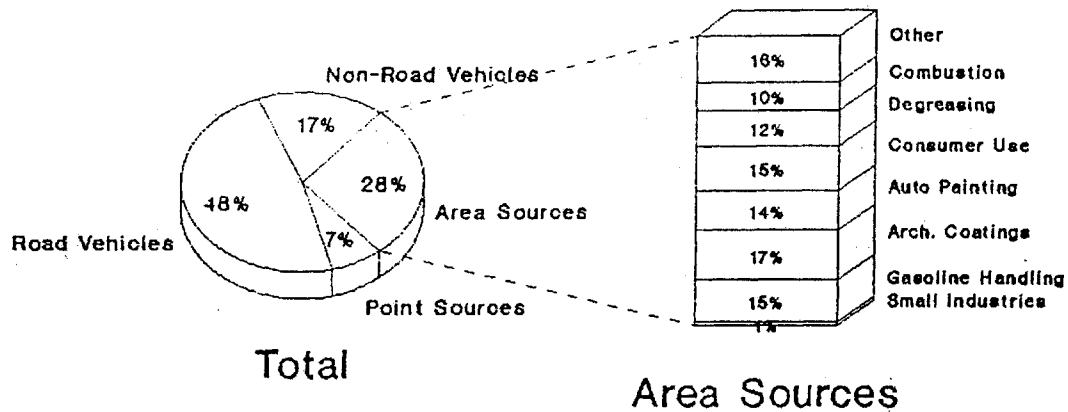


Figure 4.3

Portland VOC Emissions in 1990 Base Year



Portland Area Source VOC Emissions

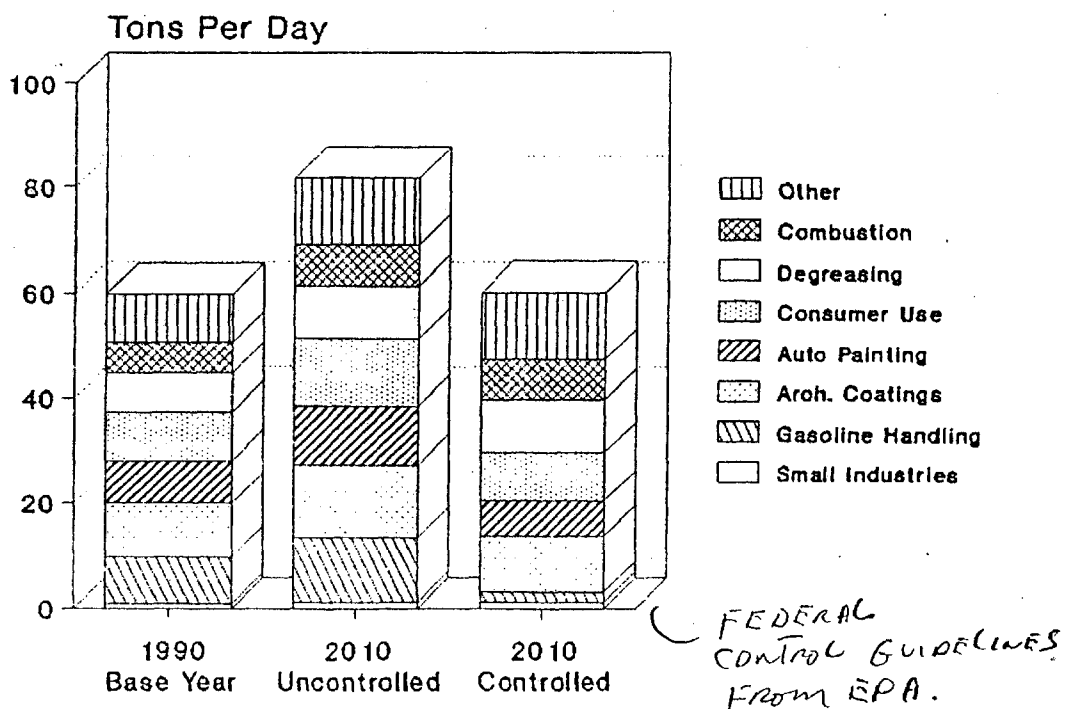
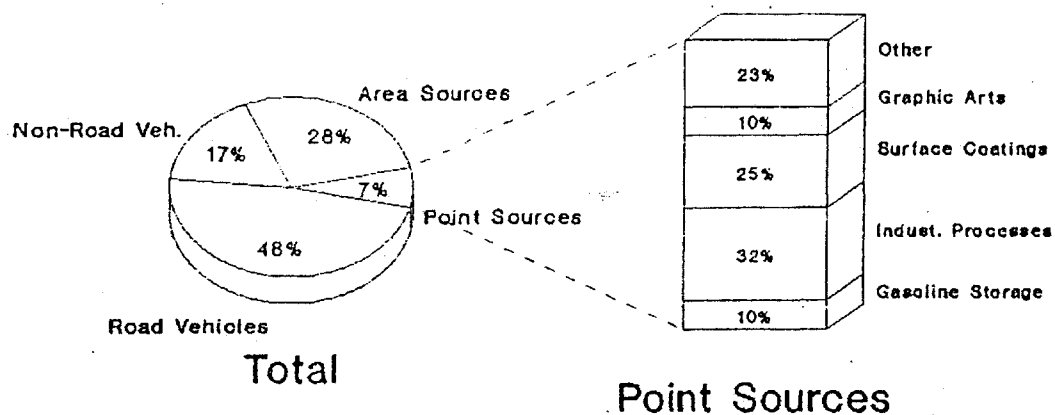
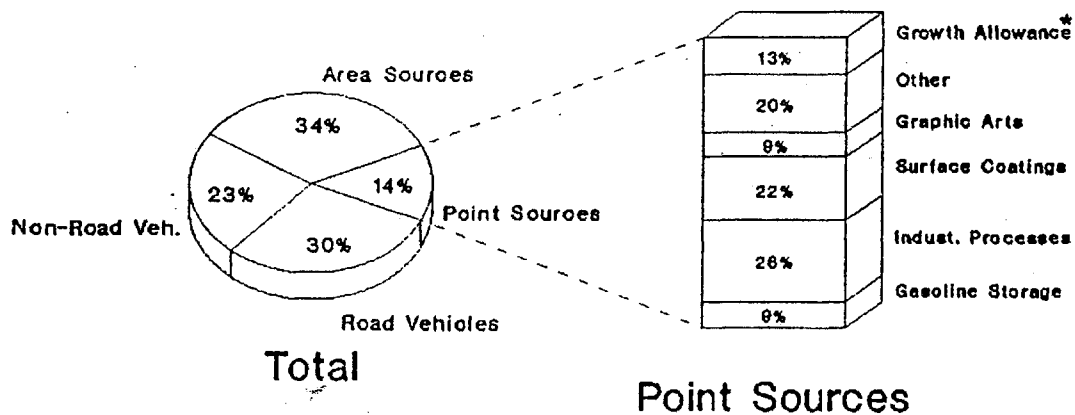


Figure 4.4

Portland VOC Emissions in 1990 Base Year



Portland VOC Emissions Projected in 2010



* Growth allowance selected by Task Force (1%/yr, 1990 base)

Agenda Item 5

Emission Reductions from Candidate Strategies

Tables 5.1 and 5.2 present the emission reduction and other potential impacts of the candidate strategies selected by the Task Force for analysis. Table 5.1 ranks strategies in terms of their effectiveness in reducing VOC emissions. Table 5.2 ranks strategies in terms of their effectiveness in reducing NOx emissions. The cost/effectiveness analysis for candidate strategies is not complete as yet. This information will be presented at the August meeting. Ranking of strategies by cost/effectiveness will likely result in different rankings than by emissions (tables 5.1-5.3) or by other strategy characteristics (page 4-18, June 25 meeting packet).

General Issues

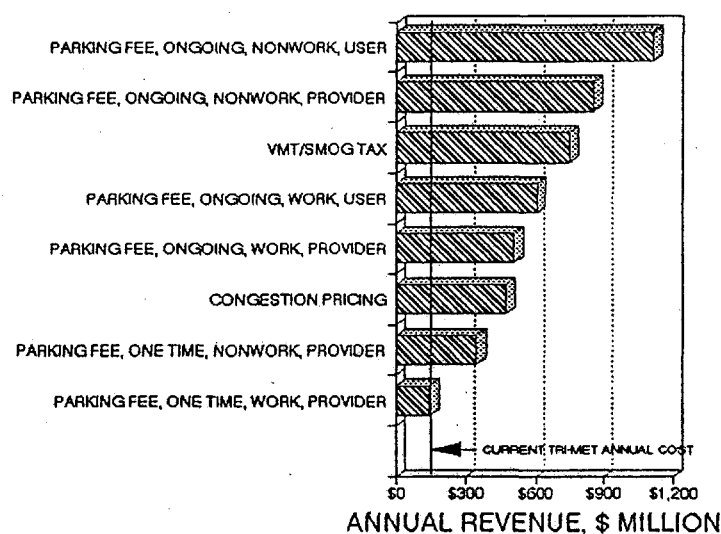
- The emission reduction potential of certain individual strategies would not necessarily be exactly additive when they are combined in packages. The interaction effect of combination strategies will be presented to the Task Force in August when some illustrative combination strategies will have been run through Metro's regional transportation model.
- Analyses of the land use, development impact fee and HOV lane strategies were not able to be completed in time for this meeting. The results will be provided at the August meeting.
- For reference, more detailed information on the characteristics of candidate strategies is contained in agenda item 4 of the June 25, 1992 Task Force meeting packet.

Incentive Programs

- Some of the fee-based strategies generate revenue that must be dedicated to other purposes (e.g., gas tax revenue is dedicated to the Highway Trust Fund and Pay-As-You-Drive Insurance revenue would be dedicated to insurance costs).
- Several of the fee-based strategies generate revenue which may be used for transportation emission reduction incentive programs. These programs could include incentives to use alternate modes such as free transit passes, improved transit service, subsidies for private shuttle services, employer van

pool programs, employee travel allowances, and improved bicycle access. The revenues could also be used to offset the impact of the fees on low income persons. The amount of revenue generated from each of these strategies is shown below in comparison to Tri-Met's total current annual capital and operating cost. This illustrates that these strategies have great financial capability of providing substantial incentives and capital for less polluting transportation alternatives.

FEE-BASED EMISSION REDUCTION STRATEGIES REVENUE AVAILABLE FOR INCENTIVES



- The strategies which generate revenue which may be used for incentive programs were modeled in two ways. First, they were modelled to estimate emission reductions from the fee itself, ignoring the use of the revenue. Second, they were modelled to estimate emission reductions from use of the fee in incentive programs. The specific incentive program would be selected for each strategy to provide the most air quality benefit and would need to be identified through an extensive analysis considering the economic impacts on the region as a whole. This would be beyond the scope of the Task Force activities. For purposes of this study, the emission reductions from a "generic" incentive program were modelled.

- The "generic" incentive program modelled envisions a targeted program to provide free alternate transportation to those affected by the fee. In order to be realistic, it was assumed that free alternate transportation would be provided to existing users of alternate modes who could be affected by the fee, and only additional excess revenue would be used for new rides. To estimate the increase in non-auto trips from use of revenue, Tri-Met's projected cost per rider (\$4.08 per round trip for operating and capital for system expansion) was used. This cost per trip should be sufficient to cover conventional Tri-Met transit service as well as other alternative incentive programs such as employer travel allowance subsidies, privately operated shuttle service and van pool purchases if these types of programs are ultimately found to be desirable to include in an incentive program.

Table 5-1

MOTOR VEHICLE EMISSION REDUCTION STRATEGY ANALYSIS FOR THE PORTLAND AREA: PERCENT CHANGE FROM 2010 BASE CASE ^1

SCENARIO: 2.2%/YR VMT GROWTH, COMMITTED NETWORK

18-Jul-92

INDIVIDUAL STRATEGY ANALYSIS RESULTS, SORTED BY HYDROCARBON EMISSION REDUCTION POTENTIAL

| STRATEGY | FREQ | TRIP PURPOSE | WHO PAYS | COST/ FEE LEVEL | REVENUE/ INCENTIVES ^2 | EMISSIONS | | | VMT | AUTO TRIPS | NON-AUTO SHARE ^3 | ENERGY |
|-------------------------------------|----------|--------------|-----------|--------------------|---------------------------|-------------|-------------|-------------|------------|---------------|----------------------|------------|
| | | | | | | VOC - HC | NOx | CO | | | | |
| REFORMULATED GASOLINE, CA PHASE II | ONGOING | ALL | USER | \$0.14-0.28/GAL | NA | -38.3% | -1.6% | -1.7% | -1.5% | -1.7% | 0.7% | ? ^4 |
| REFORMULATED GASOLINE, FED PHASE II | ONGOING | ALL | USER | \$0.08-0.20/GAL | NA | -25.1% | -1.1% | -1.2% | -1.1% | -1.2% | 0.5% | ? ^4 |
| REFORMULATED GASOLINE, FED PHASE I | ONGOING | ALL | USER | \$0.04-0.11/GAL | NA | -17.7% | -0.7% | -0.7% | -0.6% | -0.7% | 0.3% | ? ^4 |
| ENHANCED I/M PURGE & TRANSIENT | ONGOING | ALL | USER | TEST/REPAIR COST | NA | -17.5% | -9.0% | -6.0% | 0.0% | 0.0% | 0.0% | -0.6% |
| VMT/SMOG TAX | ONGOING | ALL | USER | \$0.07/MILE AVG | USED/UNUSED ^5 | -11.3/-4.6% | -11.3/-5.3% | -13.0/-5.0% | -6.6/-1.0% | -5.9/-1.3% | 4.7/0.5% | -8.4/-3.0% |
| CALIFORNIA LEV PROGRAM | ONGOING | ALL | USER | VEHICLE COST | NA | -9.8% | -22.0% | -8.2% | 0.0% | 0.0% | 0.0% | ? ^4 |
| PARKING FEE | ONGOING | WORK | USER | \$6/SPACE/DAY | USED/UNUSED | -8.4/-4.3% | -7.8/-3.9% | -10.0/-5.0% | -6.9/-3.6% | -5.6/-2.9% | 3.9/1.2% | -6.9/-3.6% |
| ENHANCED I/M PRESSURE TEST | ONGOING | ALL | USER | TEST/REPAIR COST | NA | -8.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | -0.3% |
| ADD-ON TO FUEL TAX | ONGOING | ALL | USER | \$1.50/GALLON | UNUSABLE | -8.1% | -7.5% | -8.3% | -7.4% | -8.3% | 3.1% | -44.6% |
| PARKING FEE | ONGOING | NONWORK | USER | \$0.60/SPACE/HR | USED/UNUSED | -7.5/-6.4% | -6.4/-5.7% | -6.8/-5.9% | -6.2/-5.7% | -9.9/-8.0% | 6.1/1.4% | -6.2/-5.7% |
| CONGESTION PRICING | ONGOING | ALL | USER | \$0.30/MILE | USED/UNUSED | -5.9/-5.6% | -5.4/-5.1% | -7.0/-6.6% | -4.9/-4.7% | -3.9/-3.7% | 2.1/1.9% | -4.9/-4.7% |
| PARKING FEE | ONGOING | WORK | PROVIDER | \$700/SPACE/YR | USED/UNUSED | -4.6/0% | -4.1/0% | -5.5/0% | -3.7/0% | -3.0/0% | 2.8/0% | -3.7/0% |
| PAY-AS-YOU-DRIVE INSURANCE | ONGOING | ALL | USER | \$0.45/GALLON | UNUSABLE | -3.3% | -3.1% | -3.4% | -3.0% | -3.4% | 1.3% | -19.3% |
| PARKING FEE | ONGOING | NONWORK | PROVIDER | \$700/SPACE/YR | USED/UNUSED | -2.8/0% | -2.3/0% | -2.5/0% | -2.2/0% | -3.9/0% | 3.6/0% | -2.2/0% |
| PARKING RATIO | ONE TIME | NONWORK | DEVELOPER | NA | NA | -2.7% | -2.4% | -2.5% | -2.4% | -3.4% | 0.6% | -2.4% |
| PARKING RATIO | ONE TIME | WORK | DEVELOPER | NA | NA | -1.3% | -1.2% | -1.5% | -1.1% | -0.9% | 0.4% | -1.1% |
| PARKING FEE | ONE TIME | NONWORK | PROVIDER | \$13,000/SPACE | USED/UNUSED | -1.3/0% | -1.1/0% | -1.2/0% | -1.0/0% | -1.8/0% | 1.7/0% | -1.0/0% |
| EMPLOYER TRIP REDUCTION PROGRAM | ONGOING | WORK | EMPLOYER | PROGRAM COST | NA | -1.2% | -1.1% | -1.4% | -1.0% | -8.0% | 0.4% | -1.0% |
| PARKING FEE | ONE TIME | WORK | PROVIDER | \$13,000/SPACE | USED/UNUSED | -1.2/0% | -1.0/0% | -1.4/0% | -0.9/0% | -0.8/0% | 0.7/0% | -0.9/0% |
| DEVELOPMENT IMPACT FEE ^6 | ONE TIME | ALL | DEVELOPER | SERVICE COST | USED | -- | -- | -- | -- | -- | -- | -- |
| HOV LANES ^6 | ONGOING | WORK | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- |
| LAND USE ^6 | ONE TIME | ALL | DEVELOPER | NA | NA | -- | -- | -- | -- | -- | -- | -- |

NOTES:

- ANALYSIS BASED ON THE BEST AVAILABLE INFORMATION ON THE PREDICTED IMPACTS OF THE STRATEGIES. THE RESULTS FOR THE INDIVIDUAL STRATEGIES ARE NOT ALWAYS ADDITIVE. FOR STRATEGIES WITH A RANGE OF FEES, ONLY THE HIGH FEE LEVEL WAS ANALYSED. THE TABLE SHOWS THE EFFECT OF STRATEGIES APPLIED TO THE 2010 BASE SCENARIO.
- FOR STRATEGIES THAT GENERATE REVENUE, THE TABLE INDICATES PERCENT CHANGES WITH AND WITHOUT USE OF THE REVENUE FOR TRANSPORTATION INCENTIVE PROGRAMS.
- NON-AUTO SHARE INCLUDES TRANSIT, WALK AND BICYCLE. IT IS EXPRESSED AS AN ABSOLUTE CHANGE FROM THE 10.1% SHARE IN THE 2010 BASE CASE.
- ENERGY USE IMPACT IS UNCLEAR DUE TO POSSIBLE HIGHER ENERGY USE AT THE REFINERY FOR REFORMULATED FUELS AND POSSIBLE FUEL ECONOMY LOSS FOR THE LEV PROGRAM.
- REVENUE FROM THIS FEE MAY BE UNUSABLE FOR TRANSIT PENDING AN OREGON SUPREME COURT DECISION.
- IMPACTS FROM THESE STRATEGIES HAVE NOT YET BEEN DETERMINED. RESULTS WILL BE PROVIDED AT THE NEXT MEETING.

Table 5-2

MOTOR VEHICLE EMISSION REDUCTION STRATEGY ANALYSIS FOR THE PORTLAND AREA: PERCENT CHANGE FROM 2010 BASE CASE ^1

SCENARIO: 2.2%/YR VMT GROWTH, COMMITTED NETWORK

16-Jul-92

INDIVIDUAL STRATEGY ANALYSIS RESULTS, SORTED BY NITROGEN OXIDES EMISSION REDUCTION POTENTIAL

| STRATEGY | FREQ | TRIP PURPOSE | WHO PAYS | COST/ FEE LEVEL | REVENUE/ INCENTIVES ^2 | EMISSIONS | | | VMT | AUTO TRIPS | NON-AUTO SHARE ^3 | ENERGY |
|-------------------------------------|----------|--------------|-----------|------------------|------------------------|-------------|-------------|-------------|------------|------------|-------------------|------------|
| | | | | | | HC | NOx | CO | | | | |
| CALIFORNIA LEV PROGRAM | ONGOING | ALL | USER | VEHICLE COST | NA | -9.8% | -22.0% | -8.2% | 0.0% | 0.0% | 0.0% | ? ^4 |
| VMT/SMOG TAX | ONGOING | ALL | USER | \$0.07/MILE AVG | USED/UNUSED ^5 | -11.3/-4.6% | -11.3/-5.3% | -13.0/-5.0% | -6.6/-1.0% | -5.9/-1.3% | 4.7/0.5% | -8.4/-3.0% |
| ENHANCED I/M PURGE & TRANSIENT | ONGOING | ALL | USER | TEST/REPAIR COST | NA | -17.5% | -9.0% | -6.0% | 0.0% | 0.0% | 0.0% | -0.6% |
| PARKING FEE | ONGOING | WORK | USER | \$8/SPACE/DAY | USED/UNUSED | -8.4/-4.3% | -7.6/-3.9% | -10.0/-5.0% | -6.9/-3.6% | -5.6/-2.9% | 3.9/1.2% | -6.9/-3.6% |
| ADD-ON TO FUEL TAX | ONGOING | ALL | USER | \$1.50/GALLON | UNUSABLE | -8.1% | -7.5% | -8.3% | -7.4% | -8.3% | 3.1% | -44.6% |
| PARKING FEE | ONGOING | NONWORK | USER | \$0.60/SPACE/HR | USED/UNUSED | -7.5/-6.4% | -6.4/-5.7% | -8.8/-5.9% | -6.2/-5.7% | -9.9/-8.0% | 6.1/1.4% | -6.2/-5.7% |
| CONGESTION PRICING | ONGOING | ALL | USER | \$0.30/MILE | USED/UNUSED | -5.9/-5.6% | -5.4/-5.1% | -7.0/-6.6% | -4.9/-4.7% | -3.9/-3.7% | 2.1/1.9% | -4.9/-4.7% |
| PARKING FEE | ONGOING | WORK | PROVIDER | \$700/SPACE/YR | USED/UNUSED | -4.6/0% | -4.1/0% | -5.5/0% | -3.7/0% | -3.0/0% | 2.8/0% | -3.7/0% |
| PAY-AS-YOU-DRIVE INSURANCE | ONGOING | ALL | USER | \$0.45/GALLON | UNUSABLE | -3.3% | -3.1% | -3.4% | -3.0% | -3.4% | 1.3% | -19.3% |
| PARKING RATIO | ONE TIME | NONWORK | DEVELOPER | NA | NA | -2.7% | -2.4% | -2.5% | -2.4% | -3.4% | 0.6% | -2.4% |
| PARKING FEE | ONGOING | NONWORK | PROVIDER | \$700/SPACE/YR | USED/UNUSED | -2.8/0% | -2.3/0% | -2.5/0% | -2.2/0% | -3.9/0% | 3.6/0% | -2.2/0% |
| REFORMULATED GASOLINE, CA PHASE II | ONGOING | ALL | USER | \$0.14-0.28/GAL | NA | -38.3% | -1.6% | -1.7% | -1.5% | -1.7% | 0.7% | ? ^4 |
| PARKING RATIO | ONE TIME | WORK | DEVELOPER | NA | NA | -1.3% | -1.2% | -1.5% | -1.1% | -0.9% | 0.4% | -1.1% |
| REFORMULATED GASOLINE, FED PHASE II | ONGOING | ALL | USER | \$0.08-0.20/GAL | NA | -25.1% | -1.1% | -1.2% | -1.1% | -1.2% | 0.5% | ? ^4 |
| EMPLOYER TRIP REDUCTION PROGRAM | ONGOING | WORK | EMPLOYER | PROGRAM COST | NA | -1.2% | -1.1% | -1.4% | -1.0% | -8.0% | 0.4% | -1.0% |
| PARKING FEE | ONE TIME | NONWORK | PROVIDER | \$13,000/SPACE | USED/UNUSED | -1.3/0% | -1.1/0% | -1.2/0% | -1.0/0% | -1.8/0% | 1.7/0% | -1.0/0% |
| PARKING FEE | ONE TIME | WORK | PROVIDER | \$13,000/SPACE | USED/UNUSED | -1.2/0% | -1.0/0% | -1.4/0% | -0.9/0% | -0.8/0% | 0.7/0% | -0.9/0% |
| REFORMULATED GASOLINE, FED PHASE I | ONGOING | ALL | USER | \$0.04-0.11/GAL | NA | -17.7% | -0.7% | -0.7% | -0.6% | -0.7% | 0.3% | ? ^4 |
| ENHANCED I/M PRESSURE TEST | ONGOING | ALL | USER | TEST/REPAIR COST | NA | -8.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | -0.3% |
| DEVELOPMENT IMPACT FEE ^6 | ONE TIME | ALL | DEVELOPER | SERVICE COST | USED | -- | -- | -- | -- | -- | -- | -- |
| HOV LANES ^6 | ONGOING | WORK | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- |
| LAND USE ^6 | ONE TIME | ALL | DEVELOPER | NA | NA | -- | -- | -- | -- | -- | -- | -- |

NOTES:

- ANALYSIS BASED ON THE BEST AVAILABLE INFORMATION ON THE PREDICTED IMPACTS OF THE STRATEGIES. THE RESULTS FOR THE INDIVIDUAL STRATEGIES ARE NOT ALWAYS ADDITIVE. FOR STRATEGIES WITH A RANGE OF FEES, ONLY THE HIGH FEE LEVEL WAS ANALYSED. THE TABLE SHOWS THE EFFECT OF STRATEGIES APPLIED TO THE 2010 BASE SCENARIO.
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- NON-AUTO SHARE INCLUDES TRANSIT, WALK AND BICYCLE. IT IS EXPRESSED AS AN ABSOLUTE CHANGE FROM THE 10.1% SHARE IN THE 2010 BASE CASE.
- ENERGY USE IMPACT IS UNCLEAR DUE TO POSSIBLE HIGHER ENERGY USE AT THE REFINERY FOR REFORMULATED FUELS AND POSSIBLE FUEL ECONOMY LOSS FOR THE LEV PROGRAM.
- REVENUE FROM THIS FEE MAY BE UNUSABLE FOR TRANSIT PENDING AN OREGON SUPREME COURT DECISION.
- IMPACTS FROM THESE STRATEGIES HAVE NOT YET BEEN DETERMINED. RESULTS WILL BE PROVIDED AT THE NEXT MEETING.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 92-1619 FOR THE PURPOSE OF ELIMINATING BYPASS OPTION B FROM FURTHER WESTERN BYPASS STUDY

Date: July 14, 1992

Presented by: Andrew Cotugno

PROPOSED ACTION

Resolution No. 92-1619 adopts a regional position to delete "Bypass Option B" as one of the alternatives being carried forward for consideration in the Environmental Impact Statement.

TPAC reviewed this proposal at its July 13 meeting and recommends approval of Resolution No. 92-1619.

FACTUAL BACKGROUND AND ANALYSIS

This alternative is the western of two bypass proposals (the other is Bypass Option A to the east of this location). It runs essentially along, or west of, Highway 219 outside the Urban Growth Boundary.

This option is overshadowed by Bypass Option A in that it does not perform as well in meeting the objectives of the study. It is shown in ODOT's analysis to be not significantly better than the No-Build strategy, would be little utilized if built, and would not significantly lessen congestion. A full description of the ODOT study process is included as Attachment A.

RECOMMENDATION

Delete Bypass Option B from further consideration.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 92-1619.

ATTACHMENT A

WESTERN BYPASS STUDY: ELIMINATION OF STRATEGIES FROM FURTHER CONSIDERATION

A. Introduction

As amended earlier this year, the Western Bypass Study Planning Coordination Agreement adopted by Metro, ODOT, and affected Washington County jurisdictions provides for ODOT to recommend, and JPACT and Metro to consider, the elimination of strategies from further detailed study as alternatives. The intergovernmental agreement provides in pertinent part:

"Based on the strategies recommended for elimination by ODOT's staff, JPACT and Metro shall consider recommending or requiring elimination of strategies considered unreasonable to meet the purposes and needs identified in the [Purpose and Need] Statement. As part of this process, JPACT and Metro shall consider any appropriate amendments to the RTP to eliminate strategies from further study. The adoption of any RTP amendments eliminating strategies from further study shall be accompanied by findings demonstrating compliance with applicable statewide planning goals and regional goals and objectives, if necessary. For each strategy eliminated, Metro shall demonstrate the reasons why the eliminated strategy cannot meet the identified statewide and regional transportation system needs."

Following review and action by its Technical Advisory Committee (TAC), Citizen Advisory Committee (CAC) and Steering Committee, ODOT is now before you to request elimination of two strategies from further detailed consideration as alternatives: Bypass Option B, which considered a new limited access facility essentially along or west of Highway 219 outside the Urban Growth Boundary, and a transit-intensive strategy which considered the ability to meet the identified purposes and needs through an approach relying primarily on transit.

Elimination of these strategies would not require an RTP amendment. Eliminating Bypass Option B does not require an RTP amendment because ODOT intends to carry forward Bypass Option A for further study as an alternative. Bypass Option A is located in an area similar to that identified in the RTP. ODOT's committees found that Bypass Option A would be more effective at meeting the identified purpose and need.

Bypass Option B is located well to the west of Bypass Option A, along and west of Highway 219 and is outside the corridor identified in the Regional Transportation Plan.

Regarding elimination of a transit-intensive strategy, ODOT considered whether a strategy relying primarily on transit, rather than a combination of transit and roadway improvements, could meet the purposes and needs identified for the Study. To develop the transit-intensive strategy, ODOT considered high-capacity transit corridors in the form of light rail transit along Highway 217 and Barbur Boulevard in addition to the Westside LRT to Hillsboro. ODOT supported these high-capacity transit corridors with park-and-ride lots, transit stations, and an expanded feeder bus network, and called this strategy the "Transit-Intensive (LRT) Strategy."

Eliminating the Transit-Intensive (LRT) Strategy would not require an RTP amendment because (1) the Barbur corridor lies outside the Western Bypass study area and is not affected by ODOT's proposal, (2) the RTP identifies the Highway 217 corridor as a possible future extension of light rail; and (3) none of the alternatives recommended for further study will preclude light rail transit along Highway 217. ODOT's position is that a strategy relying primarily on transit rather than a combination of transit and roadway expansion cannot meet the purposes and needs identified in this Study and does not merit further consideration.

While the purposes and needs identified in this Study cannot be met only through transit, ODOT recognizes that circumferential high-capacity transit (bus or light rail) combined with roadway improvements and demand reduction measures does merit further consideration in this Study.

Although RTP amendments are not required to eliminate either strategy, the intergovernmental agreement still requires Metro to demonstrate reasons why each strategy eliminated cannot meet the identified statewide and regional Westside circumferential travel needs identified in the Purpose and Need Statement. This staff report provides those reasons.

B. Background

Section III of the intergovernmental agreement requires ODOT to "study, develop and refine strategies to meet the statewide and regional Westside circumferential travel needs identified in the Purpose and Need Statement." Those needs include the need to adequately provide for north-south and circumferential travel in the study area.

According to ODOT's Purpose and Need Statement, because of the lack of circumferential routes and expected growth projected for the study area, transportation problems will be significant by the year 2010 without major reduction or alleviation of traffic congestion. More traffic will likely use roads not designed for high traffic volumes. Through an extensive public involvement effort, ODOT has identified needs to reduce traffic congestion and reduce reliance on the private automobile. Options to satisfy those needs include increasing road capacity and transit service and implementing demand management programs.

In the spring of 1991, ODOT and its consulting team began to develop and study a number of strategies. These strategies focused on particular solutions to address the demand for north-south or circumferential travel, as the purpose of the study is not to solve every traffic congestion problem in the study area. The strategies included:

1. a "no build" strategy;
2. a "common improvements" strategy (including transportation projects and transit service expansions under active development for the study area but without committed funding);
3. an "arterial expansion" strategy, focusing on roadway improvements beyond those listed in the "common improvements" and including extension of a major discontinuous north-south route;
4. a "transit-intensive (LRT)" strategy, focusing on transit improvements adding two light rail corridors (Barbur and Highway 217) together with supporting "feeder" bus routes, park-and-ride lots and transit stations;
5. a "transit (HOV)/arterial expansion" strategy, combining transit facilities and service improvements with roadway improvements, and including express bus service and high occupancy vehicle lanes in the Highway 217 corridor as a high-capacity transit element; and
6. a "bypass" strategy, looking at two broad corridor options for a bypass facility in addition to other roadway and transit improvements.

Thereafter, following review by ODOT's advisory committees and public open houses, ODOT revised, refined and analyzed those strategies and returned them to its committees.

In October, 1991, ODOT's CAC, TAC and Steering Committee voted to recommend elimination of Bypass Option B from further detailed study as an alternative. The CAC also voted to recommend elimination of the "transit-intensive (LRT)" strategy from further study as an alternative, because this strategy did not perform better than the "common improvements" strategy which did not contain high-capacity transit elements or other transit service beyond the Westside LRT. However, the TAC and Steering Committee were not yet prepared to take that step, although they recognized its limited performance. Instead, following comments from Tri-Met's representative that the transit intensive strategy was not combined in a way that most intensively supported high capacity transit, they adopted a motion directing ODOT to remodel Highway 217 light rail, expanding on its components to consider through connection to the Central Business District, a transportation demand management program, and dial-a-ride service.

That fall and winter, Metro modeled a "revised Transit-Intensive (LRT) Strategy" containing the features suggested by the TAC. The revised strategy was developed by a group representing Tri-Met, ODOT's study team, and Metro. Like the original "transit-intensive (LRT)" strategy, the revised strategy focused on transit, relying on light rail along Highway 217 and Barbur Boulevard for its high-capacity element. However, the strategy added (1) through routing of Highway 217 LRT to Hillsboro and downtown Portland via the Westside and Barbur LRT corridors; (2) demand-responsive transit (DRT); and (3) transportation demand management (TDM) measures intended to see how TDM would work at the alternatives level.

Following completion of modeling, ODOT brought the revised Transit-Intensive (LRT) Strategy before its committees in March and April, 1992. Based on discussion and on the information generated by the modeling, the TAC voted (1) to recommend elimination from further study of a transit-intensive strategy using light rail along the Highway 217 corridor as its high-capacity transit element; (2) to combine DRT, TDM and high-capacity transit into an alternative identified for further study; and (3) that no alternative "preclude long-range implementation of LRT along the Highway 217 corridor." Tri-Met's representative to the TAC concurred with these motions. In subsequent meetings, the CAC and Steering Committee followed with similar motions.

C. Discussion

1. Bypass Option B

Metro staff concurs with ODOT's recommendation to eliminate Bypass Option B from further detailed consideration as an alternative. ODOT's committees recommended elimination of this strategy based on information showing that Bypass Option B would be underutilized and does not substantially reduce congestion compared to the No-Build strategy. Elimination of Bypass Option B does not eliminate a Bypass alternative. Bypass Option A will be taken forward for further study, consistent with the RTP.

2. Transit-Intensive (LRT) Strategy

Metro staff also concurs with ODOT's recommendation to eliminate a transit-intensive strategy ("transit only") from further consideration as an alternative.

ODOT's advisory committees recommended elimination of a transit-intensive strategy for the following reasons:

- Transit-intensive strategies as originally developed and as revised do not address the transportation problems identified in the Western Bypass Study.
- Additional circumferential LRT service in the Highway 217 corridor connecting to the Westside LRT, to a Barbur LRT, or to the CBD does not notably improve transit ridership in the year 2010 compared to the original Transit-Intensive (LRT) Strategy or compared to the No-Build strategy.
- The LUTRAQ study is considering LRT elements as part of the 1000 Friends of Oregon alternative. Changes in planned land use designations could change the ability of LRT service in the Highway 217 corridor to address the transportation problems identified in this Study and will be folded into this Study if viable.
- High-Capacity Transit through express bus service in the Highway 217 corridor will still be included as elements of the Arterial Expansion/HOV Express and Bypass alternatives. If implemented, it would provide similar service levels to light rail transit, and would provide an opportunity to build

the transit ridership demand needed for supporting light rail transit.

Although the strategy was revised in a manner that better supported light rail, the high-capacity transit component did not result in the strategy performing significantly better than the original transit-intensive strategy. Like the original transit-intensive strategy, the revised strategy did not (1) substantially reduce north-south or circumferential traffic congestion; (2) increase study area accessibility; (3) reduce traffic diversion to minor roads and neighborhoods; or (4) reduce reliance on the single occupancy automobile.

Indeed, due to the addition of "demand-responsive transit" (dial-a-ride), the revised Transit-Intensive (LRT) Strategy actually resulted in a decrease in work person trips by fixed route (bus and light rail) transit. This is caused by a shift in ridership from fixed route transit to demand-responsive transit. Based on the modeling, ODOT concluded that demand-responsive transit may help meet the identified purpose and need in reducing reliance on the private automobile and providing greater coverage in the study area by transit and should be carried forward as part of an alternative, but that high-capacity transit by itself does not contribute to meeting this purpose and need and therefore warrants no further detailed review in this Study as a separate (stand-alone) alternative.

Apart from demand-responsive transit, Metro has modeled transportation demand management (TDM) measures to determine their effect on reducing reliance on the single occupancy automobile. Metro found that TDM has a significant positive effect on reducing reliance on the automobile. Like DRT, ODOT will carry TDM forward into the alternatives stage supported by transit and roadway components. ODOT does not propose the elimination of DRT or TDM from further consideration.

At this point, clarification is needed. Before its committees, ODOT provided information showing how the revised Transit-Intensive (LRT) Strategy performed (1) with DRT and (2) with DRT and TDM. As earlier described, with just DRT, this strategy did not perform substantially better than the original transit-intensive strategy and, indeed, resulted in a lowering of combined bus and light rail ridership. However, with TDM, the strategy performed better, due to the impact of TDM measures.

Metro's modeling of the revised Transit-Intensive (LRT) Strategy with TDM raised questions among some ODOT committee members who compared these results with those of other

strategies recommended by ODOT for further study. They questioned why ODOT would eliminate the Transit-Intensive (LRT) Strategy, when it appeared to perform as well as those other strategies in meeting some of the identified purposes and needs. The answer is that the committee members were comparing this strategy with TDM to the other strategies without TDM. This was like comparing apples with oranges. While TDM substantially improved transit ridership for the Transit-Intensive (LRT) Strategy, it also substantially improves transit ridership in each of the alternatives ODOT is recommending for further study. Those proposed alternatives, with TDM, perform much better than a transit-intensive strategy with TDM at reducing congestion. Even with TDM, a transit-intensive strategy does not assist in meeting this need. ODOT is proposing to include TDM in all the alternatives recommended for further study.

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BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ELIMINATING
BYPASS OPTION B FROM FURTHER
WESTERN BYPASS STUDY

) RESOLUTION NO. 92-1619
)
) Introduced by
Councilor Richard Devlin

WHEREAS, The Metropolitan Service District is a signatory to the Western Bypass Study Planning Coordination Agreement to seek solutions to north-south and circumferential travel congestion in Southeast Washington County; and

WHEREAS, The Coordination Agreement, as amended by Resolution No. 92-1550, commits JPACT and Metro to consider ODOT recommendations for the elimination of any strategies from further detailed consideration prior to the refinement of detailed alternatives; and

WHEREAS, Bypass Option B would establish a new, limited access roadway to the far west of and mostly outside the Urban Growth Boundary generally in the Highway 219 corridor; and

WHEREAS, ODOT's analysis of projected travel shows that the roadway in Bypass Option B would be underutilized and that Bypass Option A was a better proposal as a bypass strategy; and

WHEREAS, The ODOT Study committees have recommended elimination of Bypass Option B, the westernmost corridor along Highway 219, from further study as not a reasonable option to meet ODOT's Purpose and Need Statement, which states the transportation problem to be solved; and

WHEREAS, No amendment to the Regional Transportation Plan is required because Bypass Option A remains as an alternative for

further study and Bypass Option B is not identified in the Regional Transportation Plan as an alternative to consider; now, therefore,

BE IT RESOLVED,

1. That Bypass Option B, the westernmost bypass corridor along Highway 219, is hereby eliminated from further consideration as an alternative for Draft Environmental Impact Statement evaluation in the Western Bypass Study because this bypass strategy is not a reasonable strategy to meet the Western Bypass Study Purpose and Need Statement.

2. That the reasons for the eliminated strategy failing to meet the Purpose and Need Statement are explained in the staff reports, the matrix summary of projected utilization, and the data ODOT has presented in the record.

3. That remaining alternatives and strategies considered for DEIS inclusion address the Transportation Planning Rule, the federal Clean Air Act of 1990, relevant Regional Urban Growth Goals and Objectives (RUGGO), and funding programs and policies.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1992.

Jim Gardner, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 92-1620 FOR THE PURPOSE OF ELIMINATING A "TRANSIT-INTENSIVE STRATEGY" FROM FURTHER CONSIDERATION IN THE WESTERN BYPASS STUDY WITHOUT PRECLUDING FUTURE LIGHT RAIL TRANSIT IN THE HIGHWAY 217 CORRIDOR

DATE: May 14, 1992

Presented by: Andrew Cotugno

PROPOSED ACTION

To drop further consideration of an alternative which is transit-intensive without additional highway investment beyond the "common roadway improvements" called "Transit-Intensive (LRT)" strategy in the strategies evaluation.

This action does not remove consideration of a high-capacity transit alternative combined with roadway improvements as, for example, in the "Transit (HOV)/Arterial Expansion" alternative which is not being recommended for deletion.

TPAC reviewed this proposal at its July 13 meeting and recommends approval of Resolution No. 92-1619.

FACTUAL BACKGROUND AND ANALYSIS

The Oregon Department of Transportation, in carrying out the study of the Western Bypass recommended in Metro's Southwest Corridor Study, has evaluated six strategies and is seeking to drop those that do not address the objectives of the study to adequately serve circumferential or north-south travel in eastern Washington County. A full description of the ODOT study process is included as Attachment A.

The study team has made two attempts to define a transit-intensive (only), (with no road improvements beyond the "common improvements"), solution to the travel demands generated by the current land use plans for the study area and region. The second attempt replaced fixed feeder bus with demand-responsive feeder service and through-routing of LRT lines along 217 to the CBD and Hillsboro for more direct service. Neither showed the ability to address the purpose and needs stated for this study.

One of the alternatives remaining, the "Transit (HOV)/ Arterial Expansion" has a high-capacity transit element modeled as express bus on the transitway in conjunction with arterial improvements. From the point of view of patronage, this would give similar results to a light rail alternative (perhaps better).

From a practical viewpoint, a study such as this can address the effect of an intensive transit alternative on road needs but, in fact, cannot make a mode-within-transit decision. Both the Federal Transit Administration procedure and common sense require an Alternatives Analysis to determine the most appropriate

transit service in a corridor such as this. This choice of transit-intensive service and setting of priorities will be addressed in Metro's High-Capacity Transit System Study over the next year or so. These system considerations will be known before any possible project(s) emerging from the Western Bypass Study get to the design stage.

In terms of addressing a transit-intensive alternative along with an alternative land use plan to better utilize transit potential, ODOT has committed to include in the DEIS an evaluation of any viable alternative emerging from the 1000 Friends of Oregon LUTRAQ study.

Following presentation of the evaluation data to the Technical Advisory Committee, the Citizens Advisory Committee and the Steering Committee for the project, recommended dropping this alternative.

RECOMMENDATIONS

That this Transit-Intensive Strategy with fixed guideway light rail along Highway 217 and Barbur Boulevard and no highway expansion beyond common improvements not be considered further.

That further consideration of alternatives that have combinations of highway and transit expansion be considered.

That alternatives chosen for the DEIS evaluation shall not preclude implementation of fixed guideway rail transit along Highway 217 in the future.

That the following circumstances will cause further consideration of light rail in the Highway 217 corridor:

- If a viable alternative is identified by the 1000 Friends of Oregon LUTRAQ study, it shall be included in this DEIS evaluation.
- If the preferred alternative selected includes a fixed guideway element, the subsequent Alternatives Analysis required in the federal process will examine all such options including light rail.
- If future studies produce new information significantly changing the current travel projections used in the analysis, light rail will be considered.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 92-1620.

ACC:lmk
92-1620.RES
7-14-92

ATTACHMENT A

WESTERN BYPASS STUDY: ELIMINATION OF STRATEGIES FROM FURTHER CONSIDERATION

A. Introduction

As amended earlier this year, the Western Bypass Study Planning Coordination Agreement adopted by Metro, ODOT, and affected Washington County jurisdictions provides for ODOT to recommend, and JPACT and Metro to consider, the elimination of strategies from further detailed study as alternatives. The intergovernmental agreement provides in pertinent part:

"Based on the strategies recommended for elimination by ODOT's staff, JPACT and Metro shall consider recommending or requiring elimination of strategies considered unreasonable to meet the purposes and needs identified in the [Purpose and Need] Statement. As part of this process, JPACT and Metro shall consider any appropriate amendments to the RTP to eliminate strategies from further study. The adoption of any RTP amendments eliminating strategies from further study shall be accompanied by findings demonstrating compliance with applicable statewide planning goals and regional goals and objectives, if necessary. For each strategy eliminated, Metro shall demonstrate the reasons why the eliminated strategy cannot meet the identified statewide and regional transportation system needs."

Following review and action by its Technical Advisory Committee (TAC), Citizen Advisory Committee (CAC) and Steering Committee, ODOT is now before you to request elimination of two strategies from further detailed consideration as alternatives: Bypass Option B, which considered a new limited access facility essentially along or west of Highway 219 outside the Urban Growth Boundary, and a transit-intensive strategy which considered the ability to meet the identified purposes and needs through an approach relying primarily on transit.

Elimination of these strategies would not require an RTP amendment. Eliminating Bypass Option B does not require an RTP amendment because ODOT intends to carry forward Bypass Option A for further study as an alternative. Bypass Option A is located in an area similar to that identified in the RTP. ODOT's committees found that Bypass Option A would be more effective at meeting the identified purpose and need.

Bypass Option B is located well to the west of Bypass Option A, along and west of Highway 219 and is outside the corridor identified in the Regional Transportation Plan.

Regarding elimination of a transit-intensive strategy, ODOT considered whether a strategy relying primarily on transit, rather than a combination of transit and roadway improvements, could meet the purposes and needs identified for the Study. To develop the transit-intensive strategy, ODOT considered high-capacity transit corridors in the form of light rail transit along Highway 217 and Barbur Boulevard in addition to the Westside LRT to Hillsboro. ODOT supported these high-capacity transit corridors with park-and-ride lots, transit stations, and an expanded feeder bus network, and called this strategy the "Transit-Intensive (LRT) Strategy."

Eliminating the Transit-Intensive (LRT) Strategy would not require an RTP amendment because (1) the Barbur corridor lies outside the Western Bypass study area and is not affected by ODOT's proposal, (2) the RTP identifies the Highway 217 corridor as a possible future extension of light rail; and (3) none of the alternatives recommended for further study will preclude light rail transit along Highway 217. ODOT's position is that a strategy relying primarily on transit rather than a combination of transit and roadway expansion cannot meet the purposes and needs identified in this Study and does not merit further consideration.

While the purposes and needs identified in this Study cannot be met only through transit, ODOT recognizes that circumferential high-capacity transit (bus or light rail) combined with roadway improvements and demand reduction measures does merit further consideration in this Study.

Although RTP amendments are not required to eliminate either strategy, the intergovernmental agreement still requires Metro to demonstrate reasons why each strategy eliminated cannot meet the identified statewide and regional Westside circumferential travel needs identified in the Purpose and Need Statement. This staff report provides those reasons.

B. Background

Section III of the intergovernmental agreement requires ODOT to "study, develop and refine strategies to meet the statewide and regional Westside circumferential travel needs identified in the Purpose and Need Statement." Those needs include the need to adequately provide for north-south and circumferential travel in the study area.

According to ODOT's Purpose and Need Statement, because of the lack of circumferential routes and expected growth projected for the study area, transportation problems will be significant by the year 2010 without major reduction or alleviation of traffic congestion. More traffic will likely use roads not designed for high traffic volumes. Through an extensive public involvement effort, ODOT has identified needs to reduce traffic congestion and reduce reliance on the private automobile. Options to satisfy those needs include increasing road capacity and transit service and implementing demand management programs.

In the spring of 1991, ODOT and its consulting team began to develop and study a number of strategies. These strategies focused on particular solutions to address the demand for north-south or circumferential travel, as the purpose of the study is not to solve every traffic congestion problem in the study area. The strategies included:

1. a "no build" strategy;
2. a "common improvements" strategy (including transportation projects and transit service expansions under active development for the study area but without committed funding);
3. an "arterial expansion" strategy, focusing on roadway improvements beyond those listed in the "common improvements" and including extension of a major discontinuous north-south route;
4. a "transit-intensive (LRT)" strategy, focusing on transit improvements adding two light rail corridors (Barbur and Highway 217) together with supporting "feeder" bus routes, park-and-ride lots and transit stations;
5. a "transit (HOV)/arterial expansion" strategy, combining transit facilities and service improvements with roadway improvements, and including express bus service and high occupancy vehicle lanes in the Highway 217 corridor as a high-capacity transit element; and
6. a "bypass" strategy, looking at two broad corridor options for a bypass facility in addition to other roadway and transit improvements.

Thereafter, following review by ODOT's advisory committees and public open houses, ODOT revised, refined and analyzed those strategies and returned them to its committees.

In October, 1991, ODOT's CAC, TAC and Steering Committee voted to recommend elimination of Bypass Option B from further detailed study as an alternative. The CAC also voted to recommend elimination of the "transit-intensive (LRT)" strategy from further study as an alternative, because this strategy did not perform better than the "common improvements" strategy which did not contain high-capacity transit elements or other transit service beyond the Westside LRT. However, the TAC and Steering Committee were not yet prepared to take that step, although they recognized its limited performance. Instead, following comments from Tri-Met's representative that the transit intensive strategy was not combined in a way that most intensively supported high capacity transit, they adopted a motion directing ODOT to remodel Highway 217 light rail, expanding on its components to consider through connection to the Central Business District, a transportation demand management program, and dial-a-ride service.

That fall and winter, Metro modeled a "revised Transit-Intensive (LRT) Strategy" containing the features suggested by the TAC. The revised strategy was developed by a group representing Tri-Met, ODOT's study team, and Metro. Like the original "transit-intensive (LRT)" strategy, the revised strategy focused on transit, relying on light rail along Highway 217 and Barbur Boulevard for its high-capacity element. However, the strategy added (1) through routing of Highway 217 LRT to Hillsboro and downtown Portland via the Westside and Barbur LRT corridors; (2) demand-responsive transit (DRT); and (3) transportation demand management (TDM) measures intended to see how TDM would work at the alternatives level.

Following completion of modeling, ODOT brought the revised Transit-Intensive (LRT) Strategy before its committees in March and April, 1992. Based on discussion and on the information generated by the modeling, the TAC voted (1) to recommend elimination from further study of a transit-intensive strategy using light rail along the Highway 217 corridor as its high-capacity transit element; (2) to combine DRT, TDM and high-capacity transit into an alternative identified for further study; and (3) that no alternative "preclude long-range implementation of LRT along the Highway 217 corridor." Tri-Met's representative to the TAC concurred with these motions. In subsequent meetings, the CAC and Steering Committee followed with similar motions.

C. Discussion

1. Bypass Option B

Metro staff concurs with ODOT's recommendation to eliminate Bypass Option B from further detailed consideration as an alternative. ODOT's committees recommended elimination of this strategy based on information showing that Bypass Option B would be underutilized and does not substantially reduce congestion compared to the No-Build strategy. Elimination of Bypass Option B does not eliminate a Bypass alternative. Bypass Option A will be taken forward for further study, consistent with the RTP.

2. Transit-Intensive (LRT) Strategy

Metro staff also concurs with ODOT's recommendation to eliminate a transit-intensive strategy ("transit only") from further consideration as an alternative.

ODOT's advisory committees recommended elimination of a transit-intensive strategy for the following reasons:

- Transit-intensive strategies as originally developed and as revised do not address the transportation problems identified in the Western Bypass Study.
- Additional circumferential LRT service in the Highway 217 corridor connecting to the Westside LRT, to a Barbur LRT, or to the CBD does not notably improve transit ridership in the year 2010 compared to the original Transit-Intensive (LRT) Strategy or compared to the No-Build strategy.
- The LUTRAQ study is considering LRT elements as part of the 1000 Friends of Oregon alternative. Changes in planned land use designations could change the ability of LRT service in the Highway 217 corridor to address the transportation problems identified in this Study and will be folded into this Study if viable.
- High-Capacity Transit through express bus service in the Highway 217 corridor will still be included as elements of the Arterial Expansion/HOV Express and Bypass alternatives. If implemented, it would provide similar service levels to light rail transit, and would provide an opportunity to build

the transit ridership demand needed for supporting light rail transit.

Although the strategy was revised in a manner that better supported light rail, the high-capacity transit component did not result in the strategy performing significantly better than the original transit-intensive strategy. Like the original transit-intensive strategy, the revised strategy did not (1) substantially reduce north-south or circumferential traffic congestion; (2) increase study area accessibility; (3) reduce traffic diversion to minor roads and neighborhoods; or (4) reduce reliance on the single occupancy automobile.

Indeed, due to the addition of "demand-responsive transit" (dial-a-ride), the revised Transit-Intensive (LRT) Strategy actually resulted in a decrease in work person trips by fixed route (bus and light rail) transit. This is caused by a shift in ridership from fixed route transit to demand-responsive transit. Based on the modeling, ODOT concluded that demand-responsive transit may help meet the identified purpose and need in reducing reliance on the private automobile and providing greater coverage in the study area by transit and should be carried forward as part of an alternative, but that high-capacity transit by itself does not contribute to meeting this purpose and need and therefore warrants no further detailed review in this Study as a separate (stand-alone) alternative.

Apart from demand-responsive transit, Metro has modeled transportation demand management (TDM) measures to determine their effect on reducing reliance on the single occupancy automobile. Metro found that TDM has a significant positive effect on reducing reliance on the automobile. Like DRT, ODOT will carry TDM forward into the alternatives stage supported by transit and roadway components. ODOT does not propose the elimination of DRT or TDM from further consideration.

At this point, clarification is needed. Before its committees, ODOT provided information showing how the revised Transit-Intensive (LRT) Strategy performed (1) with DRT and (2) with DRT and TDM. As earlier described, with just DRT, this strategy did not perform substantially better than the original transit-intensive strategy and, indeed, resulted in a lowering of combined bus and light rail ridership. However, with TDM, the strategy performed better, due to the impact of TDM measures.

Metro's modeling of the revised Transit-Intensive (LRT) Strategy with TDM raised questions among some ODOT committee members who compared these results with those of other

strategies recommended by ODOT for further study. They questioned why ODOT would eliminate the Transit-Intensive (LRT) Strategy, when it appeared to perform as well as those other strategies in meeting some of the identified purposes and needs. The answer is that the committee members were comparing this strategy with TDM to the other strategies without TDM. This was like comparing apples with oranges. While TDM substantially improved transit ridership for the Transit-Intensive (LRT) Strategy, it also substantially improves transit ridership in each of the alternatives ODOT is recommending for further study. Those proposed alternatives, with TDM, perform much better than a transit-intensive strategy with TDM at reducing congestion. Even with TDM, a transit-intensive strategy does not assist in meeting this need. ODOT is proposing to include TDM in all the alternatives recommended for further study.

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BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

| | | |
|----------------------------------|---|--------------------------|
| FOR THE PURPOSE OF ELIMINATING |) | RESOLUTION NO. 92-1620 |
| A "TRANSIT-INTENSIVE STRATEGY" |) | |
| FROM FURTHER CONSIDERATION IN |) | Introduced by |
| THE WESTERN BYPASS STUDY WITHOUT |) | Councilor Richard Devlin |
| PRECLUDING FUTURE LIGHT RAIL |) | |
| RAIL TRANSIT IN THE HIGHWAY 217 |) | |
| CORRIDOR |) | |

WHEREAS, The Metropolitan Service District is a signatory to the Western Bypass Study Planning Coordination Agreement to seek solutions to north-south and circumferential travel congestion in southeast Washington County; and

WHEREAS, The Coordination Agreement, as amended by Resolution No. 92-1550 commits the Joint Policy Advisory Committee on Transportation (JPACT) and Metro to consider the Oregon Department of Transportation (ODOT) recommendation of the elimination of any strategies from further detailed consideration prior to the refinement of detailed alternatives; and

WHEREAS, The Western Bypass Study has analyzed six general transportation strategies which were reconfigured into four revised strategies; and

WHEREAS, One strategy was a revised Transit-Intensive Strategy using fixed guideway light rail lines along Highway 217 and Barbur Boulevard as its high-capacity transit element; and

WHEREAS, Analysis of projected travel under current land use plans indicated that fixed guideway light rail along the Highway 217 corridor does not meet the Western Bypass Study Purpose and Need Statement; and

WHEREAS, ODOT study committees have recommended elimination of a transit-intensive strategy from further study as not a reasonable option to meet ODOT's Purpose and Need Statement; and

WHEREAS, The proposed Arterial Expansion/High Occupancy Vehicle Express Alternative will include a high-capacity transit element along the Highway 217 Corridor that works as well or better than light rail transit; and

WHEREAS, ODOT has recommended that the alternatives to be considered further will not preclude light rail transit implementation along the Highway 217 corridor in the future; and

WHEREAS, ODOT has committed to including in the EIS any viable land use/transportation alternative emerging from the 1000 Friends of Oregon Land Use, Transportation and Air Quality (LUTRAQ) study; and

WHEREAS, No Regional Transportation Plan amendment is needed because the Barbur Boulevard light rail lies outside the Western Bypass Study Area and none of the alternatives will preclude long-range implementation of light rail along Highway 217; now, therefore,

BE IT RESOLVED,

1. That the revised Transit-Intensive Strategy with fixed guideway light rail along Highway 217 and Barbur Boulevard and no highway expansion beyond common improvements shall not be considered further in that form as an alternative for the Draft Environmental Impact Statement (DEIS) for the Western Bypass Study because it does not meet the Western Bypass Purpose and Need Statement.
2. That alternatives which include combinations of highway expansion and transit expansion, not excluding the possibility of rail transit, will be considered for Draft Environmental Impact Statement evaluation in the

Western Bypass Study.

3. That alternatives considered for Draft Environmental Impact Statement evaluation shall not preclude implementation of fixed guideway light rail transit along Highway 217 in the future.
4. That the following circumstances will cause further consideration of light rail in the Highway 217 corridor:
 - a. If a land use/transportation alternative is identified by the LUTRAQ study which is a viable land use/transportation strategy, it shall be evaluated in the Draft Environmental Impact Statement.
 - b. If the preferred alternative selected at the conclusion of the Western Bypass Study includes a fixed guideway element, the subsequent Alternatives Analysis required in the Federal Transit Administration process will examine appropriate fixed guideway options including light rail.
 - c. If future studies produce new information which significantly change the projected travel analysis, light rail will be reconsidered.
5. That the reasons for the Transit-Intensive Strategy failing to meet the Purpose and Need Statement are explained in the staff reports, the matrix summary of projected utilization, and the data ODOT has presented in the record.
6. That remaining alternatives and strategies considered for DEIS inclusion address the Transportation Planning

Rule, the federal Clean Air Act of 1990, relevant
Regional Urban Growth Goals and Objectives (RUGGO),
and funding programs and policies.

ADOPTED by the Council of the Metropolitan Service
District this _____ day of _____, 1992.

Jim Gardner, Presiding Officer

ACC:lmk
92-1620.RES/5-19-92

STOP



Sensible Transportation Options for People

July 29, 1992

Dear JPACT Member,

On August 13, you will be asked to approve ODOT's recommendation to drop two Strategies from the Western Bypass Study:

- * Bypass Option B, which runs essentially along, or west of, Hwy #219 outside the Urban Growth Boundary.
- * Transit-Intensive (LRT) Strategy, which provides for light rail transit along Hwy #217, connecting Westside Light Rail with a light rail line along Barbur Blvd.

ODOT's rationale is that neither of these strategies meets the needs identified in the Western Bypass Study's Statement of Purpose and Need.

STOP has several serious objections to ODOT's recommendation -- as well as to the overall direction of the Western Bypass Study.

1. The top three Goals and Objectives of the Western Bypass Study are:

- * To reduce congestion on major roads and highways
- * To improve transit and other methods to reduce reliance on cars and prolong the life of highways.
- * To protect the Urban Growth Boundary, in order to maximize development within the UGB.

(The designation "top three" is based on the combined rankings of public input at ODOT's Public Workshops and of Western Bypass Study Committee members. Attachment A lists all of the study's Goals and Objectives.)

These goals and objectives reflect growing public support for decreased automobile use, the creation of better transportation options, and the protection of the Urban Growth Boundary.

Granted, neither Bypass Option B nor the LRT Strategy does much to accomplish the study's top three goals. However, neither do any of the other Strategies. (See Attachment B, "Notes On Evaluation Results From the Western Bypass Study" (STOP, 1991)).

2. ODOT concludes that neither the Bypass B Strategy nor the LRT Strategy addresses the study's Statement of Purpose and Need. Again, neither do any of the other strategies.

ODOT's summary of the Statement of Purpose and Need (Attachment C) concludes that strategies must:

- * Address major North/South or circumferential travel needs.
- * Recognize various trip lengths and modes.
- * Consider the opportunity to reduce traffic as well as the opportunity to increase road capacity and transit service.
- * Consider geographic, environmental, and land use factors.
- * Recognize traffic in Northeast and Southeast portions, as well as travel demand between North and South areas, and through the Study area.

Believing that ODOT's Summary missed some critical information contained in the Statement of Purpose and Need, STOP published its own analysis of this document, "Transportation Needs in the Western Bypass Study Area", included as Attachment D. Our analysis highlighted these statistics from ODOT's Statement of Purpose and Need:

In 1988, less than 4% of all Western Bypass Study area trips were long distance, circumferential trips (i.e., between the Southern and Northern areas of Washington Co.)

In 2010:

- * 68% of all study area trips will be less than 6 miles in length.
- * 92% of all study area trips will be short trips within the urbanized area. More than half of these will be within the same district (i.e., Tigard, Beaverton, Aloha, etc.). The remainder will be between adjacent districts.
- * Less than 4% of all study area trips will be long distance, circumferential.
- * 85% of all study area trips will begin and end in the study area.

- * Less than 5% of all trips that begin and end in the study area would be likely to use a Western Bypass.

Based on ODOT's extensive research, we can only conclude that there is no significant demand for long-distance, circumferential trips in Washington County -- now, or in the year 2010.

3. ODOT's more detailed analysis of Alternatives indicates that none of them significantly reduce automobile reliance or congestion -- two of the top-ranked study objectives.

(See Attachment E for a graphic comparison of these Alternatives and Strategies.)

The failure of ODOT's Alternatives to address these critical factors demonstrates that we're looking at the wrong problem. As long as we continue to develop strategies that address long-distance, circumferential travel, we won't be solving the real problem: short, local, urban trips.

4. The cost of any of ODOT's Alternatives will be high.

- * The "TSM/Planned Projects Alternative" includes 54 separate construction projects, 11 of which are new roads.
- * The "Arterial Expansion/HOV Alternative" includes all of the TSM/Planned Projects plus 5 additional large construction projects: a new, limited-access expressway between I-5 and 99W, a new 4-lane road through established residential sections of Beaverton and Tigard, and significant widening projects on 99W, 217, and SW 216/219th Ave.
- * The "Bypass Alternative" includes not only a \$300 Million limited access 4-lane freeway, but also all 54 of the TSM/PP Alternative projects, plus 4 additional widening projects.

The only funding source identified for these alternatives is the Access Oregon Program, which is currently available only for a Bypass facility. (Presumably, Access Oregon funds would not pay for the 58 additional construction projects included in the Bypass Alternative.) None of the other "build" Alternatives is currently funded.

Based on these concerns, we have some questions for JPACT:

- * Is solving North/South circumferential travel in Washington County still a regional priority?
- * If so, where are we going to find the \$300 Million -- and more -- to do it?
- * What happens if we decide to invest in any of these solutions? What other regional priorities will have to be bumped in order to address 4% of Washington County's traffic problems?
- * How is the region going to address the remaining 96% of Washington County's traffic problems? With what money?
- * All of the proposed Alternatives project a significant increase in VMT over the next 20 years. If we select one of these Alternatives, how will the region meet the Transportation Planning Rule requirement to decrease regional VMT over the next 20 years? Who will have to bear the burden of balancing out Washington County's sharp VMT increase: Clackamas County? the City of Portland? Multnomah County?
- * What measures will the region have to take to offset the air quality problems caused by increased VMT in Washington County? What impact will this have on the region's ability to attract new industry and development?

We have posed these questions to ODOT and elected officials in Washington County. Their response has been to point to Metro's jurisdiction for regional transportation planning. Indeed, ODOT is conducting the Western Bypass Study at Metro's request; local jurisdictions serve on the committees in an advisory capacity. As the regional transportation decision-making body, JPACT has ultimate responsibility for the Western Bypass Study and its results.

We urge you to consider whether or not the Western Bypass Study, as currently defined, has any chance of producing effective solutions to Washington County's -- and the region's -- pressing transportation needs.

Dave Stewart and I will be at the August 13 JFACT meeting to present these concerns in person. Please feel free to call either one of us at the STOP Office (624-6083) if you have any comments or questions.

Sincerely,

Meeky Blizzard

Meeky Blizzard
Executive Coordinator

Attachments

GOALS AND OBJECTIVES

Attachment A

The advisory committees used issues identified in the initial public involvement effort as the basis for developing the Goals and Objectives of the Study. These Goals and Objectives will guide development of strategies to solve current and projected travel needs in the study area. They represent public values and agency priorities identified through staff consultations and public involvement activities.

● GOAL 1:

Conduct the Western Bypass Study in an open, objective and expeditious process allowing input from all sectors of the community and considering all reasonable alternative solutions to transportation problems that comply with local, regional, state and federal plans and regulations.

Objectives:

1.1 Keep citizens, local, regional and state agencies and officials, as well as other interest groups, involved in the study process through public forums and workshops and through newsletters and other media.

1.2 Identify and assess major existing and future state, regional and intra-county travel needs, primarily as they relate to north/south or circumferential access within and through the study area.

1.3 Identify and evaluate the widest range of reasonable alternative solutions to transportation problems, including, but not limited to, transit/HOV, street, and highway improvements, and transportation demand management measures, regardless of current funding availability.

1.4 Maintain the study schedule in order to move forward towards the implementation of a feasible and effective solution in a timely manner.

● GOAL 2:

Develop a solution to transportation problems related to accommodating major existing and future (year 2010) state, regional, and intra-county travel needs primarily north/south or circumferential within the project study area.

Objectives:

2.1 Reduce congestion on existing streets and highways, as compared to a no-action alternative [what traffic would be like in the future if nothing were done].

2.2 Improve access through, to/from, and within the study area.

2.3 Reduce through-traffic diversion to rural roads and residential streets.

2.4 Improve safety for both motorized and non-motorized traffic.

2.5 Reduce reliance on the private automobile and reduce or delay the need for additional vehicular capacity through support of transit, ride sharing (carpools/vanpools), and other demand management strategies.

2.6 Develop alternatives that have flexibility to be improved to meet longer term, future needs (beyond the year 2010 and looking toward anticipated growth within the urban area).

● GOAL 3:

Develop a solution to transportation problems that is sensitive to local and regional environmental issues and community needs, consistent with local, regional, state and federal plans and regulations.

Objectives:

3.1 Avoid or minimize negative impacts on the natural environment, e.g., wetlands, water, air, energy, noise, visual, agricultural and forest land.

3.2 Avoid or minimize negative impacts on the built environment, e.g., on existing urban and rural land uses and cultural, historical, and recreational resources.

3.3 Support an urban development pattern that provides for the efficient delivery of urban services, including public transportation, in a manner consistent with statewide planning goals and with local and regional planning.

3.4 Minimize negative impacts or pressures on the Urban Growth Boundary and identify how various alternatives might affect the rate, type or form of urbanization.

● GOAL 4:

Consider economic and social factors in the identification and development of a solution to transportation problems for the study area, consistent with local, regional and state plans.

Objectives:

4.1 Consider the construction, operation and maintenance costs of each alternative.

4.2 Avoid or minimize negative impacts on the integrity and social fabric of the diverse neighborhoods and business communities in the study area (urban and rural).

4.3 Support the economic health of the study area and communities that depend on access through the study area.

STOP



Attachment B

Sensible Transportation Options for People

NOTES ON EVALUATION RESULTS

FROM THE WESTERN BYPASS STUDY

November 1991

Prepared By

Dave Stewart, Member, Western Bypass Study Citizens Advisory Committee

SYNOPSIS

None of the strategies evaluated by the Western Bypass Study adequately addresses the study objectives of providing congestion relief, reducing automobile dependency, minimizing impacts on the natural environment, and supporting efficient urban development patterns. These results are detailed in the study documents titled "Final Western Bypass Study Evaluation Of Strategies" dated October 1991, available from ODOT.

STRATEGY DESCRIPTIONS

The Western Bypass Study has evaluated six strategies for the bypass study area, which includes most of Washington County from Hillsboro eastward. The strategies include:

- **No Build:** Includes currently planned and funded projects, plus Westside Light Rail.
- **Arterial Expansion:** A package of improvements and extensions based on existing arterial streets.
- **Transit Intensive:** Light Rail in the 217 and Barbur corridors plus greatly expanded bus service.
- **Arterial/HOV:** Arterial improvements similar to the Arterial Expansion package plus new transit/HOV lanes on Highway 217
- **Bypass:** A rural bypass freeway in either of two corridors plus additional lanes on Highway 217.
- **Common:** Consists of elements common to the other "build" strategies. Includes roadway improvements throughout the study area. This strategy was created to provide a baseline against which the incremental value of each "build" strategy's unique components could be estimated.

CONGESTION RELIEF

Congestion relief is a stated objective of the study and has been consistently raised by the public as a major concern. ODOT's congestion projections show that surprisingly little relief is given in the year 2010 by any strategy (Table 1). The bypass itself offers no congestion relief beyond the "common elements". The only arterial for which relief beyond that provided by the "common strategy" is projected is Highway 217, but because the bypass strategy includes additional lanes on 217 there is no reason to conclude that the bypass itself offers any benefit (Table 2).

The study made PM peak-hour congestion projections for ten study area arterials in the year 2010. Results were described using "Level of Service" (LOS) indices:

- LOS A: Free flow conditions
- LOS B: Stable flow conditions, relatively high speeds attainable
- LOS C: Stable flow conditions, lower speeds prevalent
- LOS D: Approaching unstable flow, traffic showing signs of restriction
- LOS E: Unstable flow, traffic volume equal or greater than capacity
- LOS F: Roadway failure, "parking lot conditions"

Most of the arterials would experience "parking lot" conditions on a daily basis under the Bypass strategy. Results for the Bypass strategy predict that in the PM peak hour:

- Murray Boulevard will experience LOS F at several locations
- Most of TV Highway in the study area will experience LOS F
- Highway 99W will experience LOS F at several locations
- Interstate 5 will experience LOS D, E, and F throughout its length south of Portland
- Farmington Road will experience LOS F on some urban sections
- US 26 will have some LOS E west of 217, some LOS F east of 217
- Durham Road will experience LOS F along most of its length
- Tualatin Road will experience LOS F along most of its length
- Some segments of Oregon 217 will operate at LOS D or E
- Tualatin-Sherwood/Edy Road will operate mostly at LOS C or better

Source: Final Western Bypass Study Evaluation of Strategies - Descriptive Matrix October 1991

AUTOMOBILE DEPENDENCY

Reducing reliance on the single occupant automobile is a study objective and has consistently been identified by the public as a primary concern. None of the strategies would reduce auto dependency relative to the extremely auto-dependent no-build projections (Table 3). Vehicle miles traveled (VMT) would increase dramatically under any strategy, relative to the most recently available baseline year (Table 4).

IMPACTS ON THE NATURAL ENVIRONMENT

All of the strategies would cause long term impacts on the natural environment, though study goals state that these should be avoided. Public input has expressed great concern about impacts on wetlands and agricultural lands. The bypass strategies have the greatest impact overall (Table 5).

SUPPORT FOR EFFICIENT URBAN GROWTH

The study's objectives include supporting efficient urban development patterns and minimizing pressures on the Urban Growth Boundary (UGB). Public input strongly supports protecting the UGB and avoiding sprawl. The bypass strategy would encourage automobile-based development near the urban fringe and intensify pressure on the Urban Growth Boundary (Table 6).

| | Common | Arterial | Transit/LRT | Arterial/HOV | Bypass A | Bypass B |
|--------------------------|--------|----------|-------------|--------------|----------|----------|
| Oregon 217 | | 2 | | 1 | 1 | 1 |
| Murray Blvd | | 1 | | 1 | | |
| Tualatin-Sherwood/Edy Rd | | | | | | |
| TV Highway | | | | | | |
| Highway 99W | | 1 | | 1 | | |
| Interstate 5 | | | | | | |
| Farmington Road | 1 | 1 | 1 | 1 | 1 | 1 |
| Sunset Highway | 1 | 1 | 1 | 1 | 1 | 1 |
| Durham Road | | 1 | | 1 | | |
| Tualatin Road | | 1 | | 1 | | |
| Column Totals | 2 | 8 | 2 | 7 | 3 | 3 |

Table 1 Congestion Relief Relative to No-Build In 2010

1 = Significantly Better Than No-Build Strategy

2 = Significantly Better Than Other Build Strategies

Stipple pattern indicates no significant difference relative to no-build

Source: Final Western Bypass Study Evaluation of Strategies - Evaluation Matrix October 1991

| | Arterial | Transit/LRT | Arterial/HOV | Bypass A | Bypass B |
|--------------------------|----------|-------------|--------------|----------|----------|
| Oregon 217 | 2 | | 1 | 1 | 1 |
| Murray Blvd | 1 | | 1 | | |
| Tualatin-Sherwood/Edy Rd | | | | | |
| TV Highway | | | | | |
| Highway 99W | 1 | | 1 | | |
| Interstate 5 | | | | | |
| Farmington Road | | | | | |
| Sunset Highway | | | | | |
| Durham Road | 1 | | 1 | | |
| Tualatin Road | 1 | | 1 | | |
| Column Totals | 6 | 0 | 5 | 1 | 1 |

Table 2 Incremental Congestion Relief Beyond Common Strategy

Values from Table 1 Normalized Relative To Common Strategy

Stipple pattern indicates no significant difference relative to common strategy

Source: Final Western Bypass Study Evaluation of Strategies - Evaluation Matrix October 1991

Work Trips Only

| | No-Build | Common | Arterial | Transit | HOV | Bypass A | Bypass B |
|---------|----------|--------|----------|---------|------|----------|----------|
| Transit | 3.2 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| HOV | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 |
| SOV | 83.5 | 83.2 | 83.2 | 83.2 | 83.2 | 83.2 | 83.2 |

Other Trips Only

| | No-Build | Common | Arterial | Transit | HOV | Bypass A | Bypass B |
|------------|----------|--------|----------|---------|------|----------|----------|
| Transit | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| Automobile | 99.3 | 99.3 | 99.4 | 99.3 | 99.3 | 99.4 | 99.4 |

Table 3 Mode Split As Percent of Total Weekday Person Trips Within The Study Area

HOV = High Occupancy Vehicle
SOV = Single Occupant Vehicle

Source: Final Western Bypass Study Evaluation of Strategies - Evaluation Matrix October 1991

| | 1988 Actual | No-Build | Common | Arterial | Transit | HOV | Bypass A | Bypass B |
|----------------------|-------------|----------|---------|----------|---------|---------|----------|----------|
| Peak Hour VMT | 460,655 | 683,184 | 687,678 | 707,000 | 688,038 | 704,598 | 719,668 | 708,635 |
| (% change from 1988) | 0% | 48% | 49% | 53% | 49% | 53% | 56% | 54% |

Table 4 Projected PM Peak Hour VMT Relative To Recent Actual Conditions

Source: Shapiro and Associates, Inc. 1991

| | Common | Arterial | Transit | HOV | Bypass A | Bypass B |
|----------------------------|--------|----------|---------|-----|----------|----------|
| Hydrology/Water Quality | -1 | -1 | -1 | -1 | -1 | -1 |
| Ecosystems/Wetlands | -1 | -1 | -1 | -1 | -2 | -2 |
| Air Quality | | | | | | |
| Agricultural & Forest Land | | | | | -1 | -2 |
| Energy | | | | | | |
| Visual Resources | | -1 | -1 | -1 | -1 | -1 |
| Geological Resources | | -1 | | -1 | -1 | -1 |
| Column Totals | -2 | -4 | -3 | -4 | -6 | -7 |

Table 5 Long Term Impacts On The Natural Environment Relative to No-Build

-1 = Significantly Worse Than No-Build Strategy
-2 = Significantly Worse Than Other Build Strategies
Stipple pattern indicates no significant difference relative to no-build

Source: Final Western Bypass Study Evaluation of Strategies - Evaluation Matrix October 1991

| Provides for Efficient Delivery of Urban Services | Common | Arterial | Transit | HOV | Bypass A | Bypass B |
|--|--------|----------|---------|-----|----------|----------|
| Provides Access To Transportation | 1 | 2 | 1 | 2 | 2 | 1 |
| Facilitates Use Of Transit/HOV | | | 1 | 1 | | |
| Proximity of Improvements To Urbanizable Land | | 1 | 1 | 1 | -2 | -1 |
| Proximity of Interchanges To Urbanizable Land | | | | | -2 | -1 |
| Consistency With State And Regional Plans | | -1 | -1 | -1 | -1 | -1 |
| Consistency With Adopted Local Plans | | -1 | -1 | -1 | -1 | -1 |
| Location of Improvements Relative to Fringe Of UGB | | 1 | 1 | 1 | -2 | -1 |
| Ability to Mitigate Potential Negative Impacts | | | | | | |
| Proximity of Improvement(s) to Vacant Urban Land | | 1 | 1 | 1 | -1 | -1 |
| Proximity of Improvement(s) to Vacant Urbanizable Land | | 1 | 1 | 1 | -1 | -1 |
| Column Totals | 1 | 4 | 4 | 5 | -8 | -6 |

Table 6 Impacts On Urban Form Relative to No-Build

"-2" = Significantly Worse Than Other Build Strategies

"-1" = Significantly Worse Than No-Build Strategy

"1" = Significantly Better Than No-Build Strategy

"2" = Significantly Better Than Other Build Strategies

Stipple pattern indicates no significant difference relative to no-build

Source: Final Western Bypass Study Evaluation of Strategies - Evaluation Matrix October 1991

**Western Bypass Study
Statement of Purpose and Need
Summary**

The Statement of Purpose and Need for the Western Bypass Study summarizes one year of reviewing local plans, collecting data, mapping and working with three advisory committees to develop goals, objectives, and criteria for evaluating potential solutions to north-south and circumferential travel problems. The major findings of the Statement of Purpose and Need are outlined below.

THE REGION AND STUDY AREA - MAJOR FINDINGS

Analysis of existing traffic information tells us what many residents have been saying all along: traffic, especially during the peak hours (morning and evening rush hours), has exceeded the capacity of our roadways, producing backups and delays. The congestion is also causing traffic to divert onto rural and residential roads that were not designed to safely handle this level of traffic. Over the next 20 years, travel conditions will get much worse, given the study's "No-Build" assumptions: 1) development will occur within the guidelines of existing land use plans, and 2) only road/transit improvements with committed funding plus the Westside Light Rail, will be built.

OVERALL TRAVEL PATTERNS

Population and employment growth by 2010 will increase overall congestion, but congestion is also affected by travel patterns - where people go, their mode of travel (their own car, carpool, bus), and the distance they will travel. These are the major findings of the study to date.

- Population and employment will grow substantially, much more than the entire Portland metropolitan region, bringing more people to both live and work within the study area.
 - ◆ study area population will grow by 60% (region by 35%).
 - ◆ study area employment will grow by 73% (region by 38%).
- Because of the increase in housing and employment, people will be able to both live and work in the study area and a larger proportion of trips will stay within the area, will be shorter, and will be non-work trips.

- ◆ the number of study area vehicle trips will increase 66% (region 36%).
 - ◆ there will be over 1.1 million daily study area vehicle trips in 2010 (690,000 in 1988).
 - ◆ close to 68% of the trips will be less than six miles in length (61% in 1988).
- Under the "No-Build" assumptions, people will still use automobiles as their main method of travel in 2010, and the percentage of commuters carpooling or using transit will remain low until time, cost savings, incentives or disincentives outweigh the advantages of driving one's own car.
- ◆ 95% of trips in the study area will be by automobile.
 - ◆ small increases in transit use will occur with light rail, mostly for travel to and from Portland.
 - ◆ the percentage of trips made by carpool will remain about the same (less than 3%).
- Geography and land use patterns (where and how the area has developed) are constraints to both transit and roadway service.
- ◆ steep slopes (e.g. Bull Mountain), irregular street patterns, single-family subdivisions, and low-density employment centers make regular bus service and continuous north-south through streets difficult to provide.

Those are the major findings relating to traffic in general - now and projected to the year 2010. But the focus of the Western Bypass Study is more specific to circumferential travel needs.

NORTH-SOUTH/CIRCUMFERENTIAL TRAVEL

As overall traffic within the study area will grow over the next 20 years, so will north-south and circumferential traffic. Key findings include:

- Highway 217 is the only major continuous route in the study area that connects Highway 26 in the north with Interstate 5 in the south.
- By 2010, circumferential traffic alone will grow to equal the capacity of one full lane of traffic on Highway 217 during the afternoon peak hour.

STOP

Sensible Transportation Options for People

Transportation Needs in the Western Bypass Study Area

Prepared by Sensible Transportation Options for People, Inc.

SYNOPSIS

The proposed Western Bypass freeway has been promoted as a solution to transportation problems in Washington County. The Western Bypass Study's *Statement of Purpose and Need* shows that traffic in the bypass study area is mostly short local trips taken within the urbanized area. Only about 3% of trips beginning and ending within the study area are long distance trips between the southern and north-northwestern districts. Less than 5% of such trips might use a new rural bypass freeway. Traffic that might use a rural bypass is a small fraction of traffic on critically congested arterials. We conclude that constructing a bypass freeway would not relieve existing congestion. Given the projected funding shortfalls for highway and arterial construction in the Metropolitan region and the state, highway dollars would be better spent solving local congestion problems.

Sensible Transportation Options for People (STOP) is a nonprofit grassroots organization dedicated to promoting a wide range transportation options to meet the needs of Washington County and the Metropolitan region. Originally incorporated in response to the proposed Western Bypass freeway, STOP has grown to view transportation issues as inseparable from land use, growth management, urban form, and a host of related issues. STOP is a participant in the Oregon Department of Transportation (ODOT) Western Bypass Study ("Study").

This analysis examines two documents from the Study to determine the nature of traffic problems in the bypass Study area and the effect a new bypass freeway would have in solving those problems. The bypass Study area includes most of Washington County from Hillsboro eastward and contains most of the county's urbanized area and population. For trip analysis purposes the Study area is broken into eight districts: Tualatin/Wilsonville, Scholls, Tigard, Beaverton, North Sunset, Aloha, Hillsboro, and Helvetia .

The Study document *1988 Existing and 2010 No-Build Forecasting Analysis Results* ("2010") uses demographic projections and existing land use designations to forecast traffic conditions in the bypass Study area in the year 2010.

The Study document entitled *Statement of Purpose and Need* ("SOPAN") interprets the 2010 numbers to highlight demand for additional circumferential transportation capacity in the Study area. Circumferential travel is defined as "any person trip which is directed between or across radial routes, and is not limited by trip length or purpose" (SOPAN, p. 15). A trip from Wilsonville to Hillsboro, for example, would be circumferential. "Radial" is relative to the Portland CBD. A trip from Scholls to downtown Portland, for example, would be radial.

WASHINGTON COUNTY TRAFFIC IN 2010

Data from the *SOPAN* show unequivocally that...

The county will remain extremely auto-dependent entering the 21st century. The greatest concern expressed at Study public workshops held in Washington County was reducing automobile dependency. Single-occupancy-vehicle (SOV) trips will comprise 96% of all person-trips in the Study area, exactly as in 1988 (fig. 1). The proportion of trips using transit will remain essentially unchanged at 1.3% (2010, Major Findings and Conclusions, p. 1).

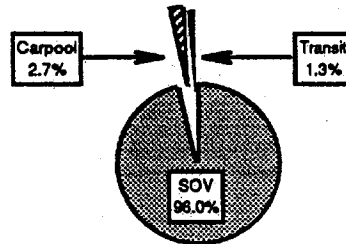


Figure 1
Bypass Study Area Mode Split In 2010

Over two-thirds of all vehicle trips will be local trips less than 6 miles in length in 2010 (fig. 2). Other kinds of trips will be a smaller proportion of all trips in 2010 than they are today (2010, fig. 8).

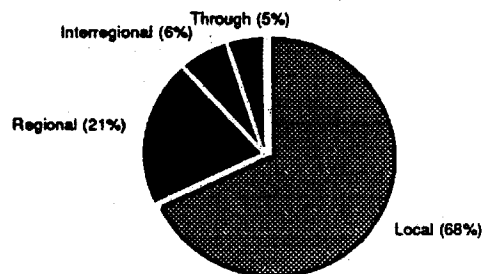


Figure 2
2010 Trip Types

Most trips within the study area will be trips within urbanized areas. Trips within each of the six substantially urbanized districts (Hillsboro, Aloha, North Sunset, Beaverton, Tigard, and Tualatin-Wilsonville), e.g. a trip from Aloha to Aloha or from Beaverton to Beaverton, account for over half of all trips within the study area. Trips between geographically adjacent urbanized districts (e.g. Aloha to Beaverton or Beaverton to North Sunset) account for over a third of all trips within the study area. Together these shorter urban-to-urban trips comprise over 92% of all trips within the study area (fig. 3).

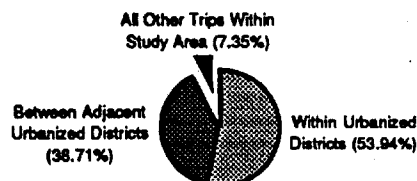


Figure 3
Urban Trips Within the Study Area

Trips entering and/or leaving the Study area will increase only slightly from 1988 to 2010, in contrast to trips beginning and ending within the Study area, which increase greatly. Numbers from the *SOPAN* (fig. 4) demonstrate this disparity in relative increase.

| | 1988 | 2010 |
|---|---------|-----------|
| All vehicle trips (<i>SOPAN</i> Fig. 8) | 834,800 | 1,362,600 |
| Change 1988 to 2010 | | 63.26% |
| Auto trips beginning and ending within the study area (<i>SOPAN</i> Table 4) | 643,173 | 1,160,225 |
| Change 1988 to 2010 | | 80.39% |
| Auto trips not beginning and ending within the study area (difference) | 191,427 | 202,375 |
| Change 1988 to 2010 | | 5.72% |

Figure 4
Relative Increase Of Trips

Demand for long distance "circumferential" travel is a small fraction of travel demand within the Study area. Data from the Study (*SOPAN*, Table 4) is analyzed in Table 1 (attached) to demonstrate this fact. Trips between the southern end of the Study area and the north-northwestern end comprise about 3.3% of trips beginning and ending within the Study area (fig 5).

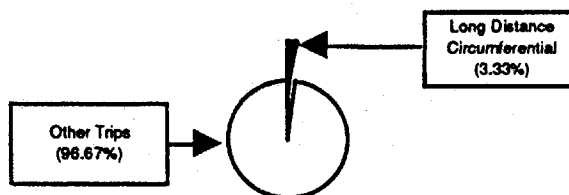


Figure 5
Long Distance Circumferential Trips

Conclusions: Entering the 21st century Washington County will be extremely reliant on the single-occupant private automobile. Most trips will be short single-occupant automobile trips within the urbanized areas. Other kinds of trips will be relatively less important. Long distance "circumferential" trips (from the southern districts to the north-northwest districts) will be a small fraction of trips within the Study area.

HOW MUCH TRAFFIC WOULD USE A RURAL BYPASS FACILITY?

No more than 4.9% of trips beginning and ending within the Study area might use a bypass freeway through the rural area south of Cooper Mountain, between US 99W and TV Highway (fig. 6). Table 2 (attached) uses data from the *SOPAN* to identify trips that would use a bypass, based on origin and destination. All long distance circumferential trips are assumed to use the bypass, as are shorter circumferential trips and local trips near the rural bypass segment. *This assignment of trips to the rural bypass is extremely generous.* Note that Aloha/Tigard and Tigard/North Sunset trips are assumed to use the rural bypass, though for most of these trips use of the bypass would require a great deal of out-of-direction travel. If these trips are not included in the bypass category the percentage of trips using the rural bypass drops to 2.44%.

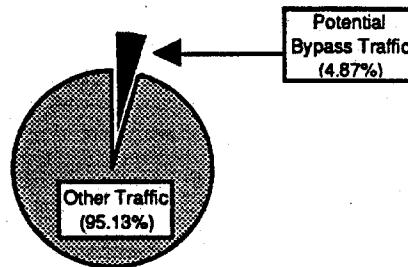


Figure 6
Proportion of Potential Bypass Traffic
Within the Study Area

Potential bypass traffic is not a rapidly growing component of traffic within the Study area. The proportion of person trips within the Study area that would use a rural bypass is approximately constant from 1988 to 2010 (Table 2). In absolute numbers, potential bypass trips will increase by about 25,000 while other trips will increase by about half a million - a twentyfold difference (Fig. 7).

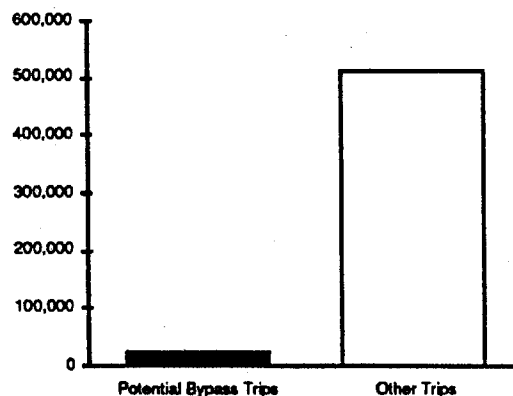


Figure 7
Absolute Growth of Person Trips Within the Study Area - 1988 to 2010

Conclusions: A small fraction of trips beginning and ending within the Study area would use a rural bypass freeway. In absolute terms potential bypass traffic will increase relatively little by 2010, while other traffic will increase dramatically.

OBSERVED CONGESTION IS NOT DUE TO POTENTIAL BYPASS TRAFFIC

Congestion between I-5 and US 99W near Tualatin is not caused by potential bypass traffic. In 2010 during the PM peak hour less than 3% of trips on Tualatin and Tualatin-Sherwood Roads will be traveling to the northern part of the Study area along the Sunset Corridor, and less than three percent will be destined south of the I-5 corridor. Over 66% of such trips will be local traffic beginning or ending in Tigard, Scholls, Sherwood, King City, or Wilsonville (*SOPAN*, Appendix D).

Congestion on 99W near Tualatin Road is not caused by potential bypass traffic. In 1988 about 2 to 3 percent of trips there were generated along the Sunset Corridor. The biggest category of trips was those local to the southern end of the Study area. Local trips will be an even larger percentage of trips in 2010 (*SOPAN*, Appendix D).

Congestion on US 26 near 185th is not caused by potential bypass traffic. In 2010 traffic on this highway will remain strongly oriented towards the northern portion of the Study area. Only 9.0 percent of the traffic in the PM peak hour will be destined for the southern portion of the Study area and Beaverton (*SOPAN*, Appendix D). The Beaverton portion of this 9% would not use a rural bypass.

Congestion on TV Highway is not caused by potential bypass traffic. In 1988 only 4% of PM peak hour trips on TV Highway between 219th Avenue and OR 217 was generated in the southern part of the Study area. Trips on this highway were primarily generated by or destined for districts in the northern portion of the Study area. This situation will remain unchanged in 2010 (*SOPAN*, Appendix D).

Congestion on Farmington Road is not caused by potential bypass traffic. In 1988 only 4% of PM peak hour trips on Farmington Road between 209th Avenue and OR 217 were generated in the southern part of the Study area. Trips on this highway were primarily generated by or destined for districts in the northern portion of the Study area, and will be so in 2010 (*SOPAN*, Appendix D).

Congestion on Oregon 217 is not caused by potential bypass traffic. Although data in the *SOPAN* show a significant fraction of PM peak hour traffic on Oregon 217 in 2010 will be "long distance circumferential trips", much of this traffic would not use a rural bypass. Detailed PM peak traffic data obtained at STOP's request (Table 3) show the *SOPAN* breakout of "long distance circumferential trips" and STOP's breakout of potential bypass trips using Oregon 217 in 2010. The *SOPAN* "long distance circumferential" grouping includes trips for which the rural bypass would be an extremely long out-of-direction detour (e.g. trips between Beaverton and I-5 South). STOP's generous estimate of bypass traffic on 217 at evening rush hour is about 15% of traffic volume, equivalent to much less than one lane of traffic, in contrast to the *SOPAN*'s two full lanes of long distance circumferential traffic.

PM peak hour congestion on 217 (*SOPAN*, fig. 11) is discontinuous and segmented, suggesting that much is due to local and radial traffic. The segment between 99W and Greenburg Road will be extremely congested in both directions in 2010, while the segment between Denny and Allen will be less congested southbound and uncongested northbound. STOP has requested a more detailed data set from ODOT.

Conclusions: The implied promise of relief from congestion when a rural bypass is constructed is an unfortunate misrepresentation. Chronic congestion on the Study area's arterials can not be attributed to traffic that would use a new rural bypass. Even on highway 217, which currently carries nearly all the long distance circumferential traffic, trips that could use a rural bypass are a small component of rush hour traffic. Shorter trips within the existing urbanized area are by far the greatest contributors to rush hour congestion.

SUMMARY

- **Traffic in Washington County is dominated by short urban trips in single occupant automobiles**
- **Traffic that might use a rural bypass is a small fraction of all Washington Country traffic**
- **A rural bypass would have little effect on existing congestion problems**

| Long Distance Circumferential Trips | | | | |
|-------------------------------------|---------------|---------------|-------------------|---------------------------------|
| TRIP ENDPOINTS | 1988 TRIPS | 2010 TRIPS | PERCENT CHANGE | PERCENT OF ALL TRIPS IN 2010 |
| Aloha / Tigard | 11,986 | 22,478 | 87.54% | 1.94% |
| Tigard / North Sunset | 4,590 | 5,640 | 22.88% | 0.49% |
| Aloha / Tualatin | 2,008 | 5,624 | 180.08% | 0.48% |
| Hillsboro / Tigard | 1,616 | 2,198 | 36.01% | 0.19% |
| Tualatin / North Sunset | 856 | 1,468 | 71.50% | 0.13% |
| Hillsboro / Tualatin | 500 | 1,006 | 101.20% | 0.09% |
| Tigard / Helvetia | 90 | 122 | 35.56% | 0.01% |
| Tualatin / Helvetia | 22 | 44 | 100.00% | 0.00% |
| Subtotals -> | 21,668 | 38,580 | 78.05% | 3.33% |
| Percent of All Trips-> | 3.37% | 3.33% | | |
| Other Trips | | | | |
| Aloha / Aloha | 64,040 | 175,647 | 174.28% | 15.14% |
| Beaverton / Beaverton | 118,338 | 138,221 | 16.80% | 11.91% |
| Hillsboro / Hillsboro | 57,062 | 122,506 | 114.69% | 10.56% |
| Beaverton / Aloha | 76,718 | 118,816 | 54.87% | 10.24% |
| Tualatin / Tualatin | 30,106 | 79,530 | 164.17% | 6.85% |
| Aloha / North Sunset | 28,048 | 77,880 | 177.67% | 6.71% |
| Aloha / Hillsboro | 30,294 | 72,000 | 137.67% | 6.21% |
| Beaverton / Tigard | 55,202 | 70,432 | 27.59% | 6.07% |
| Tigard / Tigard | 45,830 | 66,897 | 45.97% | 5.77% |
| Beaverton / North Sunset | 36,520 | 47,248 | 29.38% | 4.07% |
| North Sunset / North Sunset | 19,517 | 43,048 | 120.57% | 3.71% |
| Tualatin / Tigard | 16,882 | 40,298 | 138.70% | 3.47% |
| Hillsboro / North Sunset | 9,538 | 20,020 | 109.90% | 1.73% |
| Beaverton / Tualatin | 7,548 | 12,406 | 64.36% | 1.07% |
| Beaverton / Hillsboro | 9,978 | 11,764 | 17.90% | 1.01% |
| Tualatin / Scholls | 1,922 | 4,394 | 128.62% | 0.38% |
| Aloha / Helvetia | 1,536 | 3,360 | 118.75% | 0.29% |
| Aloha / Scholls | 1,472 | 3,242 | 120.24% | 0.28% |
| Hillsboro / Helvetia | 2,030 | 2,742 | 35.07% | 0.24% |
| North Sunset / Helvetia | 2,034 | 2,450 | 20.45% | 0.21% |
| Hillsboro / Scholls | 828 | 2,244 | 171.01% | 0.19% |
| Tigard / Scholls | 1,700 | 2,036 | 19.76% | 0.18% |
| Scholls / Scholls | 1,544 | 1,586 | 2.72% | 0.14% |
| Beaverton / Scholls | 1,574 | 1,546 | -1.78% | 0.13% |
| Beaverton / Helvetia | 612 | 730 | 19.28% | 0.06% |
| North Sunset / Scholls | 244 | 300 | 22.95% | 0.03% |
| Helvetia / Helvetia | 372 | 283 | -23.92% | 0.02% |
| Scholls / Helvetia | 14 | 20 | 42.86% | 0.00% |
| Subtotals -> | 621,503 | 1,121,646 | 80.47% | 96.67% |
| Percent of All Trips-> | 96.63% | 96.67% | | |
| ALL TRIPS -> | 643,171 | 1,160,226 | 80.39% | 100% |

Table 1

Long Distance Circumferential Trips Within The Study Area

| Rural Bypass Trips | | | | |
|-----------------------------|---------------|---------------|-------------------|---------------------------------|
| TRIP ENDPOINTS | 1988 TRIPS | 2010 TRIPS | PERCENT CHANGE | PERCENT OF ALL TRIPS IN 2010 |
| Aloha / Tigard | 11,986 | 22,478 | 87.54% | 1.94% |
| Tigard / North Sunset | 4,590 | 5,640 | 22.88% | 0.49% |
| Aloha / Tualatin | 2,008 | 5,624 | 180.08% | 0.48% |
| Tualatin / Scholls | 1,922 | 4,394 | 128.62% | 0.38% |
| Aloha / Helvetia | 1,536 | 3,360 | 118.75% | 0.29% |
| Aloha / Scholls | 1,472 | 3,242 | 120.24% | 0.28% |
| Hillsboro / Helvetia | 2,030 | 2,742 | 35.07% | 0.24% |
| Hillsboro / Scholls | 828 | 2,244 | 171.01% | 0.19% |
| Hillsboro / Tigard | 1,616 | 2,198 | 36.01% | 0.19% |
| Scholls / Scholls | 1,544 | 1,586 | 2.72% | 0.14% |
| Tualatin / North Sunset | 856 | 1,468 | 71.50% | 0.13% |
| Hillsboro / Tualatin | 500 | 1,006 | 101.20% | 0.09% |
| North Sunset / Scholls | 244 | 300 | 22.95% | 0.03% |
| Tigard / Helvetia | 90 | 122 | 35.56% | 0.01% |
| Tualatin / Helvetia | 22 | 44 | 100.00% | 0.00% |
| Scholls / Helvetia | 14 | 20 | 42.86% | 0.00% |
| Subtotals -> | 31,258 | 56,468 | 80.65% | 4.87% |
| Percent of All Trips-> | 4.86% | 4.87% | | |
| Other Trips | | | | |
| Aloha / Aloha | 64,040 | 175,647 | 174.28% | 15.14% |
| Beaverton / Beaverton | 118,338 | 138,221 | 16.80% | 11.91% |
| Hillsboro / Hillsboro | 57,062 | 122,506 | 114.69% | 10.56% |
| Beaverton / Aloha | 76,718 | 118,816 | 54.87% | 10.24% |
| Tualatin / Tualatin | 30,106 | 79,530 | 164.17% | 6.85% |
| Aloha / North Sunset | 28,048 | 77,880 | 177.67% | 6.71% |
| Aloha / Hillsboro | 30,294 | 72,000 | 137.67% | 6.21% |
| Beaverton / Tigard | 55,202 | 70,432 | 27.59% | 6.07% |
| Tigard / Tigard | 45,830 | 66,897 | 45.97% | 5.77% |
| Beaverton / North Sunset | 36,520 | 47,248 | 29.38% | 4.07% |
| North Sunset / North Sunset | 19,517 | 43,048 | 120.57% | 3.71% |
| Tualatin / Tigard | 16,882 | 40,298 | 138.70% | 3.47% |
| Hillsboro / North Sunset | 9,538 | 20,020 | 109.90% | 1.73% |
| Beaverton / Tualatin | 7,548 | 12,406 | 64.36% | 1.07% |
| Beaverton / Hillsboro | 9,978 | 11,764 | 17.90% | 1.01% |
| North Sunset / Helvetia | 2,034 | 2,450 | 20.45% | 0.21% |
| Tigard / Scholls | 1,700 | 2,036 | 19.76% | 0.18% |
| Beaverton / Scholls | 1,574 | 1,546 | -1.78% | 0.13% |
| Beaverton / Helvetia | 412 | 730 | 19.28% | 0.06% |
| Helvetia / Helvetia | 372 | 283 | -23.92% | 0.02% |
| Subtotals -> | 611,913 | 1,103,758 | 80.38% | 95.13% |
| Percent of All Trips-> | 95.14% | 95.13% | | |
| ALL TRIPS -> | 643,171 | 1,160,226 | 80.39% | 100% |

Table 2
Rural Bypass Trips Within The Study Area

| ENDPOINT <--> ENDPOINT | SOPAN "Long Distance Circumferential" | POTENTIAL BYPASS TRIPS |
|---|---|---------------------------|
| West Linn (4) Beaverton (6) | 534 | |
| Tigard (7) North Sunset (13) | 450 | |
| Aloha (11) I-5 South (32) | 436 | 436 |
| West Linn (4) Aloha (11) | 373 | |
| Beaverton (6) Tual/Wils (8) | 369 | |
| Beaverton (6) I-5 South (32) | 262 | |
| Tual/Wils (8) Aloha (11) | 206 | 206 |
| West Linn (4) North Sunset (13) | 184 | |
| Tual/Wils (8) North Sunset (13) | 142 | 142 |
| North Sunset (13) I-5 South (32) | 127 | 127 |
| Tigard (7) Hillsboro (12) | 101 | 101 |
| West Linn (4) Hillsboro (12) | 82 | |
| Hillsboro (12) I-5 South (32) | 74 | 74 |
| North Sunset (13) 99W South (31) | 43 | 43 |
| Aloha (11) 99E South (33) | 32 | 32 |
| Tual/Wils (8) Hillsboro (12) | 29 | 29 |
| Beaverton (6) 99E South (33) | 24 | |
| Tigard (7) W Wash Co. (19) | 24 | 24 |
| Tigard (7) US 26 West (26) | 20 | |
| Aloha (11) Oregon 211 (34) | 16 | 16 |
| Aloha (11) Oregon 213 (35) | 14 | 14 |
| Beaverton (6) Oregon 211 (34) | 12 | |
| Tigard (7) Helvetia (14) | 11 | |
| Stafford (5) Beaverton (6) | 10 | |
| Beaverton (6) Oregon 213 (35) | 10 | |
| Tual/Wils (8) W Wash Co. (19) | 10 | 10 |
| North Sunset (13) 99E South (33) | 9 | 9 |
| Beaverton (6) Helvetia (14) | 8 | |
| Tigard (7) Wilson River (27) | 8 | 8 |
| West Linn (4) Helvetia (14) | 7 | |
| Helvetia (14) I-5 South (32) | 7 | 7 |
| Stafford (5) Aloha (11) | 6 | 6 |
| Tual/Wils (8) US 26 West (26) | 6 | 6 |
| Tigard (7) I-5 North (24) | 5 | |
| Stafford (5) North Sunset (13) | 4 | 4 |
| Tigard (7) US 30 North (25) | 4 | |
| Tual/Wils (8) Helvetia (14) | 4 | 4 |
| Scholls (9) North Sunset (13) | 4 | 4 |
| Hillsboro (12) 99E South (33) | 4 | 4 |
| North Sunset (13) Oregon 211 (34) | 4 | 4 |
| North Sunset (13) Oregon 213 (35) | 4 | 4 |
| Tual/Wils (8) Wilson River (27) | 3 | 3 |
| Hillsboro (12) Oregon 211 (34) | 2 | 2 |
| Hillsboro (12) Oregon 213 (35) | 2 | 2 |
| North Sunset (13) Oregon 219 South (30) | 2 | 2 |
| Stafford (5) Hillsboro (12) | 1 | 1 |
| TOTAL TRIP COUNT ON 217 = 8666 | | |
| COLUMN TOTALS --> | | 3689 |
| PERCENT OF TOTAL TRIP COUNT --> | | 42.57% |
| | | 1324 |
| | | 15.28% |

Table 3
Traffic Breakout for Oregon 217
At PM Peak Hour

The Oregonian

Founded Dec. 4, 1850. Established as a daily Feb. 4, 1861. The Sunday Oregonian established Dec. 4, 1881. Published daily and Sunday by the Oregonian Publishing Co., 1320 S.W. Broadway, Portland, Oregon 97201

FRED A. STICKEL, President and Publisher

WILLIAM A. HILLIARD, Editor

PATRICK F. STICKEL, General Manager

PETER THOMPSON, Managing Editor

ROBERT M. LANDAUER, Editorial Page Editor

PATRICK L. MARLTON, Circulation Director

SATURDAY, APRIL 4, 1992

Keep light-rail study

Proposal would stack the deck against light rail as an alternative to a westside-bypass highway

The solution to Washington County's congested roads may be to build a westside-bypass highway. Or it may be to improve existing roads. Or it may be to develop enhanced transit, including light rail.

All of those options deserve careful consideration. That is why the recent proposal by a state transportation consultant to drop study of building light rail along Oregon 217 is so distressing. The proposal stacks the deck against light rail.

The justifications given for dropping that light rail line from the Western Bypass Study are as snarled as Beaverton traffic.

Here's the argument: Building light rail in the Oregon 217 corridor is so far down on the list of regional light-rail priorities that it is unlikely it would be built in the 20-year period encompassed by the study. In addition, the westside-bypass study being conducted by 1,000 Friends of Oregon will look at light rail along Oregon 217 and will provide a better picture of its merits because the 1,000 Friends' study will factor in land-use changes.

What a perverse piece of circular reasoning!

Regional light-rail priorities are not set in stone. If light rail emerged as a better solution than building a

bypass highway, then in all likelihood that project would move higher on the regional agenda. Besides, there is no way to predict how many light-rail projects might be possible in the next 20 years because the new federal transportation act for the first time makes fully 50 percent of highway funds available for mass transit.

The argument that the state should turn over all study of a major bypass option to an independent group also strains credulity. The failure of state staff to study the light-rail option would make it virtually certain that light rail wouldn't be chosen. Besides, if 1,000 Friends' approach to the study is so much better than the state's, then why doesn't the state adopt the approach being used by 1,000 Friends?

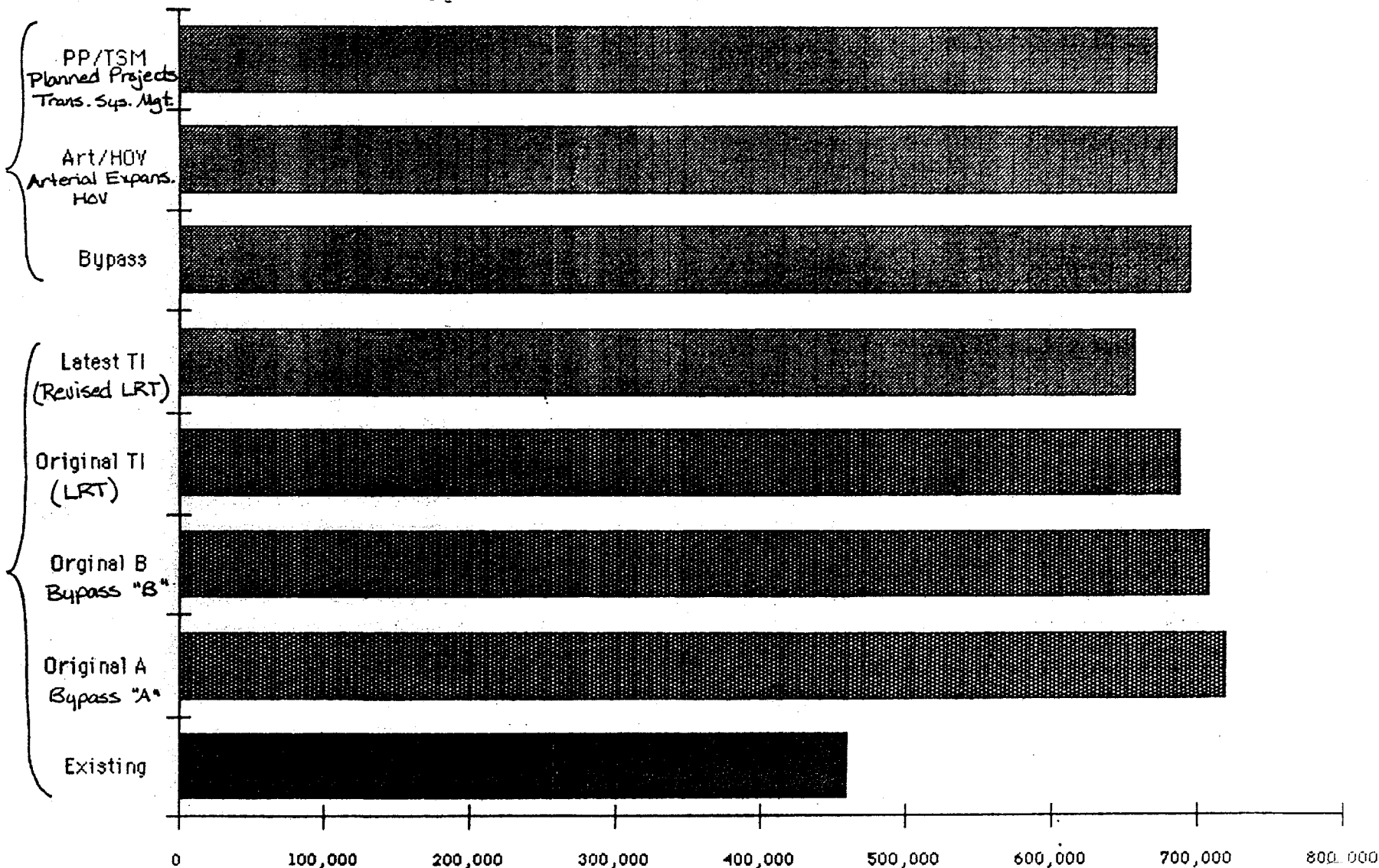
The metropolitan area is under orders by the state to reduce the number of vehicle miles traveled in the region. At the same time the region must figure out how to accommodate 500,000 more people without damaging an already fragile airshed. Transit likely will play a vital role in reaching those two goals.

The bypass study's steering committee will make an important choice next week. It should turn down this proposal and ensure that light rail gets the consideration it deserves in the bypass study.

Vehicle Miles Travelled (PM Peak)

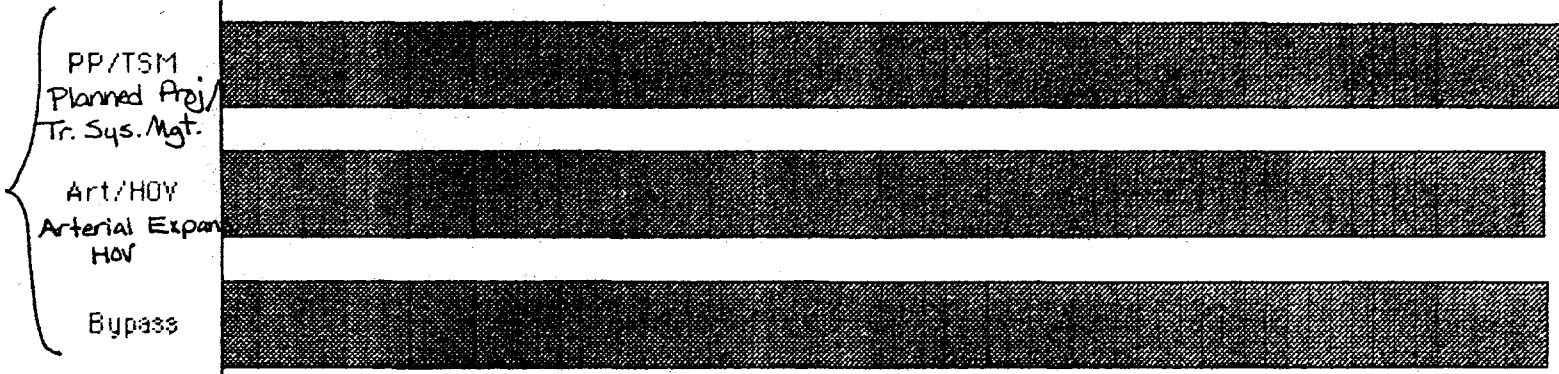
ALTERNATIVES

STRATEGIES

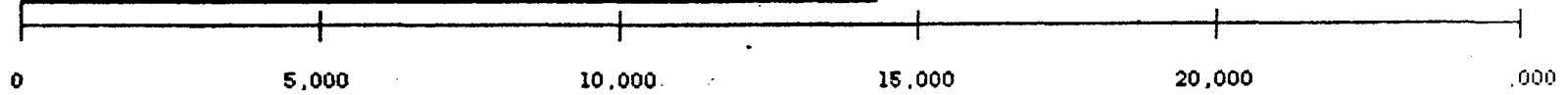
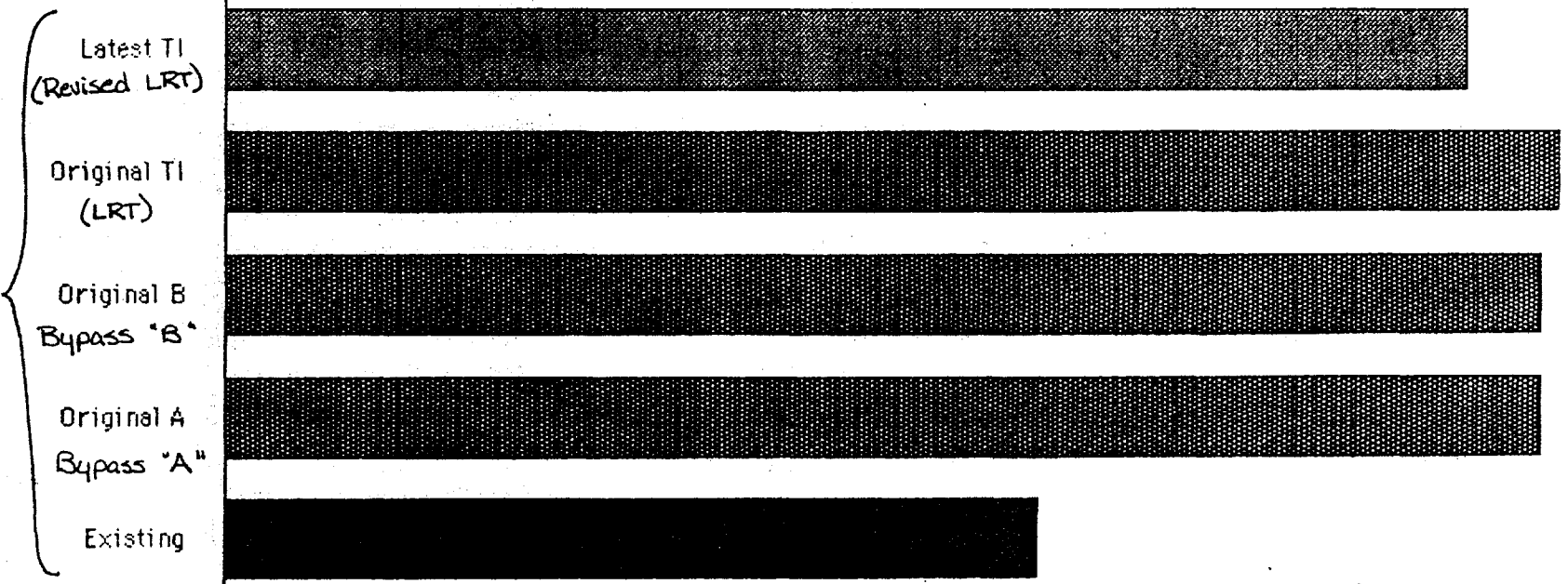


Vehicle Hours of Travel (PM Peak)

ALTERNATIVES



STRATEGIES



Vehicle Hours of Delay (PM Peak)

ALTERNATIVES

PP/TSM
Planned Proj/
Trans. Sys. Mgt.

Art/HOV
Arterial Expan
HOV

Bypass

STRATEGIES

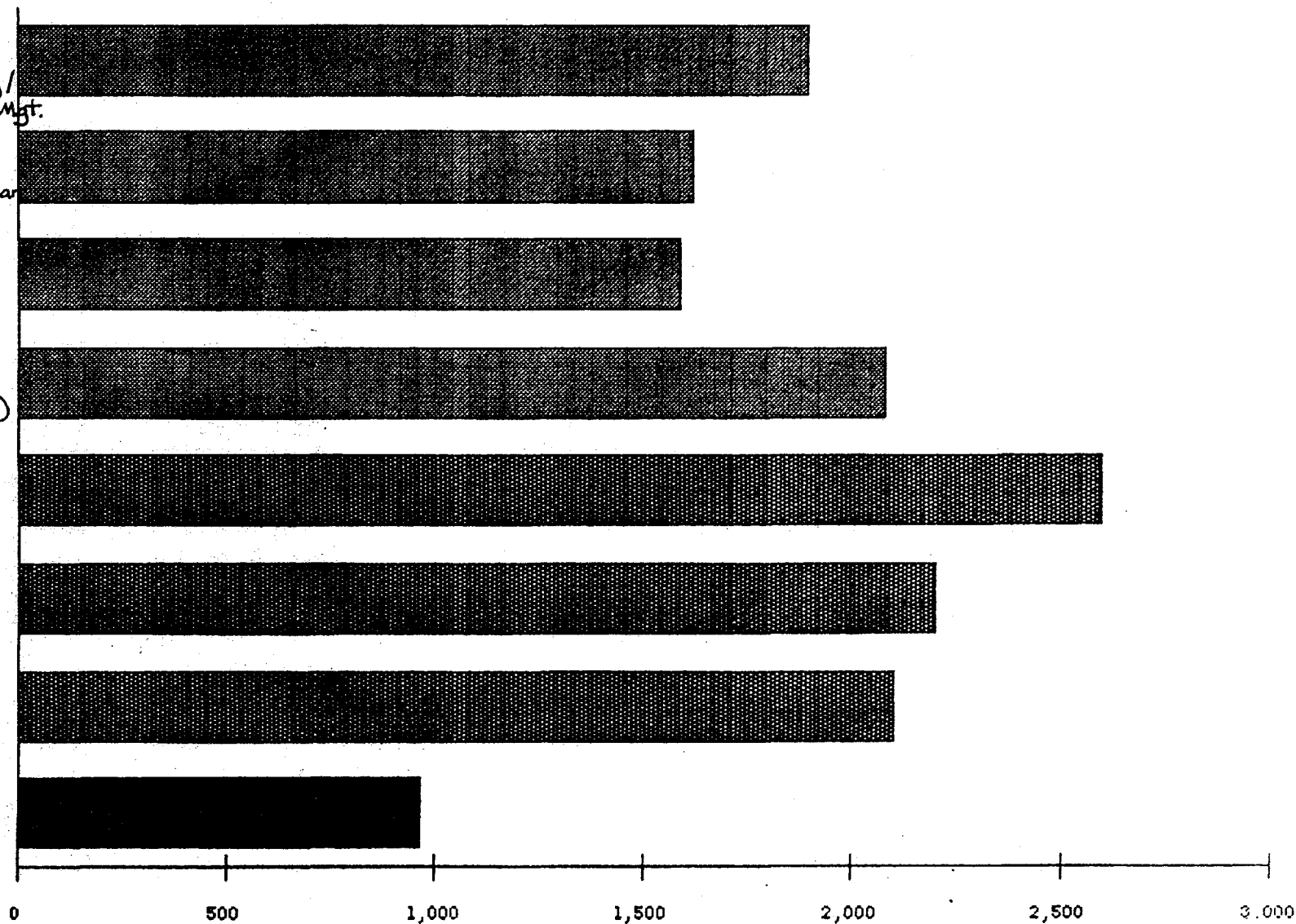
Latest TI
(Revised LRT)

Original TI
(LRT)

Original B
Bypass "B"

Original A
Bypass "A"

Existing





Portland Office

June 29, 1992

PDX32425.A0

**Steve Clark, Chairman
99W Task Force
City of Tigard
13125 S.W. Hall Boulevard
Tigard, Oregon 97223**

Subject: Dartmouth Extension/Highway 217 Improvements

Dear Mr. Clark:

The task force has been reviewing and discussing ways of improving traffic circulation in and through the Tigard area. One of the plans submitted to you was prepared by Kittelson & Associates. This plan presents an alternative way of handling traffic through Tigard, and in particular it improves the capacity of Highway 99W by providing a parallel route.

The Kittelson plan proposes to construct an overcrossing, over Highway 217 midway between the 72nd Avenue interchange and the 99W interchange, by extending Dartmouth. The Dartmouth extension would then continue south and tie into Hall Boulevard. The Kittelson plan also proposes construction of an interface with Highway 217 via a collector/distributor (C/D) and interchange ramps at the new Dartmouth overcrossing. This does not connect directly to Highway 217 but rather to the C/D system.

On behalf of our client, we request that this alternative be given serious consideration, and that accommodations be made in the Oregon Department of Transportation (ODOT) design for the Phase I I-5/Highway 217 improvements, to allow its construction in the future. If accommodations are not made, the option of developing the C/D system later may be lost or become quite expensive.

We have prepared a preliminary cost comparison between the ODOT proposed improvements for 99W and Highway 217 and the alternative improvements presented in the Kittelson plan. The costs presented here are the relative costs of constructing the alternatives at a conceptual level (the actual costs of construction will vary).

Serving Oregon and Southwest Washington from two locations:

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**503.235.8000
503.752.4271**

**503.235.2445 FAX
503.752.0276 FAX**

Steve Clark, Chairman

Page 2

June 29, 1992

PDX32425.A0

The costs prepared for this comparison include three major areas requiring improvements: (1) Highway 99W corridor from I-5 south to Commercial Street, (2) Highway 217 from the 72nd Avenue overcrossing north to the Greenburg interchange, and (3) the Dartmouth extension from I-5 south to Hall Boulevard.

Highway 99W Improvements

Improvements proposed by ODOT include the Pfaffel Street to Commercial Street project (construction estimated by ODOT to be in the range of \$4.53 million). To handle the traffic projected for 99W, the section of 99W from I-5 to Pfaffel Street should also be improved. This would provide the missing link between the Pfaffel and I-5 improvements. We did not prepare a preliminary construction cost estimate for this section of the highway, but the cost will probably be in the same category as the Pfaffel to Commercial section. For comparison purposes, the cost of this section of the highway is assumed to be approximately \$4 million.

Highway 217 Improvements

ODOT Plan

ODOT is anticipating that Highway 217 will eventually be widened to six lanes, three in each direction. Auxiliary lanes will also be required between the on and off ramps, so there will be four lanes in each direction for certain portions of the highway. For estimation purposes, we assumed auxiliary lanes between:

- 72nd northbound on ramp and 99W off ramp
- 99W northbound on ramp and Greenburg Road off ramp
- Greenburg Road southbound on ramp and 99W off ramp
- 99W southbound on ramp and 72nd Avenue off ramp

We estimated that the cost to widen Highway 217 from 72nd Avenue north to Greenburg Road to a six-lane facility with auxiliary lanes would be in the range of \$7.6 million. This estimate included the assumption that the ramps and the 99W and Hall Boulevard overcrossings would be improved.

Hunziker St. Overcrossing

One of the improvements proposed for the Kruse Way interchange included an overcrossing of Highway 217 for Hunziker Street. We estimate the cost to construct this overcrossing to be in the range of \$4.6 million. The Kittelson plan eliminated this connection because of impacts on the school and the proximity of the intersections along 72nd Avenue.

Kittelson Plan

The Kittelson plan proposes construction of a C/D system rather than widening of the existing two-lane facility.

We estimated the cost to add a C/D system to Highway 217 from 72nd Avenue north to Greenburg Road to be in the range of \$10 million; we assumed that the 99W interchange ramps would be reconstructed as shown in the alternative presented in the Kittelson plan and that accommodations would be made for the I-5/Kruse Way improvements at 72nd Avenue. This cost does not include the interface ramps from Dartmouth to the C/D. This cost is included in the Dartmouth section.

Dartmouth Improvements

Dartmouth Extension

A local improvement district (LID) is currently being prepared to widen Dartmouth to three lanes. The cost presented here does not include the LID project, but money has been included to widen Dartmouth to five lanes. The Dartmouth cost also includes the structure over Highway 217 and the extension south to Hall Boulevard. We estimated the cost to construct the Dartmouth extension to be in the range of \$8.4 million.

Dartmouth Interface Ramps

These improvements include the on and off ramps from Dartmouth to the C/D system being proposed in the Kittelson plan for Highway 217. The estimated cost to construct these ramps is in the range of \$2.5 million.

The costs presented herein do not include such items as right-of-way acquisition or wetland mitigation. These costs will affect the overall cost of the projects and should be included

before funding strategies are developed. However, because current information to estimate these costs is insufficient, the comparison will focus on the construction cost only.

Costs for ODOT's proposed improvements:

| | |
|-----------------------------|------------------|
| 99W - Pfaffel to Commercial | \$4,530,000 |
| 99W - I-5 to Pfaffel | 4,000,000 |
| Highway 217 | 7,600,000 |
| Hunziker | <u>4,600,000</u> |
| Total | \$20,730,000 |

Costs for Kittelson's proposed plan:

| | |
|-----------------------|------------------|
| Highway 217 | \$10,000,000 |
| Dartmouth extension | 8,400,000 |
| Dartmouth interchange | <u>2,600,000</u> |
| Total | \$21,000,000 |

This comparison shows that construction of the Dartmouth extension and the Highway 217 interface is in the same cost range as construction of the improvements proposed by ODOT.

One factor not shown is a comparison of the impacts on businesses and traffic during and after construction. ODOT's proposed improvements along the 99W corridor will have a significant impact on the businesses and the traffic. With the Kittelson plan there will be little disruption of the existing traffic, and the impacts on businesses will be reduced. Eliminating the overcrossing from Hunziker to 72nd Avenue can reduce the impacts on the school adjacent to Highway 217.

Steve Clark, Chairman

Page 5

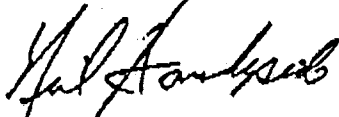
June 29, 1992

PDX32425.A0

This information is presented to assist you when reviewing alternatives and deciding on the best transportation system for the Tigard area. If you have any questions or concerns, please call me at 235-5000.

Sincerely,

CH2M HILL

A handwritten signature in dark ink, appearing to read "Neil Handyside", written over the printed name.

Neil Handyside
Project Manager

July 8, 1992

DEPARTMENT OF
TRANSPORTATION

HIGHWAY DIVISION

Region 1

FILE CODE:

Meeky Blizzard
Executive Coordinator
STOP
15405 S.W. 116th Avenue #202B
Tigard, Oregon 97224-2600

Please refer to your letter of June 19, 1992, regarding the STOP modeling request presented at the May Western Bypass Study Advisory Committee meetings.

You asked for a response to several statements that may have been taken out of context. I also hope I can clear up the confusion you expressed with the study process.

First, you stated that I feel STOP's request at the committee meetings was "irrelevant" and "impossible to honor". I felt I responded in a very positive manner and, in fact, agreed to evaluate STOP's request and present it to the project committees for discussion. The study team met to review ways to respond to the request shortly after the May meeting and requested data from Metro on June 5, 1992. As I stated at the May CAC meeting, this data and analysis will be presented at the August committee meetings.

I understand that STOP has been working with a private individual to acquire additional information from Metro. If your request was that data be provided for STOP's use and analysis and not for purposes of the study, you can make this request directly to Metro as has occurred. If your request was to develop data that will be analyzed and used in the ODOT study, that information will be provided at the August meeting.

In response to my request to discuss STOP's proposals with ODOT staff prior to presenting them at the committee meetings, you indicate that this was done. In fact, Dave Stewart called Bill Ciz on May 18 to request that additional modeling be done and presented at the June open houses. Bill pointed out the similarity to the arterial expansion



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Milwaukie, OR 97222
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FAX (503) 653-3267

alternative and suggested that Dave present the request at the CAC meeting for discussion by the committee May 20, 1992. The correct procedure would be for STOP's CAC member to present the request and the committee to discuss and make a recommendation. This did, in fact, happen at the CAC meeting and the CAC members expanded STOP's request to address other concerns as well. Although we try to be as responsive as possible to requests from the public, two day's notice is not sufficient to respond, especially considering the heavy work load of my staff in preparing for committee meetings and the open houses.

Your "eye-opening" discussion with Bill on June 17 related to the fact that there may need to be some highway improvements, such as curve reduction, shoulder widening and minor realignments, added in the rural area in the Arterial Expansion and TSM alternatives to handle the increased use of these roadways. This was raised by Mary Tobias at the CAC meeting and is something the study team has not looked at but will, based on the discussions of the TAC and CAC.

Lastly, you express confusion on how STOP can effectively be involved in the study. STOP has a representative on the Citizens Advisory Committee specifically to bring STOP's ideas and concerns formally into the study. We have tried to rely on STOP's representative Dave Stewart, to present ideas and requests from you and other STOP members to the CAC and the study team for discussions and action. We have also offered to meet with you at any time if you have questions or suggestions that you do not feel can be adequately addressed through Dave's involvement.

I hope this letter addresses your concerns. If you have any additional questions, please call me or Bill Ciz.



Michal Wert
Project Development Manager

MW:BC:po

cc: Western Bypass Study Committee Members
Don Forbes, Director, ODOT
Michael Hollern, Chair, Oregon Transportation Commission
Steve Korson, Governor's Office
Metro Council
TPAC Members
JPACT Members
Washington County Board of Commissioners
CPO Chairs, Washington County
Senator Bob Shoemaker
Senator Dick Springer
STOP Board Members

mbmw0624.e

WESTERN BYPASS STUDY

Oregon Department of Transportation

STRATEGIES

ALTERNATIVES

**NO
BUILD**

No-Build

- ♦ Building Westside Light Rail (to 185th Avenue).
- ♦ Expanding "feeder" bus service to support light rail.
- ♦ A variety of roadway improvements (see map).

**NO
BUILD**

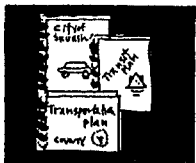
No-Build

- ♦ Building Westside Light Rail (to 185th Avenue).
- ♦ Expanding "feeder" bus service to support light rail.
- ♦ A variety of roadway improvements (see map).

Build Strategies

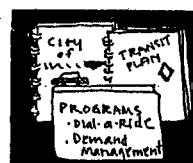
Build Alternatives

All include *transportation demand management (TDM)*, *demand responsive transit (DRT)* and *high capacity transit*.



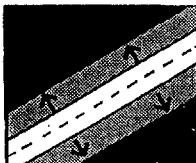
Common Improvements

This "incremental approach" includes roadway and transit improvements that are not yet funded, but likely to be built by 2010. Included in every strategy except the No-Build.



Transportation System Mgmt. (TSM)/Planned Projects

- ♦ Extending Westside Light Rail from 185th Avenue to Hillsboro.
- ♦ Expanding Hwy. 217 to three lanes in each direction.
- ♦ Extending Beef Bend Road to Elsner Road.
- ♦ Extending Murray Blvd. to Hwy. 99W (one lane in each direction, plus a center left-turn lane).
- ♦ Improving various intersections.



Arterial Expansion

- ♦ Hwy. 217 to eight general purpose lanes
- ♦ Murray Blvd. to six lanes (Hwy. 26 to Old Scholls Ferry Rd.)
- ♦ Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- ♦ Durham and Tualatin Rds. to four lanes
- ♦ Hwy. 99W to six lanes (Tualatin Rd. to Commercial St.)
- ♦ TV Hwy. to six lanes (Hillsboro to Murray Blvd.)
- ♦ Farmington Rd. to six lanes (Hwy. 217 to Murray Blvd.)
- ♦ Baseline & Jenkins Rds. to four lanes (Hillsboro to Murray)
- ♦ Walker Rd. to four lanes (Cornell Rd. to 158th)



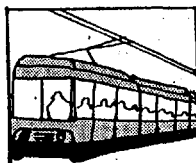
Arterial Expansion/HOV Express

The *arterial expansion* elements:

- ♦ Expanding Hwy. 217 to four lanes in each direction.
- ♦ Extending Murray Blvd. beyond Old Scholls Ferry Rd. to I-5 at a location between Bonita Rd. and Carman Dr.
- ♦ Building a new expressway from I-5 to Hwy. 99W in the Tualatin-Sherwood area.
- ♦ Expanding Hwy. 99W to six lanes from Bull Mtn. Rd. to I-5.

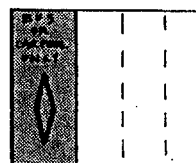
The *express* elements:

- ♦ Making one of Hwy. 217's four lanes an "express" lane.



Transit Intensive (Light Rail)

- ♦ Light rail along Hwy. 217 corridor
- ♦ Light rail along Barbur Blvd. corridor
- ♦ Expanded bus service to feed light rail



Transit (HOV)/Arterial Expansion

- ♦ Widening Hwy. 217 to six general purpose lanes
- ♦ Additional carpool/express bus lane (HOV lane)
- ♦ Durham and Tualatin Rds. to four lanes
- ♦ Hwy. 99W and Farmington Rd. to six lanes
- ♦ Murray Blvd. to six lanes (Hwy. 26 to Old Scholls Ferry Rd.)
- ♦ Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- ♦ Expanded bus service



Bypass

- ♦ Building new four-lane, limited access highway from I-5 to Hwy. 26.
- ♦ Adding express bus service on Hwy. 217.
- ♦ Expanding supporting "feeder" bus service.
- ♦ Giving transit & HOV's preferred access on Hwy. 217 ramps.



Bypass

- Four-lane, limited access highway in one of two broad corridor options. Both options include:
- ♦ A common southern connection with I-5 (between I-205 and Wilsonville) and corridor to Hwy. 99W
 - ♦ Hwy. 217 to six general purpose lanes

The options differ as follows:

- ♦ Option A connects with Hwy. 26 east of Hillsboro at the Cornelius Pass or 185th interchange
- ♦ Option B connects with Hwy. 26 west of Hillsboro at North Plains

The Oregonian

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FRIDAY, AUGUST 7, 1992

Revisit bypass study

Regional transportation officials should consider the study's limitations before dropping the light-rail option

Regional transportation officials will be asked next week to trim the Western Bypass Study by dropping two alternatives from further study.

The state Department of Transportation doesn't want to waste any more time looking at one of two proposed bypass routes — the one west of Oregon 219 far outside of the urban growth boundary. That makes sense. That bypass would do little to relieve traffic congestion in Washington County while jeopardizing farmland that should be preserved.

A second alternative the state wants to drop from the study can't be dismissed so lightly. That alternative calls for building light rail along Oregon 217 and Barbur Boulevard.

The Transportation Department analysis shows that this alternative does little to relieve "circumferential traffic." Circumferential is the tongue-twisting word given to trips that motorists make from one Washington County suburb to another, say from the county courthouse in Hillsboro to a shopping mall in Tigard or from an industrial campus in Beaverton to a Tualatin home.

There's the rub. The Western Bypass Study seeks primarily to untangle long-distance suburb-to-suburb traffic, even though those trips account for only a small part of the county's traffic problems. Most of the congestion is caused by the increasing number of much shorter trips.

So, by looking at the wrong problem, the study may end up rejecting promising solutions. Light rail might be one of them.

Some state and regional transportation planners recognize that limitation in the study. That's why they have encouraged 1000 Friends of Oregon in its effort to figure out whether traffic problems could be eased by changing development patterns so people wouldn't have to drive as much. Jobs would be located within walking or biking distance of homes and homes would be closer to shopping areas. High-density development might turn light rail or other enhanced transit into the best solution.

No matter how valuable the 1000 Friends study may be, it is not a part of this formal process. That's why the region's Joint Policy Advisory Committee on Transportation should consider carefully whether it wants the only study of the light-rail alternative to be done by an independent group.

That consideration would also give the committee a chance to talk in detail about how it might use the 1000 Friends study and how it will evaluate the Western Bypass Study's conclusions in light of state and federal orders to the region to reduce the vehicle miles traveled and protect the region's fragile airshed.

The transportation questions being aired by the Western Bypass Study extend far beyond Washington County. They will affect the future livability of the entire region.



METRO

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

Memorandum

DATE: July 27, 1992

TO: Interested Parties

FROM:  Andrew C. Cotugno, Planning Director

RE: Revised 1992 Regional Transportation Plan

Enclosed you will find the revised 1992 Regional Transportation Plan. This plan is a revision of the 1989 RTP Update. In addition to a new format and new graphics, this revised RTP includes updated project and policy information. If you have any questions about this plan or need additional copies, please contact John Cullerton at 221-1646, Ext. 278.

AC/bc
Enclosure

JUL 23 1992

July 14, 1992

Metropolitan Service District
Transportation Policy Alternatives Committee
2000 S W First Av, Portland, Oregon 97201

Attention Andy Cotugno, Chairperson

This statement pertains to your committee's July 13 session which rubber stamped recommendation to drop two alternatives for meeting circumferential transport needs in S E Washington County, and ostensibly, for curtailing dependence on single-occupant automobiles. More specifically, it concerns the only alternative contemplating use of railway technology.

If Ted Spence recommended that TPAC ought instead to ponder more alternatives, as I understood him to say, he's to be commended. He did mention the until-now-ignored proposal of which the Oregon Association of Railway Passengers submitted copies many months ago.

Auditing sessions of your committee and of other public bodies, and reading their handouts create a strong impression. Impression is that administrators of agencies involved set up an expendable road-only plan, so that when they/you discard the only plan using railway technology, as ordained from the outset, you can profess impartiality by pointing to the shelved road plan.

The woman from OrDOT argued that retained alternatives provide for transit by citing busses. That is a sophistry: Busses are commercial vehicles on roads, just as trucks are. To my knowledge, no one ever has excluded commercial vehicles from Oregon highways. The alternatives you retain will do nothing to curtail excessive dependence on private automobiles. When road agencies propose high-occupancy vehicle lanes, they're always additional pavement--which they can, and sooner or later likely will devote to unrestricted roadway purposes.


Purported "study" of the viability of railway passenger service paralleling highway 217 loaded it down with cost by predicating an entirely new electric railway. As you ought to know, electrification alone costs about as much as the earthwork, tracklaying, and other costs of building a non-electrified railway.

Not even that lesser cost need be encountered to link Hillsboro, Beaverton, Tigard, Tualatin, and Sherwood with railway passenger service. As also you must know from information made thoroughly available to you, track useful for the purpose already exists, and can be acquired for far less than the cost to replicate it. On that track, with little modification, cars with self-contained propulsion can satisfactorily handle traffic.

Implication that in the future ODOT might favor a railway along highway 217 is a mockery. As long as ODOT remains an agency to promote roads (and the sale and use of automotive vehicles) and other traditional proteges of public works programs, it will remain antagonistic to railway construction and to railway use.

By using busses instead of cars, a passenger transport entity *almost* entirely avoids paying for the infrastructure it requires. Public agencies such as Tri-Met *completely* avoid payment. Willingness of your Tri-Met participant to drop the rail alternative is for that reason understandable. That vote should be discounted.

We would welcome a good-faith study.


Kenneth McFarling
7417 S E 20th Av, 97202-6213

METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

DRAFT

Sept. 18th
Masumi Temple
Aug 25th
Bend
Sept. 15th
Roseburg

August 4, 1992

Mr. Michael P. Hollern, Chair
Oregon Transportation Commission
c/o Brooks Resources
P.O. Box 6119
Bend, Oregon 97708

Dear Mike:

On behalf of the Joint Policy Advisory Committee on Transportation, we congratulate you on the completion of the Oregon Transportation Plan (OTP) and urge its adoption. We are encouraged by the Department's recognition of the multi-modal transportation needs of the state.

In so doing, we have the following comments:

1. In the past, we have questioned the highway level-of-service standards and continue to feel that they are set too high for the metropolitan area. This leads to construction of excess capacity, too high an estimate of highway "needs" and improvement of a competitive mode for the called-for transit improvements. The OTP recognizes that this will be re-evaluated with an update to the Oregon Highway Plan. We look forward to resolving this issue at that time.
2. We support the roles called for in the OTP for metropolitan planning organizations (MPOs), local governments and the regional ODOT offices. A strong partnership between these parties is essential to address the state, regional and local transportation problems within the metropolitan areas. We appreciate ODOT's past involvements in regional transportation planning and support the intended partnership outlined in the OTP.

We understand that the Commission has determined that it lacks the authority to require regional and local governments to comply with OTP policies. As such, the Implementation chapter presents "guidelines" rather than "requirements" for regional and local governments. We feel that this distinction needs further clarification since a series of policies in fact are presented as requirements (i.e., MPOs shall..., county and city transportation planning shall...).

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Luth McFarland
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District 9
Roger Buchanan
District 10
Tim Washington
District 11
Brendi Hansen
District 12

Mr. Hollern
August 4, 1992
Page 2

3. We understand that the section on "pricing" (i.e., road pricing, parking pricing) is intended as an illustration of the magnitude of effort required to meet the LCDC VMT/capita target. As you know, this target could be met through a variety of land use, demand management, transit, bike, pedestrian or pricing actions and that the specific action plan remains to be determined for each MPO area. We support the inclusion of this section as an illustration and look forward to the continued involvement of ODOT in this issue.
4. We urge ODOT to continue refinement of the Oregon Rail Passenger Policy and Plan taking into consideration the following:
 - a. Planning should be closely coordinated with the State of Washington in order to produce a single Pacific Northwest strategy for incremental rail improvements leading to a common decision on high-speed rail.
 - b. The Portland Union Station should be recognized as the principal multi-modal center in the Portland region for intercity rail service. It already exists; funds are being spent for its upgrade; it is adjacent to the intercity bus terminal and connects to Tri-Met; and is centrally located for easy access.
 - c. Further evaluation of a Willamette Valley/Columbia Gorge commuter rail system should be evaluated in the context of land use tradeoffs for growth within the metropolitan area versus in nearby satellite communities.
 - d. Financial commitments for incremental improvements to intercity rail services should take into consideration the availability of urban transit as a mode of access to the intercity rail service. Intercity rail ridership should be more successful if improved urban transit, including expanded LRT service, provides an attractive mode of access. As such, close attention needs to be paid to ensuring intercity rail is not funded at the expense of urban transit and LRT expansion.
5. The section on "State Modal, Intermodal and System Management Plans" needs clarification. In the section

Mr. Hollern
August 4, 1992
Page 3

titled "Modal and Intermodal Plans," the term inter-modal is used when multi-modal appears to be the intent. The section on "System Management Plans" provides what we believe to be the current emphasis for intermodal plans, focusing on the terminals where passengers and freight connect from one mode to another.

6. We applaud the inclusion of bicycle and pedestrian level-of-service standards as a good initial step. Future updates should consider more comprehensive policies.
7. We look forward to receiving the Technical Document supporting the OTP and the necessary "Findings" documenting compliance with Oregon Revised Statutes, the Goal 12 Administrative Rule and the ODOT/LCDC State Agency Coordinating Agreement. We would appreciate the opportunity to review these documents before the Commission considers adoption at its September 15 meeting.

Thank you for the opportunity to participate and comment on the first Oregon Transportation Plan.

Sincerely,

Richard Devlin, Chair
Joint Policy Advisory
Committee on Transportation

RD:AC:lmk

August 11, 1992

FILE CODE:
PLA 16

CITIZENS OF OREGON

On behalf of the Oregon Transportation Commission, I am pleased to present the public hearing draft of the Oregon Transportation Plan (OTP). The OTP presents a challenging vision for Oregon's future and an aggressive, comprehensive transportation plan to move us toward that vision. Upon its adoption by the Commission, the OTP will become the state's transportation policy to guide transportation decisions into the 21st century.

Over the next 20 years, Oregon's population is projected to grow by approximately one million people. How we provide for our expanded transportation needs is crucial to the state's continued livability and economic strength. With this thought firmly in mind, the Commission initiated the development of the transportation plan in November, 1990. Since then, citizens from around the state have contributed their ideas on Oregon's transportation future as members of numerous advisory committees to the plan or participants in the nearly 50 public meetings. The Oregon Transportation Plan public hearing draft is the result of this process.

The Transportation Commission, in cooperation with the Department of Transportation, will hold a public hearing on the draft plan Tuesday, August 25, 1992, at 1:30 p.m. in the Bend Public Works Building, 1375 NE Forbes Road, Bend, Oregon. You are invited to participate in the hearing or to send written comments no later than Friday, August 28, 5:00 p.m. to the Strategic Planning Section, Room 405 Transportation Building, Salem, Oregon, 97310.

Thank you for sharing our interest in Oregon's future.



Mike Hollern, Chairman
Oregon Transportation Commission



PO Box 6119
Bend, OR 97708

WESTERN BYPASS STUDY

Oregon Department of Transportation

STRATEGIES

ALTERNATIVES

**NO
BUILD**

No-Build

- ◆ Building Westside Light Rail (to 185th Avenue).
- ◆ Expanding "feeder" bus service to support light rail.
- ◆ A variety of roadway improvements (see map).

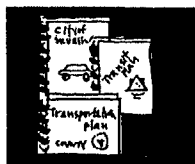
**NO
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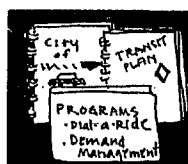
Build Strategies

Build Alternatives



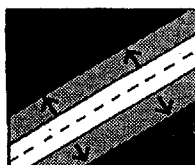
Common Improvements

This "incremental approach" includes roadway and transit improvements that are not yet funded, but likely to be built by 2010. Included in every strategy except the No-Build.



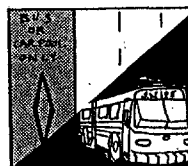
Transportation System Mgmt.(TSM)/Planned Projects

- ◆ Extending Westside Light Rail from 185th Avenue to Hillsboro.
- ◆ Expanding Hwy. 217 to three lanes in each direction.
- ◆ Extending Beef Bend Road to Elsner Road.
- ◆ Extending Murray Blvd. to Hwy. 99W (one lane in each direction, plus a center left-turn lane).
- ◆ Improving various intersections.



Arterial Expansion

- ◆ Hwy. 217 to eight general purpose lanes
- ◆ Murray Blvd. to six lanes (Hwy. 26 to Old Sholls Ferry Rd.)
- ◆ Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- ◆ Durham and Tualatin Rds. to four lanes
- ◆ Hwy. 99W to six lanes (Tualatin Rd. to Commercial St.)
- ◆ TV Hwy. to six lanes (Hillsboro to Murray Blvd.)
- ◆ Farmington Rd. to six lanes (Hwy. 217 to Murray Blvd.)
- ◆ Baseline & Jenkins Rds. to four lanes (Hillsboro to Murray)
- ◆ Walker Rd. to four lanes (Cornell Rd. to 158th)



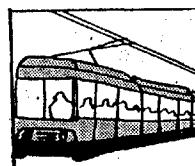
Arterial Expansion/HOV Express

The arterial expansion elements:

- ◆ Expanding Hwy. 217 to four lanes in each direction.
- ◆ Extending Murray Blvd. beyond Old Sholls Ferry Rd. to I-5 at a location between Bonita Rd. and Carman Dr.
- ◆ Building a new expressway from I-5 to Hwy. 99W in the Tualatin-Sherwood area.
- ◆ Expanding Hwy. 99W to six lanes from Bull Mtn. Rd. to I-5.

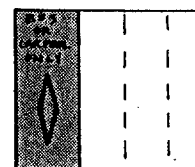
The express elements:

- ◆ Making one of Hwy. 217's four lanes an "express" lane.



Transit Intensive (Light Rail)

- ◆ Light rail along Hwy. 217 corridor
- ◆ Light rail along Barbur Blvd. corridor
- ◆ Expanded bus service to feed light rail



Transit (HOV)/Arterial Expansion

- ◆ Widening Hwy. 217 to six general purpose lanes
- ◆ Additional carpool/express bus lane (HOV lane)
- ◆ Durham and Tualatin Rds. to four lanes
- ◆ Hwy. 99W and Farmington Rd. to six lanes
- ◆ Murray Blvd. to six lanes (Hwy. 26 to Old Sholls Ferry Rd.)
- ◆ Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- ◆ Expanded bus service



Bypass

Four-lane, limited access highway in one of two broad corridor options. Both options include:

- ◆ A common southern connection with I-5 (between I-205 and Wilsonville) and corridor to Hwy. 99W
- ◆ Hwy. 217 to six general purpose lanes

The options differ as follows:

- ◆ Option A connects with Hwy. 26 east of Hillsboro at the Cornelius Pass or 185th interchange
- ◆ Option B connects with Hwy. 26 west of Hillsboro at North Plains

Bypass

- ◆ Building new four-lane, limited access highway from I-5 to Hwy. 26.
- ◆ Adding express bus service on Hwy. 217.
- ◆ Expanding supporting "feeder" bus service.
- ◆ Giving transit & HOV's preferred access on Hwy. 217 ramps.

WESTERN BYPASS STUDY

Oregon Department of Transportation

July 1991

The Western Bypass Study is exploring a range of solutions to north-south and circumferential transportation problems in the southwest Portland metropolitan area (see maps inside). Previous newsletters discussed the study goals and objectives, process, and purpose and need. This newsletter summarizes a range of strategies that are currently being evaluated to see how well they address the problems. This is the first step toward identifying solutions.

Open Houses Present Wide Range of Strategies

The **strategies** described inside represent several different concepts — expanding existing roads, improving transit, building a new highway — for improving north-south and circumferential travel. We're still evaluating these strategies and your input this time is important because the strategies are the concepts upon which more specific **alternatives** will be developed.

The upcoming open houses (see notice, this page) will provide an opportunity to review

- background information on the Western Bypass Study
- more detailed descriptions and maps of each strategy
- a preliminary assessment of the performance and impacts of each strategy

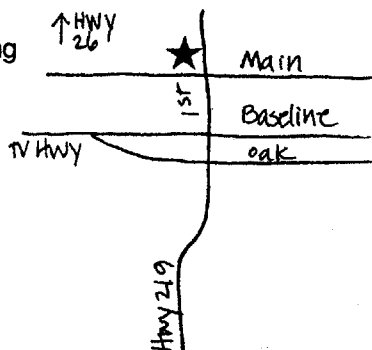
and talk with members of the Western Bypass Study team about the issues and your concerns.

We need your thoughts and comments! What are the advantages and disadvantages of each strategy? Which elements of each strategy make the most sense to you? What are the tradeoffs within and among the strategies? Your comments will be combined with input from the Citizens, Technical and Steering committees and used by the Oregon Department of Transportation (ODOT) to further analyze the strategies. Please review the summary of the strategies inside and come to one of the open houses. You can also call or write (phone numbers and address on back).

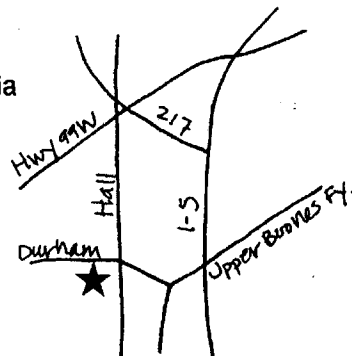
OPEN HOUSES

Browse, ask questions, give us your thoughts!

July 16, 4 - 8 pm
Public Services Building
Cafeteria (main floor)
155 N. First Ave.
Hillsboro



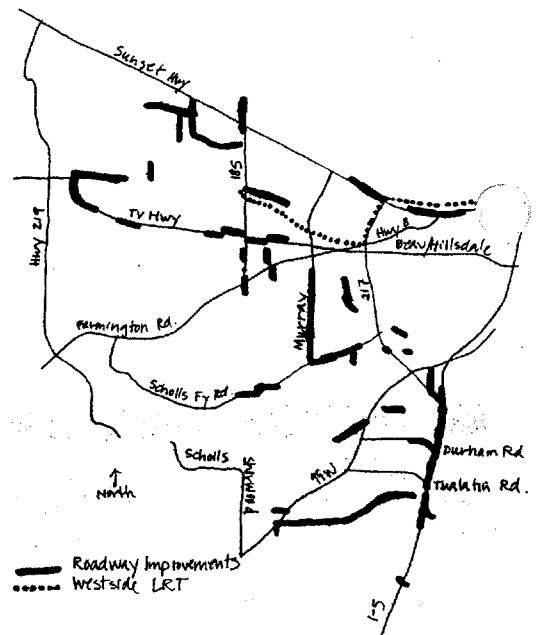
July 17, 4 - 8pm
Tigard High School Cafeteria
(east end of school)
9000 SW Durham Rd.
Tigard



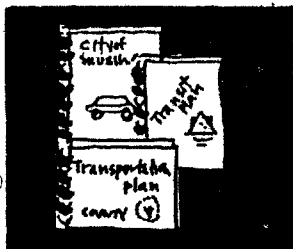
No-Build Strategy*

Most studies have a "no action" strategy or alternative against which the potential impacts of all other strategies are measured. The No-Build represents what would happen if the only improvements made will be those which already have committed funding. It also includes the Westside Light Rail (to 185th Avenue).

The No-Build was defined early in the study process and will remain the same throughout the study. The improvements included in the No-Build are also part of every other strategy.

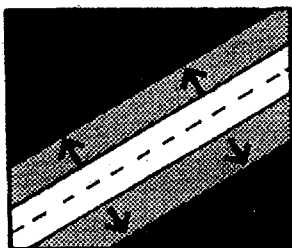
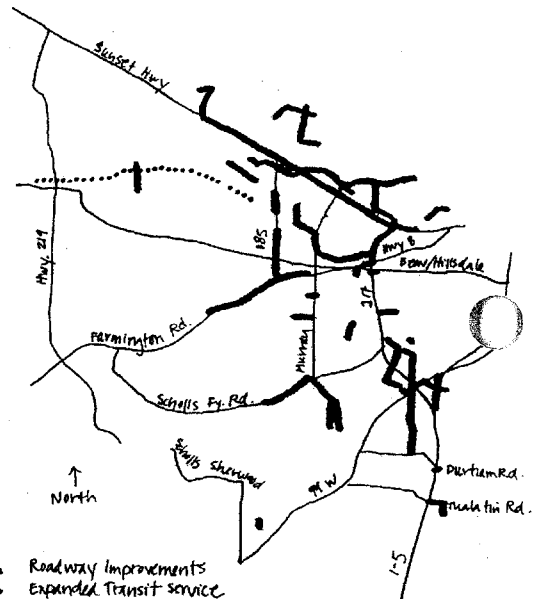


Build Strategies



Common Improvements

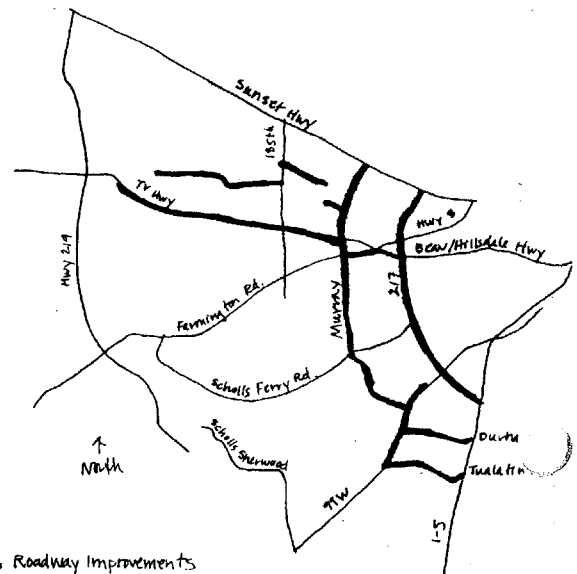
This "incremental approach" includes a number of roadway and transit improvements that are not yet funded, but are likely to be built by the year 2010. The common improvements are included in every strategy except the No-Build.



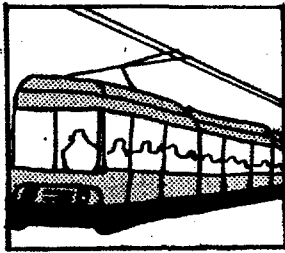
Arterial Expansion

The arterial expansion strategy would expand and extend existing roads including:

- Hwy. 217 to eight general purpose lanes
- Murray Blvd. to six lanes (Hwy. 26 to Old Scholls Ferry Rd.)
- Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- Durham and Tualatin Rds. to four lanes
- Hwy. 99W to six lanes (Tualatin Rd. to Commercial St.)
- TV Hwy. to six lanes (Hillsboro to Murray Blvd.)
- Farmington Rd. to six lanes (Hwy. 217 to Murray Blvd.)
- Baseline and Jenkins Rds. to four lanes (Hillsboro to Murray Blvd.)
- Walker Rd. to four lanes (Cornell Rd. to 158th.)



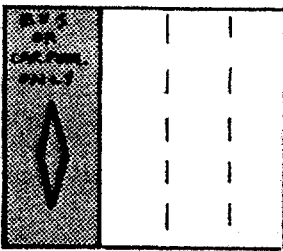
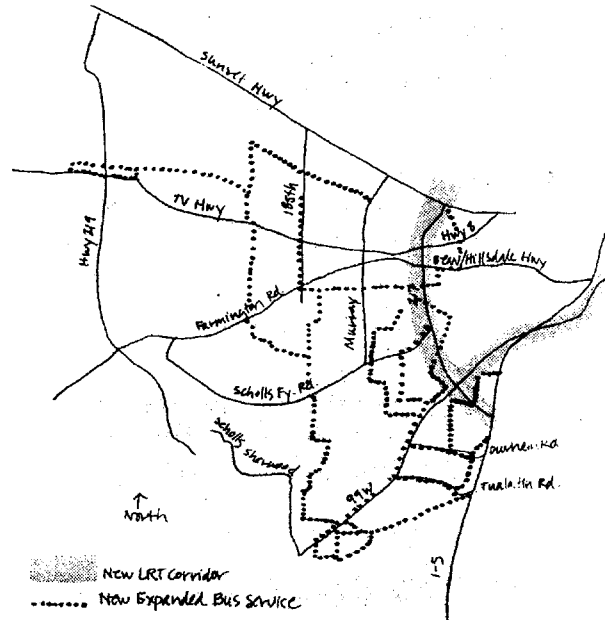
*Maps are simplified to show major components of strategies. For more detailed information or maps, come to



Transit Intensive (Light Rail)

This strategy focuses on light rail to meet traffic needs. Key improvements include:

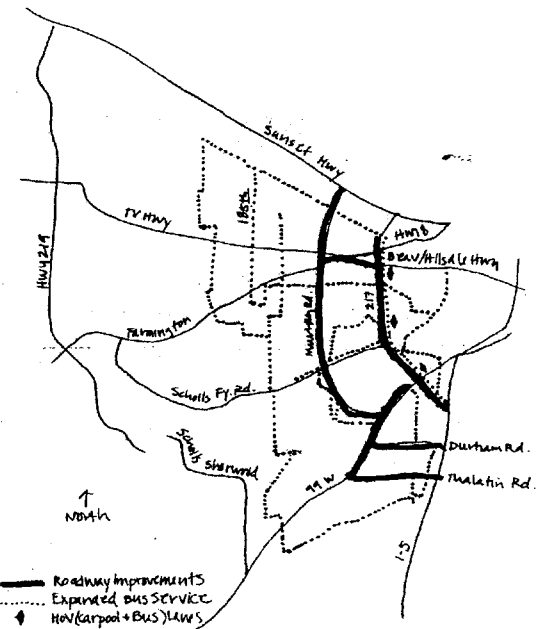
- Light rail along the Hwy. 217 corridor
- Light rail along the Barbur Blvd. corridor
- Expanded bus service to feed light rail



Transit (HOV)/ Arterial Expansion

This strategy combines transit and roadway improvements and encourages carpooling and bus travel. It includes:

- Widening Hwy. 217 to six general purpose lanes
- Additional carpool/express bus lane (high occupancy vehicle—HOV) in each direction on Hwy. 217
- Durham and Tualatin Rds. to four lanes
- Hwy. 99W and Farmington Rd. to six lanes
- Murray Blvd. to six lanes (Hwy. 26 to Old Scholls Ferry Rd.)
- Murray Blvd. (four lanes) extended to Hwy. 99W near McDonald St.
- Expanded bus service



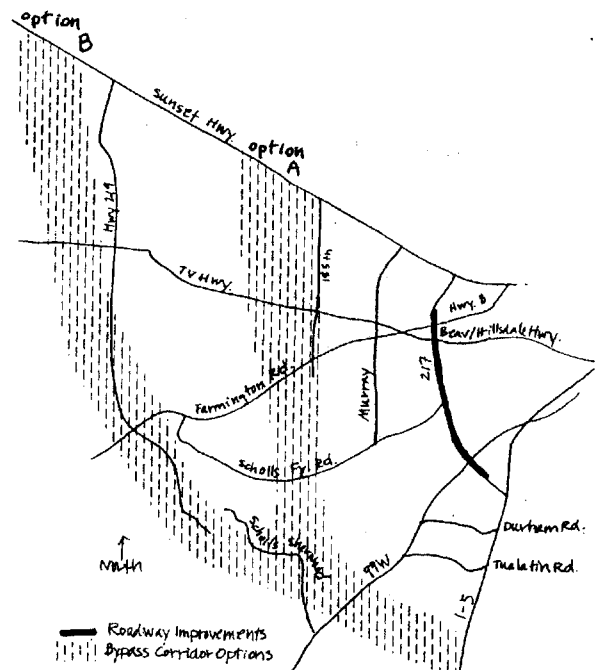
Bypass

The bypass strategy focuses on a four-lane, limited-access highway in one of two broad corridor options. Both options include:

- A common southern connection with I-5 (between I-205 and Wilsonville) and common corridor up to Hwy. 99W
- Hwy. 217 to six general purpose lanes

The options differ as follows:

- Option A connects with Hwy. 26 east of Hillsboro at the Cornelius Pass or 185th Ave. interchange
- Option B connects with Hwy. 26 west of Hillsboro at North Plains



an open house or call (phone numbers on back).

Evaluation Criteria

At the open houses, the study team will present an evaluation of how the strategies compare with one another according to criteria that were developed early in the study process. The criteria fall into these categories:

- Reduced congestion
- Traffic diversion
- Reduced reliance on auto
- Natural environment impacts
- Efficient urban development
- Costs
- Support of economy
- Accessibility
- Safety
- Flexibility
- "Built" environment impacts
- Pressure on urban growth boundary

Want To Be Involved?

The best way to keep informed and involved in the Western Bypass Study is to get on the mailing list. Newsletters are issued at key steps of the process to summarize technical work and announce public meetings. Citizens Advisory Committee meetings are also open to the public and you may request to be on the notification list for those meetings.

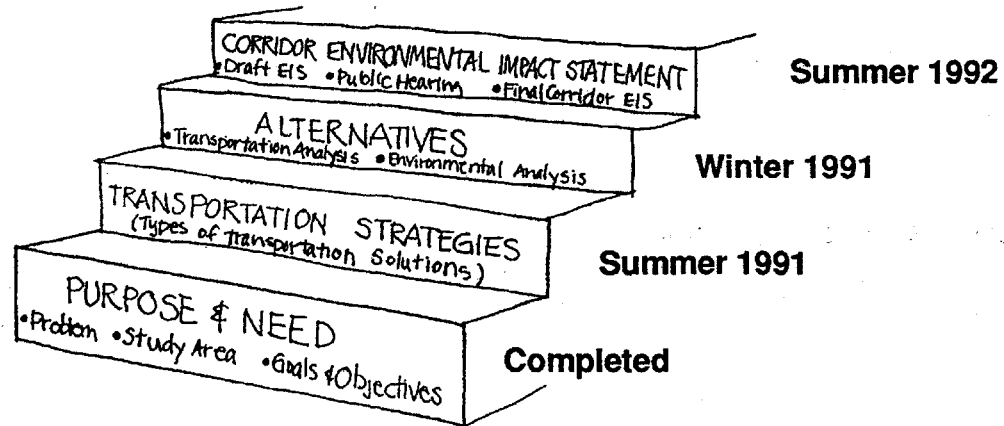
Have a question or comment? Want to be on the mailing list?

Call: Debie Garner at 235-5881
Bill Ciz at 653-3240

Write: Western Bypass Study
Oregon Department of Transportation
9002 SE McLoughlin Blvd.
Milwaukie, OR 97222

How Close Are We To A Decision?

Identifying the **preferred alternative** — the **type** (or mode) of transportation solution (transit, roadway or highway) and **general location** (or corridor) — will be the last step of the Western Bypass Study. We anticipate that decision in **summer of 1992**. We have a few steps to go through first:



Strategies — After receiving public and advisory committee feedback on the strategies presented in this newsletter, the study team will recommend a final set of strategies and ask for advisory committee and local jurisdiction approval.

Alternatives — From the broad strategies, a few specific alternatives (including the No-Build) will be defined for further analysis in an environmental impact statement (EIS).

Environmental Impact Statement — The EIS process will look at alternatives from a broad, corridor perspective, discussing the relative benefits and impacts of each. It will involve several steps: 1) a draft environmental impact statement on the specific alternatives, 2) public review of the document and a formal public hearing, 3) selection of a preferred alternative by local jurisdictions, and 4) a final environmental impact statement on the preferred alternative.

Following this step a more detailed plan will be prepared to identify the exact location, characteristics, and impacts of the preferred alternative. Depending on the type of alternative identified in the Western Bypass Study EIS — transit, roadway, highway — ODOT or another agency (Tri-Met, for example) may carry out this more detailed study.

COMMITTEE MEETING TITLE

JPACT

DATE

8-13-92

NAME

AFFILIATION

EARL BLUMENAUER

PORTLAND

LARRY COLE

BEAVERTON

ROY ROGERS

WASH. CTY.

FRED HANSEN

ODEQ

CRAIG LOMNICKI

CITIES OF CLATSOP CO.

GERRY SMITH

WSDOT

DON ADAMS

ODOT

JIM GARDNER

METRO

MIKE THORNTON

PORT

TOM WALSH

TRI-MET

SANDRA ANDERSON

MULTICOUNTY

RICHARD DEKIN

METRO

ADRIAN

METRO

J. KOWALYK

DEQ

TED JENSEN

ODOT

BRUCE WARNER

WV. CO.

Shane Greenwood

DEQ

Howard Harris

DEQ

Tuck Wilson

TRI

KIM HACKETT

METRO

Richard Brandman

METRO

CARLE CARLETT

TRI-MET

Rex Root

CITIES OF WA. CO.

COMMITTEE MEETING TITLE

JPACT

DATE

8/13/92

NAME

AFFILIATION

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STOP

Keith Ahola

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