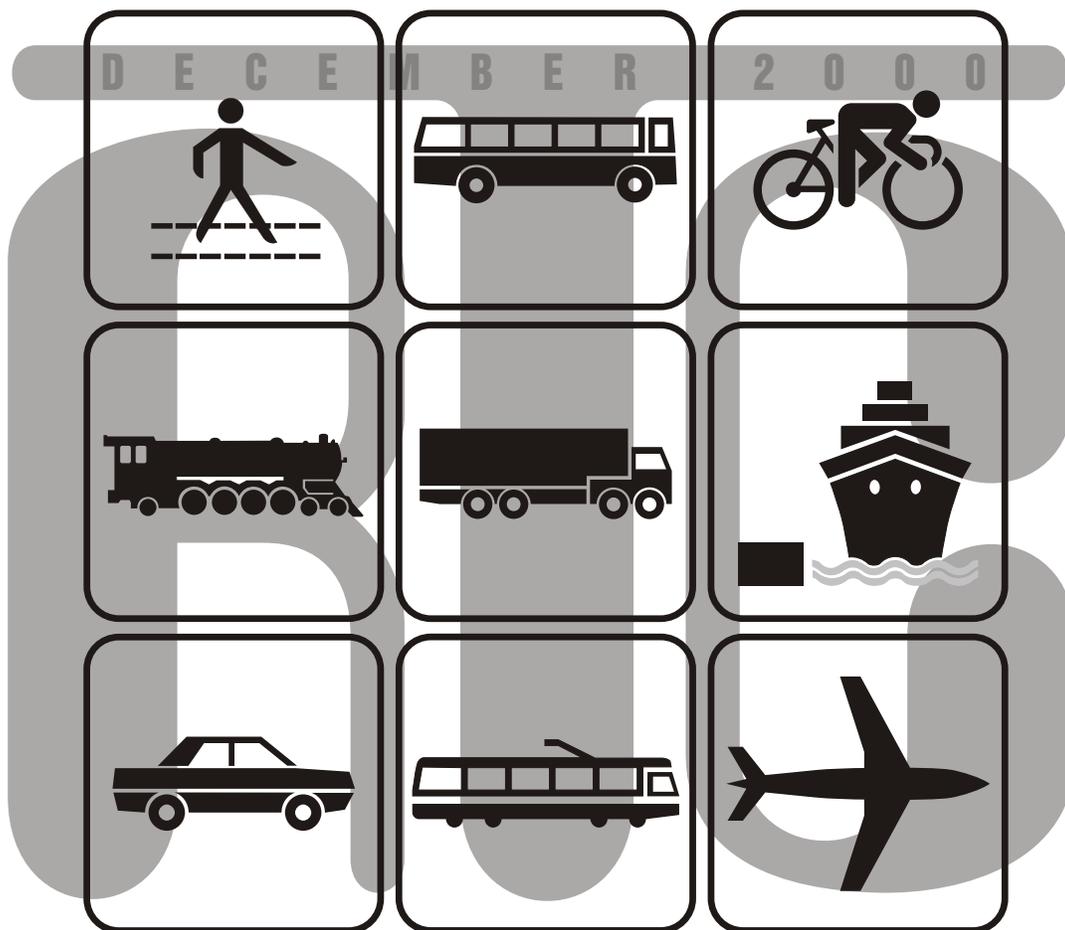


Metropolitan Transportation Plan for Clark County



Southwest Washington Regional Transportation Council

MTP APPENDIX A

**TRANSPORTATION CAPACITY IMPROVEMENTS ASSUMED
IN MTP NETWORK AND AIR QUALITY ANALYSIS**

Between 1999 and 2020 Clark County jurisdictions have planned for transportation improvements in locations with existing or forecast future capacity problems. These anticipated improvements were taken into consideration in carrying out the Metropolitan Transportation Plan needs and **air quality analysis**.

The **MTP** transportation system is the existing transportation network with improvements made on those links where projects are programmed in the Transportation Improvement Program. In addition, improvement projects are included where regional need has been identified in the MTP development process and for which there is strong regional commitment. Projects included in the MTP transportation system may eventually be programmed for funding by federal, state, Transportation Improvement Account (TIA) and/or local sources.

Assignment of forecast future year trips onto the *MTP* transportation network in the regional travel forecasting model reveals where there are likely to be deficiencies in the transportation system over the longer term. Locations where future traffic volumes exceed MTP system capacity require an analysis of remedial measures to solve these anticipated deficiencies and an analysis of financial feasibility.

The list (overleaf) is of the major transportation improvements¹ which have been incorporated into the *MTP* transportation network for Clark County. These listed projects are identified in the Metropolitan Transportation Plan needs analysis and included in the air quality conformity analysis as required by the federal Clean Air Act Amendments and Washington Clean Air Act². The *2001-2003 Transportation Improvement Program for Clark County* is consistent with this list.

¹ Additional highway lanes, additional or improved interchanges, construction of new highway segments, expanded transit service.

² Chapter 70.94 RCW.

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
<i>NOTE: Projects marked in bold are designated regional transportation system; Italicized projects are local system</i>		
Facility	Cross Street	Improvements
A. PROJECTS UNDER CONSTRUCTION AND/OR FULLY FUNDED		
I-5	Main Street to NE 78th St	Widen, 3 lanes each direction; reconstruct Main Street Interchange; reconstruct 78th Street Interchange (urban design)
I-5	78th St to Salmon Creek	Widen, 3 lanes each direction [this project was completed in Fall 1996; 3rd lane will open when I-5 widening is complete]
I-5/Hwy 99 Corridor		Intelligent Transportation Corridor (Study complete; implementation will allow traffic diversion from I-5 to Highway 99 as needed)
SR-14	Brady Rd/SE 192nd Av	Interchange Addition, Brady Rd realignment
SR-500	At Thurston Way	Construct Interchange
SR-500	Ward Rd to NE 162nd Av	Widen, 2 lanes each direction
Burton Rd	Andresen to 86th Avenue	New alignment. 3 lanes, 1 lane each direction with center left turn lane
Burton Rd	86th to NE 112th Av	Widen to add center left turn lane and intersection improvements
NE 28th St	NE 112th to NE 142nd Av	Widen to add center left turn lane and intersection improvements
Fourth Plain	NE 102nd to SR-503	Widen, 2 lanes each direction with center left turn lane
NW 78th St	Lakeshore to NW Hazel Dell Av	Widen, 2 lanes each direction with center left turn lane; bike lanes and sidewalks.
Padden Parkway West Leg	NE 53rd Av (at 78th St/Padden) to NE 83rd St extending to Andresen Rd	Construction on new alignment 2 lanes each direction
Padden Parkway, East Leg	SR-503 to Ward Rd	Construction on new alignment 2 lanes each direction
Ward Road	Fourth Plain (SR-500) to NE 88th Street	Widen, 2 lanes each direction with center left turn lane; sidewalks; bike lanes.
<i>NE 10th Av</i>	<i>SR-502 to Carty Rd</i>	<i>Widen to add center left turn lane at intersections</i>
<i>NE 20th Av</i>	<i>NE 134th St to NE 154th St</i>	<i>Widen; 2 lanes each direction with center left turn lane</i>
NE 72nd Av	NE 199th St to NE 219th St	Widen to include turn lanes at intersections; improve shoulders.
NE 87th Av	Mill Plain to Fourth Plain	Extension on new alignment. 1 lane each direction and center left turn lane at intersections
<i>Covington Rd</i>	<i>Fourth Plain to NE 102nd Ave</i>	<i>Widen, 2 lanes each direction, center left turn lane, bike lanes, sidewalks.</i>
<i>NE 137th Av</i>	<i>NE 76th to NE 99th St</i>	<i>New segment, 1 lane each direction with center left turn lane and shoulders</i>
SE 164th Av	Mill Plain to SE 1st St	Widen, 2 lanes each direction, center left turn lane
SE 192nd Av	SR-14 to SE 15th St	Construct, limited access 2 lanes each direction; bike and pedestrian path.
SE 192nd Av	SE 15th St to SE 1st St	Widen, 2 lanes each direction; bike and pedestrian path.
MTP LIST		

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
<i>NOTE: Projects marked in bold are designated regional transportation system; Italicized projects are local system</i>		
Facility	Cross Street	Improvements
B. STATE HIGHWAY SYSTEM (also, see HCT system)		
I-5	Salmon Creek to I-205	Widen, from 2 to 3 lanes each direction (added lane HOV)
I-5	At NE 134 th Street Interchange	Reconstruct interchange (diamond interchange) (Subject to I-5/I-205 North Corridor Study recommendations)
I-5	At NE 179 th Street Interchange	Interchange reconstruction (Subject to I-5/I-205 North Corridor Study recommendations)
I-5	At NE 219 th Street Interchange	Design, Engineering, Environmental (Subject to I-5/I-205 North Corridor Study recommendations)
I-5	NE 134 th Street to NE 319 th Street	Pre-design engineering for auxiliary lanes, new interchanges, and new SR-502 corridor (Subject to I-5/I-205 North Corridor Study recommendations)
I-205	Ellsworth	Add southbound on-ramp to I-205 from Ellsworth
I-205	NE 18 th St/Burton Rd	Addition of Split Diamond Interchange with I-205 auxiliary lanes and frontage roads (Subject to I-205 Strategic Corridor Pre-Design Study recommendations)
I-205	Ramp from I-205/Mill Plain to NE 112 th Ave	Ramp to accommodate left turn movements and improved circulation system (Will be coordinated with the I-205 Strategic Corridor Pre-Design Study recommendations)
SR-14	NW 6 th Av (Camas) to 32 nd St (Washougal)	Widen, from 1 to 2 lanes each direction and pre-design for additional interchanges (SR-500, 15th, 27th/32nd)
SR-500	At St John's Blvd	Construct Interchange
SR-500	At 42nd Av	Grade Separation
SR-500	At 54th Av	Grade Separation
SR-500	At NE 112th Av	Construct Interchange
SR-500	At SR-503	Construct Left-turn flyover ramp for westbound SR-500 traffic
SR-500	NE 121 st Av to NE 141 st Av	Intersection Improvements
SR-502	I-5/NE 179 th St to Duluth	Widen, 2 lanes each direction with center left tun lane (Subject to I-5/I-205 North Corridor Study recommendations)
SR-502	Duluth to Dollars Corner (NE 72 nd Av)	Widen, 2 lanes each direction with center left turn lane
SR-502	Dollars Corner (NE 72 nd Av) to Battle Ground (west city limits)	Widen, 2 lanes each direction with center left turn lane
SR-502	Battle Ground (west city limits) to SR-503	Widen, 2 lanes each direction with center left turn lane
SR-503	Lewisville Park Vicinity	Construct Climbing Lanes
SR-503	North county, rural area, north of Lewisville.	Risk mitigation at selected locations in rural area to re-align curves and widen shoulders.

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
NOTE: Projects marked in bold are designated regional transportation system; <i>Italicized projects are local system</i>		
Facility	Cross Street	Improvements
C. OTHER ARTERIAL AND COLLECTOR SYSTEM		
3rd Av, Camas	Crown Rd to east City Limits	Widen, to add continuous center left turn lane
<i>38th Av, Camas</i>	<i>Bybee to Astor</i>	<i>Widen, to add center left turn lane</i>
Mill Plain	Extension east from SE 172nd Av to SE 192nd Av	Construct on new alignment. 2 lanes each direction with center left turn lane; bike lanes; sidewalks.
SE 1st St	SE 164th Av to 192nd Av	Widen, 2 lanes each direction with center left turn lane; bike lanes; sidewalks
SE 1st St/NW Lake Rd	SE 192nd Av to Parker Street	Widen, 2 lanes each direction with center left turn lane; bike lanes; sidewalks
SE 1st St/NW Lake Rd	Parker Street to NW Lacamas Drive	Widen, to add center left turn lane
<i>SE 7th St</i>	<i>Chkalov to SE 136th Av</i>	<i>Widen, to add center left turn lanes</i>
<i>SE 10th St</i>	<i>Ellsworth to I-205</i>	<i>Widen, 2 lanes each direction</i>
NE 18th St	NE 87th Av to NE 97th Av	Construct on new alignment. 1 lane each direction with center left turn lanes
NE 18th St	NE 97th Av to NE 138th Av	Widen to 3 lanes; 1 lane each direction with center left turn lane (NE 97th to NE 105th Av) Widen to 5 lanes, 2 lanes each direction with center left turn lane and intersection improvements (from NE 105th to NE 138th Av)
NE 18th St	NE 138th Av to NE 162nd Av	I: Widen to 3 lanes; 1 lane each direction with center left turn lane II: Widen to 5 lanes, 2 lanes each direction with center left turn lane and intersection improvements
NE 28th St	NE 142nd Av to NE 162nd Av	Widen to add center left turn lane and intersection improvements
<i>NE 49th St</i>	<i>NE 112th Av to 122nd Av</i>	<i>Widen, 2 lanes each direction and intersection improvements</i>
<i>NE 49th St</i>	<i>NE 122nd Av to 137th Av</i>	<i>Widen, to add center left turn lanes</i>
<i>NE 63rd St</i>	<i>NE Andresen Rd to NE Covington Rd</i>	<i>Widen to add center left turn lane; bike lanes; sidewalks.</i>
NE 76th St	NE 107th Ave to NE 117th Ave	Widen to add center left turn; bike lanes; sidewalks.
NE 76th St	NE 117th Ave to NE 142nd Ave	Widen to add center left turn; bike lanes; sidewalks.
<i>NE 78th St</i>	<i>Ward Rd to NE 162nd Ave</i>	<i>Widen; add shoulders and center left turn lane at intersections</i>
<i>Covington Rd</i>	<i>102nd Ave to NE 76th St</i>	<i>Widen, 2 lanes each direction, center left turn lane, bike lanes, sidewalks.</i>
Padden Parkway	I-205 to NE 94th Ave and I-205 to Andresen Rd	Widen, 2 lanes each direction with bike/pedestrian trail.
Padden Parkway	At SR-503	Diamond Interchange.
<i>Ward Rd/172nd Ave Corridor</i>	<i>South of Davis to NE 119th St</i>	<i>Realign, use of 172nd Ave for through traffic from NE 96th St to NE 119th Street; install turn lanes.</i>
NE 117/119th St	Hwy 99 to 26th Av.	Realign 119th St (East of Hwy 99) with 117th St (West of Hwy 99). 3-lane road; bike lanes; sidewalks.

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
NOTE: Projects marked in bold are designated regional transportation system; <i>Italicized projects are local system</i>		
Facility	Cross Street	Improvements
<i>NW 119th St</i>	<i>NW 7th Av to Hazel Dell Av</i>	<i>Construct new minor arterial road segment</i>
NE 134th St	Rockwell Drive to WSU Entrance	Widen, 2 lanes each direction with center left turn lane; bike lanes; sidewalks.
<i>NE 139th St</i>	<i>NE 20th Ave to NE 29th Ave</i>	<i>Widen to add center left turn lane; bike lanes; sidewalks.</i>
<i>NE 154th St</i>	<i>NE 10th Av to NE 20th Av</i>	<i>New road, 1 lane each direction overpass to I-5.</i>
NW 179th St	I-5 to Krieger Rd	Widen, 2 lanes each direction (I-5 to NW 5th Av), 1 lane each direction (NW 5th Av to NW 11th Av); bike lanes; sidewalks
NE 179th St	NE 10th to NE 50th Av	Widen to add center left turn lane; bike lanes; sidewalks.
NE 179th St	NE 50th Av to Cramer Rd	Widen to add center left turn lane.
NE 179th St	Cramer Rd to SR-503	New roadway, 1 lane each direction with shoulders.
<i>NE 199th St</i>	<i>SR-503 to Battle Ground Eastern city limits</i>	<i>Widen to include center left turn lane; sidewalks.</i>
Lakeshore Ave/NW 36th Av	78th St to Bliss Road	Widen; add center left turn lane, bike lanes and sidewalks
Fruit Valley Rd	34th Street to 78th St	Widen to add center left turn lane, bike lanes and sidewalks.
<i>NW 11th Av/109th St/16th Ave</i>	<i>NW 99th St to NW 119th St</i>	<i>Widen to add center left turn lane at intersections; sidewalks</i>
<i>NW 11th Av</i>	<i>NW 139th to 179th St</i>	<i>Widen</i>
<i>NE Hazel Dell Ave</i>	<i>NE 99th St to NE 114th St</i>	<i>Widen to add center left turn lane; bike lanes; sidewalks.</i>
<i>NE 10th Av</i>	<i>NE 134th to NE 154th St</i>	<i>Widen to add center left turn lanes at intersections</i>
Main St	5th St to McLoughlin Blvd	Convert to 2-way traffic
<i>NE 17th Av</i>	<i>NE 149th St to NE 179th St</i>	<i>Widen existing facility and add new 3-lane sections; bike lanes; sidewalks</i>
NE Hwy 99	NE 129th St to NE 134th St	Realign Hwy 99 to provide north-south movement on NE 20th Ave. 2 lanes each direction with center left turn; bike lanes; sidewalks. Replace bridge over I-205
<i>NE 20th Av</i>	<i>NE 154th St to NE 29th Av</i>	<i>Extend NE 20th Av; 1 lane each direction</i>
<i>NE 25th Ave</i>	<i>NE 78th St to NE 99th St</i>	<i>Widen to add center left turn lane; bike lanes; sidewalks.</i>
<i>NE 29th Av</i>	<i>NE 134th St to NE 179th St</i>	<i>Widen to add center left turn lane</i>
<i>NE Salmon Creek Av</i>	<i>WSU to NE 50th Av</i>	<i>Widen to add center left turn lane</i>
<i>NE 32nd/33rd Aves</i>	<i>NE 99th St to NE 104th St</i>	<i>New road for local access</i>
St John's	NE 50th Av to 72nd Av	Widen, 2 lanes each direction with center left turn; bike lanes; sidewalks.
NE 72nd Ave	St John's to S of NE 99th St	Widen to add center left turn lane
<i>Ellsworth</i>	<i>SE 10th St to SR-14</i>	<i>Widen, 2 lanes each direction</i>
NE 112th Av	Mill Plain/Chkalov to NE 28th St	Widen, 2 lanes each direction with center left turn lane; intersection improvements

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
<i>NOTE: Projects marked in bold are designated regional transportation system; <i>Italicized projects are local system</i></i>		
Facility	Cross Street	Improvements
NE 112th Av	At NE 49th St	Intersection Improvements
<i>NE 138th Av</i>	<i>NE 18th to NE 28th St</i>	<i>Widen, 2 lanes each direction with sidewalks and bike lanes</i>
<i>NE 138th Av</i>	<i>NE 28th to NE 39th St</i>	<i>Widen, 1 lane each direction with center left turn lane, sidewalks and bike lanes</i>
<i>NE 137th Av</i>	<i>NE 39th to NE 49th St</i>	<i>Widen, 1 lane each direction with center left turn lane, sidewalks and bike lanes</i>
<i>NE 137th Ave</i>	<i>Fourth Plain to NE 76th St</i>	<i>Widen to add center left turn; bike lanes; sidewalks.</i>
SE 162nd Av	NE 39th St to Ward Road	Widen, 2 lanes each direction and center left turn lane
SE 192nd Av	SE 1st St to NE 18th St	Widen, 2 lanes each direction; bike and pedestrian path.
<i>NW Leadbetter</i>	<i>NW Lake Rd to NW Parker St</i>	<i>Construct new road, 1 lane each direction</i>
D. TRANSIT		
Fixed-route System Expansion		Service Hours (both expansion of route system and frequency of service on certain routes) [per C-TRAN's current <i>Service and Financial Plan</i>] 1999 Annual Service Hours: 309,000 2020 Annual Service Hours: 440,000+/- (average 1.8% growth per year)
Capital Equipment Needs	Bus Purchases	To meet service hours expansion and to replace old fleet
Fisher's Landing Park and Ride		A new facility was opened with in July 2000 Future Phase: additional spaces as needed
Central County Park and Ride		New facility (415+/- spaces)
I-5 Corridor Park and Rides		New facilities at I-5 Visitors' Center location and in vicinity of NE 99th St., and at NE 179th Street.
Seventh Street Transit Center		Improvement of Existing Facility
C-TRAN HQ		Expansion of HQ Facility
E. HIGH CAPACITY TRANSPORTATION CORRIDOR		
I-5		<ul style="list-style-type: none"> • A.M. Southbound High Occupancy Vehicle (HOV) Lane from 134th Street to Mill Plain Boulevard. • Frequent bi-state bus service. • LRT constructed to Expo Center, Portland Frequent bi-state bus service
F. REGIONAL TRANSPORTATION PLANNING STUDIES - CURRENTLY UNDERWAY (for further information on studies, refer to RTC's web site at http://www.rtc.wa.gov/studies.htm)		
I-5	I-205, Washington to I-84, Portland, Oregon including Interstate Bridge	Portland/Vancouver I-5 Trade Corridor Study (with pre-design engineering for potential new Interstate Bridge)

2020 MTP TRANSPORTATION NETWORK: IMPROVEMENTS ASSUMED IN REGIONAL TRAVEL FORECASTING MODEL		
NOTE: Projects marked in bold are designated regional transportation system; <i>Italicized projects are local system</i>		
Facility	Cross Street	Improvements
I-5/I-205	I-205 at NE 83rd Street to I-5 at NW 319th Street	I-5/I-205 North Corridor Study
I-205	I-205, Columbia River to NE 83rd Street	I-205 Strategic Corridor Pre-Design Study
SR-500	NE St John's Boulevard, NE 42nd Avenue (Falk Road), NE 54th Avenue (Stapleton Road)	SR-500 Safety Enhancement Project to develop alternatives for improving safety and traffic flow in the SR 500 corridor.

Projects listed in sections A through E above include both projects **on** the regional transportation system as well as projects **off** the regional system. Both types of project have been included in the regional travel forecasting model network and have therefore been included in the regional air emissions analysis to meet the requirements of the federal Clean Air Act Amendments and Washington Clean Air Act.

In addition to the listed projects, the RTP is supportive of any other project for which a need has been demonstrated through the regional transportation planning process that will serve to enhance the efficiency and operation of the regional transportation system. Types of project include MAINTENANCE, PRESERVATION, SAFETY, PEDESTRIAN, BICYCLE, ENHANCEMENT, TRANSPORTATION SYSTEM MANAGEMENT (TSM), and TRANSPORTATION DEMAND MANAGEMENT (TDM).

MAINTENANCE	
	Maintenance work ensures a safe, reliable and efficient transportation system on a day to day basis with such activities as pothole filling, repair of damaged bridges, incident response, maximizing operational efficiency by signal timing, snow clearing, vegetation planting and clearing, drainage and fence maintenance and litter removal. The MTP supports regional system maintenance work identified by WSDOT and local agencies.
PRESERVATION	
	Preservation projects ensure that investment in the regional transportation system is protected. Specific projects include repaving of highways, refurbishing rest areas and bridge rehabilitation. Needs and projects are identified by local agencies and WSDOT through such programs as the Highway Performance Monitoring System (HPMS), ISTEA-required Pavement Management System (PMS) and Bridge Management System (BMS). Clark County bridge needs are listed in Appendix B.
SAFETY	
	Needs identified through the ISTEA-required Safety Management System (SMS) and local analysis.
PEDESTRIAN AND BICYCLE MODE	
	Needs identified through state and local planning programs including recommendations from the Clark County Bicycle Advisory Committee, GMA plans and the <i>Clark County Trails and Bikeway System Plan</i> (December 1992; Clark County). Notable pedestrian and bicycle projects in Clark County include completion of the City of Vancouver's Columbia River Waterfront Trail, the Discovery Trail, the Columbia River/Evergreen Highway Trail, Hazel Dell Avenue bike lanes and SE 164th Avenue bike lanes. Also of regional significance is improvement of pedestrian and bicycle facilities which will improve access to transit facilities. Bike racks are already provided on C-TRAN fixed-route buses and bike lockers are provided at C-TRAN Transit Centers and Park and Rides. The bike rack and locker program will continue.
TRANSPORTATION SYSTEM MANAGEMENT	
	Potential TSM solutions are outlined in the State's <i>Statewide Multimodal Transportation Plan, System Plan Component</i> as well as local Growth Management plans. They include projects to interconnect traffic signals, to optimize signal timing and to ramp meter certain interchange ramps on the interstate system. Projects such as the Mill Plain Adaptive Traffic Control System (between 104 th Avenue and Hearthwood Boulevard) and the Transportation Information, Management, and Control System (TIMACS) are already programmed for implementation. Key Intelligent Transportation System (ITS) projects have been identified through the Vancouver Area Smart Trek (VAST) program as a first step in the ITS Plan.
TRANSPORTATION DEMAND MANAGEMENT	
	Demand management activities are determined through the Commute Trip Reduction program ongoing in the Clark County region.

Should projects in the categories listed above require state or federal funding, they are brought forward to RTC as the region's MPO to carry out a coordinated decision-making process whereby projects are prioritized and selected for funding. Regional level air quality conformity analysis is prepared by RTC and project level conformity analysis, where required, is prepared by RTC for local projects and by WSDOT for State projects.

APPENDIX A-1

MTP PROJECT PRIORITIZATION: PROJECT RANKING QUANTITATIVE ANALYSIS OF POLICY DIRECTIVES AND EVALUATION CRITERIA												
Facility	Project Extent	Description	Estimated Project Cost	% Funded*	Empl. Growth: 1996-2017 Non-Retail Weighted by Trips	Employment: 2017 Total Non-Retail Weighted by Trips	LOS Volume to Capacity Ratio: 2003 PM Pk. Hr.	Auto Trips: PM Pk. Hr.	Costs: per 2017 PM Pk. Hr. Trip	Delay: 2017 No-Build PM Pk. Hr.	Freight Tonnage Category	Commuter Use: 2017 PM Pk. Hr. Work Trips at Peak Load Point
Interstate Projects:												
I-5	Main Street to NE 134th	Main & 78th St interchanges Widen to 3 lanes ea. dir.	\$78,200,000	60%	278	1,001	1.0 (F)	10,661	\$7,335	1,537	T1	2,915
I-205	Mill Pl/NE 18th/ Burton Rd	Flyover + new interchange	\$65,915,000	0%	254	818	1.6 (F)	2,253	\$29,257	N/A	T1	951
I-5	NE 134th Street	Reconstruct interchange	\$31,210,000	0%	212	701	.68 (C)	2,516	\$12,405	18	T1	792
I-5**	NE 179th Street	Reconstruct interchange	\$18,265,000	0%	230	641	1.0 (F)	1,558	\$11,723	61	T1	924
State Projects:												
SR-14/192nd Av	SR-14 to NW 18th St	New interchange New: 2 lanes ea. dir. + CLT (SR-14 to SE15th) Widen: 2 lanes ea. dir.+ CLT (SE15th to 18th)	\$46,860,000	87%	372	758	N/A	2,891	\$16,209	N/A	T2	661
SR-500***	112th Av/SR-503	New interchange at 112th Av Ramp at SR-500/SR-503	\$28,363,000	69%	324	1,083	1.4 (F)	5,404	\$5,249	N/A	T3	1,147
SR-14	NW 6th Av to 32nd St	Widen: 2 lanes ea. dir. New interchange at SR-500	\$20,000,000	2%	317	869	.78 (D)	2,381	\$8,400	100	T2	677
SR-500	Ward Rd to 162nd Av	Widen: 2 lanes ea. dir.	\$3,200,000	100%	252	620	1.2 (F)	2,332	\$1,638	22	T3	698
SR-502**	I-5 to SR-503	Widen: 2 lanes ea. dir. + CLT	\$42,415,000	28%	177	515	1.0 (F)	1,910	\$22,207	69	T3	785
Local Projects:												
192nd Avenue	See SR-14/192nd Project in State section above											
Burton Rd	Andresen to NE 162nd Av	New: 2 lanes ea. dir. + CLT (Andresen to 86th) Widen: 2 lanes ea. dir.+ CLT (86th to 162nd)	\$24,000,000	39%	241	899	1.3 (F)	4,801	\$4,999	518	N/A	460

MTP PROJECT PRIORITIZATION: PROJECT RANKING QUANTITATIVE ANALYSIS OF POLICY DIRECTIVES AND EVALUATION CRITERIA												
Facility	Project Extent	Description	Estimated Project Cost	% Funded*	Empl. Growth: 1996-2017 Non-Retail Weighted by Trips	Employment: 2017 Total Non-Retail Weighted by Trips	LOS Volume to Capacity Ratio: 2003 PM Pk. Hr.	Auto Trips: PM Pk. Hr.	Costs: per 2017 PM Pk. Hr. Trip	Delay: 2017 No-Build PM Pk. Hr.	Freight Tonnage Category	Commuter Use: 2017 PM Pk. Hr. Work Trips at Peak Load Point
Padden Pkway	NE 53rd Av to Ward Rd	Widen: 2 lanes ea. dir. + CLT	\$25,630,000	77%	194	649	1.0 (F)	3,513	\$7,296	12	T3	529
SE 164/162 Av	Mill Plain to Fourth Plain	Widen: 2 lanes ea. dir. + CLT	\$19,062,000	61%	211	472	1.0 (F)	3,873	\$4,922	436	T3	695
SE 1st	SE 164th Av to Leadbetter	Widen: 2 lanes ea. dir. + CLT	\$25,000,000	12%	301	458	.46 (A)	2,277	\$10,979	13	T3	240
NE 18th St	NE 86th to NE 162nd Av	New: 1 lane ea. dir. + CLT (86th to 105th) Widen: 2 lanes ea. dir. + CLT (105th to 162nd)	\$23,199,000	0%	230	878	1.0 (F)	4,623	\$5,018	144	N/A	782
NE 179th St	NW 11th to NE 50th Av	Widen: 1 lane ea. dir. (11th to 2nd) Widen: 2 lanes ea. dir. + CLT (2nd to 29th) Widen: 1 lane ea dir. + CLT (29th to 50th)	\$17,500,000	8%	160	335	1.1 (F)	1,483	\$11,800	197	N/A	265

NOTE: all projects listed above are needed in the 20-year horizon. Priorities will be re-examined periodically.

* Assumes Ref. 49 funding for certain projects. Estimated project costs are subject to change as projects become more clearly defined through Preliminary Engineering (PE) and Right of Way (RW) phases.

** Transportation needs in the I-5 North corridor will be examined in detail in the WSDOT study scheduled to conclude in late 1999. The need for an I-5/NE 219th St. interchange will be addressed in the Study.

*** SR-500/NE 112th Avenue interchange is a WSDOT Safety Category Project. SR-500/SR-503 ramp is a WSDOT Mobility Category Project

APPENDIX A-2

MTP Strategies, Projects to Preserve System Capacity including Transportation Demand Management (TDM) Strategies			
Facility/ Strategy	Project	Estimated Cost	Description
Transit	Increase Transit Service	\$350,000 per year	Improve transit service per C-TRAN/s Transit Development Plan (TDP)
Pedestrian	Improve Pedestrian Access to Transit		Pedestrian improvements provided through highway building projects (improved design standards), Transportation Improvement Program of local jurisdictions.
TDM	Vanpool Program	\$540,000	Increase subsidy for vanpool program participants. 120 vanpools operated during the I-5 span closure in September 1997.
TDM	Carpool Program	\$50,000	To provide for incentive
TDM	Telecommuting/ Teleworking	\$2,500	Fund employer outreach program
TDM	Flexible Work Hours	\$2,500	Fund employer outreach program
TSM	Intelligent Transportation System (ITS): Traffic Management Center	\$10,000,000	Establish Traffic Management Center for Clark County and consider links to Portland's Traffic Management Center

CLEAN AIR CONFORMITY DETERMINATION

AIR QUALITY CONFORMITY STATEMENT

The Metropolitan Transportation Plan for Clark County is found to contribute to emission reductions and is **found to be in conformity with the Federal Clean Air Act as amended in 1990 and the Washington Clean Air Act** (chapter 70.94 RCW). The MTP does not adversely impact the existing SIP and is in conformity with it. All regionally significant transportation improvement projects are included in the regional travel forecasting model for purposes of air quality conformity analysis. A brief description of air quality conformity analysis methodology and results table follows.

AIR QUALITY CONFORMITY METHODOLOGY AND RESULTS

The Southwest Washington Air Pollution Control Authority (SWAPCA) has developed, as supplements to the State Implementation Plan, two Maintenance Plans; 1) for Carbon Monoxide (CO), and 2) for Ozone (O₃). In October, 1996 the CO Maintenance Plan and in April 1997 the Ozone Maintenance Plan were approved by the Environmental Protection Agency (EPA). Mobile source strategies contained in the Maintenance Plans were endorsed for implementation by the RTC Board of Directors (Resolution 02-96-04).

The MTP must comply with the mobile emissions budgets specified in the Maintenance Plans. The test is designed to prevent violation of the National Ambient Air Quality Standards (NAAQS); transportation emissions are not allowed to exceed levels relied upon in the Maintenance Plan demonstration. To ensure consistent assumptions, the same methodology used to develop mobile emissions budgets for the Maintenance Plans is used in the MTP air quality conformity process.

The air quality conformity analysis relies on travel data for three time periods (the AM 1-hour, the PM 2-hour, and the rest-of-the-day) and is based on use of *emme/2*, regional travel model software, and on use of Mobile 5ah to determine emissions rates as part of the emissions calculations. Input assumptions for Mobile 5ah were received from the Southwest Washington Air Pollution Control Authority (SWAPCA) and the Oregon State Department of Environmental Quality (ODEQ). Hot stabilized emissions are calculated for each link in the system.

Each of the emitted gases (Carbon Monoxide (CO), Hydrocarbons (HC) and Nitrogen Oxides (NO_x), has several categories of emission that make up the all-day total; hot starts, cold starts, and hot stabilized emissions. In addition, HC emissions also include hot soaks (which occur at the end of a trip in the destination zone), and diurnal emissions (those which occur during the day as rising temperatures cause vehicles to produce emissions through evaporation). CO is calculated for winter conditions, and HC and NO_x are computed for summer conditions. The emissions calculations includes emissions caused by intra-zonal trips (trips which begin and end in the same Transportation Analysis Zone (TAZ)). All outputs were seasonally adjusted based on EPA/SWAPCA guidance. Emissions estimates include credits taken for the following clean air programs: activities under the Commute Trip Reduction ordinance and Clean Air Action Days (free transit service and public education).

2020 METROPOLITAN TRANSPORTATION PLAN: AIR QUALITY CONFORMITY RESULTS

Year		Winter Carbon Monoxide <i>(in pounds per day)</i>	Hydrocarbons (HC) <i>(in tons per day)</i>	Nitrous Oxides (Nox) <i>(in tons per day)</i>
2000	MTP Emissions Estimate	263,000	11	12
	<i>Transportation Budget</i>	<i>300,000</i>	<i>11</i>	<i>14</i>
2010	MTP Emissions Estimate	247,000	9	12
	<i>Transportation Budget</i>	<i>260,000</i>	<i>10</i>	<i>12</i>
2020	MTP Emissions Estimate	238,000	8	12
	<i>Transportation Budget</i>	<i>260,000</i>	<i>12</i>	<i>14</i>