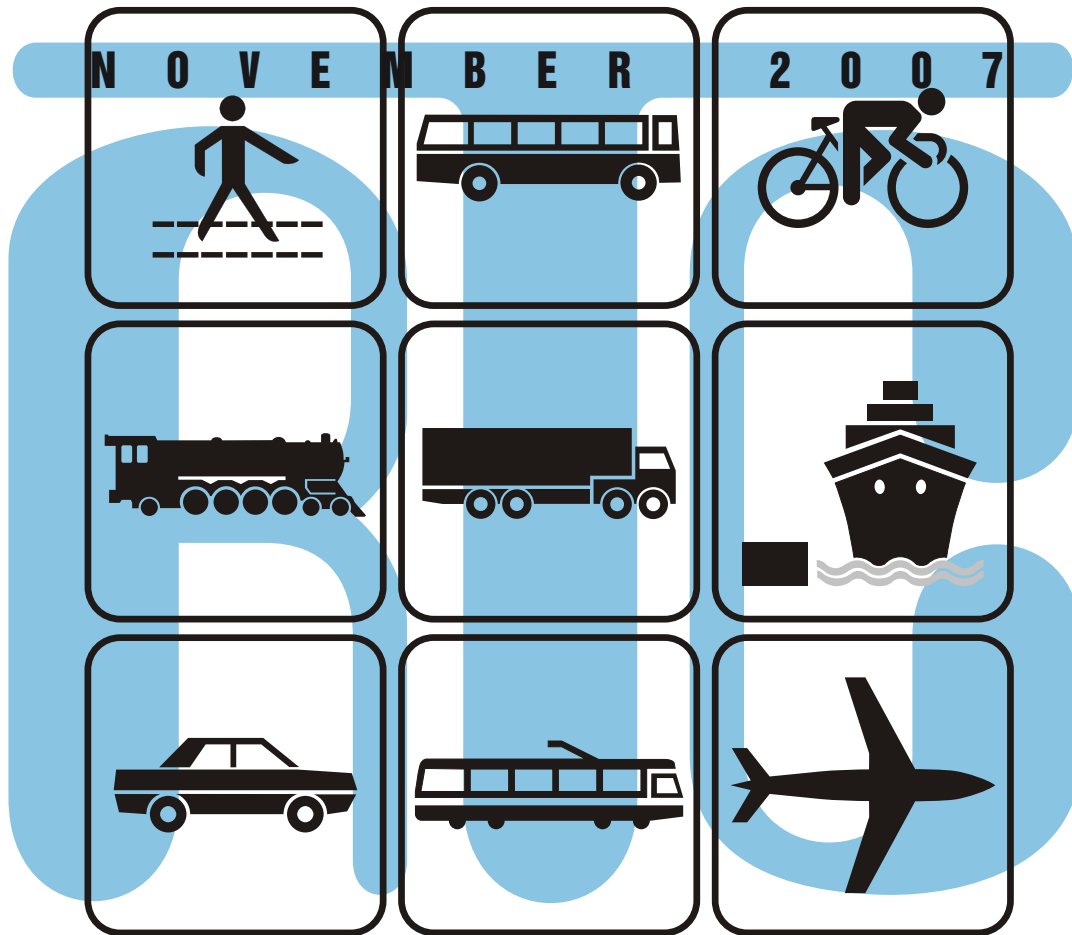


# Metropolitan Transportation Plan for Clark County

## Final Draft



**Southwest Washington Regional Transportation Council**

## CHAPTER 6

# PERFORMANCE MONITORING

The transportation planning process requires that monitoring of system performance take place. Several elements of system monitoring activities are described below.

### **GMA AND CONCURRENCY MANAGEMENT**

Monitoring of the regional transportation system's performance is an ongoing activity for RTC and local jurisdictions. The GMA-required Concurrency Management System necessitates monitoring of transportation system performance to measure its performance against established Level of Service standards. Requests for future development have to be considered in light of the established Levels of Service for transportation facilities. If Level of Service standards cannot be met, then development can be halted or mitigation measures required. Concurrency management requires not only monitoring of transportation system performance but also tracking of development in the region and update of transportation modeling tools to ensure accuracy of data.

### **REGIONAL TRAVEL FORECASTING MODEL**

RTC uses a regional travel forecast model to forecast future transportation needs. Performance measures, in terms of speed, vehicle miles traveled, lane miles of congestion and vehicle hours of delay are calculated within the model. The performance measures were reported on in Chapter 3 (Tables 3-11 through 3-14).

### **TRAVEL BEHAVIOR AND HOUSEHOLD ACTIVITY SURVEY**

Results from travel behavior and household activity surveys provide valuable information that can be used to refine and update the regional travel forecast model. In the Portland-Vancouver region, surveys were fielded in 1977, 1985, and 1994. For this region, a survey update is anticipated within the next two years. Travel behavior and household activity surveys conducted in other regions can also provide useful information. The American Community Survey (U.S. Census Bureau) now provides annual update to questions on journey to work including travel time and transportation mode used.

### **CONGESTION MANAGEMENT PROCESS**

The federal Intermodal Surface Transportation Efficiency Act (ISTEA), passed in 1991, required the development of a Congestion Management System (CMS) to be used as a tool for monitoring traffic congestion and for identifying improvement strategies to alleviate the congestion. The *Southwest Washington ISTEA Transportation Management Systems, Phase II Final Report* (May 1995), which contains the CMS, was adopted by the RTC Board on May 2, 1995 (RTC Board Resolution 05-95-14). The CMS network is a sub-set of the regional transportation system; a set that is now comprised of 30 transportation corridors to be monitored and evaluated on an ongoing basis as part of the Congestion Management Process. SAFETEA-LU required development of a Congestion Management Process. RTC's Congestion Management Process was adopted by the RTC Board in April 2006. The Congestion Management Process includes: 1) Identification of congestion management network, 2) Monitoring and analysis of system performance to identify needs, and 3) Implementation of identified needs.

In August 2007, the RTC Board endorsed the *2006 Congestion Management Report*. The Congestion Management Monitoring project focuses on delivering improved transportation system performance information to decision-makers who must identify the most cost-effective strategies for addressing transportation congestion and improving mobility. Prior to 2000, the transportation system performance reported in the Congestion Monitoring Report focused on a single corridor congestion index for each of the congestion management corridors. Over time, the report has been expanded to include travel time, speed, vehicle occupancy, transit ridership, bus capacity, intersection delay, areas of concern, and other transportation system related information. The 2006 Congestion Monitoring Report is the eighth year for publication of the Report and continues the collection and reporting of baseline data. As part of the ongoing monitoring process, the Corridor Congestion Index (CCI) and speed as a percent of posted speed limit were updated to reflect 2006 traffic counts collected as part of the Congestion Management Monitoring program. The following table (Table 6-1) reports Corridor Congestion results from the 2006 counts.

### **AIR QUALITY MONITORING**

Air quality has a direct relationship to the transportation system and its performance because mobile source emissions are a significant source of air pollution. With the Vancouver/Portland Air Quality Maintenance Area's (AQMA's) reclassification from "maintenance" to "unclassifiable/attainment" for Ozone, the region no longer needs to demonstrate air quality conformity for Ozone. Similarly for carbon monoxide, regional conformity is presumed and regional emissions analyses and emission budget tests are no longer required. However, as described in the MTP's Chapter 5's Air Quality section and MTP Appendix A, RTC continues to consult with clean air partners and agencies, such as the Southwest Clean Air Agency, Washington State Department of Ecology, and the federal Environmental Protection Agency, to develop a methodology for mobile source emissions analysis and uses the regional travel model data to provide data needed to develop mobile source emissions inventories.

### **COMMUTE TRIP REDUCTION (CTR) LAW IMPLEMENTATION**

Monitoring of the success of the Commute Trip Reduction program is carried out to ensure that the 10% trip reduction goal is being met or being actively worked toward. CTR affected worksite surveys are conducted every two years with data analysis carried out by WSDOT. Within the Clark County region, Urban Growth Areas that must have CTR plans under the 2006 CTR Efficiency Act (RCW 70.94.527) are Vancouver, Camas and Washougal as well as the unincorporated Clark County portion of the Vancouver UGA.

**Table 6-1: Corridor Monitoring Process: Corridor Congestion Summary**

Facility Name	Start Point	End Point	A.M. Corridor Congestion Index (CCI)	P.M. Corridor Congestion Index (CCI)	AM Speed Percentage of Posted Speed Limit	PM Speed Percentage of Posted Speed Limit
			Corridor Congestion .80 or Greater		Speed 65% or less than Posted Speed	
I-5	County Line	I-205 Junction	0.51	0.60	98%	95%
I-5	I-205	Main St	0.59	0.64	80%	95%
Hwy 99	134 <sup>th</sup> St	Main St	0.35	0.57	76%	62%
Hazel Dell	117 <sup>th</sup> St	Main St	0.47	0.68	82%	<b>63%</b>
I-5	Main St	State Line (S)	0.96	1.03	26%	<b>86%</b>
Main St	I-5	Fourth Plain Blvd	<b>0.80</b>	0.41	62%	61%
I-205	I-5	SR-500/4 <sup>th</sup> Plain	0.78	0.80	<b>90%</b>	<b>101%</b>
I-205	SR-500/4 <sup>th</sup> Plain	State Line (S)	0.96	<b>0.98</b>	94%	87%
112/Chkalov/Gher	SR-500	Mill Plain	0.51	0.69	76%	52%
St. Johns/Ft. Vanc	NE 72 <sup>nd</sup> Ave	Mill Plain	0.56	0.51	64%	58%
Andresen/ 72 <sup>nd</sup>	119 <sup>th</sup> Street	SR-500	0.66	<b>0.76</b>	<b>80%</b>	64%
Andresen Rd	SR-500	Mill Plain	<b>0.71</b>	0.62	80%	52%
SR-503	119 <sup>th</sup> Street	Fourth Plain	<b>0.84</b>	0.91	56%	<b>69%</b>
SR-503	SR-502	119 <sup>th</sup> Street	0.78	<b>0.81</b>	86%	70%
136/137/138 <sup>th</sup> Av.	Padden Parkway	Mill Plain	0.58	0.67	69%	63%
162 <sup>nd</sup> Ave	Ward Road	Mill Plain	0.55	0.63	80%	73%
164 <sup>th</sup> Ave	Mill Plain	SR-14	0.65	<b>0.72</b>	<b>76%</b>	<b>68%</b>
SR-14	I-5	I-205	<b>0.75</b>	<b>0.81</b>	96%	97%
SR-14	I-205	164 <sup>th</sup> Ave	<b>1.03</b>	<b>1.04</b>	68%	94%
SR-14	164 <sup>th</sup> Ave	County Line (E)	0.72	0.79	90%	87%
Mill Plain Blvd	I-5	Fourth Plain	0.47	0.53	104%	69%
Mill Plain Blvd	I-5	I-205	0.40	0.58	70%	72%
Mill Plain Blvd	I-205	164 <sup>th</sup> Ave	0.63	0.80	<b>70%</b>	53%
Fourth Plain	I-5	NW 26 <sup>th</sup> Av	0.46	0.56	76%	<b>54%</b>
Fourth Plain Blvd	I-5	Andresen	0.31	0.51	89%	69%
Fourth Plain Blvd	Andresen	SR-503	0.48	0.65	71%	59%
Fourth Plain Blvd	SR-503	162 <sup>nd</sup> Ave	<b>0.73</b>	0.95	<b>99%</b>	<b>71%</b>
SR-500	I-5	Andresen	0.77	<b>0.84</b>	73%	51%
SR-500	Andresen Rd	SR-503	0.75	0.76	62%	51%
78 <sup>th</sup> /76 <sup>th</sup> St	Lakeshore Av.	SR-503	0.43	0.57	76%	62%
Padden Pkwy	78 <sup>th</sup> St.	Ward Road	0.59	0.68	71%	66%
99 <sup>th</sup> St.	Lakeshore Av.	St John's Rd.	0.48	0.64	73%	68%
Burton/28 <sup>th</sup>	Andresen Rd	164 <sup>th</sup> Ave	0.65	<b>0.73</b>	<b>80%</b>	50%
18 <sup>th</sup> St	112 <sup>th</sup> Ave	164 <sup>th</sup> Ave	0.65	<b>0.88</b>	44%	<b>39%</b>
134 <sup>th</sup> /139 <sup>th</sup>	NW 36 <sup>th</sup> Ave	50 <sup>th</sup> Ave	0.47	<b>0.71</b>	<b>83%</b>	<b>73%</b>
SR-502	I-5/179 <sup>th</sup> St	SR-503	0.64	<b>0.82</b>	82%	79%
SR-501	I-5	9 <sup>th</sup> Street	0.53	0.54	61%	67%
La Center Road	I-5	E. Fork Lewis R.	<b>0.72</b>	0.80	<b>88%</b>	<b>86%</b>