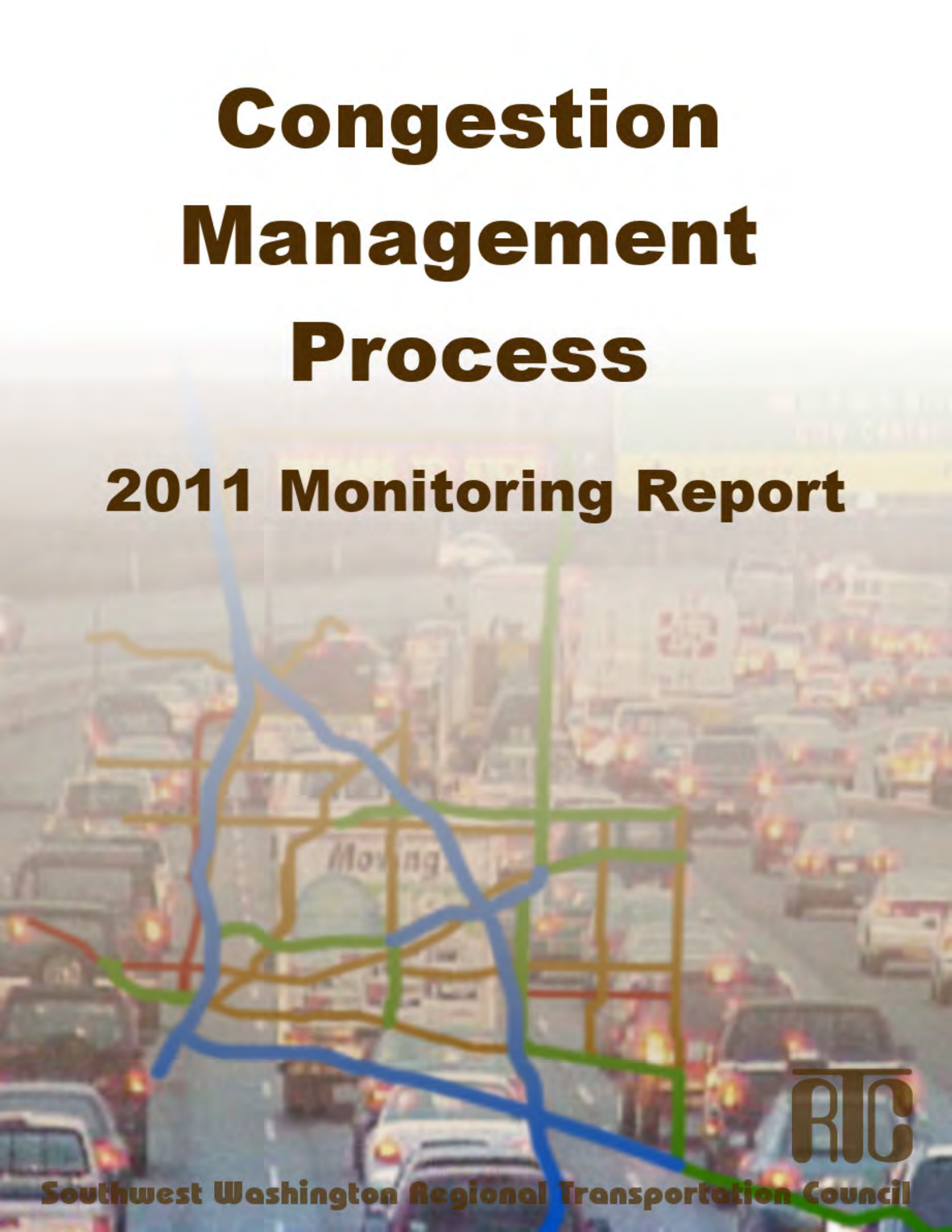
Congestion Management Process

2011 Monitoring Report



RTC

Southwest Washington Regional Transportation Council

CONGESTION MANAGEMENT PROCESS

2011 MONITORING REPORT

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I. INTRODUCTION

Traffic congestion can be generally defined as a condition where the volume of users on a transportation facility exceeds or approaches the capacity of that facility. Congestion can be characterized by heavy volumes, increased travel time, delay, travel time uncertainty, reduced travel speed, increase of traffic crashes, or other characteristics. It is important to note that high traffic volumes that may result in congestion can also be a sign of growth and economic vitality. While it may be impossible to totally remove all congestion, congestion needs to be managed in order to provide a reliable transportation system for users.

The ability to increase highway capacity as a means to relieve congestion is limited by constrained financial resources as well as physical and natural environmental factors. Therefore, the prime consideration should be improvement to the operation and management of the existing and future transportation system.

The *Congestion Management Process: Monitoring Report* offers information to Southwest Washington Regional Transportation Council (RTC) for consideration in implementing a Congestion Management Process (CMP). The CMP was formerly known as a Congestion Management System and was intended by Federal law to be a systematic, transparent way for transportation planning agencies to identify and manage congestion, using performance measures to direct funding towards strategies that most effectively address congestion. The CMP is intended to augment the previous effort and be integrated in the overall metropolitan transportation planning process.

A. BACKGROUND

The CMP is required to be developed and implemented as an integral part of the metropolitan planning process in Transportation Management Areas, regions with more than 200,000 people.

Federal regulation 23 CFR 450.320(c) identifies the required components for a CMP:

1. Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions.

2. Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affect MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area.

3. Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with

existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area.

4. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combination of strategies, are some examples of what should be appropriately considered for each area:

- *(i) Demand management measures, including growth management and congestion pricing*
- *(ii) Traffic operational improvements*
- *(iii) Public transportation improvements*
- *(iv) ITS technologies as related to the regional ITS architecture, and*
- *(v) Where necessary, additional system capacity*

5. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation.

6. Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision makers and the public to provide guidance on selection of effective strategies for future implementation.

B. Overall Process

The overall Congestion Management Process used by Southwest Washington Regional Transportation Council incorporates the following steps:

1) Develop purpose, goals and objectives
2) Identify boundary and network
3) Develop performance measures
4) Monitor system performance
5) Identify and evaluate strategies
6) Implement strategies
7) Monitor strategy effectiveness

The Congestion Management Process and Products is displayed in **Figure 1** on page 7.

C. Purpose, Goals and Objectives

The purpose of the CMP is to establish a process that provides for effective management and operation of the transportation system in congestion management corridors to provide travel reliability.

Transportation projects and strategies identified in the CMP should meet the goals for the region's metropolitan transportation planning process as listed in the Metropolitan Transportation Plan (MTP) for Clark County. These MTP goals include:

<u>Economy</u>
Support economic development and community vitality.

<u>Safety and Security</u>
Ensure safety and security of the Transportation System.

<u>Accessibility and Mobility</u>
Provide reliable mobility for personal travel and freight movement as well as access to locations throughout the region and integrity of neighborhoods accomplished through development of an efficient balanced, multi-modal regional transportation system.

<u>Management and Operations</u>
Maximize efficient management and operation of the transportation system through transportation demand management and transportation system management strategies.

Environmental
Protect environmental quality and natural resources and promote energy efficiency.

Vision and Values
Ensure the MTP reflects community values to help build and sustain a healthy, livable, and prosperous community.

Finance
Provide a financially-viable and sustainable transportation system.

Preservation
Maintain and preserve the regional transportation system to ensure system investments are protected.

The following objectives were used to guide the development of RTC's Congestion Management Process:

- focus upon congestion
- emphasize regional travel perspective
- support the local and regional transportation decision-making process
- increase public awareness of congestion issues and tradeoffs.

D. Congestion Management Boundary and Network

1. Congestion Management Network

The boundary of the Vancouver/Clark County Congestion Management System were set as Clark County and include the major inter-regional corridors and major arterial corridors connecting cities to the base congestion management network, (I-5, SR-14, SR-501, SR-502, SR-503, and La Center Road). Congestion management corridors connect Battle Ground, Ridgefield, and La Center to Vancouver and the CMP's base network.

The first step in defining the congestion management network was to identify a set of candidate facilities and corridors. Only regionally-significant corridors were considered as candidates for the network. Regionally significant corridors were defined as facilities that are part of the Regional Transportation System as identified in the Metropolitan Transportation Plan (MTP).

The initial congestion management network was refined from the list of candidate corridors. Using federal guidelines to include facilities with "existing or potential recurring congestion," professional judgment was used to identify corridors with existing congestion and those likely to become congested.

The scope of the congestion management network includes 31 regionally-significant transportation corridors within the Clark County, Washington region as listed in **Table 2** (Page 8) and illustrated on **Map 1** (Page 10).

2. Corridor Concept

An important step in defining the congestion management network was to define the basic unit for describing the network and performing analyses. For the Vancouver/Clark County congestion management network, transportation corridors were selected as the congestion management unit.

Where appropriate, individual corridors are made up of more than one transportation facility. The multi-facility corridors occur where there are parallel facilities serving the same function and to support the concept that transit or transportation demand management impacts a corridor rather than a single facility. Although data is reported for individual facilities, they are still grouped by the congestion management corridor they are associated with and by a set of specific endpoints. These constituent facilities are defined as those major regional facilities (i.e., principal arterials and freeways) that run in parallel and may be used as alternative routes. It should be noted that a corridor might consist of

only one facility if there are no alternative facilities in close proximity. The endpoints for each corridor represent locations where the characteristics of the corridor change significantly.

Each facility within a corridor is further divided into a series of segments. A segment is the portion of roadway between major intersections or interchanges. To allow for consistent operational analysis, corridor segments were developed such that the capacity and number of lanes remain the same within each segment.

3. Land Use

Land use and transportation are related, in that land use and transportation can impact one another. Development type, density, and location influence regional travel patterns and transportation access influences land use and development.

In order to fully understand the Congestion Management Network, you need to understand land use along congestion management corridors. **Map 2** (Page 11) illustrates the Congestion Management Corridors and generalized comprehensive land uses within the region.

Associated with land use are the existing and future population and employment estimates for Clark County:

Table 1 – Population and Employment

	2010	2035
Population	425,363	641,800
Employment	126,500	256,200

4. Multimodal

In addition to the road network, it is important to understand the multimodal aspects of the CMP Network. Sometimes modes such as walking, bicycling, and transit are overlooked for their ability to mitigate congestion. Investment in these modes can increase safety and mobility.

The Clark County Bicycle and Pedestrian Master Plan provides a 20-year vision and implementation strategy for active modes: http://www.clark.wa.gov/planning/bikeandped/docs.html. The C-TRAN website provides information on the existing and future regional transit system: http://www.c-tran.com/.

The CMP supports bicycle, pedestrian, and transit systems along the CMP network.

5. Transit Service

Transit users in Clark County benefit from the region's Public Transportation Benefit Authority (C-TRAN), which provides transit access within Clark County and to Portland, Oregon. This service also provides connections with neighboring transit service providers in Portland, Oregon, Skamania County, and Cowlitz County. **Map 3** (Page 12) illustrates fixed bus routes within Clark County and the frequency of service. The regional travel model estimates approximately 47% of the households and 68% of employment is within ¼ mile of PM peak period fixed route service.

6. Relationship to Regional Plans

The CMP is one component of the metropolitan transportation planning process. It is integrated with the Metropolitan Transportation Plan (MTP) and the Metropolitan Transportation Improvement Program (TIP), and other regional plans and processes. For example, a TIP selection criterion rewards projects for consistency with the CMP.

7. Preservation and Maintenance

The region needs to ensure that sufficient money is available to adequately preserve and maintain the transportation system the region already in place. As the transportation system ages and grows, preservation and maintenance costs are likely to take up a greater percentage of available revenues over time. Agencies

and jurisdictions have set standards for preserving and maintaining the existing transportation system.

8. Transportation Demand Management (TDM)

Transportation Demand Management (TDM) programs focus on reducing travel demand, particularly at peak commute hours. TDM makes more efficient use of the current roadway system and can reduce vehicle trips. It is important for the region to support Transportation Demand Management strategies that help the region make the best use of the existing road system.

9. Transportation Systems Management and Operations (TSMO)

Transportation Systems Management and Operations focus on low-cost, quickly implemented transportation improvements that aim to optimize the existing transportation network. Examples can include low-cost technology-based strategies and physical improvements that improve operation of the transportation system. It is important for the region to support Transportation Systems Management and Operations that enhance the existing transportation system. RTC has an adopted Regional Transportation Systems Management and Operations Plan.

E. Performance Measures

Performance measures are objective ways to determine the needs or the degree of success a project or program has had in achieving its stated goals. In other words, performance measures are a way to track needs and progress. Performance measures are what we use to track the region's progress in reducing and managing congestion. For the purpose of this report, both system wide and peak period performance measures are utilized.

There are a number of performance measures that the region would like to use or expand but there are limitations due to current availability. The following section identifies data elements that are collected and analyzed and the specific performance measures used. Chapter II includes the measurement of these performance measures.

1. Data Elements

Collected data elements include traffic counts, travel time, automobile occupancy, and transit data. In addition, RTC compiles and collects other measures of system performance such as highest volume intersections, Columbia River bridge volumes, and park and ride usage.

This collected data serves as the basis for developing performance measures. Performance measures in the Congestion Management Process are categorized according to the region's overall transportation goals. It is also important to note that performance measures are collected and analyzed under the Metropolitan Transportation Plan, Transportation Improvement Program, and other regional programs.

Performance Measures

<u>Economy</u>

- Truck Percentage
- Vehicle Volumes
- Columbia River Traffic Volumes

<u>Safety and Security</u>

- High Accident Locations

<u>Accessibility and Mobility</u>

- Population Compared to Transit
- Employment and Population within 1/3 mile of Transit
- Transit Seat Capacity Used

<u>Management and Operations</u>

- Volume to Capacity Ratio
- Average Speed
- Speed vs. Posted Speed

- Intersection Delay
- Park and Ride Capacity
- Vehicle Occupancy Rates
- On-time Transit Performance
- Busiest Intersections

Environmental

- Vanpool Usage

Vision and Values

- Comprehensive Land Use
- County Bicycle and Pedestrian Plan

Finance

- None. Covered in MTP and TIP

Preservation

- None. CMP Supports Preservation as a Primary Strategy

2. Data Collection

RTC is responsible for setting up a process for the collection of congestion data. Some of the needed data is regularly collected by other transportation agencies within the Clark County region. RTC organizes a process for collecting existing data. The flow for the collection of transportation data is illustrated on **Figure 2** (Page 9).

Intelligent Transportation Systems (ITS) are making the collection of data more automated and will continue to do so over time. In addition, the region has initiated a transportation data archive system called PORTAL to enhance data availability, ease its retrieval, and assist with the analysis of transportation data to support performance monitoring. RTC anticipates that many of the performance measures will become automated over time through the PORTAL process.

3. Data Analysis and System Performance

Transportation data is analyzed and validated for use in the Congestion Management Process. The collected data is then applied to develop system performance measures for the transportation corridors. System performance data is then illustrated through text, tables, and maps. The system performance data and maps are then used to identify system deficiencies and needs.

Figure 1 – Congestion Management Process and Products

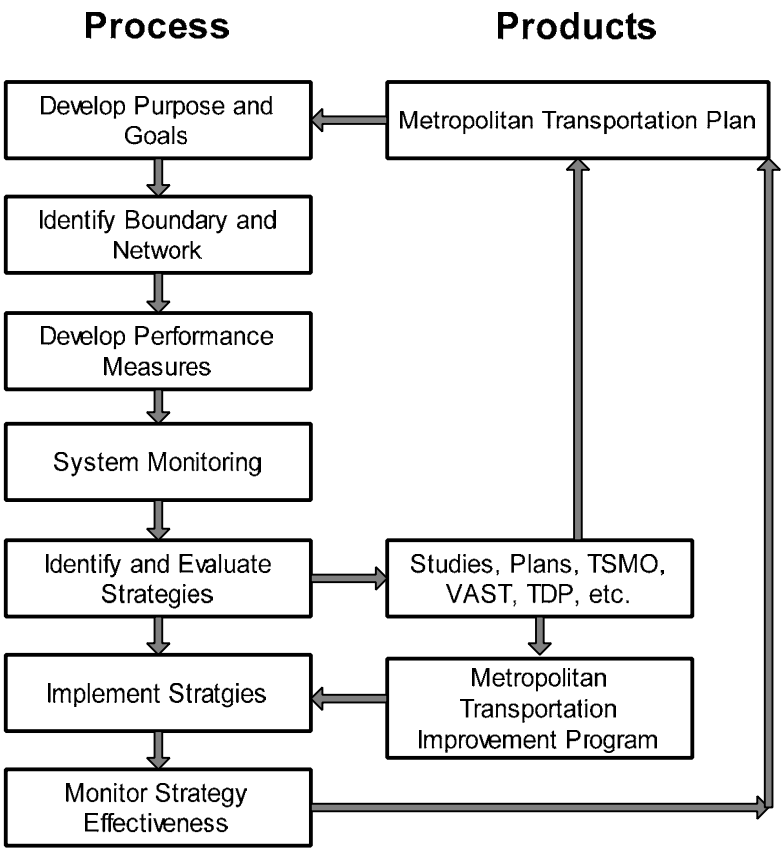
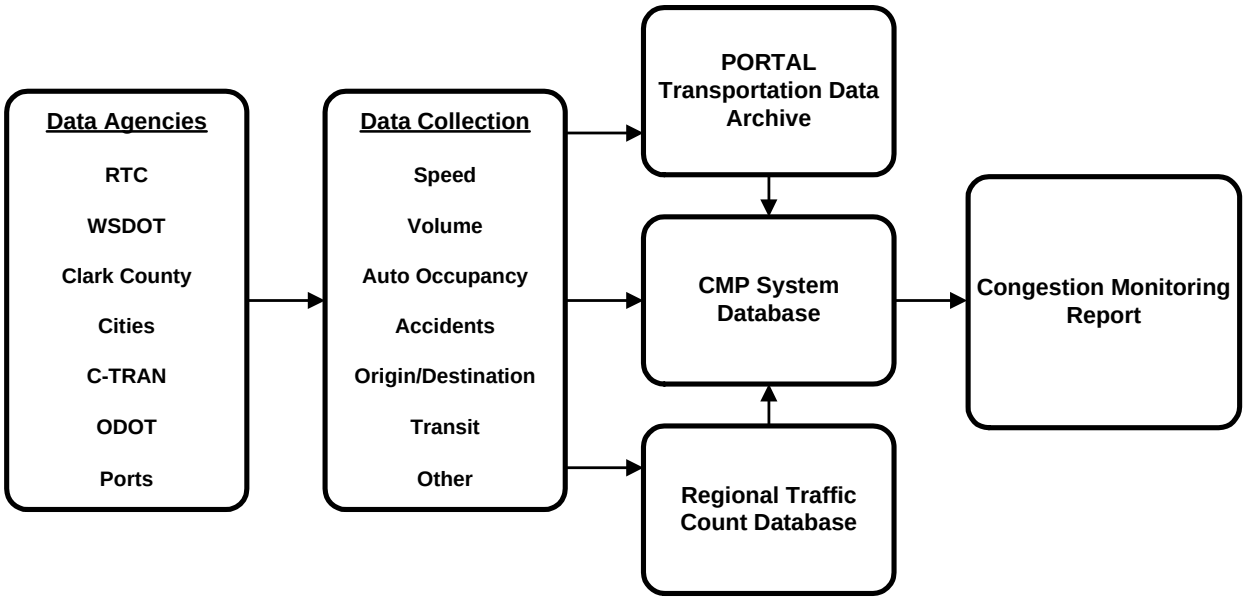


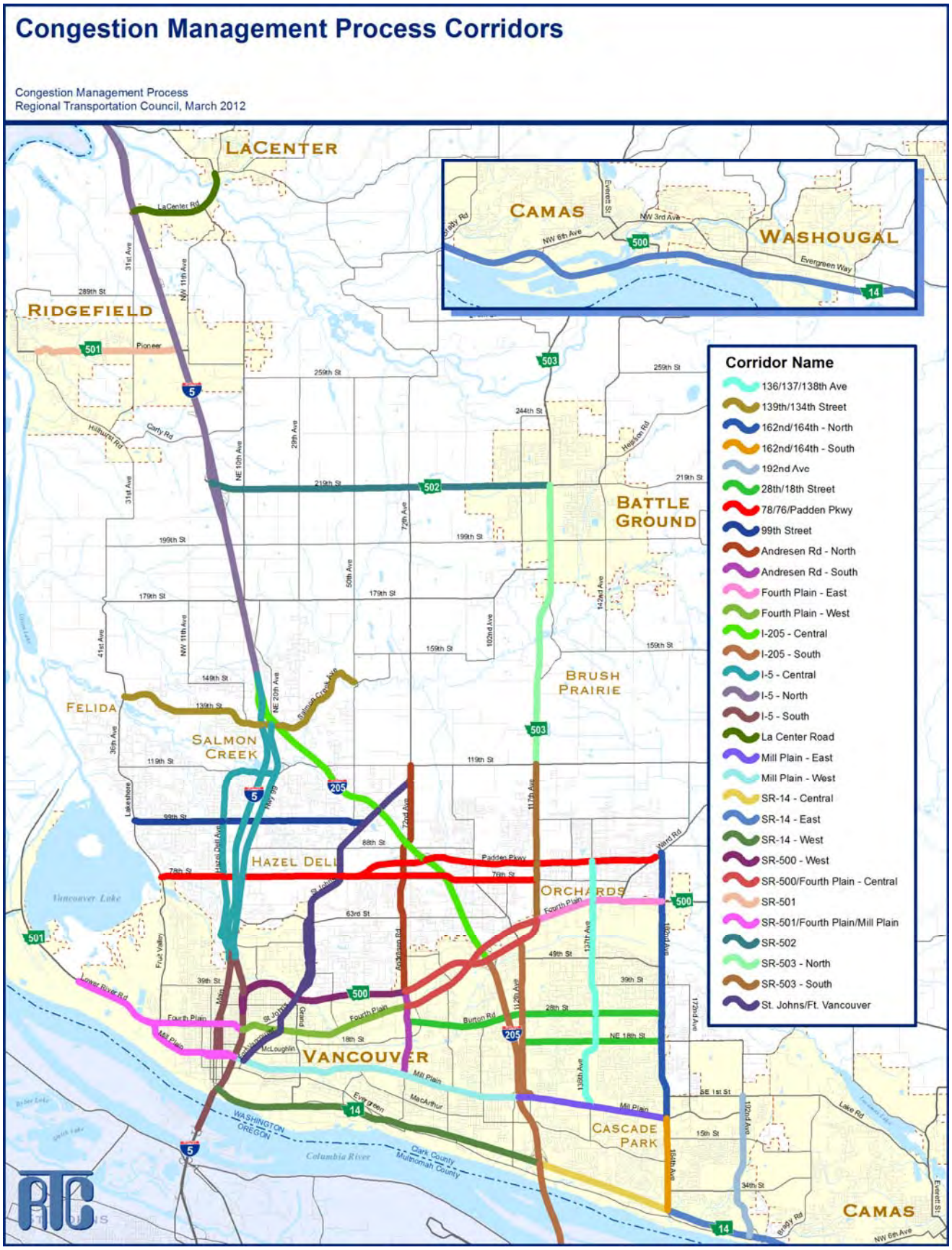
Table 2 – Corridors in the Congestion Management Network

Corridor Name	Facilities	Endpoints	
I-5 – North	I-5	County Line	I-205 Interchange
I-5 – Central	I-5, Hwy 99, Hazel Dell	I-205 Interchange	Main St.
I-5 – South	I-5, Main Street	Main St. Interchange	Jantzen Beach
I-205 – Central	I-205	I-5 interchange	SR 500
I-205 – South	I-205, 112th Avenue	SR 500	Airport Way
St. Johns	St. Johns Rd./St. James Rd., Fort Vancouver Way	NE 72nd Ave.	Mill Plain Blvd.
Andresen - North	Andresen Rd. / N.E. 72nd Avenue.	119th St	SR 500
Andresen - South	Andresen Rd.	SR 500	Mill Plain Blvd.
SR-503 North	SR 503	SR 502	119th St.
SR 503 South	SR 503	119th St.	Fourth Pl./SR 500
137th Avenue	136th/137th/138th Avenue	Padden Parkway	Mill Plain Blvd.
162nd Av. North	162nd/164th Avenue	Ward Rd.	Mill Plain Blvd.
164th Av. South	164th Avenue	Mill Plain Blvd.	SR-14
192nd Av.	192nd Avenue	SE 1st St.	SR-14
SR 14 West	SR 14	I-5	I-205
SR 14 Central	SR 14	I-205	164th Ave.
SR 14 East	SR 14	164th Ave.	Evergreen Hwy.
SR-501/Fourth Plain	SR-501/Mill Plain, Fourth Plain	I-5	NW 26th Street
Mill Plain West	Mill Plain Blvd.	I-5	I-205
Mill Plain East	Mill Plain Blvd.	I-205	164th Ave.
Fourth Plain West	Fourth Plain	I-5	Andresen Rd.
SR 500 – West	SR 500	I-5	Andresen Rd.
Fourth Plain /SR-500 Central	SR 500, Fourth Plain	Andresen Rd.	SR 503
Fourth Plain – East	Fourth Plain	SR 503	162nd Ave.
78th/Padden Parkway	78th St./76th St., Padden Parkway	Lakeshore Ave.	Ward Rd.
99th Street	99th St.	Lakeshore Ave.	St. Johns Blvd.
28th/18th Street	28th Street, Burton Rd, 18th Street	Andresen Rd.	164th Avenue
134th Street	134th St./139th St./Salmon Creek Ave.	NW 36th Ave.	WSU Entrance
SR-502	SR 502	I-5	SR 503
SR 501	SR 501	I-5	9th St. (Ridgefield)
La Center Road	La Center Rd.	I-5	E. Fork Lewis Rv.

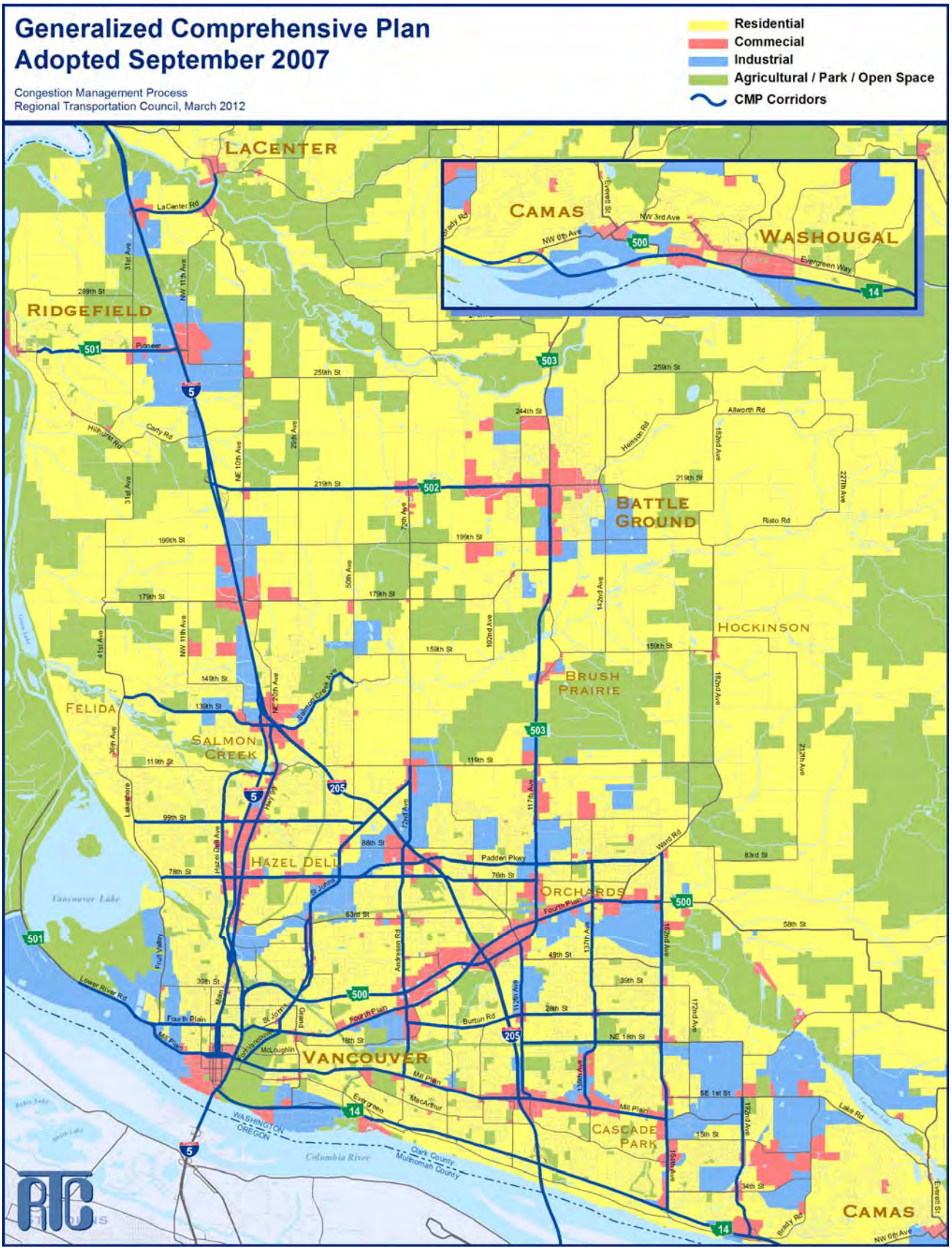
Figure 2 - Transportation Data Flow



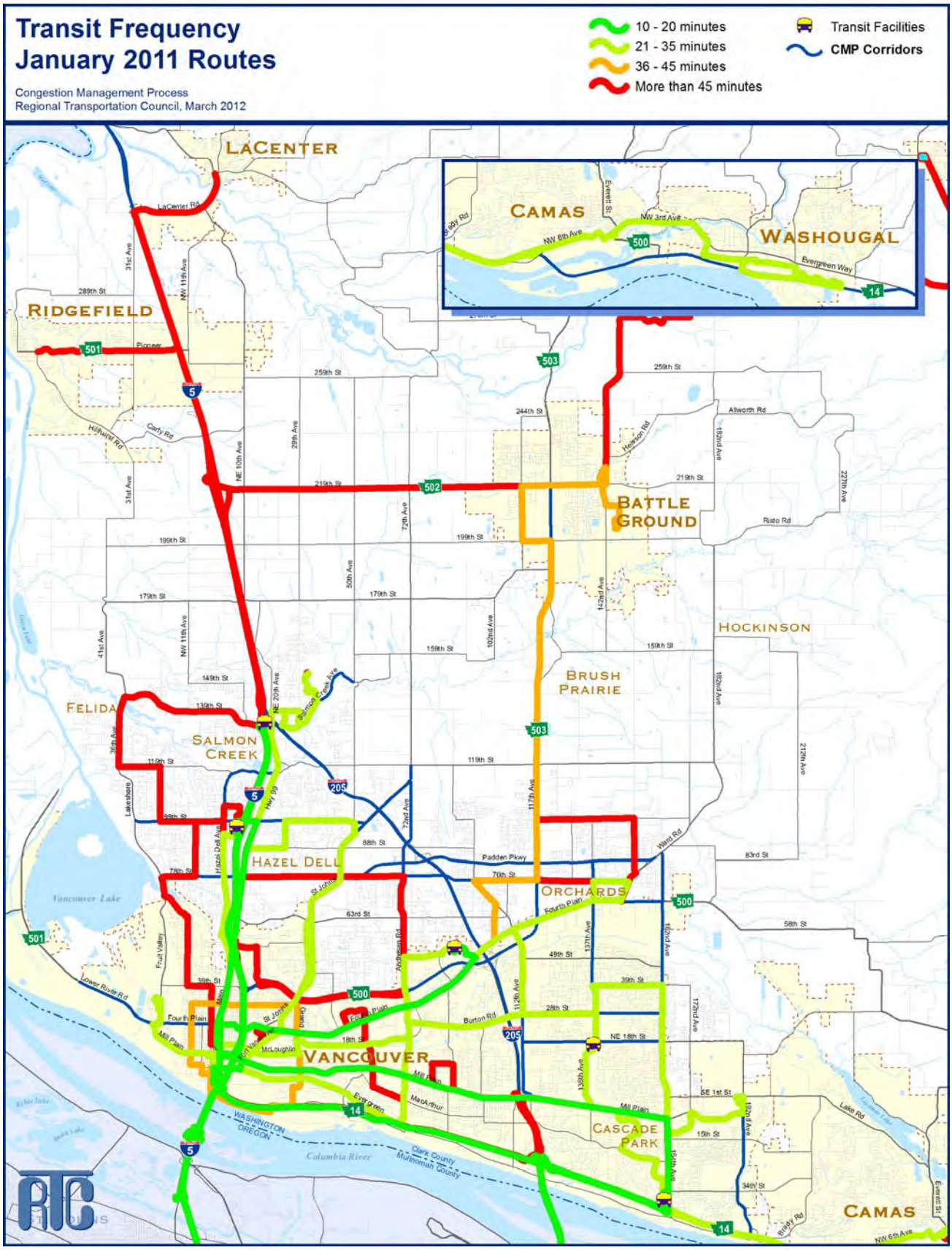
Map 1 – Congestion Management Network



Map 2 – Land Use



Map 3 – Transit Service and Frequency



II. SYSTEM MONITORING

This section contains a discussion and display of the system performance measures contained in the Congestion Management Process.

System monitoring is described in three sections. Part A consists of data compiled for measuring system performance at the corridor level. It is comprised of data that supports the Congestion Management System. Part B includes a summary of the corridor trends between years 2001 and 2011. Part C uses shorter segment transportation data, with detail provided in Appendix A, to identify specific segments with congestion concerns related to volume to capacity ratio and speed.

There are many sources of congestion including bottlenecks, traffic incidents, bad weather, construction, poor signal timing, and other events. The source of congestion can vary from one corridor to another, such that the strategies to improve capacity must be tailored to each corridor.

This report attempts to measure and quantify average weekday AM and PM peak period "congestion" consistently across the congestion management corridors, through the use of performance measures.

A. SYSTEM PERFORMANCE MEASURES

1. VOLUMES

Vehicle Volumes

AM and PM peak hour vehicle volumes were compiled from the regional traffic count database. Volumes represent traffic counts within each corridor and provide a good comparison of the relative difference in travel demand among the congestion management corridors.

Peak hour traffic volumes for the congestion management corridors are delineated by four volume range categories. These categories are intended to provide a regional picture of travel flows for the Clark County region.

PM peak hour trends are similar to AM peak hour; although, most congestion management corridors carry higher volumes during the PM Peak.

Map 4, Page 20: During the PM peak, I-5 and I-205 and portions of SR-14 and SR-500 display volumes greater than 3,000 vehicles per hour. Within the region, facilities carrying more than 1,500 vehicles in the PM peak hour include segments of SR-14, SR-500, SR-503, Mill Plain, Fourth Plain, Andresen Road, 164th Avenue, 78th Street, Padden Parkway, and 134th Street.

The corridors with the highest peak hour volume difference (at least 500 additional vehicles) between the AM and PM peak include: portions of I-5, Andresen Road, Mill Plain Boulevard, and 78/76th Street.

Highest Volume Intersections

Table 3 displays the highest volume intersections in 2011 based on the total number of vehicles entering an intersection on an average weekday. At-grade intersections along SR-500, Mill Plain, SR-503, and Padden Parkway dominate the list.

SR-500/St. Johns Road will be under construction, 2011-2013, to become a grade separated interchange.

Table 3 - Highest Volume Intersections

Rank	East/West	North/South	Volume
1	Mill Plain	Chkalov Dr.	72,000
2	Fourth Plain	SR-500	71,000
3	SR-500	St. Johns Rd.	67,000
4	SR-500	54th Ave.	62,000
5	Padden Pkwy	SR-503	58,000
6	SR-500	42nd Ave.	58,000
7	Mill Plain	136th Ave.	57,000
8	Padden Pkwy	Andresen Rd.	54,000
9	Fourth Plain	Andresen Rd.	52,000
10	Mill Plain	120th Ave.	51,000
11	134th St.	20th Av./Hwy	50,000
12	78th St.	Highway 99	49,000
13	Mill Plain	164th Ave.	48,000
14	Mill Plain	123rd/124th Av.	48,000
15	SR-502	SR-503	47,000

Columbia River Bridge Volumes

A good indicator of change to bi-state travel is the amount of vehicle travel across the Columbia River bridges (I-5 and I-205). **Table 4** shows the historical growth in Columbia River bridge crossings since 1980.

Daily bridge traffic volumes have been maintained at Columbia River bridges since 1961. The Interstate Bridge carried approximately 33,500 vehicles a day in 1961. Volumes had increased to over 108,000 vehicles a day by 1980. With the opening of the Glenn Jackson Bridge in late-1982, total Columbia River crossings had increased to 144,000 vehicles a day by 1985. By 1995, total river crossings had reached 222,700; more than double the 1980 crossings. In 2005, Columbia River crossings peaked at 278,500. Since 1961, average total bridge crossings have only decreased in two periods (1974 and 2006-2011).

The Interstate Bridge reached capacity during peak hours in the early 1990's. Glenn Jackson Bridge traffic volumes began to exceed the Interstate Bridge traffic volumes on a daily basis in 1999. Columbia River traffic volumes began to decrease, beginning in 2006 as the corridors became saturated and the economy slowed.

Table 4 - Average Weekday Traffic Across the Columbia River

Year	I-5	I-205	Total
1980	108,600	N/A	108,600
1985	91,400	52,600	144,000
1990	95,400	87,100	182,500
1995	116,600	106,100	222,700
2000	126,900	132,100	259,000
2005	132,600	145,900	278,500
2010	126,700	145,500	272,200
2011	128,208	143,025	271,233

2. CAPACITY

Corridor Capacity Ratio

The corridor capacity ratio is an aggregation of the volume/capacity ratios for the individual general-purpose segments that make up a facility within a corridor. The corridor capacity ratio is calculated for both the AM and PM peak hours and for the peak directions of travel within a corridor. For each segment in a corridor, the volume/capacity ratio, vehicle miles traveled, and vehicle miles traveled weighted by volume/capacity ratio (the product of the volume/capacity ratio and vehicle miles traveled) for the peak hour are calculated. The corridor capacity ratio is the sum of the weighted link ratios.

The five highest volume to capacity ratio corridors include:

1. 18th Street, 112th to 162nd Av
2. SR-14, I-5 to I-205
3. I-205, Airport Way to SR-500
4. I-5, Jantzen Beach to Main St.
5. SR-503, Fourth Plain to 119th St.

Map 5, Page 21: Both the AM and PM periods show congestion along major facilities such as I-5 South, I-205, SR-14 Central, SR-503 South, SR-500 West, and 18th Street. Much of the AM period congestion can be attributed to the demand for crossing the two Interstate bridges into Oregon. Generally, the PM period displays higher corridor congestion than that experienced in the AM period.

Map 6, Page 22: In the PM period, additional congestion is shown along SR-503 North and Fourth Plain East.

Map 7, Page 23: In addition to existing corridor capacity ratio, the 2035 PM corridor capacity ratio was calculated using the regional travel forecasting model (2011 MTP forecast model version). The model shows where future corridor congestion will occur even with planned transportation improvements. Generally, the 2035 MTP shows a worsening of congestion. With PM congestion in the I-5, I-205, SR-501 (to Port), SR-502, SR-503, Main Street/Highway 99, Andresen, 162nd/164th Ave., Mill Plain East, Fourth Plain East, 18th Street, Burton Road, 134th Street, and La Center Road Corridors. The 2035 model shows that planned transportation improvements positively impact future corridor capacity.

3. SPEED

Auto Travel Speed

Travel time data is collected annually. The data is collected using global position units (GPS) and by driving corridors as many times as possible during peak periods (6:30-8:30 a.m. and 4:00-6:00 p.m.). Travel speed is computed from the travel time data. It consists of utilizing the travel time and distance to calculate the average travel speed in the peak period for through movements.

In general, facilities with multiple at-grade controlled intersections display lower speeds. While grade-separated facilities show much faster speeds. Usually, the PM period displays lower corridor speed than that experienced in the AM period.

Map 8 & 9, Pages 24-25: Corridor travel speed continues to be a problem. As development occurs, corridor travel speed continues to decline. One concern is regional facilities that have a travel speed below 25 mph, which may encourage trips to divert to alternate routes. During the AM period, Main Street, Andresen South, SR-503 South, and 136/137/138th Ave. display average speeds below 25 mph.

In the PM period, corridors with travel speed below 25 mph include Main St., Highway 99, St. Johns, Andresen, 112th Ave., 136/137/138th Ave., Mill Plain, Fourth Plain, 78th/76th Street, and Burton Road.

Speed as Percent of Speed Limit

Travel speed was converted to a percent of posted speed limit for each of the congestion management corridors. This was intended to provide another measure of the delay along the corridor.

As development occurs along the corridors, travel speed often decreases because of congestion, multiple driveways, and additional traffic signals. One of the difficulties is in balancing access to land uses and maintaining the throughput travel speed on arterials.

The speed percentages for the freeway facilities are generally close to 100% of the posted speed limit. While facilities with multiple signalized intersections and driveways are generally between 65% and 80% of the posted speed limit.

The five lowest speed corridors compared to posted speed limit include:

1. 112th Av., Mill Plain to SR-500

2. Andresen Rd., Mill Plain to SR-500
3. Fourth Plain, SR-503 to 162nd Av.
4. Mill Plain, I-205 to 164th Av.
5. Highway 99, I-5 to 134th St.

Map 10, Page 26: In the AM period, I-5 South, SR-503 South, and 136/137/138th Avenues operate at less than 65% of the posted speed.

Map 11, Page 27: In the PM period, SR-14 East, Highway 99, St., 112th Avenue, St. Johns/Ft. Vancouver, Andresen, 136/137/138th Avenue, Fourth Plain, Mill Plain East, SR-500, 78th/76th Street all operate at less than 65% of the posted speed.

Intersection Delay

The delay at an intersection, for the through movement, was recorded as part of the PM travel time. Delay time represents the period of time travel speed is below 5 mph due to the intersection control. The delay time at an intersection was averaged for the multiple travel time runs. Intersections with an average delay time of greater than 45, 60, and 90 seconds were identified as a location of delay along a corridor. This delay is only calculated for through movement on the congestion management corridor and does not include delay associated with left turns or cross street traffic.

Map 12, Page 28: Generally, intersections that displayed a 45 second or greater delay, for the average through movement on a CMP corridor, were located where two major arterials intersect. Map 12 displays the location of the 50 intersections that demonstrated this characteristic. Of these intersections, 21 had an average delay between 60-89 seconds and 5 had an average delay greater than 90 seconds. Delay at these intersections adds to the overall travel time and increases congestion at these locations. The largest delay was for the northbound movement at the 18th Street and 112th Avenue intersection which was under construction at the time. With the implementation of a number of signal timing improvements, year 2010 was the first year that showed an overall decrease in overall intersection delay since this performance measure was added to the report in 2002.

In addition to intersection delay, delay can also occur at freeway off ramps, where high volumes of traffic are loaded onto the arterial system. This can create a significant problem when traffic backs onto the freeway. Locations known to experience this characteristic in the PM peak include northbound I-205 off ramp to SR-14, Mill Plain, SR-500, and eastbound SR-14 off ramp to 164th Av. In the AM Peak, backups can occur on SR-500 and SR-14 ramps to I-5 South, and Padden Parkway, SR-500, and SR-14 ramps to I-205 South.

4. Occupancy

Vehicle Occupancy

Average automobile occupancy is calculated by observing passenger cars at a given location and the number of people in each vehicle. The number of people divided by the number of passenger cars is the average automobile occupancy for that location. Trucks, buses, and other commercial vehicles are excluded from average automobile occupancy. Data is collected for the AM and PM time periods. (**Table 5**)

Table 5
Average Automobile Occupancy by Time of Day

Facility Type	AM	PM
[1]Freeway	1.12	1.18
Arterial	1.13	1.24

1*Freeway includes I-5, I-205, SR-14, and SR-500*

The AM time period displays a lower average automobile occupancy, with the AM average automobile occupancy at

1.13 persons per vehicle. The PM average automobile occupancy rate is approximately 1.21 persons per vehicle.

It may be that the AM peak period is more of a traditional commute time, while the PM peak period likely has a greater percentage of discretionary trips such as shopping where drive-alone trips are less prominent.

Carpool and Vanpool

Carpools and vanpools are modes that mitigate congestion and increase vehicle occupancy in the peak periods. Carpools and vanpools form when a group of people commute together. Carpools are generally informal, including 2 or more people, while vanpool arrangements are generally more formal and include 5 or more people. C-TRAN owns, maintains, manages, insures, and licenses a fleet of vans which are available to commuter groups. In 2011, C-TRAN had nine vanpools in service.

5. SAFETY

Safety

Safety for all modes of travel is an important component of the metropolitan transportation planning process. As such, the region completed a 2011 Safety Management Assessment for Clark County. **Map 13 (Page 29)** illustrates the 30 signalized intersections that had 20 or more collisions between years 2007 and 2009. The CMP supports the goals and objectives of the Safety Assessment: http://www.rtc.wa.gov/reports/misc/SafetyMgmt2011.pdf.

6. TRUCKS

Truck Percentage

Traffic counts are collected at several locations where vehicles are classified according to the number of axles. This provides a measure of trucks as a percentage of all vehicles traveling on the roadway. Trucks are defined as vehicles with more than two axles, such as typical tractor/trailer rigs, traveling on the roadway during the peak period. It is important to note that trucks often travel outside of peak periods to avoid congestion.

Map 14, Page 30: Overall, I-5, I-205, SR-14 East, SR-501 (Pioneer), SR-502, SR-503, and Fourth Plain/Mill Plain west of I-5 display the highest percentage of truck volumes during the PM peak period with truck percentages greater than 4 percent. I-5 North has a truck percentage above 12%.

In the AM period, the percentage of trucks is generally higher. I-5 North, I-205 Central, and Fourth Plain/Mill Plain west of I-5 all have percentages above 8%.

7. TRANSIT

Transit System Ridership

Table 6 provides 2011 annual C-TRAN patronage by type of service. Between 2010 and 2011 minor transit service revisions were made and total ridership increased by 6.2%.

Approximately 85% of C-TRAN system ridership was made up of urban fixed route patrons, followed by commuter service that carried 10.7% of the total riders and C-VAN that carried 3% of the total riders.

Table 6 - Ridership by Type of Service

Service Type	Annual Riders	Percent
Urban/Local	5,929,158	85.2%
Commuter	747,583	10.7%
C-VAN	206,596	3.0%
Events/Other	28,346	0.4%
Connector	18,711	0.3%
Vanpool	28,210	0.4%
Total	**6,958,604**	**100.0%**

Table 7 compares growth in Clark County population with changes to C-TRAN system ridership during the same period. The average annual growth rate in Clark County population since 1985 has ranged from 2.3% to 4.4% per year depending on the time period. Over the same time period, C-TRAN ridership's growth rate has generally been higher than the population growth rate.

Table 7 – Historical Population and Patronage Growth

Year	Population	Annual Growth Rate	System Passenger Trips	Annual Growth Rate
1985	206,744		1,765,423	
1990	238,053	3.0%	2,840,724	12.2%
1995	291,000	4.4%	4,327,291	10.5%
2000	345,238	3.7%	5,437,084	5.1%
2005	391,500	2.7%	5,812,417	1.4%
2010	425,363	1.7%	6,552,570	2.5%
2011	428,000	0.6%	6,958,604	6.2%

In 2000, the passage of initiative 695 had a significant impact on transit revenue, and C-TRAN had to reduce transit service. In 2005, C-TRAN restructured transit fares to increase the proportion that fare revenue contributes to service costs. These changes resulted in a decrease in ridership. In September 2005, voters overwhelmingly supported a sales tax increase to support preservation of C-TRAN service levels and restore service that had been cut following passage of Initiative 695 in 2000.

As a result of the 2007 Service Redesign Study, C-TRAN implemented a number of service improvements in 2007, and opened the 99th Street Transit Center. These service changes, along with high fuel costs, have resulted in significant passenger increases.

Transit Seat Capacity Used

Transit capacity used includes transit riders divided by the transit capacity at a defined location. Transit seat capacity represents the percentage of seats that are occupied during the two-hour peak period. C-TRAN uses an automated ridership collection system on their vehicles. RTC compiled this data at a specific location in each corridor to calculate bus capacity based on the vehicle type and frequency of service. This process has allowed for the estimation of transit patronage and capacity for congestion management corridors.

Map 15, Page 31: Generally, in the PM Peak period, the number of available seats is higher to accommodate more transit riders. In the PM period, six corridors utilize more than 75% of the available seat capacity, while 16 corridors utilized more than 50% of the available seats.

Park and Ride Capacity

Park and Ride capacity and daily average usage include lots owned or leased by C TRAN. In addition to the capacity shown in Table 7, there are WSDOT maintained or informal park and ride and park and pool facilities located throughout the County.

On September 25, 2011, the re-located Salmon Creek Park and Ride lot opened. The Camas/Washougal Park and Ride lot is being moved as part of a current road project and will not be available until late 2012. The Battle Ground Park and Ride lot has changed use and is no longer available as a Park and Ride. Clark County park and ride capacity and usage is shown in **Table 8**.

Table 8 - Clark County Park and Ride Capacity and Usage in 2011

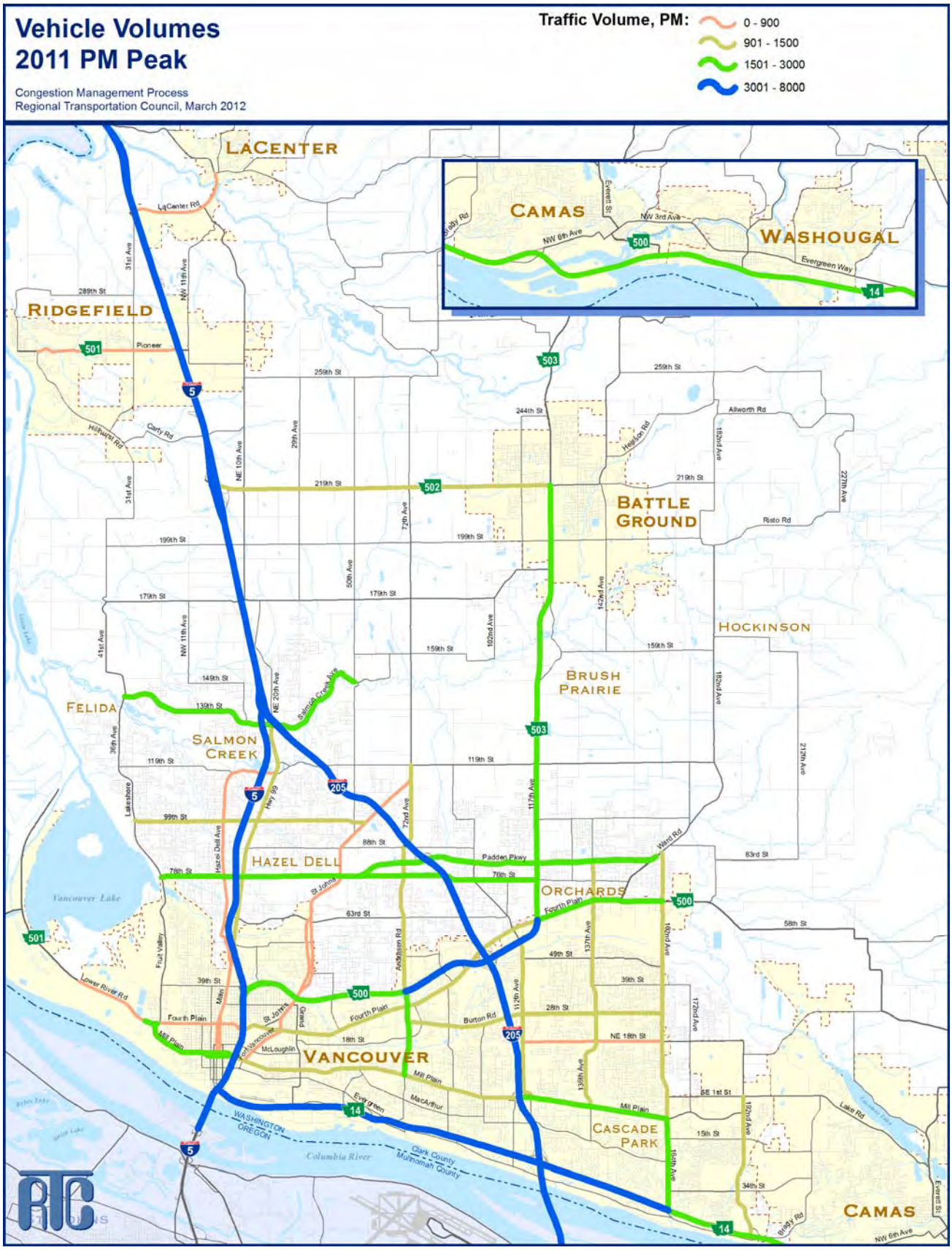
Facility	Lot Capacity	Lot Usage
99th Street	610	349
Evergreen	279	30
Salmon Creek	467	275
BPA Ross	200	59
Andresen/KMART	60	54
Fisher's Landing	560	501
Camas/Washougal	0	0
Total	**2,176**	

Transit On-Time Performance

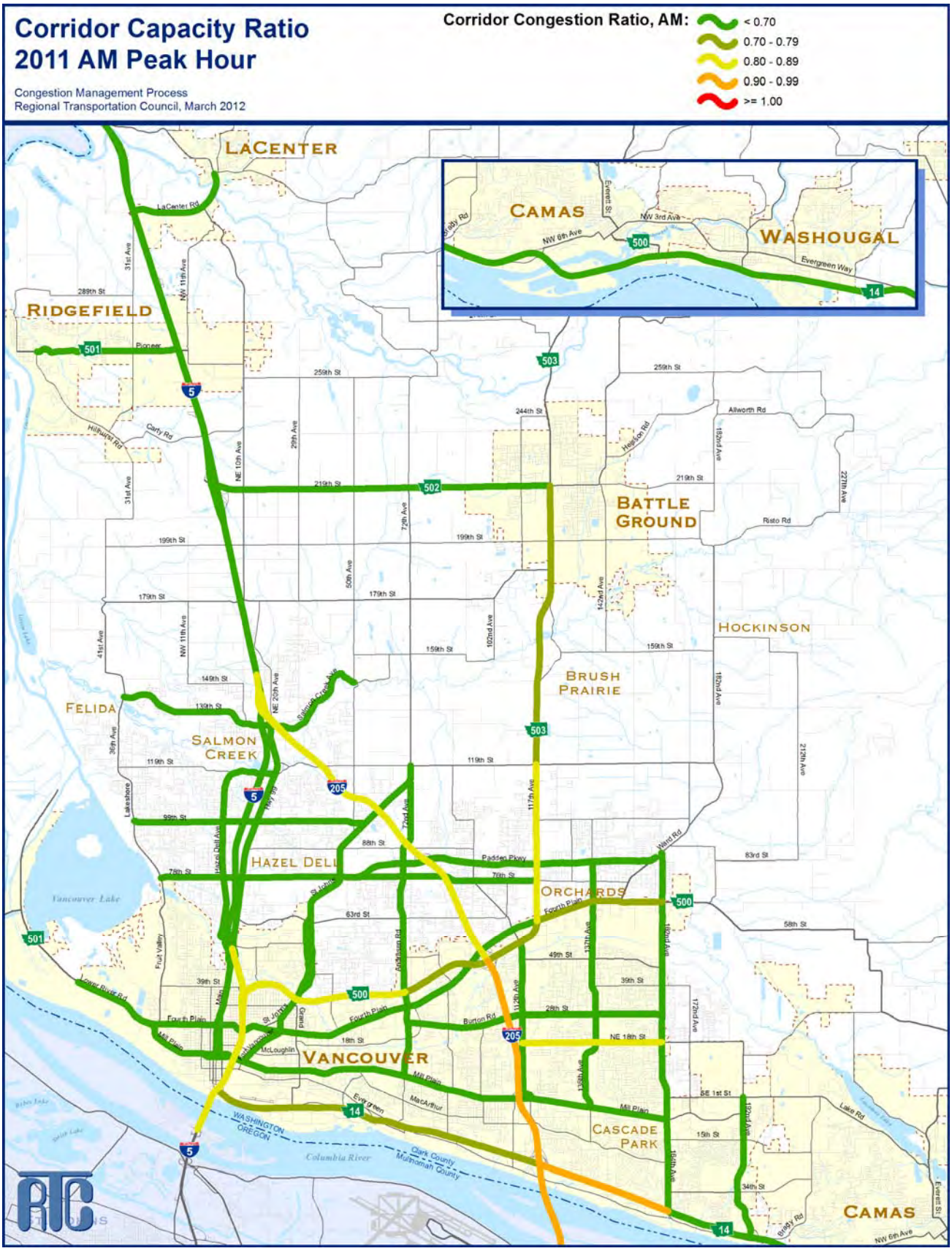
Traffic congestion, station dwell time, wheel chair boardings, and other factors can impact transit vehicle's ability to maintain a schedule.

C-TRAN's 2011 On-Time Performance Report showed five routes with the lowest on-time performance: Route 37 (Highway 99/Mill Plain), Route 7 (Battle Ground), Route 4 (Fourth Plain), Route 44 (Fourth Plain Limited), and Route 39 (VA/NE 87th Avenue). These routes are experiencing a number of issues which create problems for meeting on-time reliability.

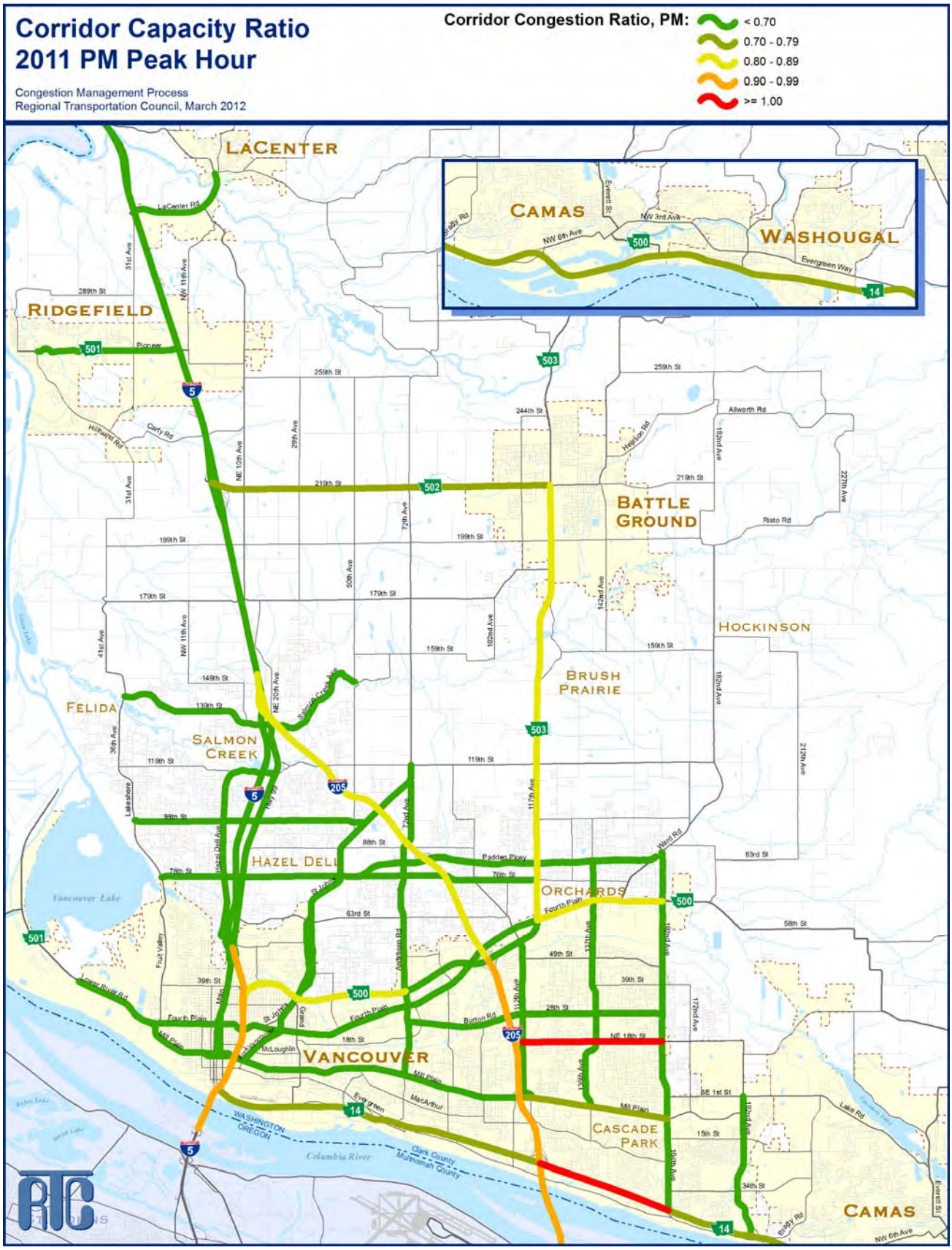
Map 4 – PM Vehicle Volumes



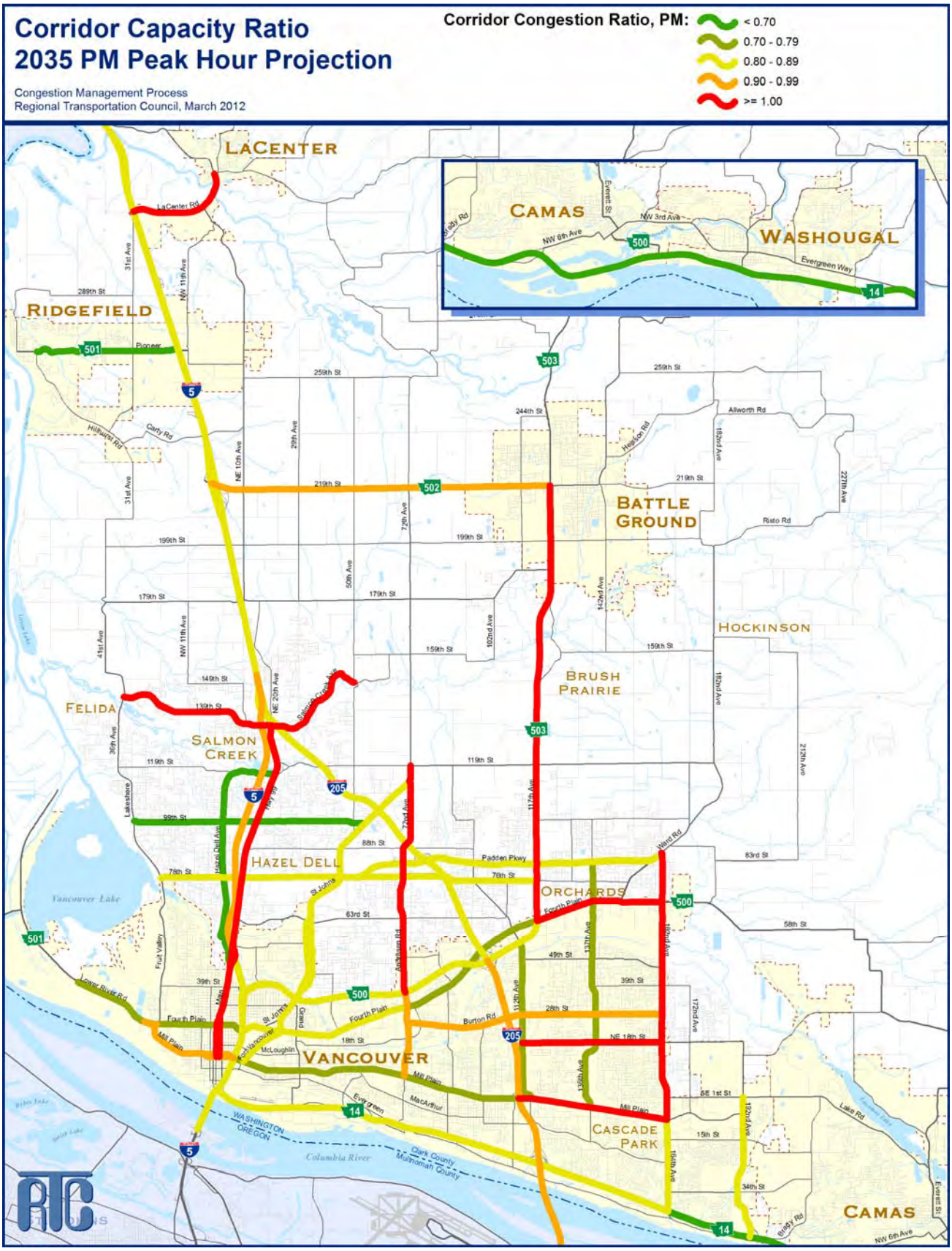
Map 5 – AM Capacity Ratio



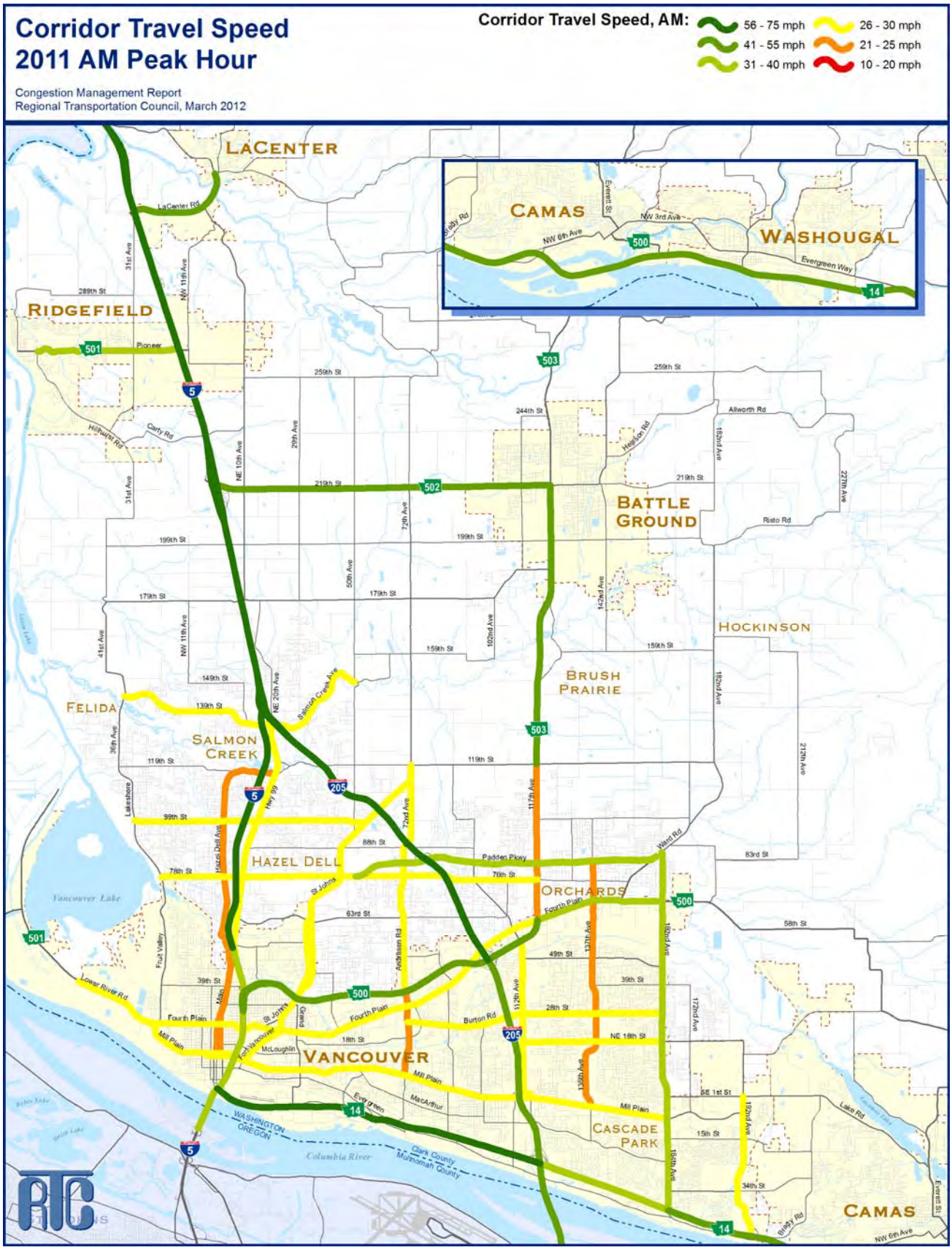
Map 6 – PM Capacity Ratio



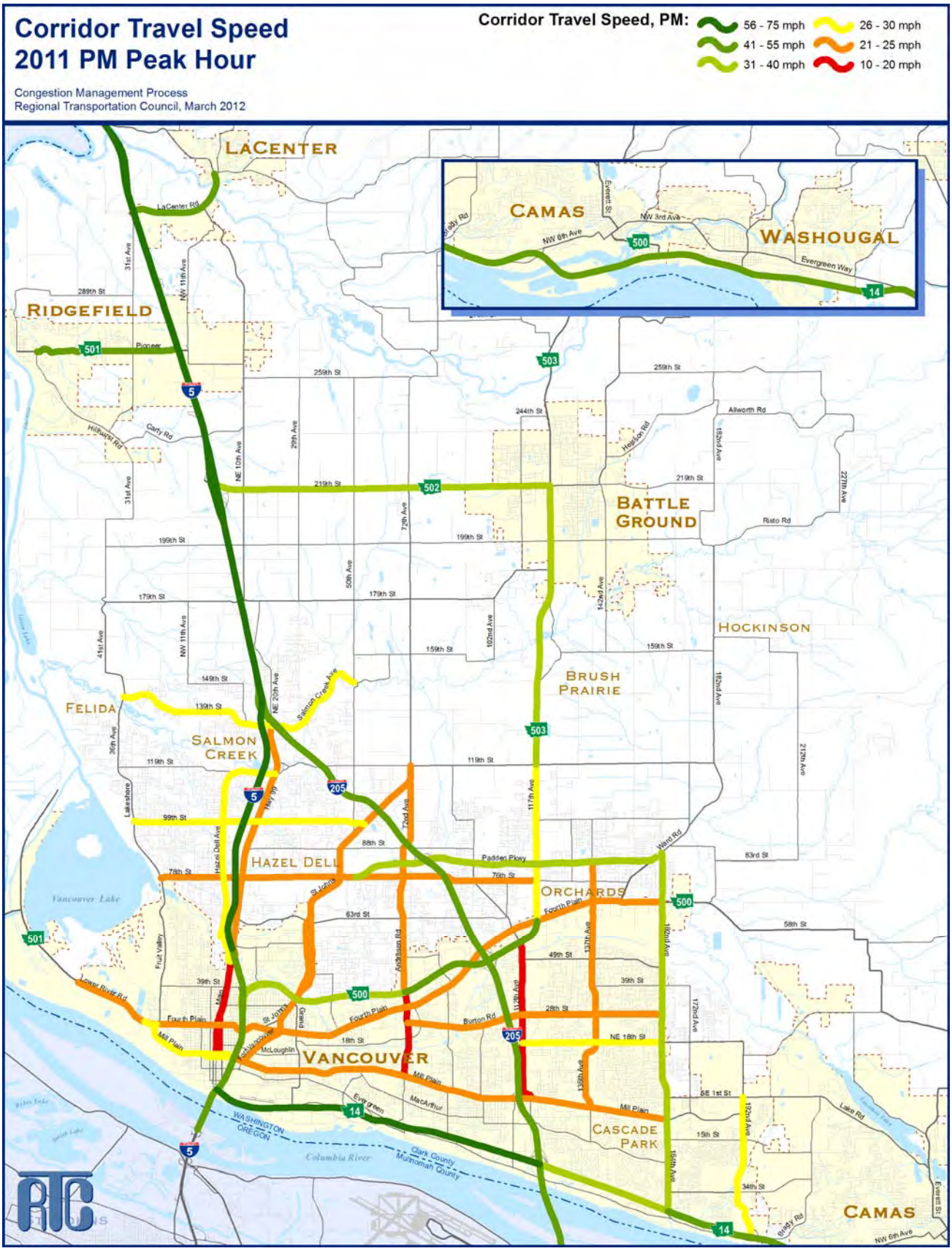
Map 7 – 2035 PM Capacity Ratio



Map 8 – AM Corridor Travel Speed



Map 9 – PM Corridor Travel Speed



Map 10 – AM Speed as Percent of Speed Limit

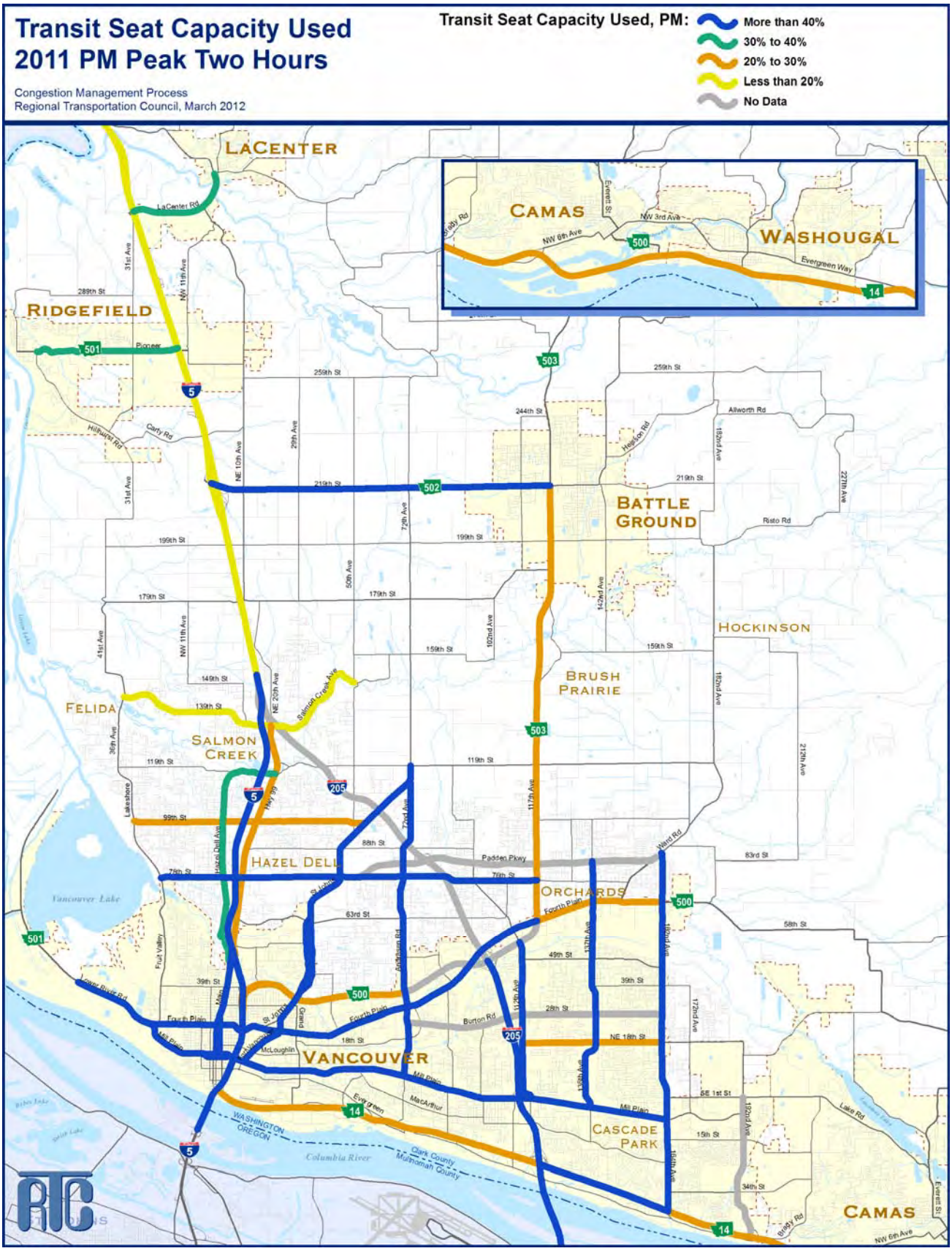
Map 11 – PM Speed as Percent of Speed Limit

Map 12 – PM Intersection Delay

Map 13 – High Collision Intersections

Map 14 – PM Truck Percentage

Map 15 – PM Transit Seat Capacity Used



B. 2001-2011 TRENDS

1. VEHICLE VOLUMES

Between 2001 and 2011 the region experienced a substantial increase in overall traffic volumes. The overall increase in traffic volumes relates to growth in the regional population.

Several corridors have shown a significant increase in peak hour vehicle volumes since 2001. Corridors that experienced a volume increase of over 500 vehicles in the PM peak hour include: I-5 Central, SR-14 Central and East, Padden Parkway and 78th Street. The new 192nd Avenue corridor, north of SR-14, was added and now carries over 1,100 vehicles in the PM peak while PM peak period volumes on 164th Avenue decreased by 250 vehicles.

Main Street, I-205 South, SR-14 East, and Padden Parkway had vehicle volume increases of over 500 vehicles in the AM peak. The new 192nd Avenue corridor was added and carries over 1,200 vehicles southbound towards SR-14, while 164th Avenue carries over 600 less vehicles in the AM peak period.

2. CORRIDOR CAPACITY

Through the ten-year period, both the AM and PM peak periods had increased congestion along congestion management corridors. However, congestion decreased along corridors where capacity has been added to the system. The change in corridor capacity (volume to capacity ratio) has been especially reflective of road improvements. In the past few years, capacity has been added with transportation improvements along many of the congestion management corridors. Some of the major improvements include:

- I-5/Pioneer St. Interchange
- I-205 Off ramp to 112th Av.
- I-5/SR-502 Interchange
- St. Johns, NE 50th Av. to 72nd Av.
- 72nd Av., N. of 88th St. to St. Johns
- NE 138th Av., 18th St. to 28th St.
- I-5, Main to 99th St.
- 162nd Av., 39th St. to Ward Rd.
- Burton/28th St., 86th Av. to 144th Av.
- 192nd Avenue (Relieves 162nd Av.)
- Padden Parkway
- SR-500/112th Av. Interchange

3. SPEED

In general, a trend between 2001 and 2011 congestion monitoring reports includes decreased speeds along congestion management corridors, with the exception of where the system has been improved. Corridors that had a significant (5 mph or more) decrease in PM peak period speed include: Highway 99 (-5), Main Street (-16), 112th Ave. (-7), Andresen Rd. North (-5), SR-14 West (-5), SR-14 Central (-26), and SR-502 (-6).

In the AM period, significant decreases in speed include: I-5 South (-20), I-205 South (-7), Main St. (-14), SR-503 South (-9), and Fourth Plain West (-8).

Significant increase (5 mph or more) in PM peak period speeds occurred in corridors that had transportation improvements since year 2001.

C. AREAS OF CONCERN

Using the individual CMS corridor segment data, areas of concerns were identified. Areas of concern are defined as segments within an individual corridor with a volume to capacity (V/C) ratio greater that 0.9 or a travel speed 60% or less of the posted speed limit.

1. VOLUME TO CAPACITY RATIO

The volume to capacity ratio identifies road segments where current volumes are approaching road capacity. This limitation on road capacity leads to congestion.

Map 16, Page 34: Prominent volume to capacity ratio areas of concern in the AM peak period are the bottlenecks at the two interstate bridges. The AM period shows a high volume to capacity ratio with related poor system performance on portions of I-5, I-205, St. Johns/Ft. Vancouver Way, SR-503, Fourth Plain, 72nd Ave., and 18th Street.

Map 17, Page 35: In the PM period, additional volume to capacity ratio areas of concern showed up. The PM period shows congestion on portions of I-5, I-205, SR-14, SR-500, SR-502, SR-503, Fourth Plain, Andresen Road, 18th Street, and 28th Street.

2. SPEED

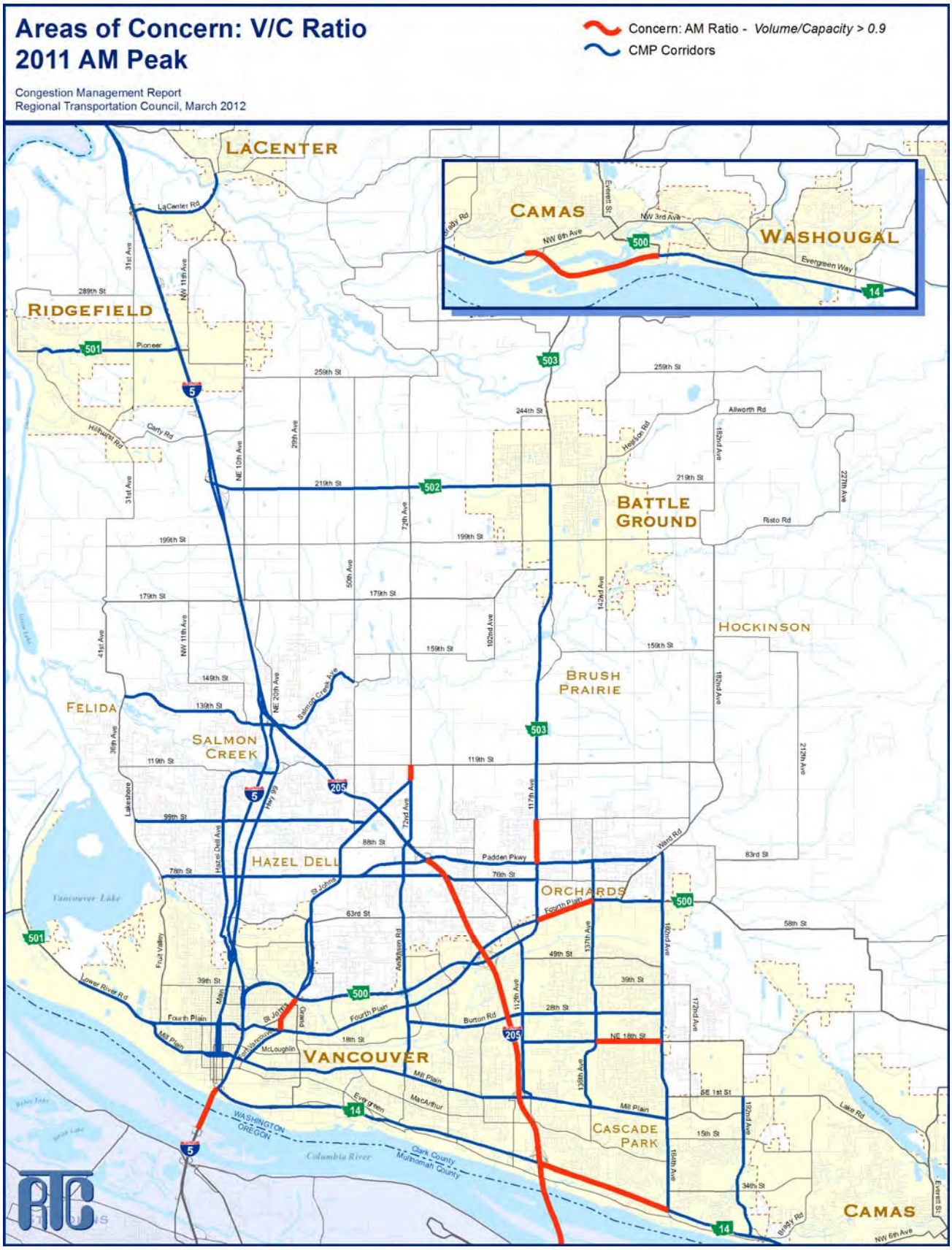
A travel speed lower than 60% of the posted speed limit is an indicator of delay, which can result in congestion.

Often these speed areas of concern occur at locations with multiple traffic signals in close proximity or with intersections experiencing delay of greater than 45 seconds.

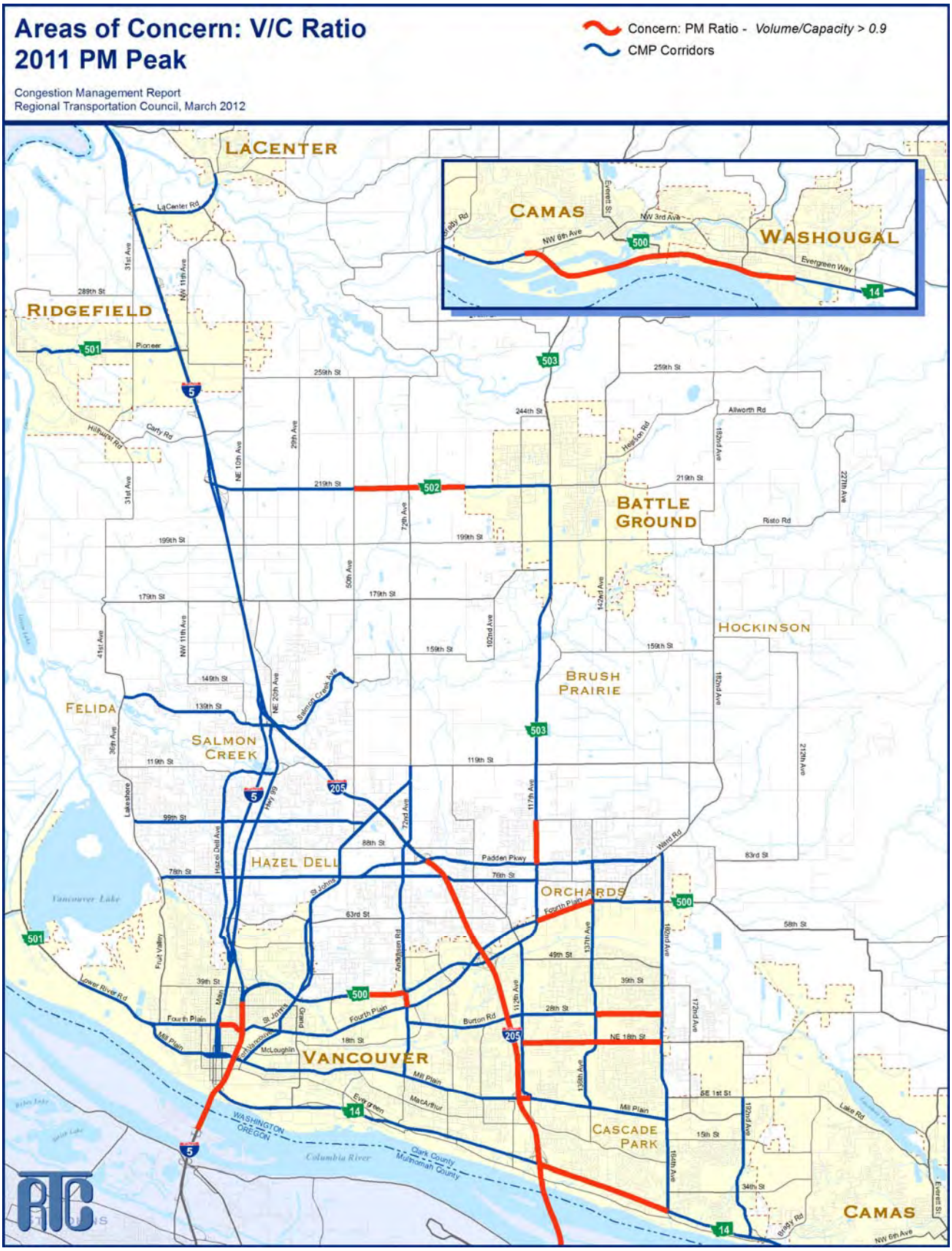
Map 18, Page 36: In the AM period, speed areas of concern occur along portions of I-5, Main Street, Highway 99, Andresen, SR-503, 137th Avenue, Mill Plain, Fourth Plain, 78th Street, Padden Parkway, and 134th Street.

Map 19, Page 37: In the PM period, speed areas of concern occur along portions of most of the congestion management corridors in the Vancouver Urban Area, with the exception of grade-separated facilities (I-5, I-205, and SR-14).

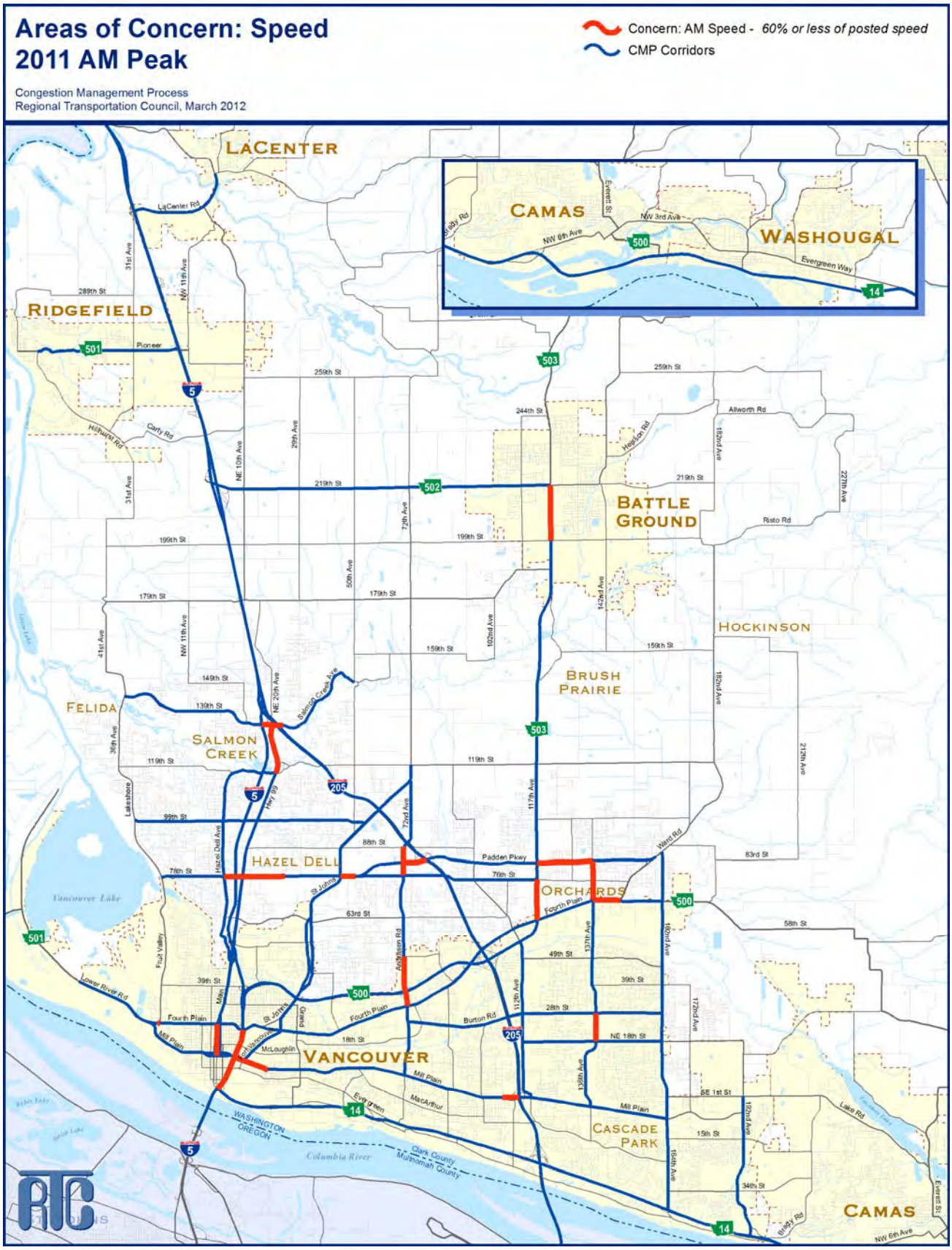
Map 16 – AM Areas of Concern: Volume to Capacity Ratio



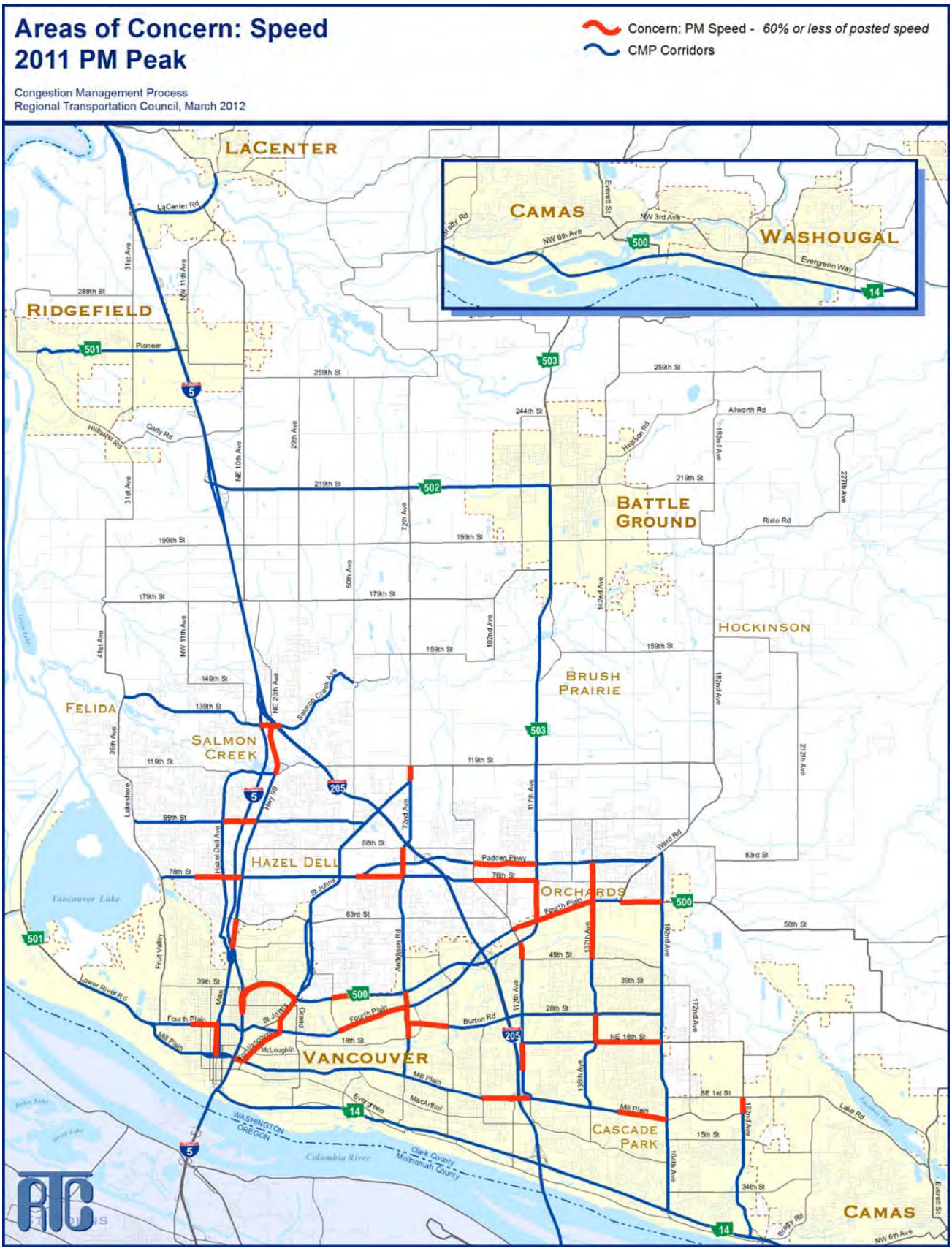
Map 17 – PM Areas of Concern: Volume to Capacity Ratio



Map 18 – AM Areas of Concern: Speed



Map 19 – PM Areas of Concern: Speed



III. STRATEGIES

Because each roadway corridor has its own characteristics, congestion management efforts must be tailored to meet the needs of a roadway. Transportation professionals must employ a variety of strategies to effectively manage congestion.

A. TRANSPORTATION PLANNING EFFORTS

Southwest Washington Regional Transportation Council (RTC) is involved in a number of transportation planning efforts intended to address congestion. The following is a list of current transportation planning efforts:

The **Metropolitan Transportation Plan** for Clark County (MTP) is the most prominent planning document. The plan is designed to be a guide for the effective investment of public funds for regional transportation needs over a twenty-year period. The region uses a wide range of data to develop a regional travel demand forecasting model. The model simulates both current travel demand and also forecasts travel demand twenty years into the future. Using the model, the region can identify where future congestion is most likely to occur.

Transportation System Management and Operations (TSMO) Plan was adopted in June 2011. TSMO focuses on low-cost, quickly implemented transportation improvements that aim to utilize existing transportation facilities more efficiently. TSMO combines advanced technologies, operational policies and procedures, and existing resources to improve coordination and operation of the multimodal transportation network. TSMO project examples include traffic signal integration, ramp metering, access management, traveler information, smart transit management, and coordinated incident response to make the transportation system work better.

The **Columbia River Crossing** project is a bridge, transit, and highway improvement project for the purpose of addressing safety, congestion and mobility problems on I-5 between Washington and Oregon. The CRC Final Environmental Impact Statement was completed and the Record of Decision issued in 2011.

C-TRAN is conducting a Federal Transit Administration **Alternatives Analysis (AA) process in the Fourth Plain corridor**. The AA process will identify the Locally Preferred Alternative for the Fourth Plain corridor. The purpose is to develop an HCT project that will improve trip reliability, reduce travel time, encourage transit use, and create a catalyst for transit-oriented economic development. The Fourth Plain AA process should be completed in 2012.

The **C-TRAN 20-year Transit Development Plan** was adopted in 2010. This planning process is designed to build upon existing service and develop future operating scenarios for public transit. The plan incorporates the recommendations of the High Capacity Transit System Plan.

The **CTR program** is intended to improve transportation system efficiency, conserve energy, and improve air quality by decreasing the number of commute trips made by people driving alone. RTC approved a Regional Commute Trip Reduction Plan and endorsed CTR plans for unincorporated Clark County, Vancouver, Camas, and Washougal. The downtown Vancouver Growth and

Transportation Efficiency Center (GTEC) was certified in 2007.

The **Clark County Freight Mobility Study** (RTC, 2010) provides useful information and analysis designed to inform metropolitan transportation planning, local comprehensive planning, and project design. Study efforts included an evaluation of freight traffic movement, identification of freight system deficiencies, identified future infrastructure needs, and identified policy issues to support freight mobility in Clark County.

The **Human Services Transportation Plan for Clark, Skamania, and Klickitat Counties** summarizes the transportation needs for people who, because of disability, low income, or age, face transportation challenges. It also identifies the transportation activities to respond to these challenges.

The **2011 Safety Management Assessment** for Clark County is intended to be an organized approach to transportation safety. Safety for all modes of travel is an important component of the metropolitan transportation planning process. The purpose of the plan is to consider ways to increase the safety of the transportation system.

B. IDENTIFY AND EVALUATE TRANSPORTATION STRATEGIES

To address transportation issues, agencies and jurisdictions should give consideration to the various strategies identified in this section.

System Preservation and Maintenance. An essential for continued transportation mobility is the preservation and maintenance of the existing roadway, transit, bicycle, and pedestrian systems.

Safety Improvements. It is vital that the region builds and maintains a transportation system that provides a safe and secure means of travel by all modes.

Roadway Improvements. Potential strategies may include adding lanes, adding turn lanes, improving sight distance, adding auxiliary lanes, adding High Occupancy Vehicle (HOV) lanes, grade separation, intersection improvements, roundabouts, and upgrade of roads to urban standards (with bicycle lanes, sidewalks, and transit amenities).

Transit Improvements. Potential strategies may include increases in bus route coverage and frequencies, improved transit amenities, additional park-and-ride lots, and implementation of high capacity transit.

Bicycle and Pedestrian Improvements. Potential strategies may include new sidewalks, new bicycle lanes, separated pathway and trails, bicycle racks and bike lockers at transit centers and other major destinations, pedestrian oriented development, pedestrian and bicycle safety enhancements.

Transportation Demand Management. Potential strategies may include alternative work hours, telecommuting, ridesharing, vanpools, and growth and transportation efficiency centers.

Transportation System Management and Operations (TSMO). Potential strategies may include traffic signal coordination, incident management systems, ramp metering, highway information systems, advanced traveler information system. Operational improvements should be consistent with the TSMO guidance.

Access Management. Potential strategies may include center medians, consolidation of access points, interchange modification, appropriate intersection and interchange spacing, frontage roads, and collector-distributor roads.

Land Use. Potential strategies may include mixed-use development, infill, increased densities, and transit oriented development.

Parking Management. Potential strategies may include enforcement of existing parking regulations, location-specific parking ordinances, and preferred parking for carpool/vanpools.

C. STRATEGY IMPLEMENTATION

RTC's Congestion Management Process provides a tool for monitoring the region's traffic congestion. The CMP provides information to help guide the investment of transportation funding toward improving congestion. The CMP data can also help direct investment to where capacity improvements versus traffic operational and management solutions would be the most effective.

1. OBJECTIVES AND STRATEGIES

Reducing congestion in the region will require accomplishing the following objectives:

- Preservation and maintenance of the existing system
- Improving system performance through operation and management strategies
- Where possible, shifting trips to other modes
- Addition of auto capacity at key bottlenecks

These objectives can be met through implementing the following strategies:

Preservation Strategies

- Preserve and maintain the transportation system that the region already has.

Safety Strategies

- Implementation of safety improvements including those supported in the Safety Management Assessment.

System Performance Strategies

- Implementation of the Transportation System Management and Operations (TSMO) Plan recommendations.
- Implementation of the Communication Master Plan.
- Access Management
- Land Use Planning
- Bottleneck Removal

Multimodal Strategies

- Expansion of the public transit system, including High Capacity Transit.
- Expansion of bicycle and pedestrian facilities.
- Implementation of Transportation Demand Management (TDM) strategies.

Capacity Expansion Strategies

- Expand capacity of the transportation system as identified through the regional transportation planning process.

2. IMPLEMENTATION

In coordination with WSDOT, C-TRAN, and local agencies, RTC utilizes the Congestion Management Process to identify needs. Congestion needs are incorporated into recommendations included in the Metropolitan Transportation Plan for Clark County.

RTC links the development of the Metropolitan Transportation Plan with the Congestion Management Process.

Based on the analysis from the congestion management report, local agencies develop projects that reduce

congestion and improve the operation and safety of the existing system.

Local project priorities are then submitted to RTC and prioritized through the regional Metropolitan Transportation Improvement Program (MTIP) which selects priority projects for implementation.

D. MONITOR STRATEGY EFFECTIVENESS

This report contains data that allows for the continuing development and updating of information to track the performance of the regional transportation system and implemented strategies.

In assessing the degree to which the CMP strategies address congestion issues, projects are tracked through the project implementation process and results are reported back to regional technical committees.

APPENDICES

APPENDIX A. INDIVIDUAL CORRIDOR DATA

Appendix A considers and displays the transportation data by individual segment along each of the congestion management corridors. The detailed data is used to develop the corridor summaries documented in the previous chapters and provides a comprehensive set of transportation data for the individual segments and facilities that comprise the corridors.

The purpose of considering transportation data by individual segments is to identify specific locations where congestion is occurring, which may or may not be affecting the operation of the corridor as a whole.

This section contains detailed transportation data for each of the congestion management corridors, for both the AM and PM peak periods. Information by corridor contains an individual data sheet and a schematic map of the corridor.

The detailed transportation data is provided for the following corridors:

I-5

I-205

St. Johns

Andresen Road/72nd Avenue

SR-503

137th Avenue

162nd/164th Avenue

192nd Avenue

SR-14

Mill Plain Boulevard

Fourth Plain Boulevard

SR-500

78th/Padden Parkway

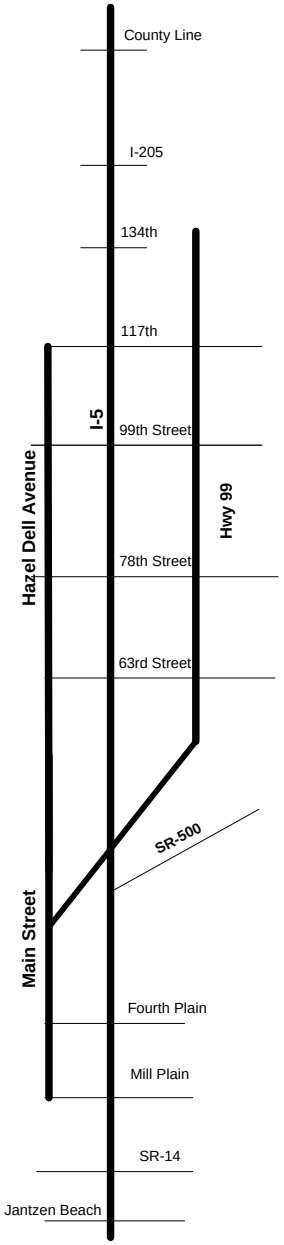
99th Street

28th/18th Streets

134th/139th Streets

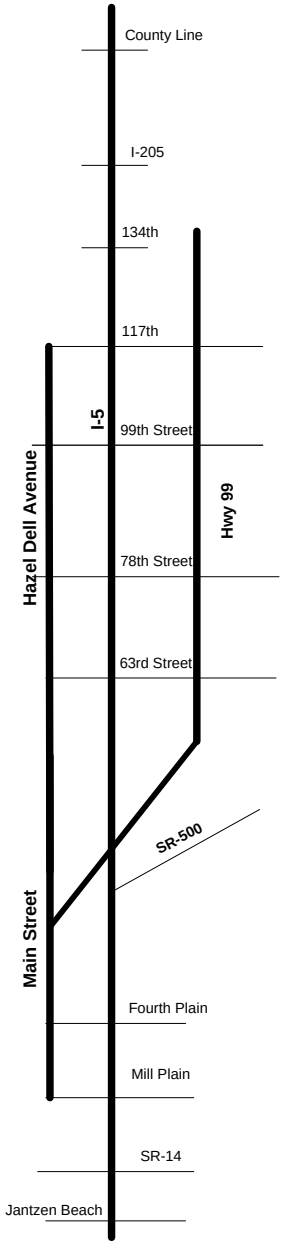
SR-502

SR-501 & La Center Road



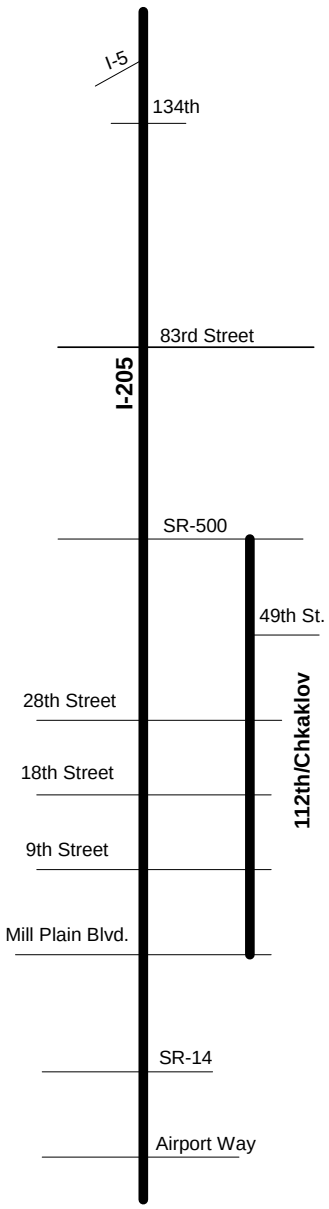
I-5 Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
I-5													
County Line	- 319th St.	3.57	5800	1828	0.32	13%		186	69				
319th St.	- SR 501/Pioneer	2.63	5800	2702	0.47	13%		135	70				
SR 502/219th St.	- 179th St.	2.22	5800	2915	0.50	13%	1.15	122	66				
179th St.	- I-205	1.66	5400	3350	0.62	8%		95	63	47, LC/Rid Connector	30	69	43.5%
		12.46		**3350**	**0.48**	**9%**	**1.15**	**666**	**67**	**47, LC/Rid Conne**	**30**	**69**	**43.5%**
I-5													
I-205	- 134th St.	1.07	3800	1765	0.46	8%		64	60				
134th St.	- 99th St.	1.18	6000	3312	0.55	8%		67	63				
99th St.	- 78th St.	1.03	6000	3802	0.63	6%		60	62	105,134,157,199	599	984	60.9%
78th St.	- Main St.	1.50	6000	3370	0.56	6%		86	63				
		4.78		**3802**	**0.57**	**7%**	**1.10**	**277**	**62**	**105,134,157,199**	**599**	**984**	**60.9%**
Hwy 99													
134th St.	- 117th St.	0.89	1800	758	0.42	9%		140	23				
117th St.	- 99th St.	0.91	1800	393	0.22	7%		131	25				
99th St.	- 78th St.	1.03	1800	245	0.14	6%		150	25				
78th St.	- 63rd St.	0.75	1800	548	0.30	6%	1.15	91	30	37,78	47	456	10.3%
63rd St.	- Ross St.	0.41	800	553	0.69	5%		37	40				
		3.99		**758**	**0.35**	**7%**	**1.15**	**549**	**26**	**37,78**	**47**	**456**	**10.3%**
Hazel Dell													
117th St.	- 99th St.	1.67	900	320	0.36	3%		246	24				
99th St.	- 78th St.	0.99	1700	334	0.20	2%		150	24				
78th St.	- 63rd St.	0.73	900	324	0.36	3%		98	27	32	28	175	16.0%
		3.39		**334**	**0.31**	**3%**	**1.13**	**494**	**25**	**32**	**28**	**175**	**16.0%**
I-5													
Main St.	- 39th St.	0.71	5800	3290	0.57	6%		45	57	105,134,157,190,199	736	1,107	66.5%
39th St.	- 4th Plain	0.73	6800	5270	0.78	6%	1.24	64	41				
4th Plain	- Mill Plain	0.33	6800	4895	0.72	6%		48	25				
Mill Plain	- SR 14	0.66	5400	4524	0.84	6%	1.14	88	27				
SR 14	- Jantzen Beach	1.21	5400	5094	0.94	7%		140	31	4,41,44,47,105,134,1	1324	1,704	77.7%
		3.64		**5270**	**0.81**	**6%**	**1.19**	**385**	**34**	**4,41,44,47,105,13**	**1324**	**1,704**	**77.7%**
Main Street													
Ross St.	- 39th St.	0.83	1700	1238	0.73	3%		61	49				
39th St.	- Fourth Plain	0.69	1400	866	0.62	6%		98	25	37,78	47	456	10.3%
Fourth Plain	- Mill Plain	0.57	900	416	0.46	0%		206	10				
		2.09		**1238**	**0.66**	**4%**	**1.13**	**365**	**21**	**32,37**	**179**	**386**	**46.4%**



I-5 Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
I-5													
County Line	- 319th St.	4.13	5800	2457	0.42	16%		211	70				
319th St.	- SR 501/Pioneer	2.54	5800	3036	0.52	13%		135	68				
SR-501/Pioneer	- SR 502/219th St.	2.98	5800	3153	0.54	13%		160	67				
179th St.	- I-205	1.47	5400	4420	0.82	9%	0.00	86	62	47, LC/Rid Connector	19	115	16.5%
		12.81		**4420**	**0.56**	**12%**	**1.23**	**684**	**67**	**47, LC/Rid Conne**	**19**	**115**	**16.5%**
I-5													
I-205	- 134th St.	0.75	3800	2250	0.59	9%		41	66				
134th St.	- 99th St.	1.92	6000	3000	0.50	9%	1.17	108	64				
99th St.	- 78th St.	1.08	6000	4020	0.67	5%		65	60	105,134,157,199	492	902	54.5%
78th St.	- Main St.	1.33	6000	4660	0.78	6%		84	57				
		5.08		**4660**	**0.65**	**7%**	**1.17**	**298**	**61**	**105,134,157,199**	**492**	**902**	**54.5%**
Hwy 99													
134th St.	- 117th St.	0.89	1800	1038	0.58	2%		192	17				
117th St.	- 99th St.	0.91	1800	766	0.43	2%		124	26				
99th St.	- 78th St.	1.03	1800	870	0.48	2%		140	26				
78th St.	- 63rd St.	0.75	1800	1074	0.60	2%	1.33	143	19	37,78	101	421	24.0%
63rd St.	- Ross St.	0.41	1800	972	0.54	2%		79	19				
		3.99		**1074**	**0.53**	**2%**	**1.33**	**678**	**21**	**37,78**	**101**	**421**	**24.0%**
Hazel Dell													
117th St.	- 99th St.	1.67	900	527	0.59	1%		204	29				
99th St.	- 78th St.	0.99	1700	700	0.41	1%		141	25				
78th St.	- 63rd St.	0.73	900	611	0.68	1%		127	21	32	56	140	40.0%
		3.39		**700**	**0.55**	**1%**	**1.22**	**472**	**26**	**32**	**56**	**140**	**40.0%**
I-5													
Main St.	- SR 500	0.70	5800	4990	0.86	5%		45	56	105,134,157,190,199	541	1,148	47.1%
SR 500	- 4th Plain	0.16	6800	6260	0.92	4%	1.08	11	52				
4th Plain	- Mill Plain	0.97	6800	6243	0.92	4%		65	54				
Mill Plain	- SR 14	0.52	5700	5149	0.90	3%	1.22	34	55				
SR 14	- Jantzen Beach	0.65	5400	4821	0.89	5%		55	43	4,41,44,47,105,134,1	1,346	1,663	80.9%
		3.00		**6260**	**0.90**	**4%**	**1.22**	**210**	**51**	**4,41,44,47,105,13**	**1,346**	**1,663**	**80.9%**
Main Street													
Ross St.	- 39th St.	0.85	1700	641	0.38	3%		97	32				
39th St.	- Fourth Plain	0.69	1400	551	0.39	2%		142	17	37,78	101	421	24.0%
Fourth Plain	- Mill Plain	0.57	900	355	0.39	2%		161	13				
		2.11		**641**	**0.39**	**2%**	**1.22**	**400**	**19**	**32,37**	**252**	**386**	**65.3%**

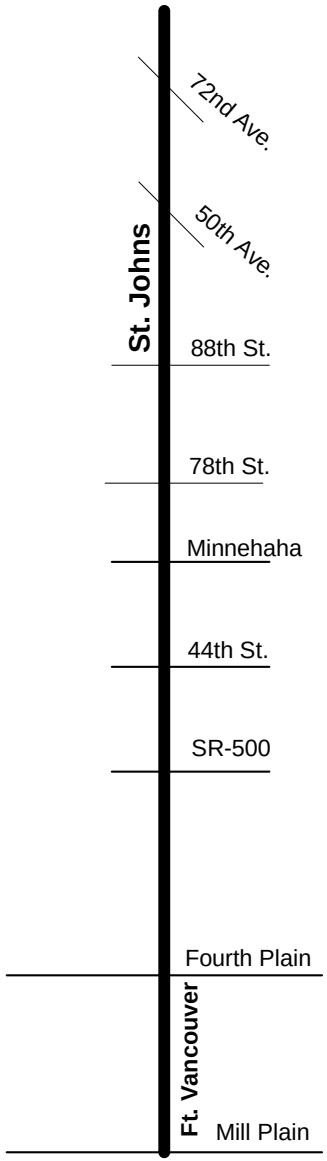


I-205 Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
I-205													
I-5	- 134th St.	0.75	3800	1923	0.51	9%		45	60				
134th St.	- 83rd St.	2.89	3800	2696	0.71	7%		173	60				
83rd St.	- SR 500	1.99	3800	4000	1.05	6%	1.10	135	53				
		5.63		**4000**	**0.85**	**7%**	**1.10**	**353**	**57**	**0**	**0**	**0**	**0.0%**
I-205													
SR 500	- Mill Plain	2.78	5800	5400	0.93	0%	1.08	172	58				
Mill Plain	- SR 14	1.00	6800	6300	0.93	0%	1.13	64	56				
SR 14	- Airport Way	2.65	8000	7500	0.94	4%		187	51	65,164,177	592	861	68.8%
		6.43		**7500**	**0.93**	**4%**	**1.11**	**423**	**55**	**164, 165, 177**	**592**	**861**	**68.8%**
112th Ave. NE / Chkalov Drive / Gher Road													
SR 500	- 49th St.	0.31	1700	1196	0.70	0%		44	25				
49th St.	- 28th St.	0.99	1700	712	0.42	0%		131	27	80	88	140	62.9%
28th St.	- 18th St.	0.49	1700	596	0.35	5%		64	28				
18th St.	- 9th St.	0.50	1700	685	0.40	0%		55	33				
9th St.	- Mill Plain	0.57	1700	918	0.54	0%		97	21				
		2.86		**1196**	**0.48**	**5%**	**1.13**	**391**	**26**	**80**	**88**	**140**	**62.9%**

I-205 Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
I-205													
I-5	- 134th St.	0.79	3800	2149	0.57	10%		48	60				
134th St.	- 83rd St.	3.73	3800	2800	0.74	9%		228	59				
83rd St.	- SR 500	2.27	3800	3800	1.00	9%	1.24	178	46				
		6.79		**3800**	**0.83**	**9%**	**1.24**	**454**	**54**	**N/A**	**0**	**0**	**0.0%**
I-205													
SR 500	- Mill Plain	2.49	5800	5300	0.91	6%	1.23	183	49				
Mill Plain	- SR 14	0.91	6800	6300	0.93	9%	1.19	57	57				
SR 14	- Airport Way	2.03	8000	7300	0.91	4%		202	36	65,164,177	424	820	51.7%
		5.43		**7300**	**0.92**	**6%**	**1.21**	**442**	**44**	**65,164,177**	**424**	**820**	**51.7%**
112th Ave. NE / Chkalov Drive / Gher Road													
SR 500	- 49th St.	0.31	1700	1386	0.82	2%		70	16				
49th St.	- 28th St.	0.99	1700	975	0.57	3%		126	28	80	147	140	105.0%
28th St.	- 18th St.	0.49	1700	939	0.55	1%		75	24				
18th St.	- 9th St.	0.50	1700	866	0.51	1%		320	6				
9th St.	- Mill Plain	0.57	1700	935	0.55	2%		79	26				
		2.86		**1386**	**0.59**	**2%**	**1.22**	**670**	**15**	**80**	**147**	**140**	**105.0%**

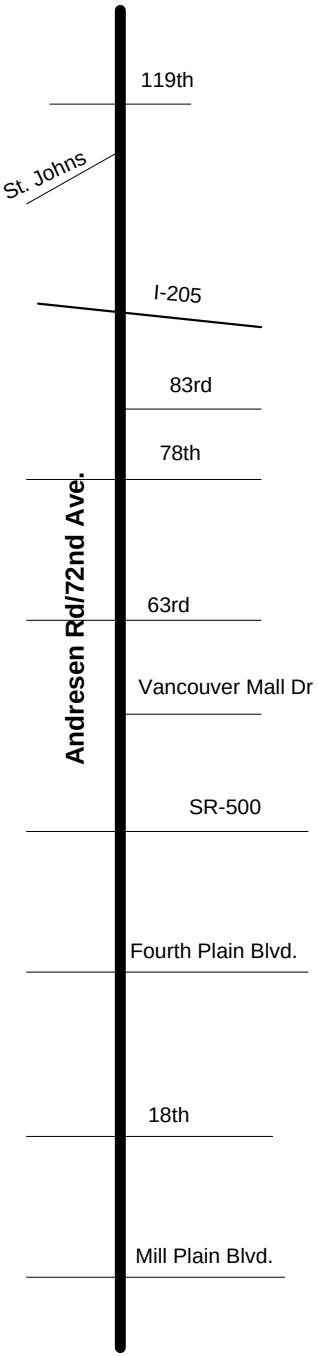


Grand/St. Johns Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
St. Johns Rd.													
NE 72nd Ave.	- 50th Ave.	1.38	1800	337	0.19	3%		112	44				
50th Ave.	- NE 88th St.	0.34	1800	651	0.36	0%		44	28				
NE 88th St.	- NE 78th St.	0.49	1800	896	0.50	6%		70	25				
NE 78th St.	- NE Minnehaha St.	1.06	1800	676	0.38	8%		109	35				
St. Johns Rd./St. James Rd.													
NE Minnehaha St.	- NE 49th St.	0.72	1800	866	0.48	0%		81	32	25	81	105	77.1%
NE 49th St.	- SR 500	0.74	1600	998	0.62	4%		123	22				
St. Johns Blvd.													
SR-500	- Ft. Vancouver	0.44	1000	1064	1.06	0%		63	25				
Ft. Vancouver Way													
St. Johns	- Fourth Plain	0.22	700	640	0.91	0%		43	18	25	94	105	89.5%
Fourth Plain	- Mill Plain	0.86	1200	514	0.43	0%		142	22				
		6.25		**1064**	**0.52**	**7%**	**1.17**	**787**	**29**	**25**	**94**	**105**	**89.5%**

Grand/St. Johns Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
St. Johns Rd.													
NE 72nd Ave.	- 50th Ave.	1.38	1800	358	0.20	4%		141	35				
50th Ave.	- NE 88th St.	0.34	1800	737	0.41	3%		33	37				
NE 88th St.	- NE 78th St.	0.49	1800	853	0.47	3%		81	22				
NE 78th St.	- NE Minnehaha St.	1.07	1800	746	0.41	3%		133	29				
St. Johns Rd./St. James Rd.													
NE Minnehaha St.	- NE 44th St.	0.93	1800	807	0.45	3%		112	30	25	99	105	94.3%
NE 44th St.	- SR 500	0.54	1600	798	0.50	3%		59	33				
St. Johns Blvd.													
SR 500	- Ft. Vancouver	0.44	1000	822	0.82	2%		142	11				
Ft. Vancouver Way													
St. Johns	- Fourth Plain	0.22	700	361	0.52	2%		45	17	25	110	105	104.8%
Fourth Plain	- Mill Plain	0.86	1200	523	0.44	2%		187	17				
		6.27		**853**	**0.45**	**3%**	**1.27**	**933**	**24**	**25**	**99**	**105**	**94.3%**

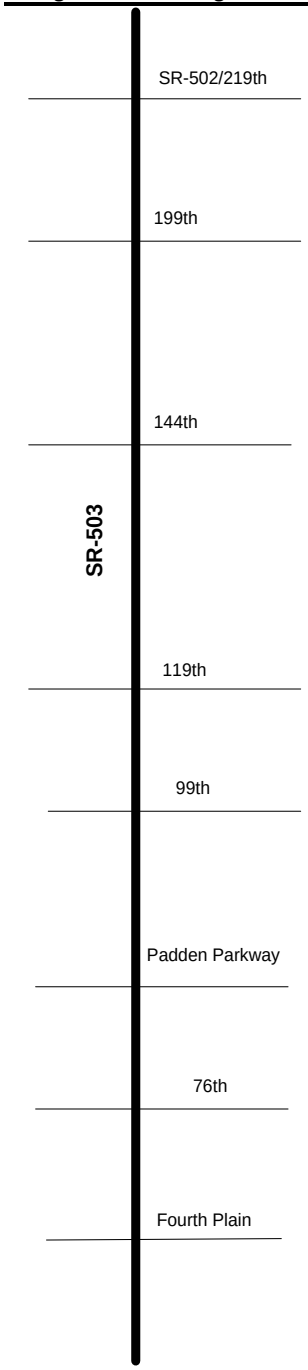


Andresen Rd./72nd Av. Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
Andresen Rd. / N.E. 72nd Avenue.													
119th St.	- St. Johns Rd.	0.31	800	845	1.06	4%		31	36				
St. Johns Rd.	- 88th St.	1.21	1800	535	0.30	5%		115	38				
88th St.	- Padden Parkway	0.27	1800	1064	0.59	4%		37	26				
Padden Parkway	- 78th St.	0.24	1800	492	0.27	0%		67	13				
78th St.	- 63rd St.	0.76	1800	501	0.28	7%		99	28	78	26	70	37.1%
63rd St.	- Vancouver Mall Dr.	0.70	1800	717	0.40	4%		81	31				
Vancouver Mall	- SR 500	0.62	1800	1027	0.57	0%		96	23				
		4.11		**1064**	**0.47**	**4%**	**1.13**	**526**	**28**	**78**	**26**	**70**	**37.1%**
Andresen Rd.													
SR 500	- Fourth Plain Blvd.	0.26	1800	1114	0.62	4%		46	20				
Fourth Plain Blvd.	- 18th St.	0.55	1800	683	0.38	5%		78	25				
18th St.	- Mill Plain Blvd.	0.68	1800	546	0.30	0%		108	23	32	0	140	0.0%
		1.49		**1114**	**0.42**	**4%**	**1.13**	**232**	**23**	**32**	**0**	**140**	**0.0%**

Andresen Rd./72nd Av. Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
Andresen Rd. / N.E. 72nd Avenue.													
119th St.	- St. Johns Rd.	0.31	1800	1006	0.56	4%		61	18				
St. Johns Rd.	- 88th St.	1.21	1800	748	0.42	3%		110	40				
88th St.	- Padden Parkway	0.27	1800	1490	0.83	3%		58	17				
Padden Parkway	- 78th St.	0.24	1800	889	0.49	3%		114	8				
78th St.	- 63rd St.	0.76	1800	792	0.44	3%		107	26	78	74	70	105.7%
63rd St.	- Vancouver Mall Dr.	0.70	1800	1015	0.56	3%		95	27				
Vancouver Mall Dr.	- SR 500	0.62	1800	1260	0.70	3%		85	26				
		4.11		**1490**	**0.56**	**3%**	**1.22**	**630**	**23**	**78**	**74**	**70**	**105.7%**
Andresen Rd.													
SR 500	- Fourth Plain Blvd.	0.26	1800	1714	0.95	3%		54	17				
Fourth Plain Blvd.	- 18th St.	0.55	1800	1119	0.62	2%		194	10				
18th St.	- Mill Plain Blvd.	0.68	1800	747	0.42	2%		87	28	32	83	140	59.3%
		1.49		**1714**	**0.65**	**2%**	**1.22**	**335**	**16**	**32**	**83**	**140**	**59.3%**

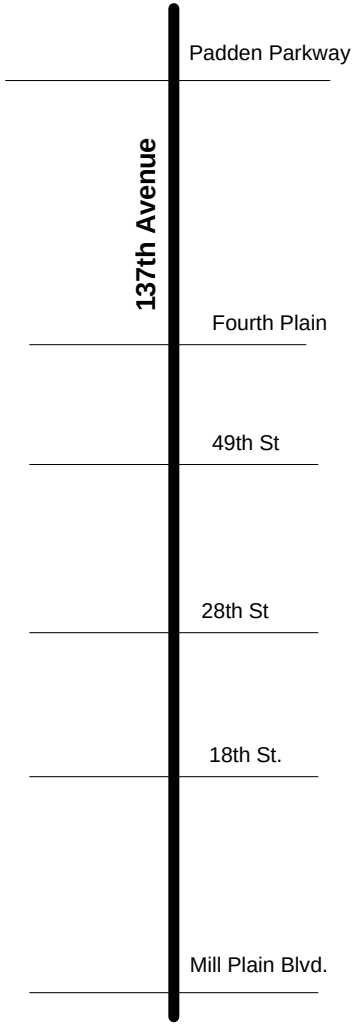


SR-503 Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
SR 503													
119th St.	- 99th St.	0.99	1800	1477	0.82	7%		101	35				
99th St.	- Padden Parkway	0.77	1800	1672	0.93	7%		95	29	7,72	46	140	32.9%
Padden Parkway	- 76th St.	0.30	1800	1279	0.71	7%		43	25				
76th St.	- Fourth Plain/SR 500	0.72	1800	1272	0.71	0%	1.06	210	12				
		2.78		**1672**	**0.82**	**7%**	**1.06**	**449**	**22**	**7,72**	**46**	**140**	**32.9%**
SR 503													
SR-502	- 199th St.	0.99	1800	1202	0.67	5%		130	27	7,72	46	140	32.9%
199th St.	- 149th St.	2.54	1800	1419	0.79	4%	1.16	176	52				
149th St.	- 119th St.	1.49	1800	1547	0.86	3%		107	50				
		5.02		**1547**	**0.79**	**4%**	**1.16**	**413**	**44**	**7,72**	**46**	**140**	**32.9%**

SR-503 Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
SR 503													
119th St.	- 99th St.	0.99	1800	1474	0.82	4%		96	37				
99th St.	- Padden Parkway	0.77	1800	1774	0.99	3%		75	37	7,72	37	140	26.4%
Padden Parkway	- 76th St.	0.30	1800	1517	0.84	2%		37	29				
76th St.	- Fourth Plain/SR 500	0.72	1800	1536	0.85	2%	1.23	188	14				
		2.78		**1774**	**0.88**	**3%**	**1.23**	**396**	**25**	**7,72**	**37**	**140**	**26.4%**
SR 503													
SR-502	- 199th St.	0.99	1800	1347	0.75	4%		130	27	7,72	37	140	26.4%
199th St.	- 149th St.	2.54	1800	1404	0.78	4%	1.26	222	41				
149th St.	- 119th St.	1.49	1800	1583	0.88	4%		116	46				
		5.02		**1583**	**0.81**	**4%**	**1.23**	**468**	**39**	**7,72**	**37**	**140**	**26.4%**

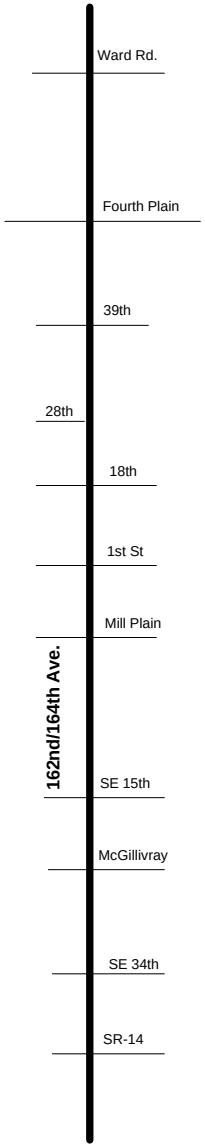


136/137/138th Avenue Corridor

AM Peak	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
	Length	Capacity	AM - Nouthbound/Eastbound									
136/137/138th Ave.												
Padden Parkway - Fourth Plain	0.70	900	401	0.45	5%		156	16				
Fourth Plain - 49th St.	1.04	800	403	0.50	0%		111	34				
49th St. - 28th St.	1.00	800	530	0.66	0%		161	22				
28th St. - 18th St.	0.49	1800	771	0.43	4%		110	16	80	111	304	36.5%
18th St. - Mill Plain	1.27	1700	688	0.40	0%		188	24				
	4.50		**771**	**0.48**	**4%**	**1.13**	**726**	**22**	**80**	**111**	**304**	**36.5%**

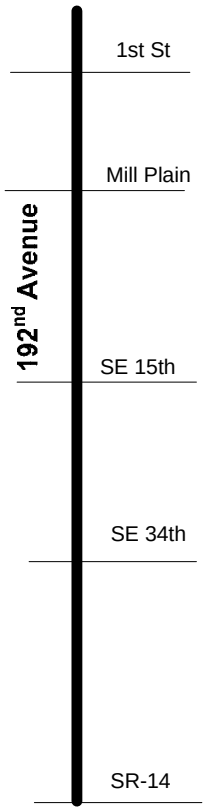
136/137/138th Avenue Corridor

PM Peak	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
	Length	Capacity	PM - Nouthbound/Eastbound									
136/137/138th Ave.												
Padden Parkway - Fourth Plain	0.70	900	550	0.61	3%		186	14				
Fourth Plain - 49th St.	1.04	800	555	0.69	2%		148	25				
49th St. - 28th St.	1.00	800	639	0.80	5%		149	24				
28th St. - 18th St.	0.49	1800	956	0.53	2%		109	16	80	180	304	59.2%
18th St. - Mill Plain	1.27	1700	1079	0.63	2%		185	25				
	4.50		**1079**	**0.66**	**3%**	**1.22**	**777**	**22**	**80**	**180**	**304**	**59.2%**



162nd/164th Avenue Corridor													
AM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**AM - Nouthbound/Eastbound**									
162nd/164th Ave.												
Ward Rd. - SR 500	0.87	1800	720	0.40	7%		92	34				
SR 500 - 39th St.	1.49	1800	839	0.47	7%		143	38				
39th St. - 28th St.	0.51	1800	904	0.50	5%		67	27				
28th St. - 18th St.	0.49	1800	1078	0.60	6%		63	28	30	77	164	47.0%
18th St. - 1st St.	1.01	2400	1018	0.42	5%		90	40				
1st St. - Mill Plain	0.39	2400	980	0.41	6%		44	32				
	4.76		**1078**	**0.46**	**6%**	**1.13**	**499**	**34**	**30**	**77**	**164**	**47.0%**
162nd/164th Ave.												
Mill Plain - 15th St.	0.36	2400	1039	0.43	6%		37	35				
15th St. - McGillvray	0.40	2400	955	0.40	6%	1.14	40	36				
McGillvray - 34th St.	0.52	2400	1382	0.58	5%		46	41	30,37	140	410	34.1%
34th St. - SR 14	0.34	2400	1394	0.58	3%		38	32				
	1.62		**1394**	**0.51**	**5%**	**1.14**	**161**	**36**	**30,37**	**140**	**410**	**34.1%**

162nd/164th Avenue Corridor												
PM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**PM - Nouthbound/Eastbound**									
162nd/164th Ave.												
Ward Rd. - Fourth Plain	0.87	1800	881	0.49	3%		94	33				
Fourth Plain - 39th St.	1.49	1800	1250	0.69	2%		182	29				
39th St. - 28th St.	0.51	1800	1113	0.62	2%		43	43				
28th St. - 18th St.	0.49	1800	1293	0.72	3%		45	39	30	79	164	48.2%
18th St. - 1st St.	1.01	2400	1346	0.56	3%		91	40				
1st St. - Mill Plain	0.39	2400	1117	0.47	2%		48	29				
	4.76		**1346**	**0.61**	**3%**	**1.22**	**503**	**34**	**30**	**79**	**164**	**48.2%**
162nd/164th Ave.												
Mill Plain - 15th St.	0.36	2400	1406	0.59	2%		36	36				
15th St. - McGillvray	0.40	2400	1447	0.60	3%	1.27	43	33				
McGillvray - 34th St.	0.52	2400	1668	0.70	2%		51	37	30,37	190	410	46.3%
34th St. - SR 14	0.38	2400	1732	0.72	2%		49	28				
	1.66		**1732**	**0.66**	**2%**	**1.27**	**179**	**33**	**30,37**	**190**	**410**	**46.3%**



192nd Avenue Corridor													
AM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Southbound/Westbound**									
192nd Ave.													
SE 1st St.	- Mill Plain	0.30	1800	463	0.26	4%		35	31				
Mill Plain	- SE 15th St.	0.47	1800	671	0.37	4%		55	31				
SE 15th St.	- 34th St.	0.93	1800	488	0.27	4%		130	26				
34th St.	- SR 14	0.91	1800	1268	0.70	4%		110	30				
		2.61		**1268**	**0.53**	**4%**	**1.13**	**330**	**28**	**N/A**	**0**	**0**	**0.0%**

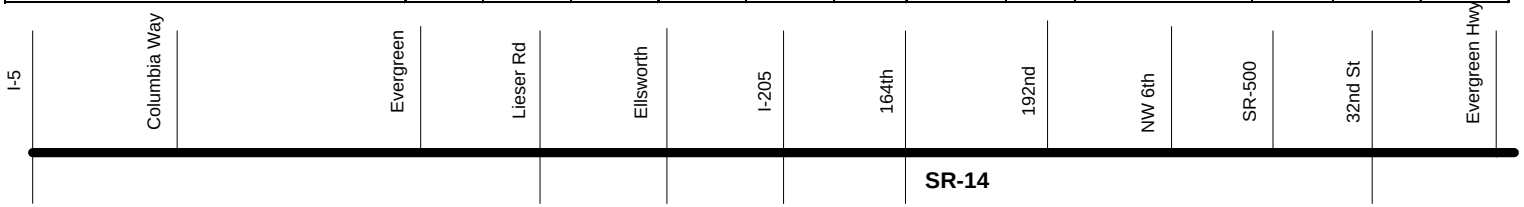
192nd Avenue Corridor													
PM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Southbound/Westbound**									
192nd Ave.													
SE 1st St.	- Mill Plain	0.30	1800	684	0.38	2%		52	21				
Mill Plain	- SE 15th St.	0.47	1800	833	0.46	3%		63	27				
SE 15th St.	- 34th St.	0.93	1800	844	0.47	2%		97	35				
34th St.	- SR 14	0.91	1800	1154	0.64	2%		127	26				
		2.61		**1154**	**0.53**	**2%**	**1.22**	**339**	**28**	**N/A**	**0**	**0**	**0.0%**

SR-14 Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
SR 14													
I-5	- Columbia Way	1.89	3800	2218	0.58	4%		124	55				
Columbia Way	- Evergreen Blvd.	1.70	3800	2902	0.76	0%	1.09	106	58				
Evergreen Blvd.	- Lieser Rd.	0.84	3800	2980	0.78	0%		52	58	41	15	41	36.6%
Lieser Rd.	- Ellsworth Rd.	0.76	3800	3220	0.85	0%		47	58				
Ellsworth Rd.	- I-205	0.77	3800	2340	0.62	4%		47	59				
		5.96		**3220**	**0.72**	**4%**	**1.09**	**376**	**57**	**41**	**15**	**41**	**36.6%**
SR 14													
I-205	- 164th Ave.	2.76	3800	3470	0.91	4%	1.04	252	39	41,65,164	62	820	7.6%
		2.76		**3470**	**0.91**	**4%**	**1.04**	**252**	**39**	**41,65,164**	**62**	**820**	**7.6%**
SR 14													
164th Ave.	- 192nd Ave.	1.40	5000	2610	0.52	0%		122	41				
192nd Ave.	- 6th Ave. NW	2.06	3800	1984	0.52	0%	1.10	125	59	41	59	181	32.6%
6th Ave. NW	- SR 500	2.13	1200	1316	1.10	8%		148	52				
SR 500	- 32nd St.	2.39	1200	999	0.83	4%		231	37				
32nd St.	- Evergreen Hwy.	1.82	900	190	0.21	10%		124	53				
		9.80		**2610**	**0.69**	**7%**	**1.10**	**750**	**47**	**41**	**59**	**181**	**32.6%**

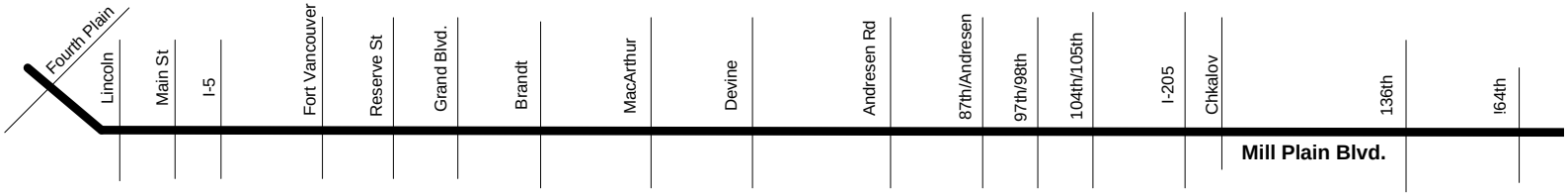
SR-14 Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
SR 14													
I-5	- Columbia Way	0.67	3800	2582	0.68	4%		42	57				
Columbia Way	- Evergreen Blvd.	2.31	3800	2927	0.77	4%	1.15	137	61				
Evergreen Blvd.	- Lieser Rd.	1.12	3800	3070	0.81	4%		71	57	41	42	140	30.0%
Lieser Rd.	- Ellsworth Rd.	1.12	3800	3180	0.84	4%		74	54				
Ellsworth Rd.	- I-205	0.77	3800	2600	0.68	3%		47	59				
		5.99		**3180**	**0.77**	**4%**	**1.15**	**371**	**58**	**41**	**42**	**140**	**30.0%**
SR 14													
I-205	- 164th Ave.	2.03	3800	3790	1.00	3%	1.11	200	37	41,65,164	342	738	46.3%
		2.03		**3790**	**1.00**	**3%**	**1.11**	**200**	**37**	**41,65,164**	**342**	**738**	**46.3%**
SR 14													
164th Ave.	- 192nd Ave.	1.68	5000	2650	0.53	5%		101	60				
192nd Ave.	- 6th Ave. NW	2.07	3800	2007	0.53	5%	1.21	122	61	41	36	140	25.7%
6th Ave. NW	- SR 500	2.56	1200	1291	1.08	8%		176	52				
SR 500	- 32nd St.	2.39	1200	1233	1.03	5%		193	45				
32nd St.	- Evergreen Hwy.	1.82	900	200	0.22	10%		130	50				
		10.52		**2650**	**0.74**	**6%**	**1.21**	**722**	**52**	**41**	**36**	**140**	**25.7%**



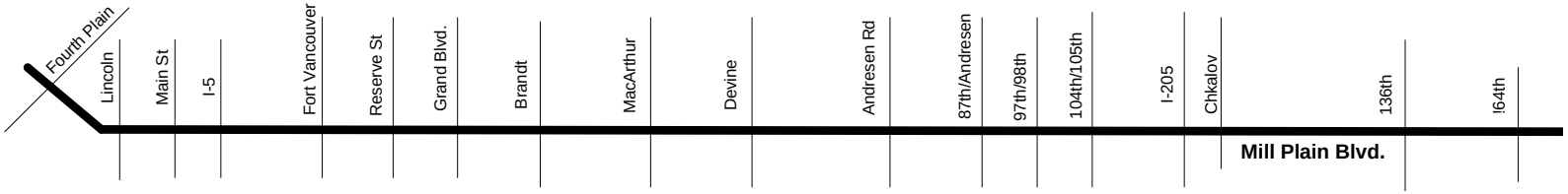
Mill Plain Blvd. Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
Mill Plain/SR 501													
I-5	- Main St.	0.33	2400	1179	0.49	9%		60	20				
Main St.	- Lincoln	0.57	2400	826	0.34	16%		90	23	25	45	140	32.1%
Lincoln	- Fourth Plain	0.82	1800	356	0.20	26%	1.10	87	34				
		1.72		**1179**	**0.36**	**15%**	**1.10**	**237**	**26**	**25**	**45**	**140**	**32.1%**
Mill Plain													
I-5	- Ft. Vancouver	0.17	1800	635	0.35	2%		31	20				
Ft. Vancouver	- Reserve St.	0.46	1800	584	0.32	3%		82	20				
Reserve St.	- Grand Blvd.	0.57	1800	527	0.29	1%		58	35	37	280	246	113.8%
Grand Blvd.	- Brandt Rd.	0.57	1800	527	0.29	6%		56	37				
Brandt Rd.	- MacArthur Blvd.	0.50	1800	570	0.32	3%		50	36				
MacArthur Blvd.	- Devine Rd.	0.24	1800	502	0.28	4%		30	29				
Devine Rd.	- Andresen Rd.	0.58	1800	720	0.40	3%	1.10	55	38				
Andresen Rd.	- 87th/Leiser Rd.	0.89	1800	568	0.32	3%		87	37	37	205	246	83.3%
87th/Leiser Rd.	- 97/98th Ave.	0.52	1800	689	0.38	3%		68	28				
97/98th Ave.	- 104/105th Ave.	0.36	1800	772	0.43	3%		38	34				
104/105th Ave.	- I-205	0.29	1800	853	0.47	3%		70	15				
		5.15		**853**	**0.35**	**3%**	**1.10**	**625**	**30**	**37**	**205**	**246**	**83.3%**
Mill Plain													
I-205	- Chkalov Drive	0.21	3000	2372	0.79	0%		19	40	37	158	246	64.2%
Chkalov Drive	- 124th Ave.	0.48	2400	1437	0.60	0%	1.14	55	31				
124th Ave.	- 136th Ave.	0.60	2400	1189	0.50	0%		91	24				
136th Ave.	- Park Crest Ave.	0.49	2400	1286	0.54	0%		47	38				
Park Crest Ave.	- 164th Ave.	0.88	2400	887	0.37	5%		110	29				
		2.66		**2372**	**0.54**	**5%**	**1.14**	**322**	**30**	**37**	**116**	**240**	**48.3%**



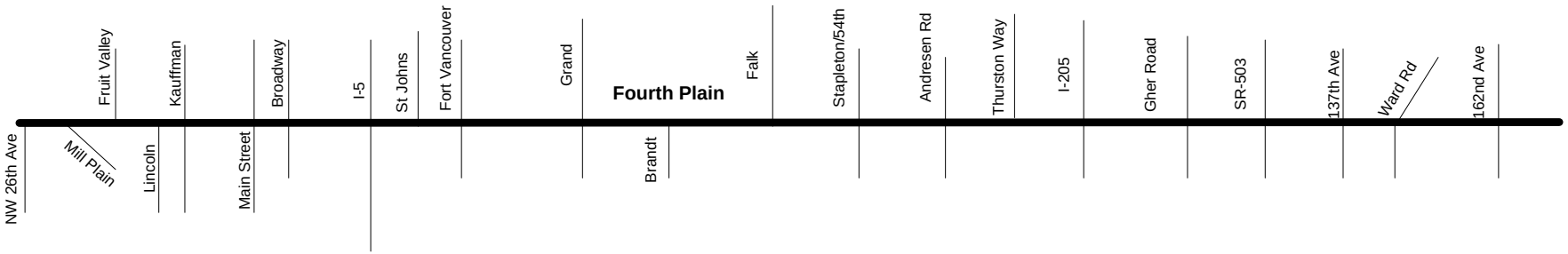
Mill Plain Blvd. Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
Mill Plain/SR 501													
I-5	- Main St.	0.32	2400	1638	0.68	2%		40	29				
Main St.	- Lincoln	0.63	2400	1001	0.42	9%		101	22	25	48	105	45.7%
Lincoln	- Fourth Plain	0.76	1800	368	0.20	13%	1.13	74	37				
		1.71		**1638**	**0.47**	**6%**	**1.13**	**215**	**29**	**25**	**48**	**105**	**45.7%**
Mill Plain													
I-5	- Ft. Vancouver	0.17	1800	1180	0.66	1%		34	18				
Ft. Vancouver	- Reserve St.	0.46	1800	705	0.39	2%		49	34				
Reserve St.	- Grand Blvd.	0.57	1800	611	0.34	1%		80	26	37	227	246	92.3%
Grand Blvd.	- Brandt Rd.	0.57	1800	602	0.33	2%		55	37				
Brandt Rd.	- MacArthur Blvd.	0.50	1800	714	0.40	2%		56	32				
MacArthur Blvd.	- Devine Rd.	0.24	1800	584	0.32	1%		27	32				
Devine Rd.	- Andresen Rd.	0.58	1800	861	0.48	1%	1.23	58	36				
Andresen Rd.	- 87th Ave.	0.89	1800	898	0.50	1%		86	37	37	221	246	89.8%
87th Ave.	- 98th Ave.	0.52	1800	993	0.55	1%		83	23				
98th Ave.	- 105th Ave.	0.40	1800	940	0.52	1%		178	8				
105th Ave.	- I-205	0.25	1800	1192	0.66	1%		59	15				
		5.15		**1192**	**0.47**	**1%**	**1.23**	**765**	**24**	**37**	**221**	**246**	**89.8%**
Mill Plain													
I-205	- Chkalov Drive	0.21	3000	2934	0.98	1%		81	9	37	187	246	76.0%
Chkalov Drive	- 124th Ave.	0.48	2400	1955	0.81	2%	1.30	88	20				
124th Ave.	- 136th Ave.	0.60	2400	1754	0.73	2%		68	32				
136th Ave.	- Park Crest Ave.	0.49	2400	1790	0.75	2%		72	25				
Park Crest Ave.	- 164th Ave.	0.88	2400	1685	0.70	2%		167	19				
		2.66		**2934**	**0.77**	**2%**	**1.30**	**476**	**20**	**37**	**187**	**240**	**77.9%**



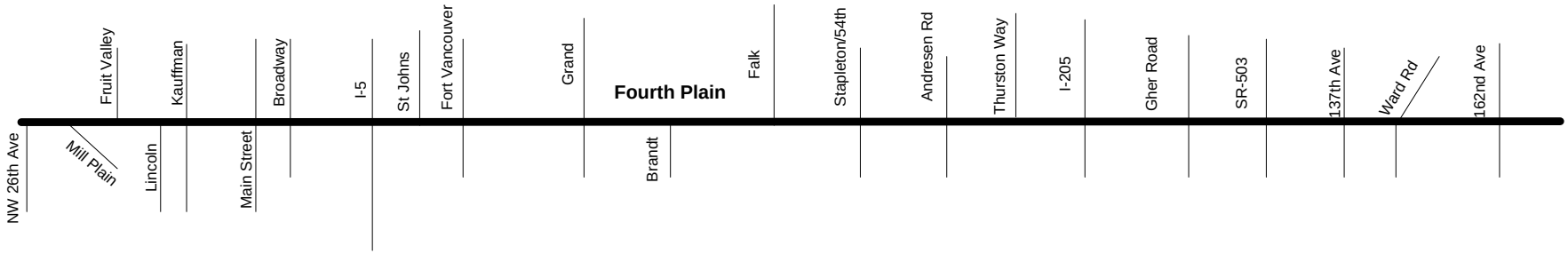
Fourth Plain Blvd. Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	AM - Nouthbound/Eastbound									
Fourth Plain/SR 501													
I-5	- Broadway	0.49	900	638	0.71	9%		90	20	4	269	328	82.0%
Broadway	- Kaufman	0.45	900	547	0.61	13%		56	29				
Kaufman	- Fruit Valley Rd.	0.56	900	349	0.39	15%	1.09	66	31				
Fruit Valley Rd.	- Mill Plain	0.14	900	553	0.61	10%	1.03	31	16				
Mill Plain	- Port of Vancouver	0.20	900	402	0.45	36%		16	45				
		1.84		**638**	**0.58**	**15%**	**1.06**	**259**	**26**	**4**	**269**	**328**	**82.0%**
Fourth Plain													
I-5	- St. Johns Blvd.	0.36	1800	456	0.25	0%		46	28				
St. Johns Blvd.	- Ft. Vancouver	0.34	1800	496	0.28	0%		42	29				
Ft. Vancouver	- Grand Blvd.	0.29	1800	460	0.26	4%		44	24	4,39,44	335	538	62.3%
Grand Blvd.	- Brandt Rd.	0.56	1800	522	0.29	0%		84	24				
Brandt Rd.	- Falk Rd.	0.21	1700	455	0.27	0%		22	34				
Falk Rd.	- Stapleton Rd.	0.49	1700	403	0.24	0%		68	26				
Stapleton Rd.	- Andresen Rd.	0.79	1700	698	0.41	6%	1.16	105	27				
		3.04		**698**	**0.32**	**5%**	**1.16**	**411**	**27**	**4,39,44**	**335**	**538**	**62.3%**
Fourth Plain													
Andresen Rd.	- Thurston Way	0.92	1800	530	0.29	5%		135	25				
Thurston Way	- I-205	0.77	1800	511	0.28	4%		87	32				
I-205	- Gher Rd.	0.68	1800	427	0.24	7%		75	33	4,7,44,80	416	702	59.3%
Gher Rd.	- SR 503	0.45	1800	515	0.29	0%		62	26				
		2.82		**530**	**0.28**	**5%**	**1.13**	**359**	**28**	**4,7,44,80**	**416**	**702**	**59.3%**
Fourth Plain													
SR 503	- 137th Ave.	1.06	1800	1632	0.91	3%		135	28	44,72	31	234	13.2%
137th Ave.	- Ward Rd.	0.49	1800	1179	0.66	0%		62	28				
Ward Rd.	- 162nd Ave.	0.73	1800	700	0.39	3%		71	37				
		2.28		**1632**	**0.76**	**3%**	**1.13**	**268**	**31**	**44,72**	**31**	**234**	**13.2%**



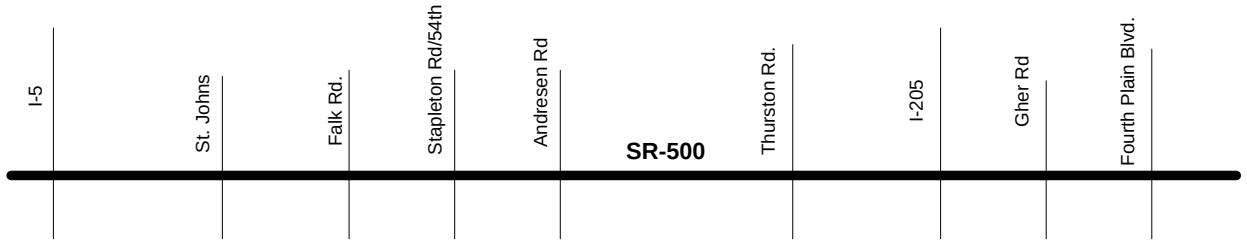
Fourth Plain Blvd. Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
Fourth Plain/SR 501													
I-5	- Broadway	0.44	900	808	0.90	4%		52	30	4	331	328	100.9%
Broadway	- Kaufman	0.50	900	603	0.67	5%		144	13				
Kaufman	- Fruit Valley Rd.	0.56	900	366	0.41	5%	1.22	56	36				
Fruit Valley Rd.	- Mill Plain Blvd.	0.14	900	480	0.53	5%		20	25				
Mill Plain Blvd.	- NW 26th Av.	0.19	900	387	0.43	7%	1.18	49	14				
		1.83		**808**	**0.67**	**5%**	**1.20**	**321**	**21**	**4**	**331**	**328**	**100.9%**
Fourth Plain													
I-5	- St. Johns Blvd.	0.36	1800	760	0.42	2%		43	30				
St. Johns Blvd.	- Ft. Vancouver	0.34	1800	691	0.38	2%		61	20				
Ft. Vancouver	- Grand Blvd.	0.29	1800	766	0.43	2%		66	16	4,39,44	426	497	85.7%
Grand Blvd.	- Brandt Rd.	0.56	1800	741	0.41	2%		88	23				
Brandt Rd.	- Falk Rd.	0.21	1700	863	0.51	2%		29	26				
Falk Rd.	- Stapleton Rd.	0.49	1700	808	0.48	2%		74	24				
Stapleton Rd.	- Andresen Rd.	0.79	1700	1192	0.70	2%	1.34	116	25				
		3.04		**1192**	**0.53**	**2%**	**1.34**	**477**	**23**	**4,39,44**	**426**	**497**	**85.7%**
Fourth Plain													
Andresen Rd.	- Thurston Way	0.92	1800	1006	0.56	2%		119	28				
Thurston Way	- I-205 Mid	0.77	1800	1114	0.62	2%		80	35				
I-205 Mid	- Gher Rd.	0.68	1800	883	0.49	2%		122	20	4,7,44,80	584	661	88.4%
Gher Rd.	- SR 503	0.45	1800	942	0.52	2%		142	11				
		2.82		**1114**	**0.56**	**2%**	**1.22**	**463**	**22**	**4,7,44,80**	**584**	**661**	**88.4%**
Fourth Plain													
SR 503	- 137th Ave.	1.06	2000	1967	0.98	3%		162	24	44,72	49	193	25.4%
137th Ave.	- Ward Rd.	0.49	1800	1302	0.72	2%		47	38				
Ward Rd.	- 162nd Ave.	0.73	1800	1013	0.56	2%		132	20				
		2.28		**1967**	**0.85**	**2%**	**1.22**	**341**	**24**	**44,72**	**49**	**193**	**25.4%**

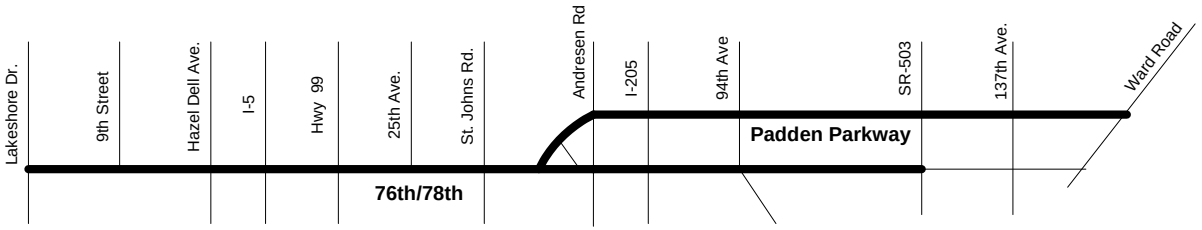


SR-500 Corridor													
AM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Nouthbound/Eastbound**									
SR 500													
I-5	- St. Johns/Grand	1.20	2400	1866	0.78	5%		82	53				
St. Johns/Grand	- Falk Rd.	0.65	2400	2091	0.87	4%		49	48	190	63	82	76.8%
Falk Rd.	- Stapleton Rd./54th	0.57	2400	2135	0.89	0%		49	42				
Stapleton Rd./54th	- Andresen Rd.	1.13	2400	1821	0.76	0%	1.14	89	46				
		3.55		**2135**	**0.81**	**5%**	**1.14**	**269**	**48**	**190**	**63**	**82**	**76.8%**
SR 500													
Andresen Rd.	- Thurston Way	0.66	4000	2370	0.59	0%		42	57				
Thurston Way	- I-205	0.52	4800	2829	0.59	3%		33	57				
I-205	- Gher Rd.	1.00	4000	3493	0.87	5%		67	54				
Gher Rd.	- SR 503	0.22	5800	2277	0.39	0%		18	44				
		2.40		**3493**	**0.72**	**4%**	**1.13**	**160**	**54**	**N/A**	**0**	**0**	**0.0%**

SR-500 Corridor													
PM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**PM - Nouthbound/Eastbound**									
SR 500													
I-5	- St. Johns/Grand	1.09	2400	1919	0.80	3%		152	26				
St. Johns/Grand	- Falk Rd.	0.65	2400	2088	0.87	3%		55	43	190	39	164	23.8%
Falk Rd.	- Stapleton Rd./54th	0.57	2400	2112	0.88	2%		67	31				
Stapleton Rd./54th	- Andresen Rd.	0.26	2400	2201	0.92	2%	1.21	18	52				
		2.57		**2201**	**0.85**	**2%**	**1.21**	**292**	**32**	**190**	**39**	**164**	**23.8%**
SR 500													
Andresen Rd.	- Thurston Way	0.90	4000	2558	0.64	2%		55	59				
Thurston Way	- I-205	0.81	4800	3064	0.64	2%		50	58				
I-205	- Gher Rd.	0.42	4000	2219	0.55	5%		25	60				
Gher Rd.	- SR 503	1.15	5800	2534	0.44	3%		122	34				
		3.28		**3064**	**0.56**	**3%**	**1.22**	**252**	**47**	**N/A**	**0**	**0**	**0.0%**

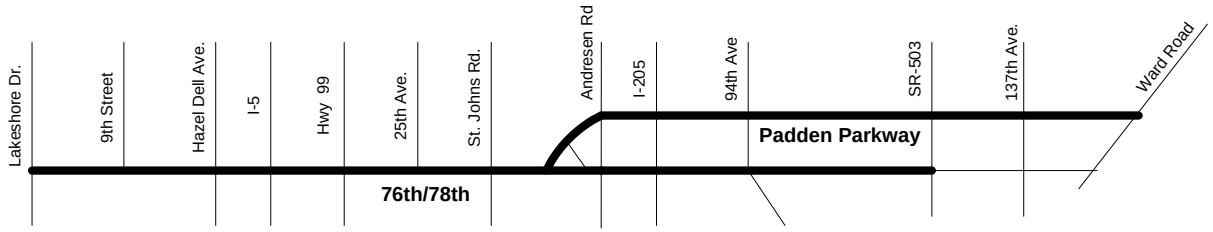


78th/76th/Padden Parkway Corridor													
AM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Nouthbound/Eastbound**									
78th St./76th St.													
Lake Shore Av.	- NW 9th Av.	0.60	1800	406	0.23	7%		84	26				
NW 9th Av.	- Hazel Dell Av.	0.51	1800	773	0.43	7%		56	33				
Hazel Dell Av.	- I-5	0.21	2400	850	0.35	6%		44	17				
I-5	- Hwy 99	0.12	2400	866	0.36	7%		27	16				
Hwy 99	- 25th Ave.	0.76	1800	616	0.34	8%		116	24	78	12	70	17.1%
25th Ave.	- St. Johns Rd.	0.98	1800	665	0.37	7%		89	40				
St. Johns Rd.	- Padden Parkway	0.46	1800	995	0.55	7%		64	26				
Padden Parkway	- Andresen Rd.	0.69	900	318	0.35	6%		96	26				
Andresen Rd.	- Covington/94th	1.27	900	303	0.34	5%		132	35	0	0	0	0.0%
Covington/94th	- SR-503 (117th)	1.12	900	261	0.29	5%		140	29				
		6.72		**995**	**0.37**	**7%**	**1.13**	**848**	**29**	**7**	**29**	**70**	**41.4%**
Padden Parkway													
78th St.	- Andresen Rd.	0.71	2600	644	0.25	0%		56	46				
Andresen Rd.	- I-205	0.52	2600	1465	0.56	0%		104	18				
I-205	- 94th Av.	0.76	2600	1383	0.53	3%		60	46				
94th Av.	- SR 503 (117th)	1.12	2600	1449	0.56	0%		103	39				
SR-503	- 137th Av.	0.99	2600	816	0.31	0%		129	28				
Ward Rd.	- 162nd Ave.	0.16	1800	482	0.27	0%		14	41				
		5.36		**1465**	**0.45**	**3%**	**1.13**	**571**	**34**	**N/A**	**0**	**0**	**0.0%**



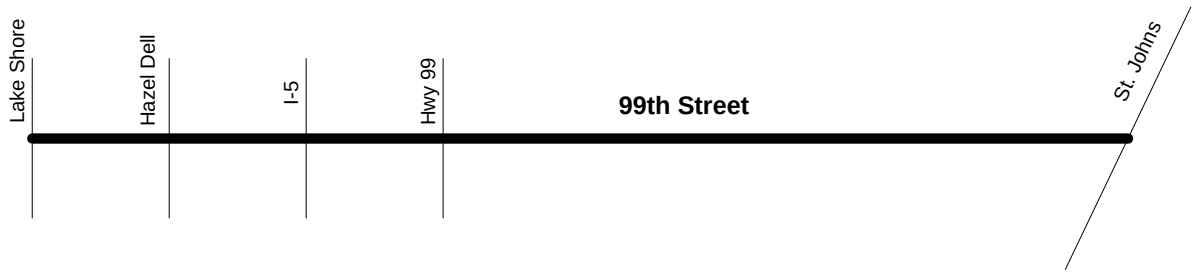
78th/76th/Padden Parkway Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used
		Length	Capacity	PM - Nouthbound/Eastbound									
78th St./76th St.													
Lake Shore Av.	- NW 9th Av.	0.60	1800	471	0.26	3%		62	35				
NW 9th Av.	- Hazel Dell Av.	0.51	1800	1083	0.60	3%		112	16				
Hazel Dell Av.	- I-5	0.21	2400	1123	0.47	3%		48	16				
I-5	- Hwy 99	0.12	2400	1510	0.63	3%		67	6				
Hwy 99	- 25th Ave.	0.76	1800	1127	0.63	3%		73	37	78	27	70	38.6%
25th Ave.	- St. Johns Rd.	0.98	1800	1058	0.59	3%		130	27				
St. Johns Rd.	- Padden Parkway	0.46	1800	1600	0.89	4%		47	35				
Padden Parkway	- Andresen Rd.	0.69	900	511	0.57	6%		132	19				
Andresen Rd.	- Covington/94th	1.27	900	516	0.57	4%		145	32	7	61	70	87.1%
Covington/94th	- SR-503	1.12	900	477	0.53	5%		208	19				
		6.72		**1600**	**0.61**	**4%**	**1.22**	**1024**	**24**	**7**	**61**	**70**	**87.1%**
Padden Parkway													
78th St.	- Andresen Rd.	0.71	2600	847	0.33	3%		64	40				
Andresen Rd.	- I-205	0.21	2600	1763	0.68	4%		25	30				
I-205	- 94th Av.	1.07	2600	1556	0.60	3%		99	39				
94th Av.	- SR-503 (117th)	1.12	2600	1348	0.52	3%		148	27				
SR-503	- 137th Ave.	0.99	2600	1000	0.38	3%		103	35				
137th Ave.	- 162nd Ave.	1.10	2600	802	0.31	3%		92	43				
		4.49		**1763**	**0.48**	**3%**	**1.22**	**467**	**35**	**N/A**	**0**	**0**	**0.0%**



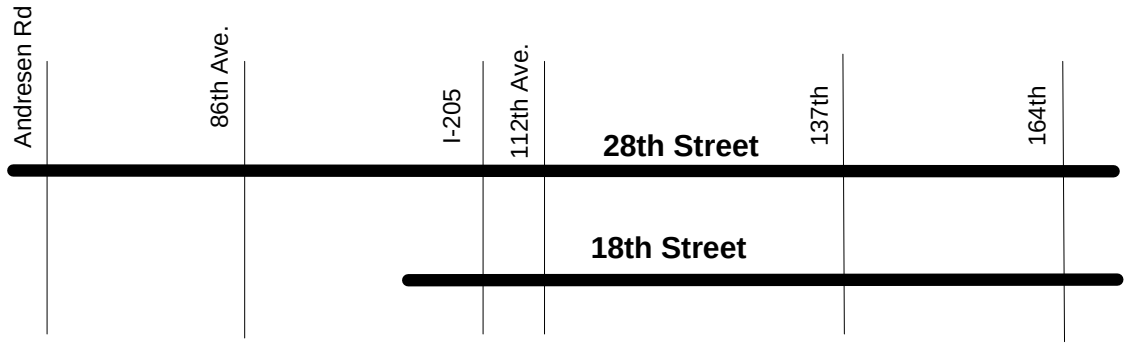
99th Street Corridor													
AM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**AM - Nouthbound/Eastbound**									
99th Street												
Lake Shore Av. - NW 9th Av.	1.09	1200	88	0.07	2%		135	29				
NW 9th Av. - Hazel Dell Av.	0.49	1700	650	0.38	2%		68	26				
Hazel Dell Av. - I-5	0.37	1700	863	0.51	4%		58	23				
I-5 - Hwy 99	0.22	1800	825	0.46	4%		34	23				
Hwy 99 - 25th Ave.	0.50	1800	516	0.29	3%		79	23				
25th Ave. - St. Johns Rd.	1.43	900	424	0.47	2%		164	31	25	46	105	43.8%
	4.09		**863**	**0.41**	**3%**	**1.13**	**538**	**27**	**25**	**46**	**105**	**43.8%**

99th Street Corridor													
PM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**PM - Nouthbound/Eastbound**									
99th Street												
Lake Shore Av. - NW 9th Av.	1.09	1200	145	0.12	2%		108	36				
NW 9th Av. - Hazel Dell Av.	0.49	1700	686	0.40	2%		59	30				
Hazel Dell Av. - I-5	0.37	1700	1125	0.66	1%		80	17				
I-5 - Hwy 99	0.22	1800	1084	0.60	2%		45	18				
Hwy 99 - 25th Ave.	0.50	1800	789	0.44	2%		50	36				
25th Ave. - St. Johns Rd.	1.43	900	614	0.68	2%		152	34	25	35	140	25.0%
	4.10		**1125**	**0.56**	**2%**	**1.22**	**494**	**30**	**25**	**35**	**140**	**25.0%**



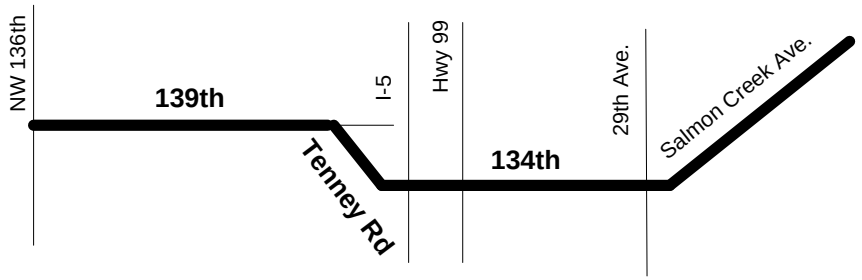
28th/18th Street Corridor												
AM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**AM - Nouthbound/Eastbound**									
28th Street												
Andresen Rd. - 86th Ave.	0.73	1200	679	0.57	0%		115	23	30	0	164	0.0%
86th Ave. - 112th Ave.	1.35	1800	526	0.29	3%		150	32				
112th Ave. - 137th Ave.	1.31	1800	842	0.47	0%		209	23				
137th Ave. - 164th Ave.	1.18	900	564	0.63	5%		179	24				
	4.57		**842**	**0.48**	**4%**	**1.13**	**653**	**25**	**30**	**0**	**164**	**0.0%**
18th Street												
112th Ave. - 137th Ave.	1.30	900	680	0.76	3%		168	28	177	45	82	54.9%
137th Ave. - 164th Ave.	1.17	800	750	0.94	5%		167	25				
	2.47		**750**	**0.85**	**4%**	**1.13**	**335**	**27**	**177**	**45**	**82**	**54.9%**

28th/18th Street Corridor												
PM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**PM - Nouthbound/Eastbound**									
28th Street												
Andresen Rd. - 86th Ave.	0.73	900	711	0.79	2%		155	17	30	0	164	0.0%
86th Ave. - 112th Ave.	1.35	1800	764	0.42	2%		189	26				
112th Ave. - 137th Ave.	1.31	1800	1017	0.57	3%		210	22				
137th Ave. - 164th Ave.	1.18	900	940	1.04	2%		160	27				
	4.57		**1017**	**0.69**	**2%**	**1.22**	**714**	**23**	**30**	**0**	**164**	**0.0%**
18th Street												
112th Ave. - 138th Ave.	1.30	800	898	1.12	2%		134	35	177	30	123	24.4%
138th Ave. - 164th Ave.	1.17	800	870	1.09	2%		206	20				
	2.47		**898**	**1.11**	**2%**	**1.22**	**340**	**26**	**177**	**30**	**123**	**24.4%**



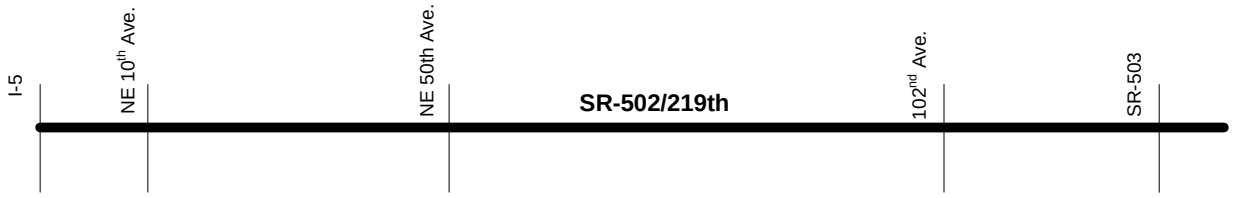
134th/139th Street Corridor												
AM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**AM - Nouthbound/Eastbound**									
134th St./139th St./Salmon Creek Ave.												
NW 36th Ave. - NW 11th Ave.	1.23	800	592	0.74	3%	1.27	196	23				
NW 11th Ave. - NE 10th Ave.	1.13	1800	822	0.46	6%		120	34	9	3	46	6.5%
NE 10th Ave. - I-5	0.28	1800	1315	0.73	5%		39	26				
I-5 - I-205 NB Ramp	0.38	1800	1051	0.58	5%		95	14	19	10	92	10.9%
I-205 NB Ramp - Salmon Cr. Ave.	0.44	900	498	0.55	4%		41	39				
Salmon Cr. Ave. - 50th Ave.	1.48	900	253	0.28	4%		146	36				
	4.94		**1315**	**0.56**	**5%**	**1.27**	**637**	**28**	**9**	**3**	**46**	**6.5%**

134th/139th Street Corridor												
PM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
	Length	**Capacity**	**PM - Nouthbound/Eastbound**									
134th St./139th St./Salmon Creek Ave.												
NW 36th Ave. - NW 11th Ave.	1.23	800	546	0.68	2%	1.27	124	36				
NW 11th Ave. - NE 10th Ave.	1.13	1800	1031	0.57	2%		144	28	9	5	46	10.9%
NE 10th Ave. - I-5	0.28	1800	1459	0.81	2%		49	21				
I-5 - I-205 NB off-ramp	0.38	1800	1509	0.84	2%		95	14	19	12	92	13.0%
I-205 NB off-ramp - Salmon Cr. Ave.	0.44	900	759	0.84	2%		47	34				
Salmon Cr. Ave. - 50th Ave.	1.48	900	418	0.46	1%		153	35				
	4.94		**1509**	**0.66**	**2%**	**1.27**	**612**	**29**	**9**	**5**	**46**	**10.9%**



SR-502/219th St. Corridor													
AM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Nouthbound/Eastbound**									
SR 502													
I-5	- 10th Ave.	0.26	2400	800	0.33	5%		20	47				
10th Ave.	- 50th Ave.	1.96	800	468	0.59	7%		149	47				
50th Ave.	- 92nd Ave	1.97	800	669	0.84	6%	1.09	172	41				
92nd Ave.	- SR-503	1.51	1800	690	0.38	5%		153	36	47	22	23	95.7%
		5.70		**800**	**0.60**	**6%**	**1.09**	**494**	**42**	**47**	**22**	**23**	**95.7%**

SR-502/219th St. Corridor													
PM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**PM - Nouthbound/Eastbound**									
SR 502													
I-5	- 10th Ave.	0.26	2400	866	0.36	5%		25	37				
10th Ave.	- 50th Ave.	1.96	800	540	0.68	6%		151	47				
50th Ave.	- 92nd Ave	1.97	800	825	1.03	7%	1.22	196	36				
92nd Ave.	- SR-503	1.51	1800	1185	0.66	3%		204	27	47	12	23	52.2%
		5.70		**1185**	**0.78**	**5%**	**1.22**	**576**	**36**	**47**	**12**	**23**	**52.2%**



SR-501 & La Center Road Corridors													
AM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**AM - Nouthbound/Eastbound**									
SR 501													
I-5	- 45th Ave.	0.80	800	529	0.66	8%		83	35	LC/Rid. Connector	10	23	43.5%
45th Ave.	- 9th St.	1.75	800	376	0.47	7%		151	42				
		2.55		**529**	**0.54**	**8%**	**1.13**	**234**	**39**	**LC/Rid. Connect**	**10**	**23**	**43.5%**
La Center Rd.													
I-5	- E. Fork Lewis Rv.	1.79	1000	573	0.57	3%		138	47	LC/Rid. Connector	8	23	34.8%
		1.79		**573**	**0.57**	**3%**	**1.13**	**138**	**47**	**LC/Rid. Connect**	**9**	**23**	**34.8%**

SR-501 & La Center Road Corridors													
PM Peak		**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**
		Length	**Capacity**	**PM - Nouthbound/Eastbound**									
SR 501													
I-5	- 45th Ave.	0.80	800	548	0.69	10%		74	39	LC/Rid. Connector	9	23	39.1%
45th Ave.	- 9th St.	1.75	800	462	0.58	7%		152	41				
		2.55		**548**	**0.62**	**9%**	**1.22**	**226**	**41**	**LC/Rid. Connect**	**9**	**23**	**39.1%**
La Center Rd.													
I-5	- E. Fork Lewis Rv.	1.79	1000	696	0.62	3%		147	44	LC/Rid. Connector	8	23	34.8%
		1.79		**696**	**0.62**	**3%**	**1.22**	**147**	**44**	**LC/Rid. Connect**	**8**	**23**	**34.8%**