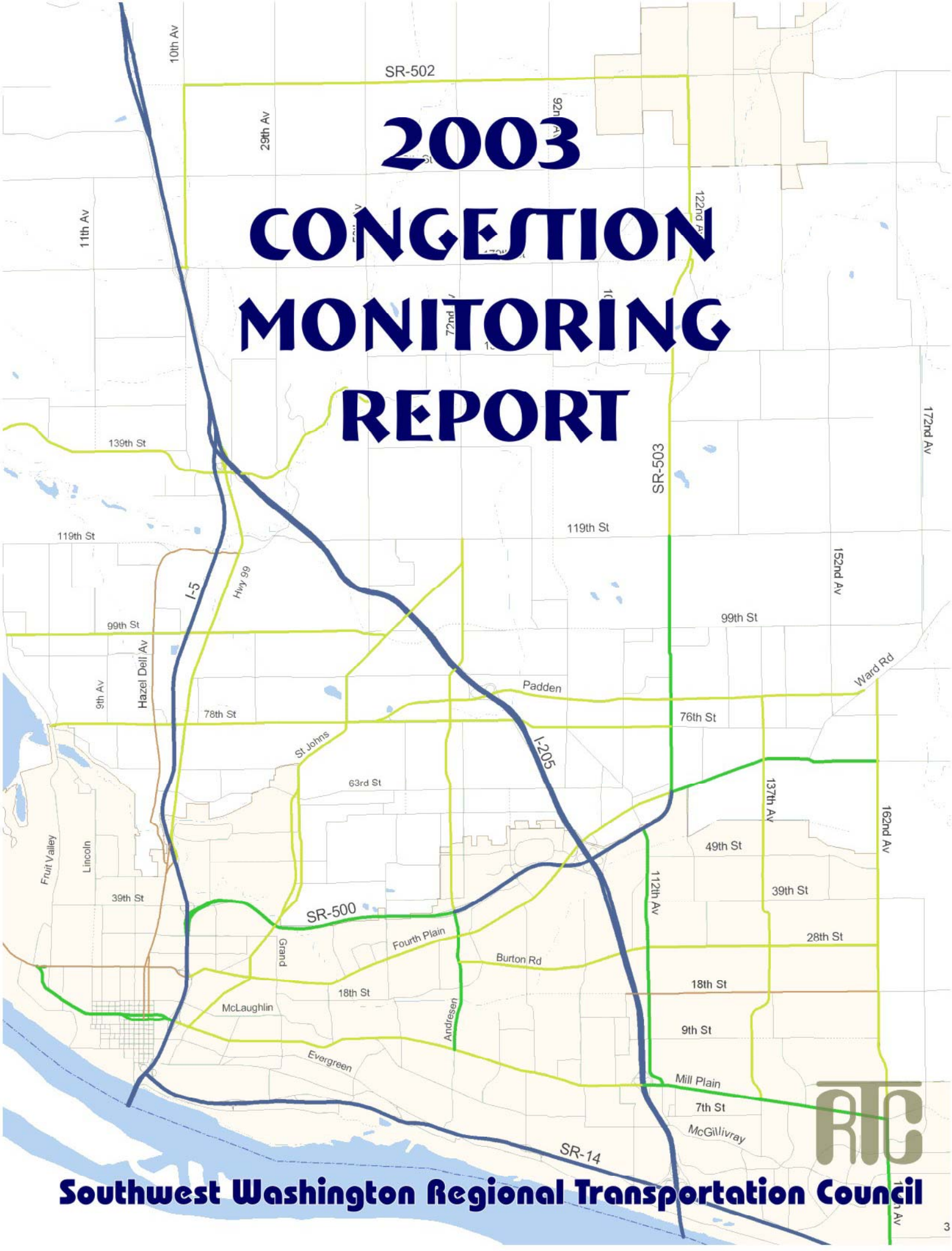

2003 CONGESTION MONITORING REPORT

Southwest Washington Regional Transportation Council

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CHAPTER I.
INTRODUCTION

The Congestion Management System serves as the foundation for monitoring the regional transportation system and for providing ongoing information. The monitoring element of the congestion management network is designed as an informational tool to be used within the decision-making process. It is also intended to provide an understanding of the transportation system's operating conditions and deficiencies and to assess the impacts of alternative improvement strategies. In this way, it will help to focus efforts while allowing flexibility in the project selection process.

RTC's first Congestion Monitoring Report was initiated as a result of the 1991 Intermodal Surface Transportation Efficiency Act, which required regions like the Vancouver/Clark County urban area to develop management systems. The federal interest in a congestion management system was to have the regional planning process develop better analysis tools for evaluating alternative strategies for addressing traffic congestion problems.

A. PURPOSE AND NEED

The purpose of the Congestion Management System is to improve how transportation system performance is measured and analyzed to better identify transportation congestion needs.

This is accomplished through data collection, analysis of system performance, identification of system needs, and reporting of findings.

Traffic congestion negatively impacts the region's natural environment, economy, and quality of life. Through the congestion management monitoring process, the decision-making process is improved by identifying current congestion along the transportation system.

B. GOALS

The following goals were used to guide the development of the Congestion Management System:

- Focus upon congestion
- Be practical and easy to apply
- Emphasize regional travel perspective

C. SCOPE

The scope of the congestion management system includes 30 regionally significant transportation corridors within the Clark County, Washington region.

The congestion monitoring process originally began with an emphasis on traffic volumes and transportation facility capacity to monitor transportation system congestion through the development of a corridor capacity ratio. In order to provide a more comprehensive analysis of the operation of the transportation system, the congestion monitoring process was expanded to include additional data elements.

The congestion management system has evolved to incorporate time-based and other multimodal measures to improve knowledge regarding the operation of the transportation system and the characteristics of regional travel.

D. CONGESTION MANAGEMENT SYSTEM

1. CORRIDOR CONCEPT

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

2. CONGESTION MANAGEMENT NETWORK

The boundaries of the Vancouver/Clark County Congestion Management System were set as the Vancouver metropolitan area. The exceptions to this definition are the major inter-regional corridors and major arterial corridors connecting other cities to the base congestion management network, (I-5, SR-14, SR-501, SR-502, SR-503, and La Center Road). This included the addition of congestion management corridors to connect Battle Ground, Ridgefield, and La Center with the base network.

Within these boundaries, the first step in defining the 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 those corridors that are currently or are likely to become congested.

The original congestion management network was made up of twenty-one transportation corridors. The 2003 congestion management network is comprised of thirty corridors. The primary reasons for inclusion of additional corridors have been to provide more logical breakpoints, to connect to other significant urban areas, recognize new connections, or increasing congestion.

The existing Congestion Management Network is listed in **Table 1** and illustrated on **Map 1** (Page 19).

Table 1 – 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	State line
I-205 – Central	I-205	I-5 interchange	SR 500
I-205 – South	I-205, 112th Avenue	SR 500	State line
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
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.	County Line
SR-501/Fourth Plain	SR-501/Mill Plain, Fourth Plain	I-5	Port of Vancouver
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
SR 500 – East	SR 500	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.

3. Data Elements

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

This collected data serves as the basis for developing vehicle volumes, Columbia River crossing, capacity ratio, truck percentage, travel speed, speed as percent of posted speed limit, intersection delay, automobile occupancy, transit ridership by type of service, transit seat capacity, and transit seat percent of lane capacity.

4. 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 organized a process for collecting existing data on a regular basis and initiated the collection of additional data needs.

Except for the traffic count program, there had been a lack of easily accessible transportation congestion data that supported the congestion management monitoring process. In order to provide a more comprehensive analysis of the operation of the transportation system, RTC coordinated with local transportation agencies or contracted to collect needed transportation data.

The City of Vancouver and Clark County collect extensive travel time data in the p.m. period along concurrency corridors. RTC reviewed the corridors covered and contracts with Clark County to collect the additional travel time for corridors not part of the City's or County's effort.

RTC coordinates with C-TRAN for the collection of peak period passenger counts for transit routes along the congestion management corridors.

RTC also initiated an effort for the collection of automobile occupancy information at 15 key locations on various regional transportation facilities within the region. A representative automobile occupancy rate by facility type and geographic area was developed based on this analysis.

The flow for the collection of transportation data is illustrated on **Figure 1.**

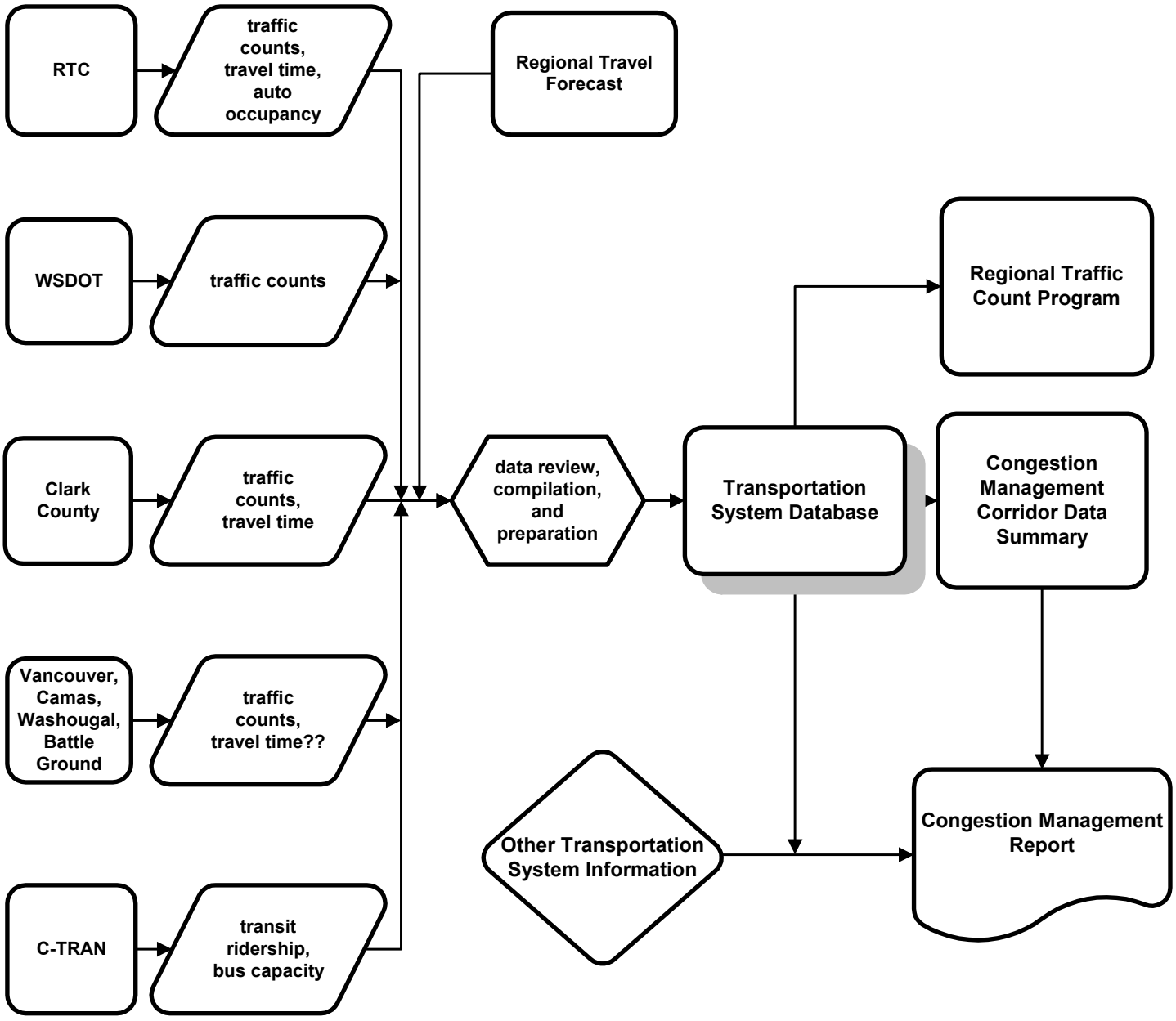
5. Data Analysis and System Performance

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

6. Reporting

The congestion monitoring results are displayed through the annual development of a Congestion Monitoring Report. The intent of the report is to provide transportation system performance information to staff and decision-makers that must identify the most cost-effective strategies for addressing transportation congestion and improving mobility. The Congestion Monitoring Report is available through RTC in print or the internet at www.rtc.wa.gov

Figure 1 - Transportation Data Flow



CHAPTER II.
SUMMARY OF PERFORMANCE

This section contains a discussion and display of data information contained in the Congestion Monitoring Report.

Part A consists of the data compiled and collected for the congestion monitoring process and comprised of data that is configured to match the congestion management corridor delineation. Part B consists of other transportation information and data elements that do not necessarily match the congestion management corridors, although in some cases makes use of the data developed in Part A. Part C includes a summary of the corridor trends between year 2000 and 2003. Part D uses segmental transportation data included in Appendix A rather than corridor summary data. Part D identifies specific areas with congestion concerns.

The primary cause of congestion is an imbalance between transportation demand and available capacity. The difficulty in defining congestion is that congestion varies by how people accept delay. One simple definition of congestion is the delay of travel in excess of what is normally experienced under light traffic conditions. Four related factors that are often used to quantify the severity of traffic congestion include duration, extent, intensity, and reliability.

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. This report does not attempt to measure congestion created by a traffic or weather incident.

Through analysis of transportation system performance, strategies can be identified to improve mobility and lessen delay in the peak period.

It is important to remember that the congestion monitoring report focuses on a regional system-wide framework for analyzing congestion.

A. CONGESTION MANAGEMENT CORRIDORS

1. 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 provides 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.

Map 2, Page 20: During the AM 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 per hour are primarily state facilities including other segments of SR-14 and SR-500. The other facilities carrying more than 1,500 vehicles per hour are main arterials near state facilities (Mill Plain east of I-205 and 164th Avenue north of SR-14).

Map 3, Page 21: PM peak hour trends for traffic volumes for most of the congestion management corridors are similar to AM peak; although, most

congestion management corridors carry significantly higher volumes during the PM peak. The corridors with the highest peak hour volume difference (at least 500 additional vehicles) between the AM and PM peak include: I-5, Highway 99, Main Street, and 112th Avenue. For Main Street the AM Peak volumes are higher that the PM Peak volumes.

2. 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. For consistency purposes only general-purpose lanes are considered in the calculated corridor capacity ratio. 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.

Map 4, Page 22: Both the AM and PM periods show congestion along major facilities such as I-5, I-205, SR-14, SR-500, and Burton Road. 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. The main exception includes Main Street. On Main Street, congestion can be attributed to morning commuters using Main Street as an alternative to the congested I-5 corridor.

Map 5, Page 23: In the PM period, additional congestion is shown along Andresen Road, SR-503-South, 162nd Avenue North, and 18th Street.

The near-term capacity improvement projects along SR-500, 162nd Avenue, and Burton Road will likely reduce the corridor capacity ratio in these corridors. Other planned projects will also provide future capacity and reduce capacity ratios.

3. CORRIDOR TRAVEL SPEED

The City of Vancouver and Clark County collect PM peak period travel time for concurrency purposes along most of the congestion management corridors. RTC has contracted with Clark County to collect AM peak and additional PM peak travel time data in corridors not covered by the concurrency data collection effort. Travel speed is computed from the travel time data. It consists of utilizing the travel time and distance to calculate an average travel speed.

In general, facilities with multiple at-grade 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 6 & 7, Pages 24-25: One concern is regional facilities that have a travel speed below 25 mph, which may encourage neighborhood cut-through traffic. During the AM period 134th Street, Main Street, Fourth Plain west of I-5, Burton Road and 18th Street display speeds below 25 mph. In the PM period 112th Avenue, Andresen Road, 137th Avenue, Mill Plain West of I-5, Mill Plain east of I-205, Fourth Plain, St. Johns, Burton Road, and 18th Street display speeds below 25 mph.

While speed alone is not an indicator of congestion, higher speed facilities are more attractive and generally carry more vehicles.

4. 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 multiple driveways and additional traffic signals. One of the difficulties is in balancing access to land uses and maintaining the throughput travel speed of arterials.

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

Map 8, Page 26: In the AM period, only I-5 South, Main Street, and Fourth Plain west of I-5 operates at less than 65% of the posted speed.

Map 9, Page 27: In the PM peak, arterials and freeways generally display lower percentages, due to higher congestion. In the PM period, I-5 South, SR-500, Andresen South, Mill Plain East, SR-500/Fourth Plain (construction), St. Johns, 112th Avenue, 137th Avenue, and 18th Street operate at less than 65% of the posted speed.

5. Intersection Delay

The time stopped at an intersection, for the through movement was recorded as part of the travel time data. The stop time at an intersection was averaged for the multiple travel time runs. Intersections with an average stop time of greater than 30 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 10, Page 28: Generally, intersections that displayed a 30 second or greater delay, for the average through movement on a CMS corridor, were located where two major arterials intersect. Map 10 displays the location of the 27 intersections that demonstrated this delay characteristic. Delay at these intersections add to the overall travel time and reduce the corridor's full capacity and increase travel time.

In addition to intersection delay, delay can also occur at freeway off ramps, where high volumes of traffic are loaded on to the arterial system.

6. Automobile 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 was collected for the AM, PM, and Midday time periods. (**Table 2**)

The AM time period displays the lowest average automobile occupancy for all facility types, with the AM average automobile occupancy generally at 1.11 persons per vehicle or lower. The one exception was along west 139th Street near the Vancouver Schools (High, Middle, and elementary). This high vehicle occupancy can be attributed to school trips where children are frequently transported by parents or friends. The I-205 and SR-14 corridors have the lowest AM automobile occupancy all at 1.03.

Map 11, Page 29: In the PM peak, SR-14, I-205 south and I-5 south have the lowest average automobile occupancy

rates (1.03 to 1.08). The Fourth Plain, Mill Plain, and Highway 99 corridors have the highest PM average automobile occupancy rates (1.31-1.34). This may be due to a higher percentage of non-commute trips in these corridors.

Overall, the midday automobile occupancy rates are near 1.23, with a lower variation between corridors.

It may be that the AM peak period is more of a traditional commute time. The PM and the midday time periods likely have a greater percentage of discretionary trips such as shopping where drive alone trips are less prominent.

Table 2
Automobile Occupancy by Time of Day

Time Period	Average Automobile Occupancy Rate
AM	1.11
Mid-Day	1.23
PM	1.24

7. Truck Percentage

Collected traffic counts include several locations that classified vehicles according to the number of axles. This is 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.

Map 12, Page 30: Overall, the state facilities and Fourth Plain west of I-5 display the highest percentage of truck volumes during the PM peak period. The exception to this is on SR-500, which has truck percentages similar to major arterials, such as Andresen Road and 164th Avenue. I-5, I-205, SR-14, SR-502, Mill Plain, and Fourth Plain corridors have truck percentages of 5% or higher. I-5 North has a truck percentage above 10%. Fourth Plain Boulevard and Mill Plain from I-5 to the Port of Vancouver both have AM period percentages greater than 10%.

8. Transit Seat Capacity Used

Transit capacity used includes transit riders divided by the transit capacity at a defined location. Transit seat capacity is based on 2003 bus service and represents the percentage of seats that are occupied during the two-hour peak period. C-TRAN collected ridership at specific locations along the congestion management corridors. RTC compiled this data and calculated 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 13, Page 31: During the AM period portions of I-5, I-205, SR-14, 162nd Avenue, Fourth Plain, and Burton corridors utilize more than 45% of the available seats.

Map 14, Page 32: In the PM period I-5, I-205, Hazel Dell, Mill Plain, Fourth Plain, and Andresen utilize more than 45% of the available seat capacity.

9. Transit Seats As Percentage of Lane Capacity

This measure is intended as a planning analysis tool. It utilizes the transit seat capacity data to calculate transit seat capacity as a percentage of vehicle capacity per lane on the congestion management corridors. It provides a picture of how much transit service is in a corridor in relation to the road capacity and presents an idea of the potential of transit to mitigate or manage auto demand on the congestion management corridors.

Map 15, Page 33: The PM map shows that the I-5 corridor has the highest

percentage of transit seats due to the high level of vehicles accessing both I-5 and Main Street (30%). In contrast, SR-14 between I-5 and I-205 has only one bus during the two-hour peak period (1.8%).

B. Other Transportation Measures

1. Highest Volume Intersections

Table 3 displays the highest volume intersections in 2003. It is based on the total number of vehicles entering an intersection on an average weekday. At-grade intersections along SR-500, Mill Plain, and SR-503 dominate the list.

Table 3 - Highest Volume Intersections

Rank	East/West	North/South	Volume
1	SR-500	Gher/112th	85,000
2	Mill Plain	Chkalov Dr.	78,000
3	SR-500	St. Johns Rd.	64,000
4	SR-500	SR-503	60,000
5	SR-500	54th Ave.	59,000
6	Mill Plain	136th Ave.	58,000
7	SR-500	42nd Ave.	58,000
8	SE 34th St.	SE 164th Ave.	58,000
9	Fourth Plain	Andresen Rd.	55,000
10	Padden Pkw.	SR-503	54,000
11	Mill Plain	123rd/124th Ave.	52,000
12	78th St.	Highway 99	50,000
13	Mill Plain	Andresen Rd.	47,000
14	76th St.	SR-503	46,000
15	Mill Plain	104th/105th Ave.	45,000

The at-grade intersections along SR-500 make up a third of the fifteen intersections and also has four of the five highest rankings. Mill Plain Boulevard also has five of the top fifteen intersections. SR-503 in the Orchards area also has three intersections in the top fifteen.

2. Columbia River Bridge Vehicle Volumes

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

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
2003	129,500	143,600	273,100

In 1980, the only highway across the Columbia River was the Interstate Bridge that carried 108,600 vehicles a day. By 1985, with the opening of the Glenn Jackson Bridge in 1983, Interstate Bridge volumes decreased to 91,400 vehicles a day. However, the new Glenn Jackson Bridge carried 52,600 day for a combined river crossing of 144,000 vehicles a day. By 1995, total river crossings (222,700) had more than doubled compared to 1980 (108,600).

While traffic on both bridges has continued to grow since 1990, the Interstate Bridge is at or near capacity about six hours a day. As a result, in 1999 the Glenn Jackson Bridge traffic volumes exceeded the Interstate Bridge traffic volumes on a daily basis. This trend continues today. In 2003, total river crossings exceeds 270,000 vehicles a day. The all-time maximum weekday volume on the two Columbia River Bridges exceeded 313,000 vehicles on Friday, December 19, 2003.

Future growth is expected to continue on both bridges. However, growth on the Glenn Jackson Bridge will grow at a faster rate than that of the Interstate Bridge.

3. TRANSIT SYSTEM RIDERSHIP

Figure 2 and **Table 5** provide information on 2003 annual C-TRAN patronage by type of service.

Almost 96% of C-TRAN system ridership was made up of fixed route service. Urban fixed route service carries three-quarters of C-TRAN's total annual ridership. This is followed by commuter service that carries approximately 19% of the total riders.

Figure 2 - Ridership by Type of Service

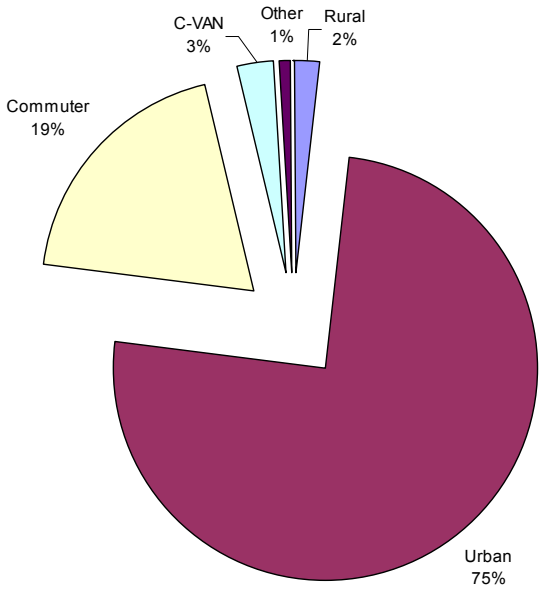


Table 6 compares growth in Clark County population with changes to C-TRAN system ridership during the same period. The average annual growth rate in Clark County population since 1985 has ranged from 2.5% to 4.5% per year depending on the time period. At the same time, C-TRAN ridership growth rate has been higher than the population growth rate.

Table 5 - 2003 Ridership by Type of Service

Type of Service	Annual Riders	Percent of Total
Rural	122,084	1.8%
Urban	5,159,944	74.7%
Commuter	1,331,119	19.2%
Events/Other	55,927	0.8%
C-VAN	188,591	2.7%
Demand Response	10,933	0.2%
Vanpool	36,442	0.5%
Total	**6,905,040**	**100.0%**

The passage of Initiative 695 had a serious impact on transit service in Clark County in 2000. The impact to operating revenue resulted in more than a 25% reduction in service levels from 1999. However, even with reductions, C-Tran ridership has continued to grow.

Table 6 – 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%
2003	372,300	2.6%	6,905,040	9.0%

4. PARK AND RIDE CAPACITY

In 2000, the opening of the Fisher's Landing Transit Center added 560 spaces to the total park and ride spaces available through the County. However, as previously noted the reductions in service levels constrained total ridership, with standing passenger occurring on all commuter service. Clark County park and ride capacity is shown in **Table 7**. Park and ride capacity includes Park and Ride Lots, Transit Centers, and other parking agreements. Although the 7th Street

transit center does not provide parking spaces, parking is available in a nearby paid parking garage.

C-Tran will soon begin construction of the 99th Street Park and Ride with over 450 parking spaces. This Park and Ride lot is scheduled to open in 2005. In addition, improvements are being made to add an additional 20 spaces at the Salmon Creek Park and Ride lot in 2004. The reconstruction of the 134th Street Interchange will result in the relocation of the Salmon Creek Park and Ride by year 2011.

In addition to the capacity shown in Table 7, there are informal park and ride and park and pool facilities located throughout the County.

Table 7 - Clark County Park and Ride Capacity

Facility	Lot Capacity
Battle Ground	28
Evergreen	279
Salmon Creek	475
BPA Ross	200
Andresen Kmart	40
Fisher's Landing	560
Vancouver Mall	60
Camas/Washougal	20
7th Street	0
Total	**1,622**

C. 2000-2003 TRENDS

1. VEHICLE VOLUMES

In the four-year period, several corridors have shown a significant increase in peak hour vehicle volumes. Corridors that had a vehicle volume increase of over 400 vehicles in the PM peak hour include: I-5, I-205, SR-14, Mill Plain west of I-5, Fourth Plain (Orchards), and Padden Parkway.

In addition, Main Street had a vehicle volume increase of over 400 vehicles in the AM peak.

2. CORRIDOR CAPACITY

Through the four-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, Main St. to 99th St.
- Mill Plain Extension
- Fourth Plain, 102nd Av. to SR-503
- Padden Parkway
- SR-500/Thurston Way Interchange
- Fishers Landing Transit Center

3. SPEED

In general, a trend between 2000 and 2003 congestion management system includes decreased speeds along congestion management corridors. Corridors that had a significant decrease in peak period speed include: I-5, I-205, Andresen, Fourth Plain west of I-5, 18th Street, and Main Street. The decrease in speed on Main Street occurred in the AM peak period.

D. 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 that has volume to capacity (V/C) ratio

greater that 0.9 or a travel speed 60% or less of the posted speed limit.

This section does not attempt to develop solutions to these areas of concern, but takes these segments and cross-references to the transportation solutions identified in a Transportation Improvement Program (TIP), Metropolitan Transportation Plan (MTP), or other plans. These areas of concerns warrant further analysis and monitoring.

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. **Table 8** cross-references AM and PM volume to capacity areas of concern to transportation solutions identified in current transportation plans.

Map 16, Page 34: Most of the AM period volume to capacity ratio areas of concern are related to bottlenecks at the two interstate bridges. The AM period shows congestion on portions of I-5, I-205, SR-14, SR-500, 137th Avenue, 164th Avenue, and Burton Road.

Map 17, Page 35: In the PM period, additional volume to capacity ratio areas of concern occur. The PM period shows congestion on portions of I-5, I-205, SR-14, SR-500, SR-502, SR-503, Hazel Dell Avenue, Andresen/72nd Avenue, 112th Avenue, 137th Avenue, 162nd/164 Avenue, 18th Street, and Burton Road.

2. SPEED

A travel speed lower than 60% of the posted speed limit is an indicator of delay, which can result in congestion. **Table 9** cross-references AM and PM speed areas of concern to transportation solutions identified in current transportation plans.

Often these speed areas of concern correlate with locations within close proximity of multiple traffic signals or an intersection that displayed greater than 30 seconds of delay.

Map 18, Page 36: In the AM period, speed areas of concern occur along portions of I-5, SR-500, SR-503, Main Street, Ft. Vancouver, St. Johns Road, Andresen/72nd Avenue, 112th Avenue, 162nd Avenue, Mill Plain Boulevard, Fourth Plain Boulevard, 18th Street, Padden Parkway, and 134th Street.

Map 19, Page 37: In the PM period, speed areas of concern occur along portions of I-5, SR-500, SR-502, SR-503, Main Street, Hazel Dell Avenue, St. Johns Road, Andresen/72nd Avenue, 112th Avenue, 137th Avenue, 162nd/164th Avenue, Mill Plain Boulevard, Fourth Plain Boulevard, 18th Street, Burton Road, 78th Street, 99th Street, and 134th Street.

Table 8
Areas of Concern: Volume to Capacity Ratio > 0.9

Areas of Concern: AM Volume to Capacity Greater Than 0.9				
Corridor	**Segment**	**Identified Improvement**	**Estimated Completion**	**Jurisdiction**
28th Street	86th Av. - 137th Av.	TIP: Widen to 3 lanes	2004	Vancouver
164th Avenue	SR-14 - SE 34th Street	TIP: Construct 192nd Avenue	2005	Vancouver
SR-500	I-205 - Gher Rd.	TIP: SR-500/112th Avenue Interchange	2005	WSDOT
SR-500	Ward Rd. - 162nd Av.	TIP: Widen to 5 lanes	2006	WSDOT
137th Avenue	18th Street - 28th Street	TIP: Widen to 5 lanes	2007	Vancouver
I-205	State Line - SR-500	MTP: Collector/Distributor System	10-20 Years	WSDOT
I-205	SR-500 - 83rd Street	MTP: Widen to 6 lanes	10-20 Years	WSDOT
SR-14	I-205 - 164th Avenue	MTP: Widen to 6 lanes	10-20 Years	WSDOT
SR-14	6th Avenue - 32nd Street	MTP: Widen to 4 lanes w/interchanges	10-20 Years	WSDOT
I-5	State Line - SR-500	Strategic MTP: Collector/Distributor, and Bridge	20+ Years	WSDOT
Areas of Concern: PM Volume to Capacity Greater Than 0.9				
Corridor	**Segment**	**Identified Improvement**	**Estimated Completion**	**Jurisdiction**
164th Avenue	SR-14 - SE 34th Street	TIP: Construct 192nd Avenue	2004	Vancouver
Hazel Dell Ave.	63rd Street - 78th Street	Restripe for center turn lane	2004	Clark County
162nd Avenue	39th Street - SR-500	TIP: Widen to 5 lanes	2005	Clark County
28th Street	86th Av. - 137th Av.	TIP: Widen to 3 lanes	2005	Vancouver
SR-500	Thurston Way - Gher Rd.	TIP: SR-500/112th Avenue Interchange	2005	WSDOT
112th Avenue	49th Street - SR-500	TIP: SR-500 Interchange/49th St. Intersection	2005/2007	Vanc./WSDOT
SR-500	Ward Rd. - 162nd Av.	TIP: Widen to 5 lanes	2006	WSDOT
137th Avenue	18th Street - 28th Street	TIP: Widen to 5 lanes	2007	Vancouver
72nd Avenue	St. Johns to I-205	TIP: Widen to 5 lanes	2007	Clark County
SR-502	179th St. - 199th St.	TIP: 219th Street Interchange	2007	WSDOT
18th Street	137th Av. - 162nd Av.	MTP: Widen to 5 lanes	5-10 Years	Vancouver
I-205	SR-500 - 83rd Street	MTP: Widen to 6 lanes	10-20 Years	WSDOT
I-205	State Line - SR-500	MTP: Collector/Distributor System	10-20 Years	WSDOT
SR-14	I-205 - 164th Avenue	MTP: Widen to 6 lanes	10-20 Years	WSDOT
SR-14	6th Avenue - 32nd Street	MTP: Widen to 4 lanes	10-20 Years	WSDOT
SR-500	54th Avenue - Andresen Rd.	MTP: Interchange and Auxiliary Lanes	10-20 Years	WSDOT
SR-500	SR-503 - 137th Av.	MTP: SR-500/SR-503 Fly-Over Ramp	10-20 Years	WSDOT
SR-503	Fourth Plain - 76th St.	MTP: SR-500/SR-503 Fly-Over Ramp	10-20 Years	WSDOT
I-5	State Line - SR-500	Strategic MTP: Collector/Distributor System	20+ Years	WSDOT
Andresen Rd.	Fourth Plain - SR-500	None		Vancouver

Table 9
Areas of Concern: Speed < 60% of Posted Speed

Areas of Concern: AM Speed 60% or Less of Posted Speed Limit				
Corridor	**Segment**	**Identified Improvement**	**Estimated Completion**	**Jurisdiction**
Padden Parkway	Andresen Rd. - I-205	Padden Parkway West	2003	Clark County
Andresen Rd.	I-205 - 83rd Street	Intersection Improvements	2004	Clark County
162nd Avenue	SR-500 - Ward Road	TIP: Widen/Intersection Improvements	2005	Clark County
SR-500	Gher Rd. - SR-503	TIP: SR-500/112th Avenue Interchange	2005	WSDOT
112th Avenue	Mill Plain - NE 9th St.	TIP: Traffic Signal Coordination	2006	Vancouver
134th Street	I-5 to I-205	MTP: I-5/Salmon Creek Interchange	2011	Clark County
Andresen Rd.	Van Mall Dr. - Fourth Plain	Traffic Signal Coordination and Timing	1-5 Years	Vancouver
Ft. Vancouver	Fourth Plain to St. Johns	Traffic Signal Coordination and Timing	1-5 Years	Vancouver
Fourth Plain	Fruit Valley to Mill Plain	Solution to be identified in Gateway Plan	5-10 Years	Vancouver
18th Street	137th Av. - 162nd Av.	MTP: Road Improvements/Signal Coordination	10-20 Years	Vancouver
Mill Plain Blvd.	Lieser - 98th Avenue	Signal Coordination/Realignment of 86th/Lieser	10-20 Years	Vancouver
SR-500	SR-503 - 137th Avenue	MTP: SR-500/SR-503 Fly-Over Ramp	10-20 Years	WSDOT
St. Johns	SR-500 - NE 44th St.	MTP: SR-500/St. Johns Interchange	10-20 Years	Vancouver
I-5	State Line to SR-500	Strategic MTP: Collector/Distributor and Bridge	20+ Years	WSDOT
Main Street	I-5 to Mill Plain	Strategic MTP: Collector/Distributor System	20+ Years	Vancouver
SR-503	76th Street - Fourth Plain	None		WSDOT

Areas of Concern: PM Speed 60% or Less of Posted Speed Limit				
Corridor	**Segment**	**Identified Improvement**	**Estimated Completion**	**Jurisdiction**
164th Avenue	SR-14 - SE 34th Street	TIP: Construct 192nd Avenue	2004	Vancouver
Andresen Road	78th Street - 83rd Street	Signal Coordination	2004	Clark County
Burton Road	Andresen Rd. - 112th Av.	TIP: Road Improvements/Signal Coordination	2004	Vancouver
Hazel Dell Ave.	63rd Street - 78th Street	Intersection Improvements/Striping	2004	Clark County
112th Avenue	18th Street - 28th Street	TIP: Signal Coordination/Intersection Imp.	2004-2013	Vancouver
162nd Avenue	39th Street - SR-500	TIP: Widen to 5 lanes	2005	Clark County
Fourth Plain	I-205 - SR-503	Signal Coordination following SR-500/112th	2005	Clark County
SR-500	Gher Rd. - SR-503	TIP: 112th Avenue Interchange	2005	WSDOT
112th Avenue	49th Street - SR-500	TIP: Signal Coordination/Intersection Imp.	2006	Vancouver
SR-500	Ward Rd. - 162nd Av.	TIP: Road Improvements/Signal Coordination	2006	WSDOT
137th Avenue	18th Street - 28th Street	TIP: Widen to 5 lanes/Signal Coordination	2007	Vancouver
Mill Plain Blvd.	104th Ave. - 162nd Av.	TIP: I-205 to 112th Av. Ramp/Signal Coordination	2007	Vancouver
134th Street	NE 10th Ave. - I-205	TIP: I-5/Salmon Creek Interchange	2011	Clark County
Andresen Road	18th Street - Fourth Plain	Traffic Signal Coordination	1-5 Years	Vancouver
Andresen Road	SR-500 - Van Mall Dr.	Traffic Signal Coordination	1-5 Years	Vancouver
Fourth Plain	Main St. - Kaufman	Traffic Signal Coordination	1-5 Years	Vancouver
Fourth Plain	Falk Rd. - Andresen Rd.	Traffic Signal Coordination	1-5 Years	Vancouver
Main Street	Fourth Plain - 39th Street	Traffic Signal Coordination and Timing	1-5 Years	Vancouver
Mill Plain Blvd.	Lincoln - Ft. Vancouver Way	Traffic Signal Coordination and Timing	1-5 Years	Vancouver
18th Street	112th Av. - 137th Av.	MTP: Widen to 5 lanes/Signal Coordination	5-10 Years	Vancouver
SR-502	92nd Av. - SR-503	MTP: Road Improvements/Signal Coordination	5-10 Years	WSDOT
St. Johns	Ft. Vancouver - SR-500	SR-500/St. Johns Interchange	5-10 Years	Vancouver
SR-500	St. Johns to I-5	MTP: SR-500/St. Johns Interchange	10-20 Years	WSDOT
I-5	SR-14 - Mill Plain	Strategic MTP: Collector/Distributor System	20+ Years	WSDOT
78th Street	Hazel Dell - Hwy. 99	None (Close Proximity of Signals)		Clark County
99th Street	Hazel Dell - Hwy. 99	None (Close Proximity of Signals)		Clark County
SR-503	Fourth Plain - 76th St.	None		WSDOT
SR-503	199th Street - SR-502	None		WSDOT

CHAPTER III.
PERFORMANCE MONITORING AND IMPLEMENTATION

The purpose of the Congestion Management System is to develop a better tool that provides information on the performance of the transportation system and identify strategies to alleviate congestion and enhance mobility.

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

The congestion management database and Report will accomplish several objectives. It will support the local decision-making process, increase public awareness of transportation issues and tradeoffs, improve calibration efforts related to the regional travel forecasting model, and facilitate the means to develop tools for a more comprehensive and innovative analysis of the transportation system.

The subsequent phase of the congestion monitoring development is to: 1) continue the enhanced data collection process, 2) identify additional data collection needs, 3) improve the data collection process, 4) and initiate a more seamless process to update and distribute data.

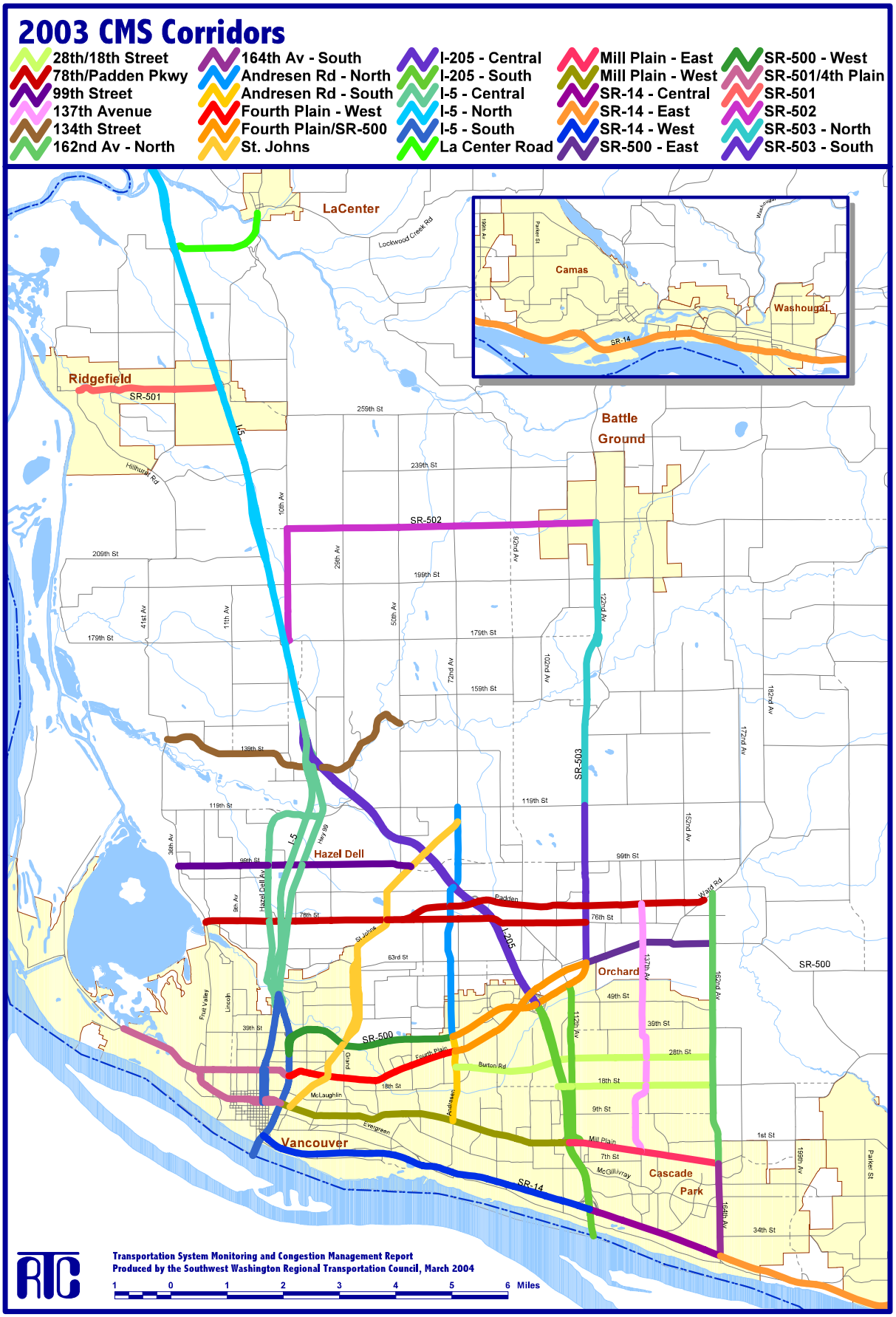
The congestion management system is intended to be a continuing systematic process that provides information on transportation system performance.

Continued coordination with local jurisdictions and local agencies is another key activity to ensure consistency of data collection, data factoring and ease of data storage/retrieval. This will also ensure the traffic count and turn movement and other data elements support local and regional transportation planning studies and concurrency management programs.

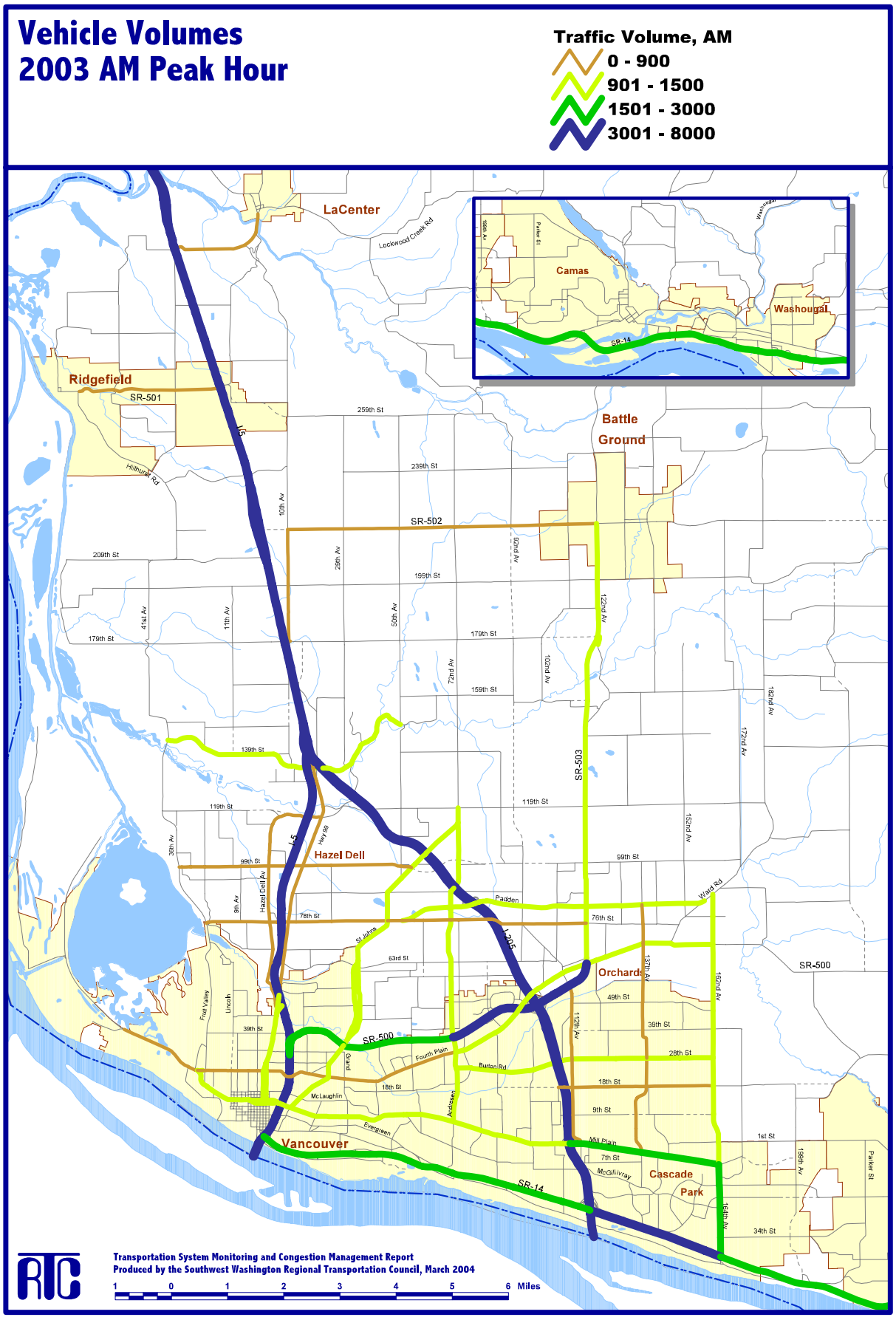
Congestion monitoring is a key component of the regional transportation planning process. The congestion management system for the Clark County region supports the long-term transportation goals and objectives defined in the Metropolitan Transportation Plan. It assists in identifying the most effective transportation projects to address congestion. The congestion management system element is closely related to the data management and travel forecasting model elements.

Existing data elements will continue to be reviewed. The continued data collection need will be identified. Existing data collection activities in the region will be identified that can provide support for the congestion management system, such as corridor travel times for concurrency and will be utilized for application to the congestion management system. Additional data collection needs will be identified and initiated. These may include filling missing data from previous years, developing a process for ongoing transit ridership and travel time information, adding information roadway lane density, and vehicle classification counts for the congestion management corridors.

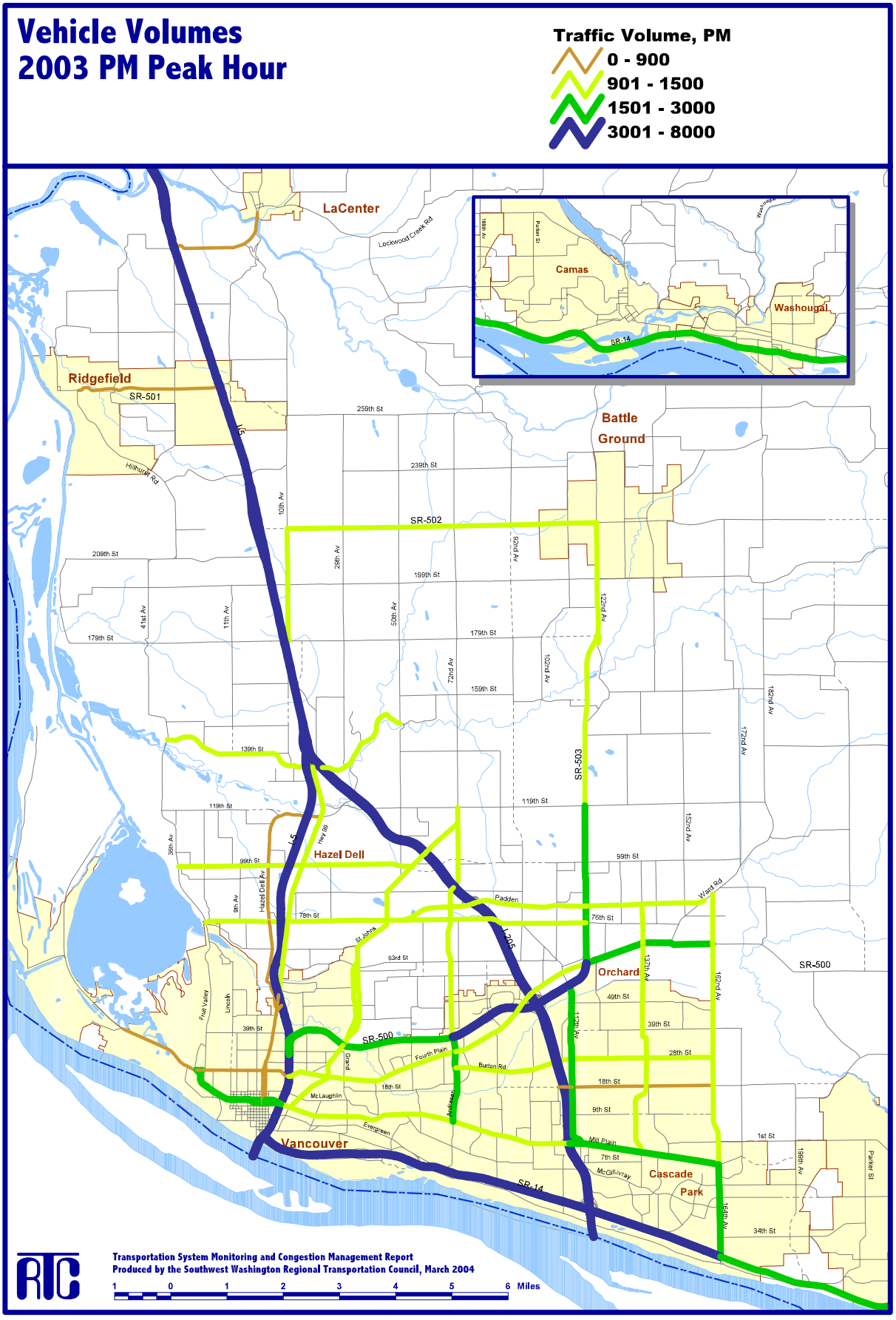
Map 1 – Congestion Management Network



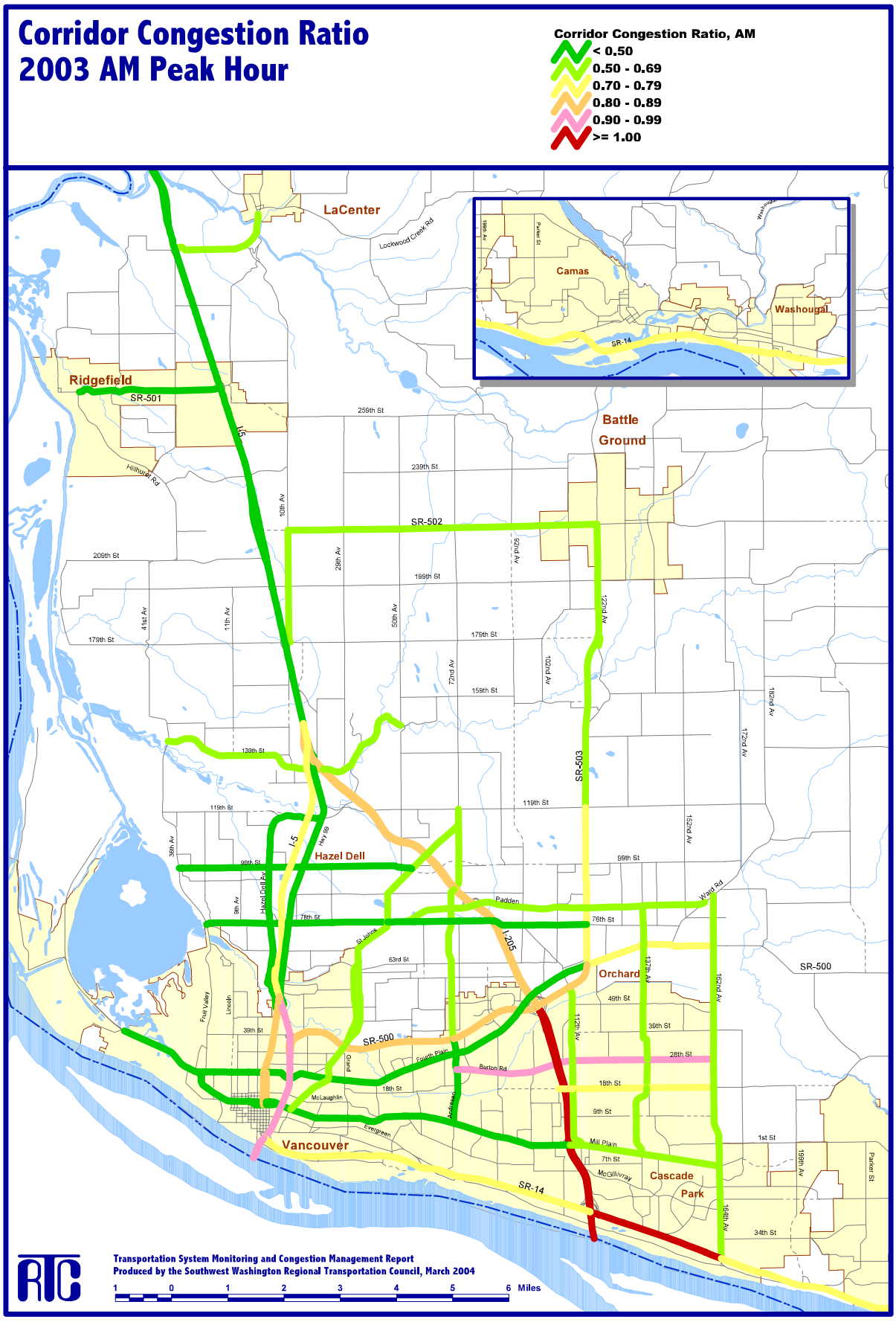
Map 2 – AM Vehicle Volumes



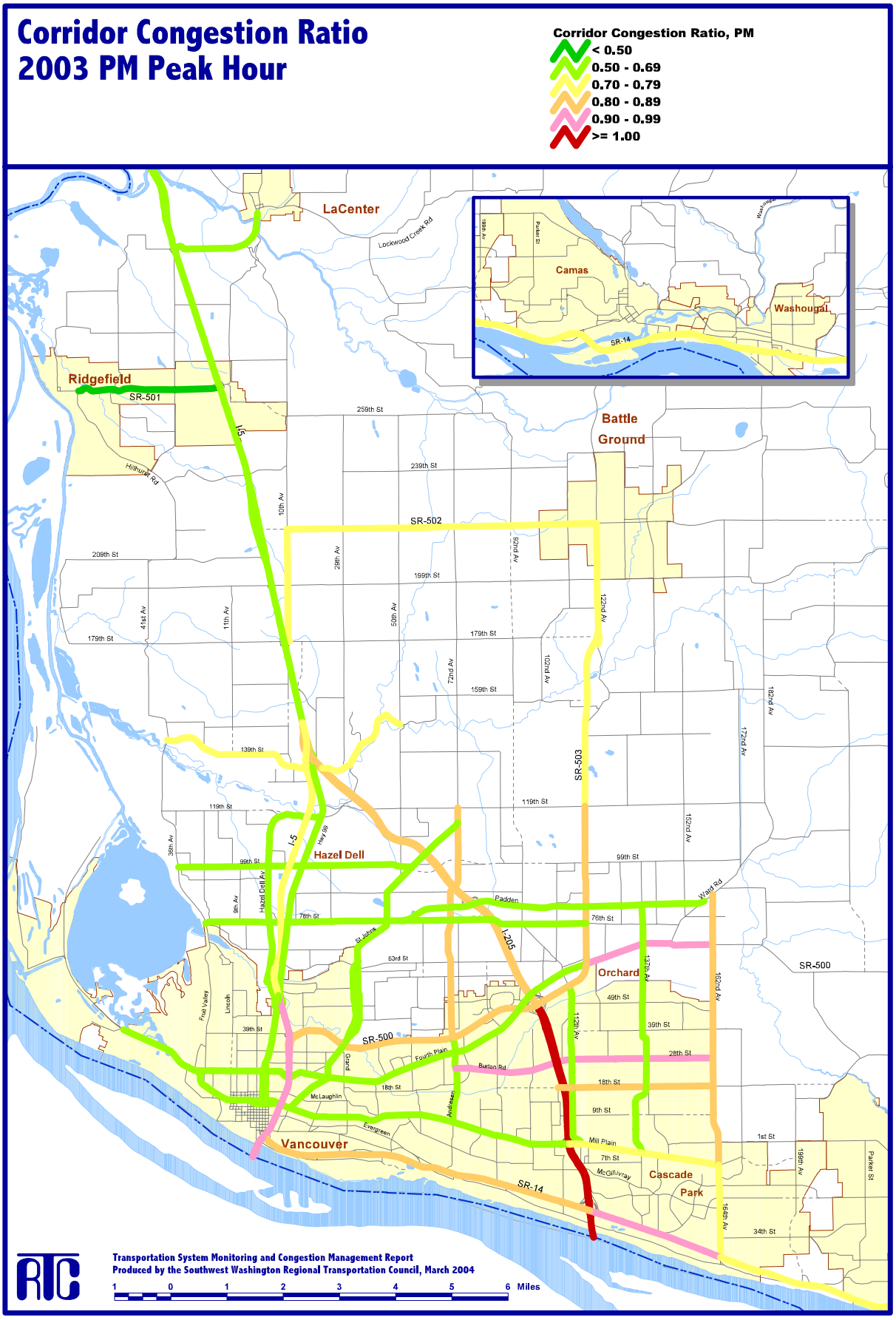
Map 3 – PM Vehicle Volumes



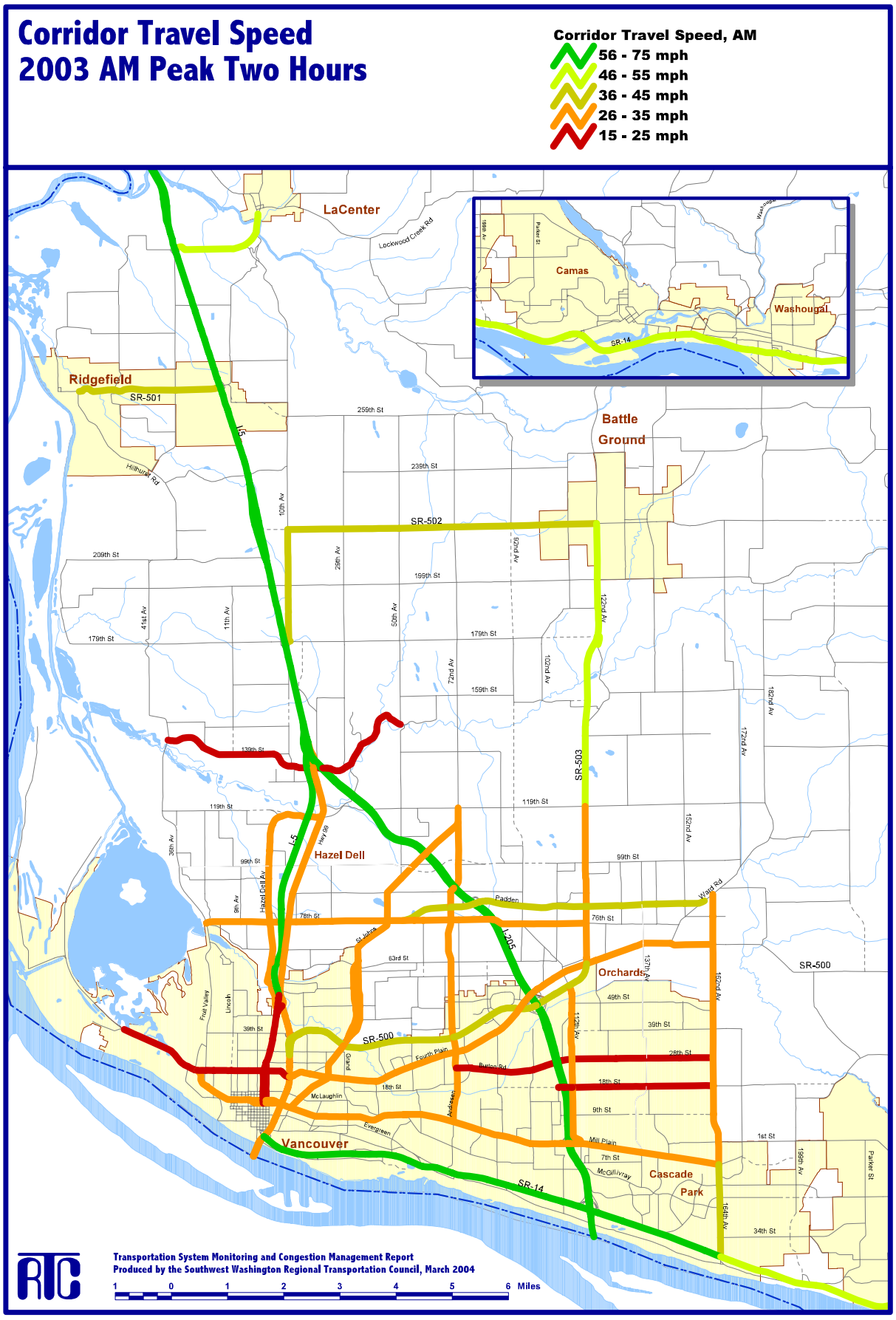
Map 4 – AM Capacity Ratio



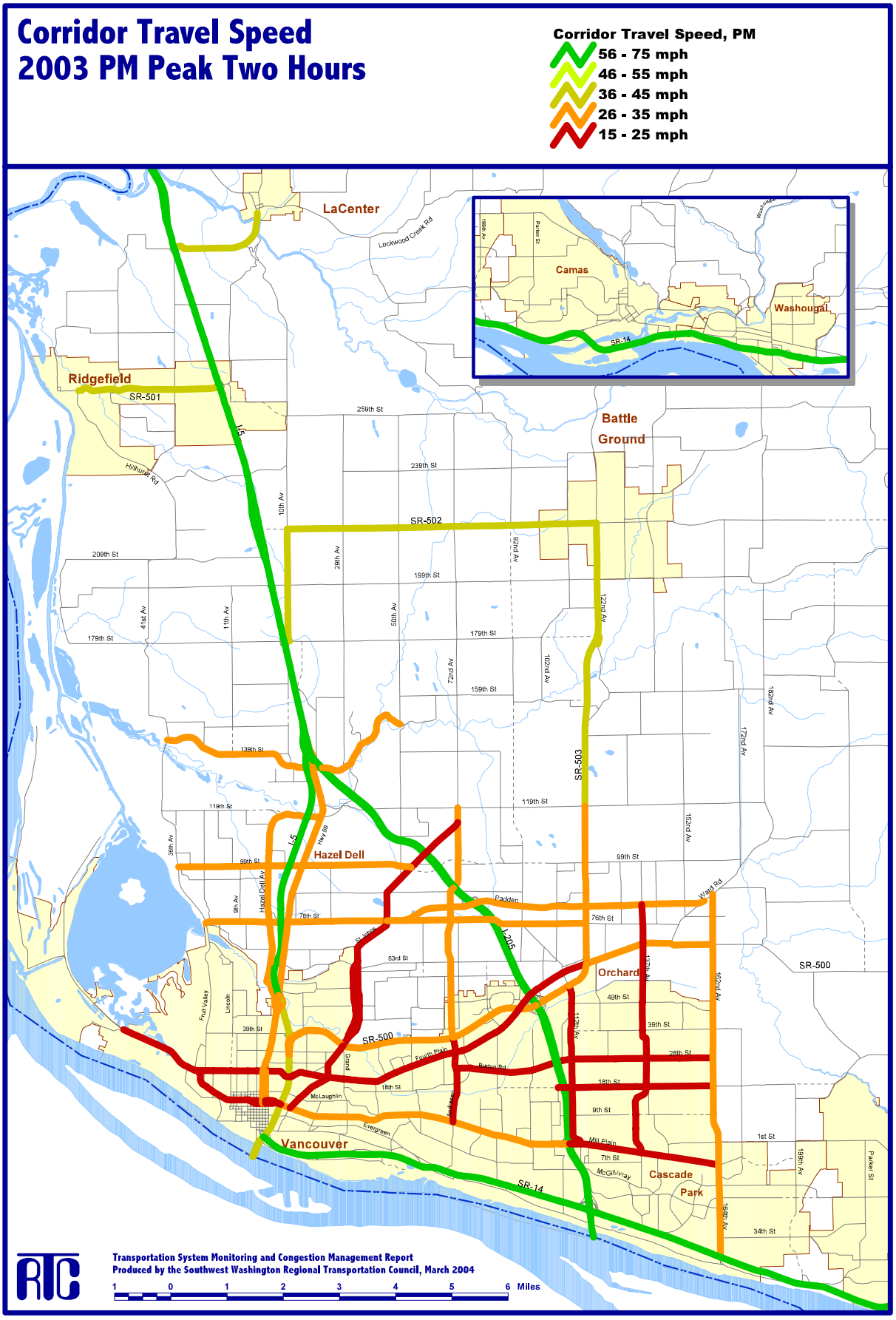
Map 5 – PM Capacity Ratio



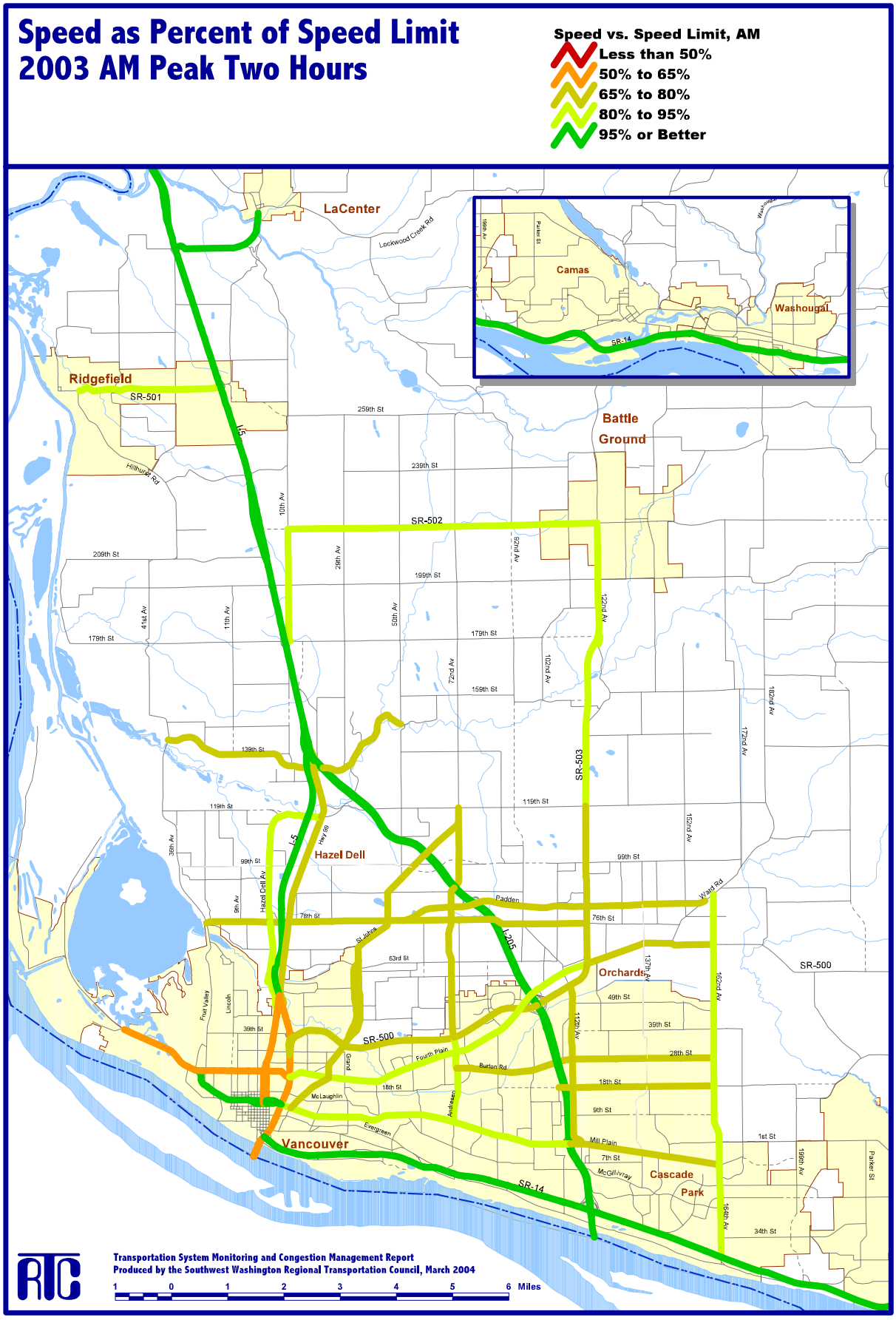
Map 6 – AM Corridor Travel Speed



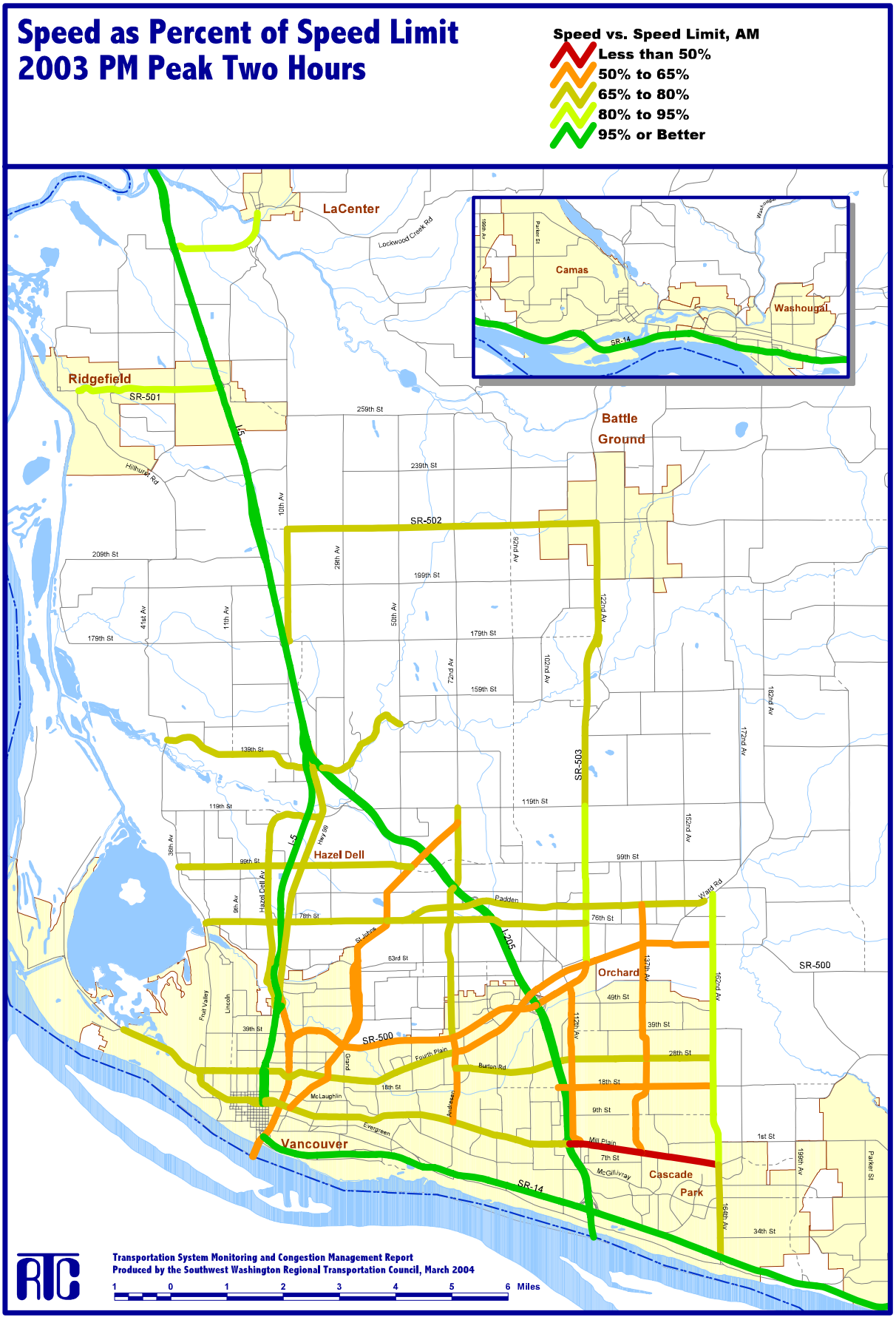
Map 7 – PM Corridor Travel Speed



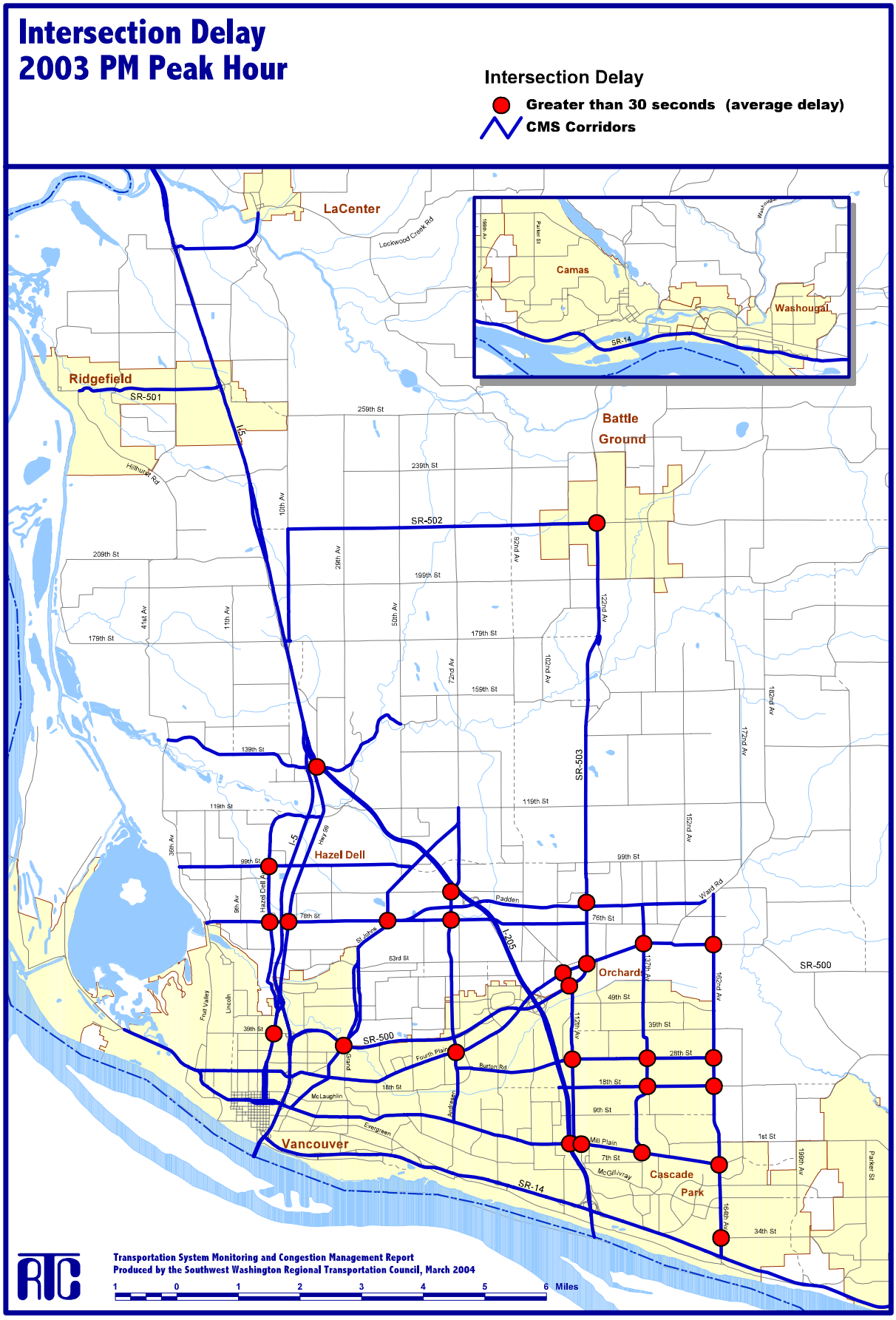
Map 8 – AM Speed as Percent of Speed Limit



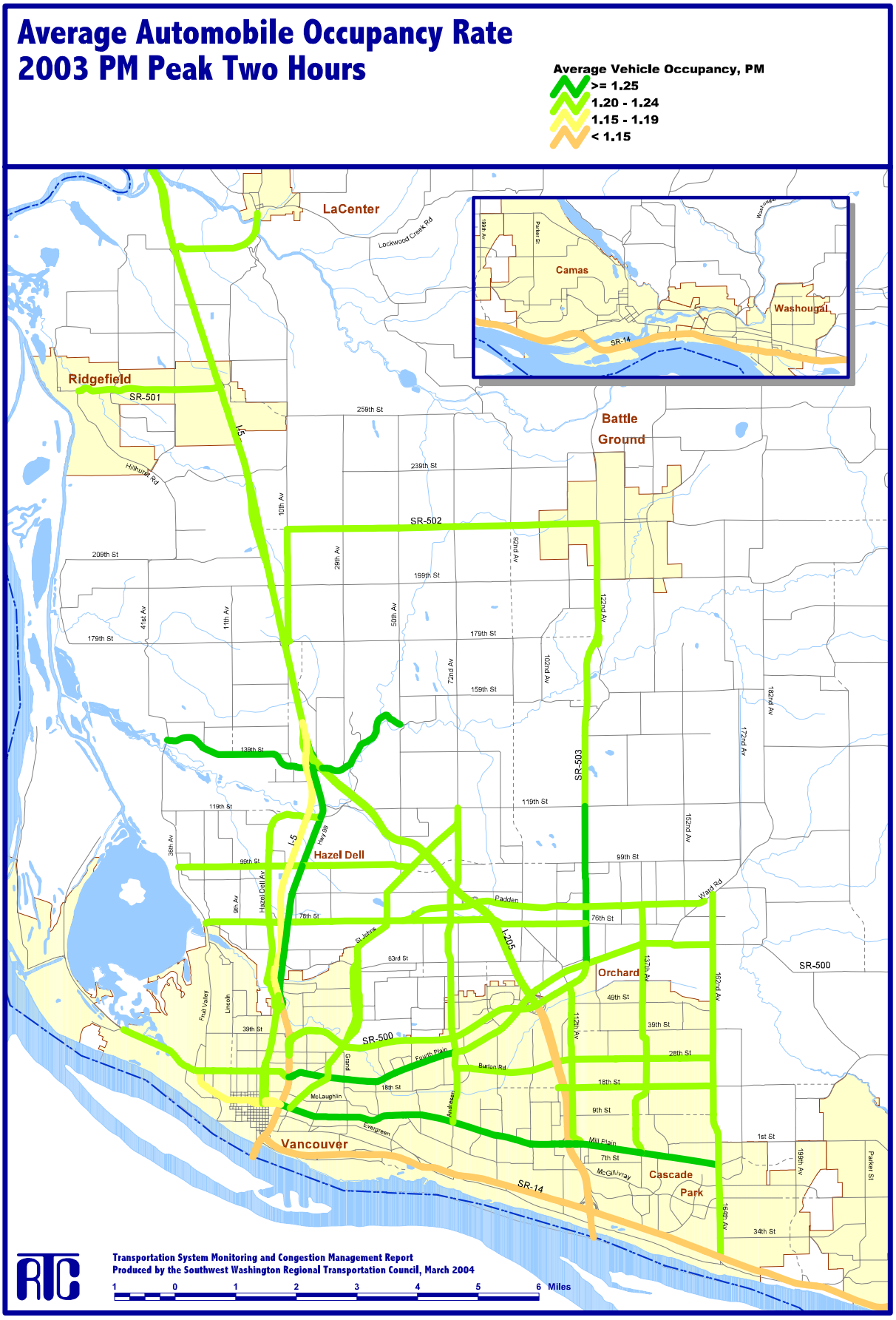
Map 9 – PM Speed as Percent of Speed Limit



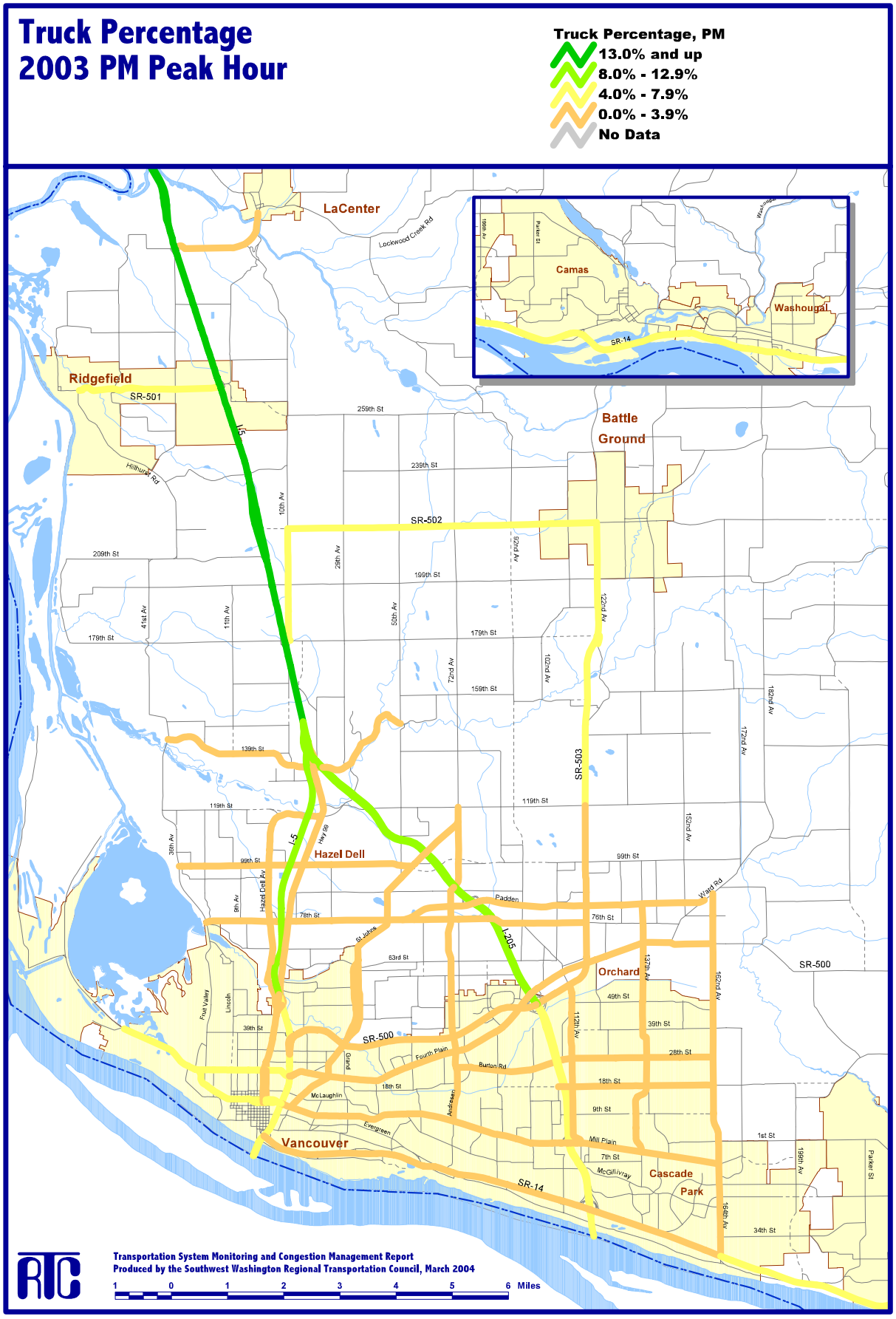
Map 10 – PM Intersection Delay



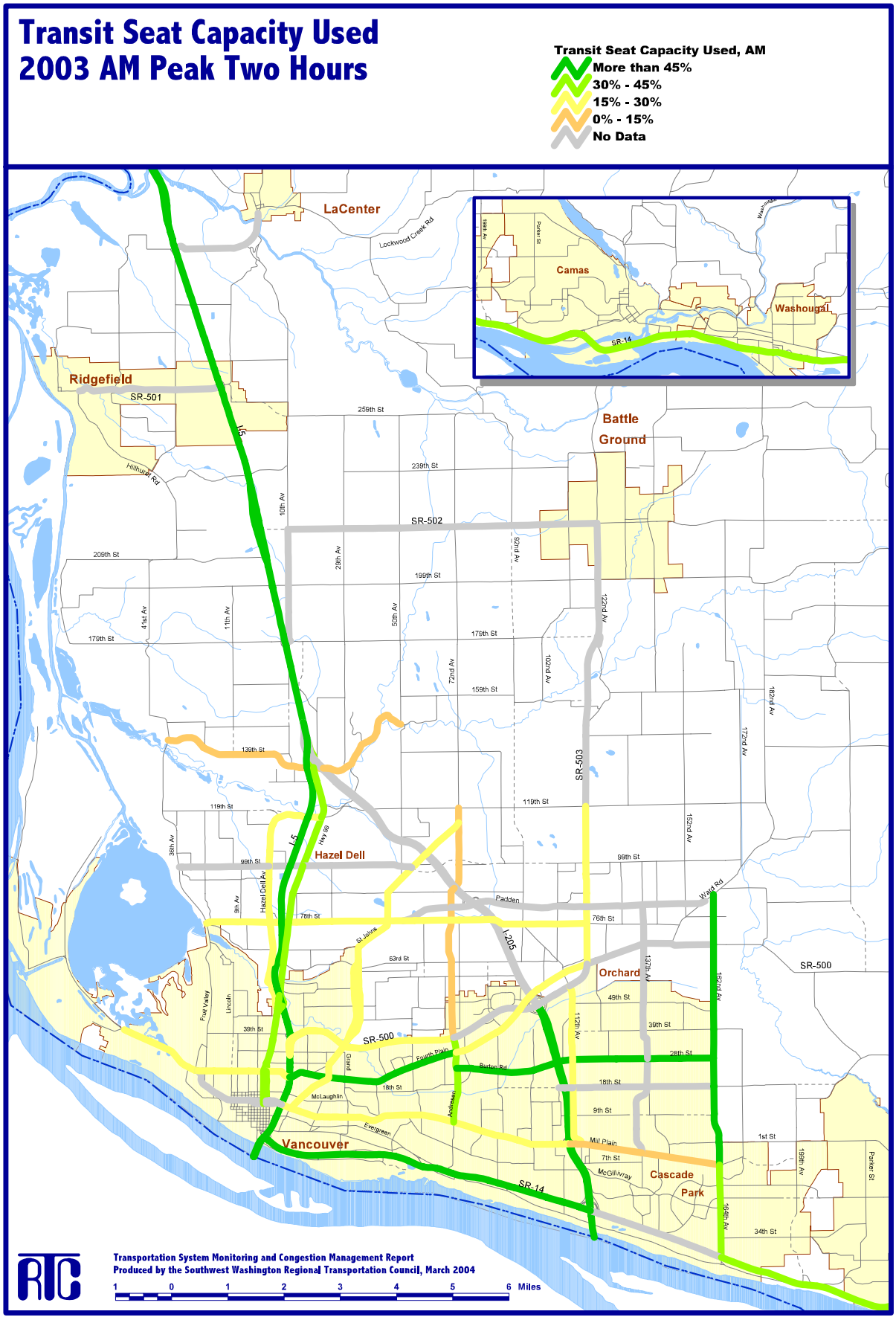
Map 11 –PM Auto Occupancy



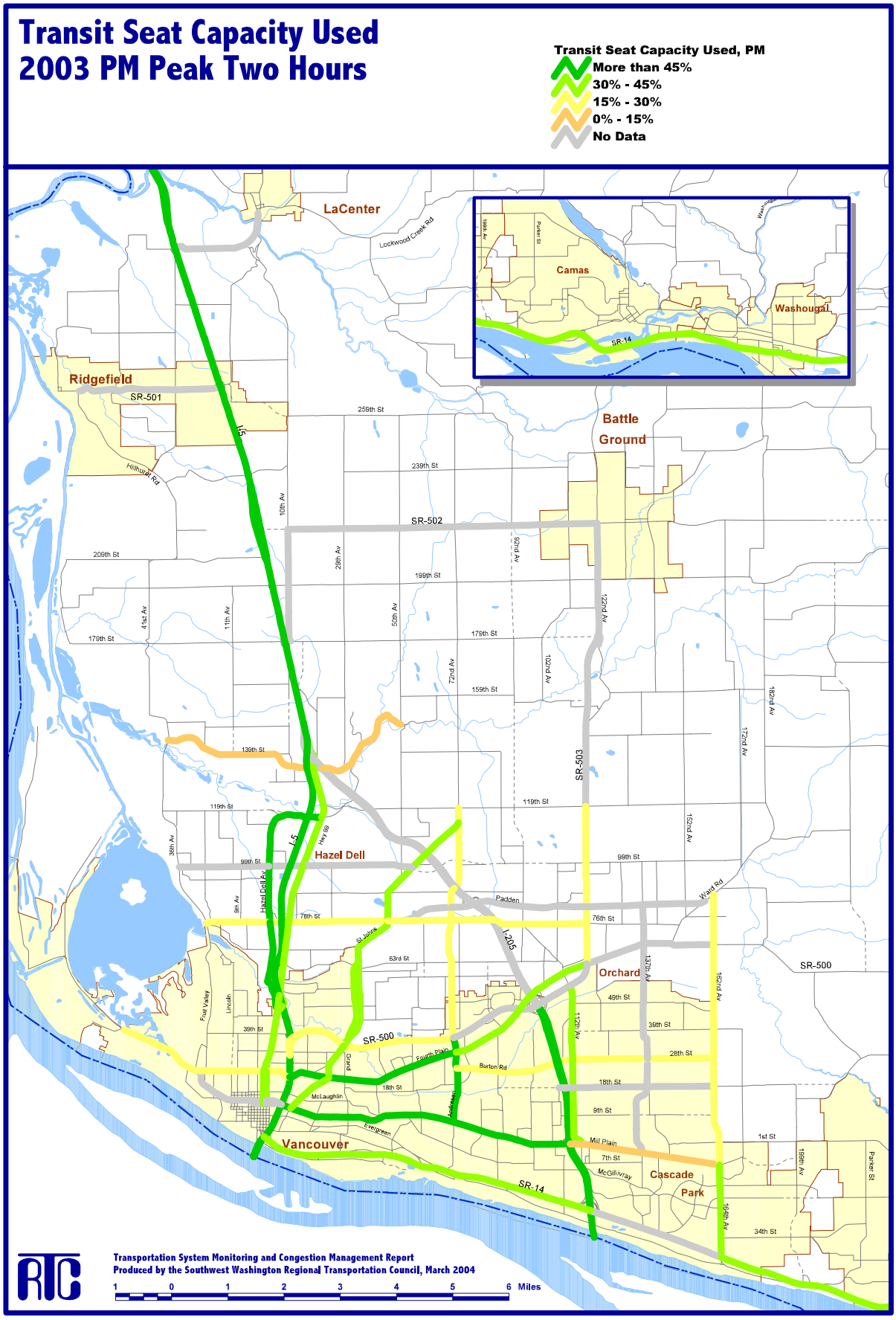
Map 12 – PM Truck Percentage



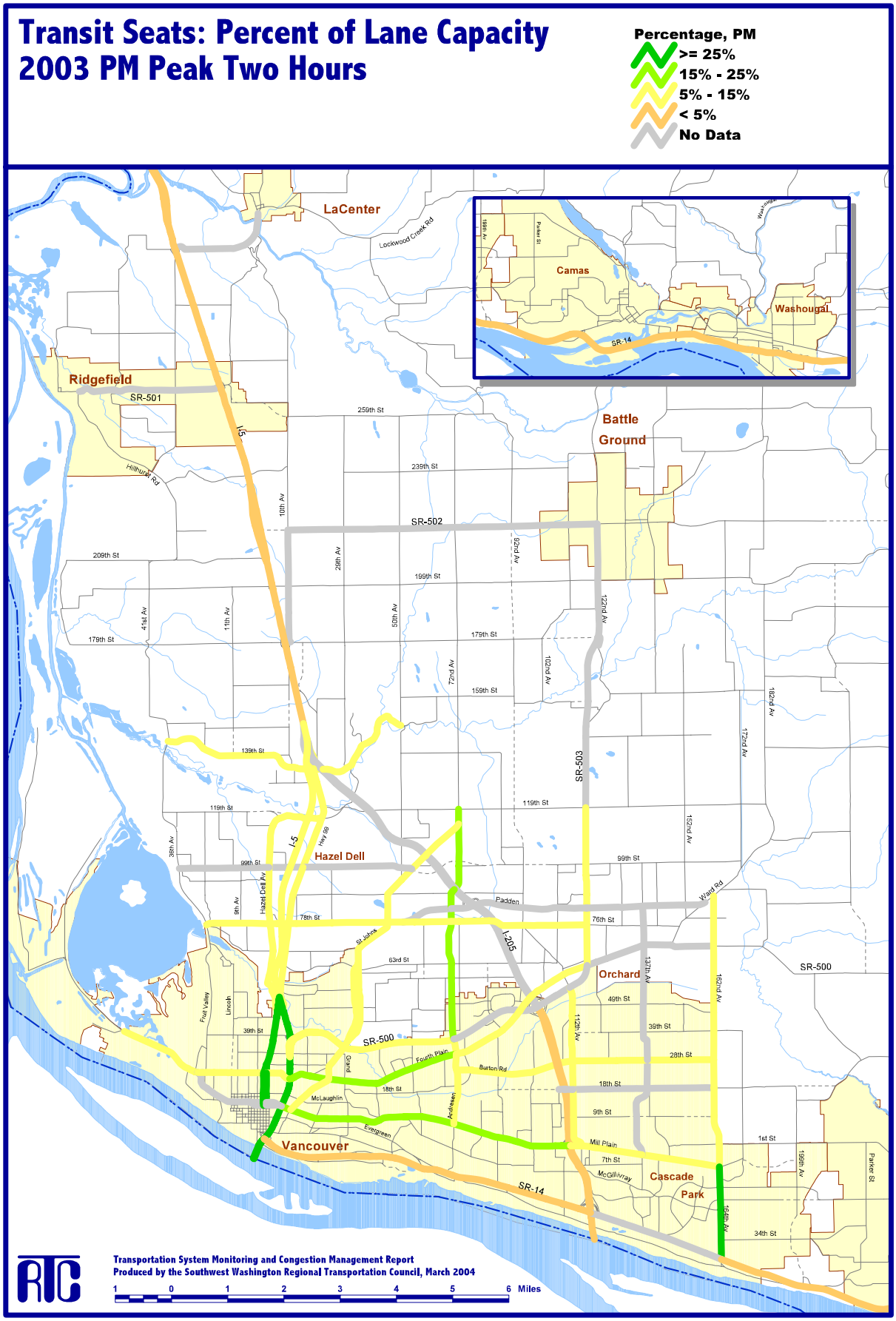
Map 13 – AM Transit Seat Capacity Used



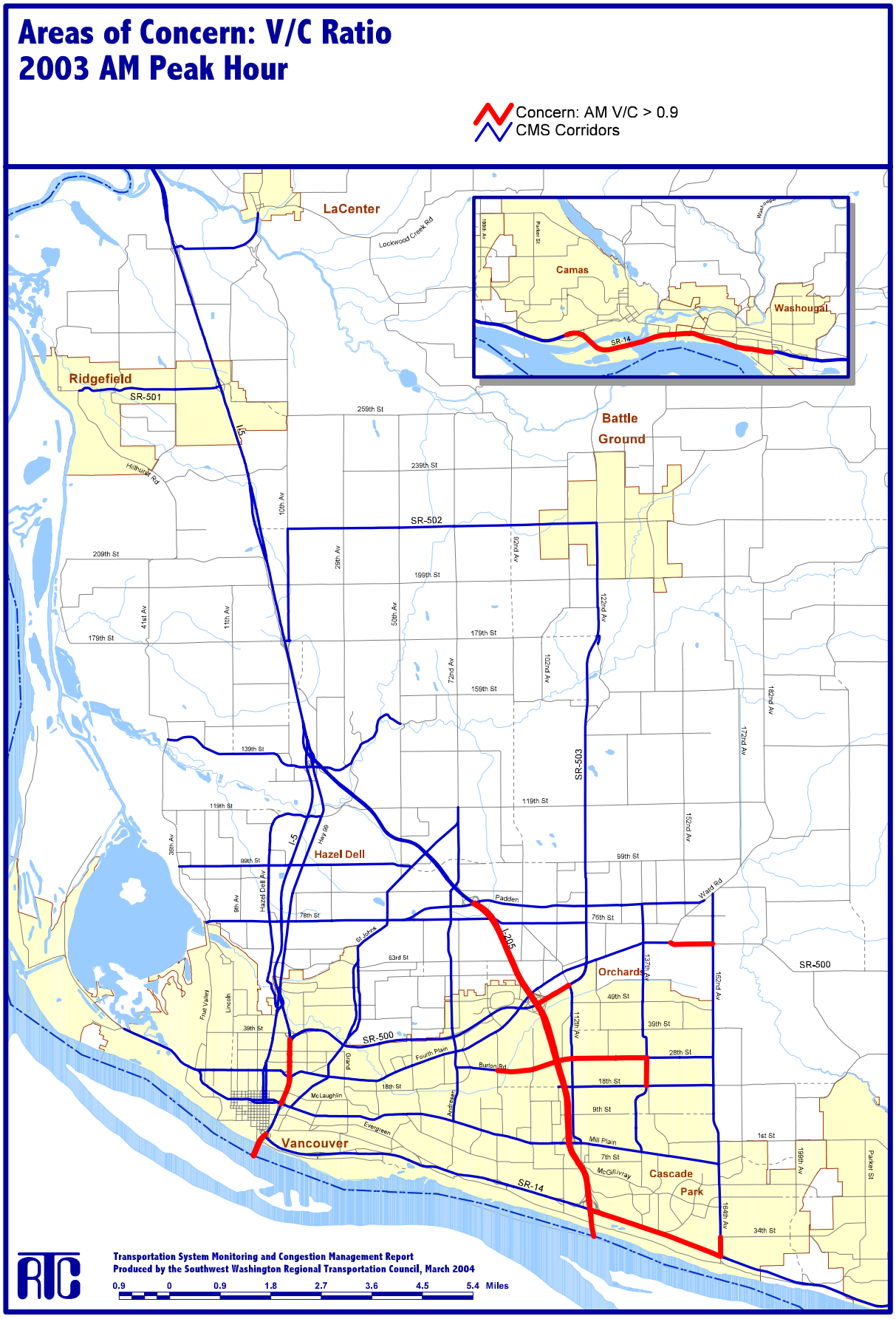
Map 14 – PM Transit Seat Capacity Used



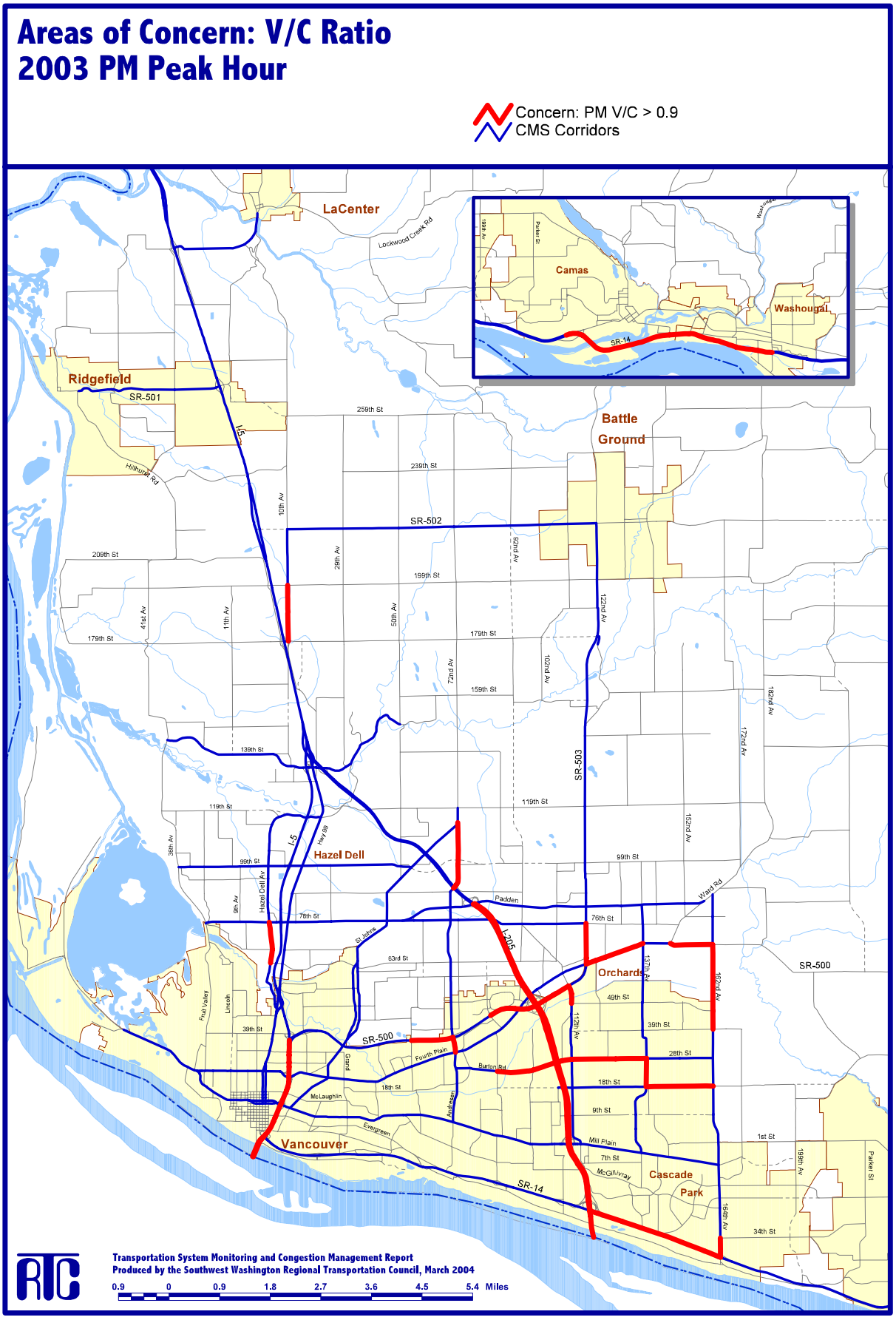
Map 15 – PM Transit Seats as Percent of Lane Capacity



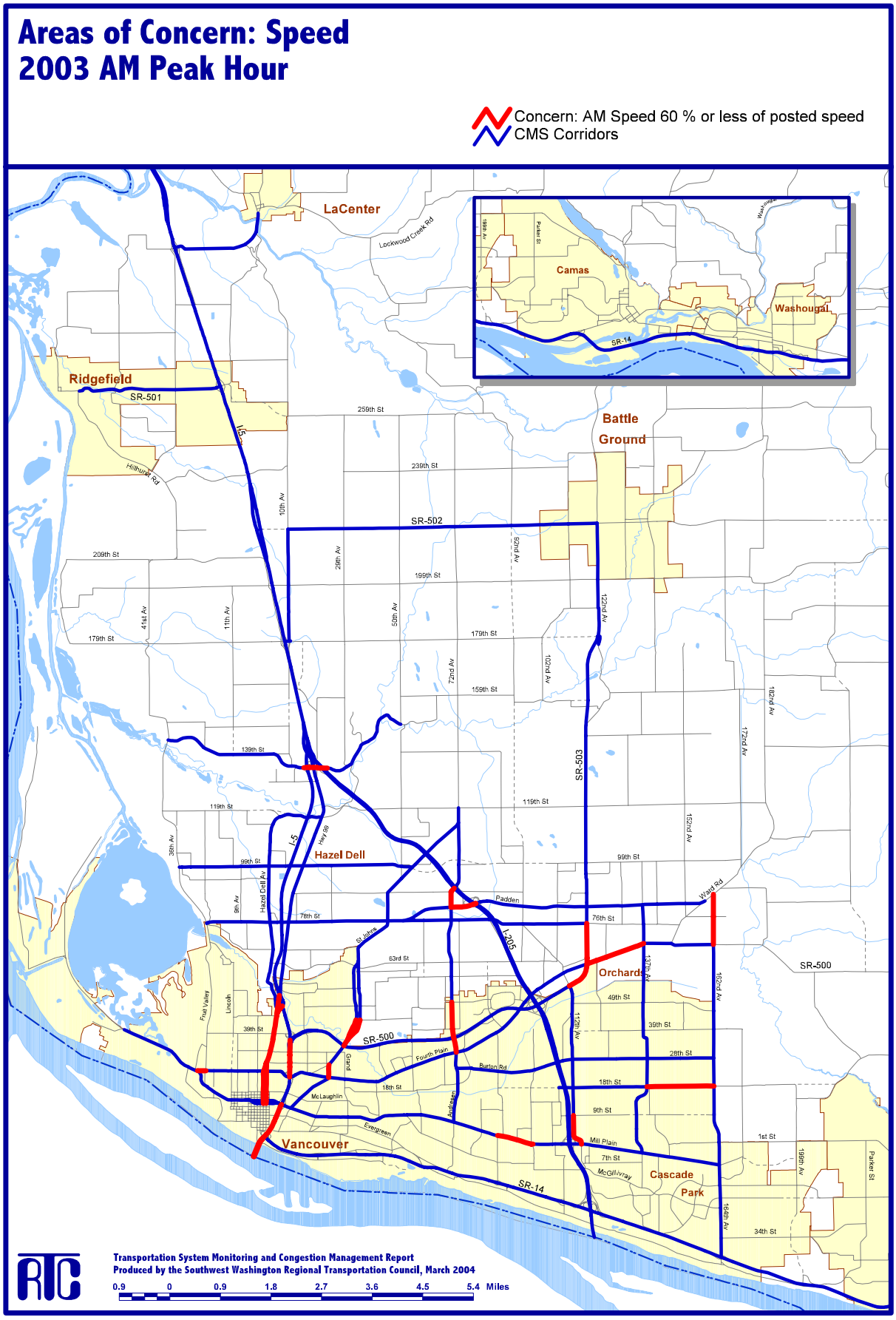
Map 16 – AM Areas of Concern: Volume to Capacity Ratio



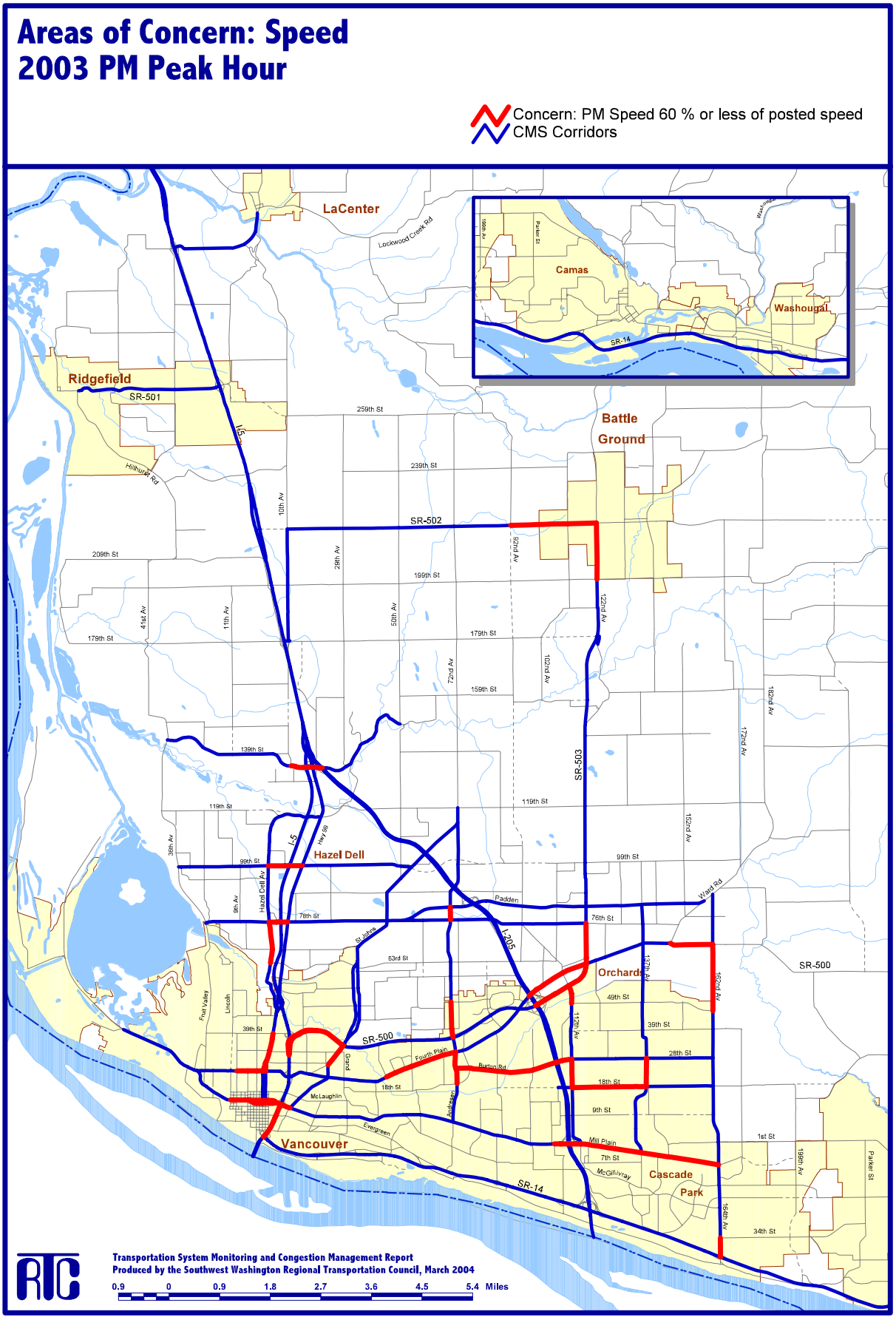
Map 17 – PM Areas of Concern: Volume to Capacity Ratio



Map 18 – AM Areas of Concern: Speed



Map 19 – PM Areas of Concern: Speed



APPENDICES

APPENDIX A.
INDIVIDUAL CORRIDOR DATA

This chapter considers and displays the transportation data by individual segment along each of the CMS corridors. The detailed data was used to develop the congestion management corridor summaries 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

SR-14

Mill Plain Boulevard

Fourth Plain Boulevard

SR-500

78th/Padden Parkway

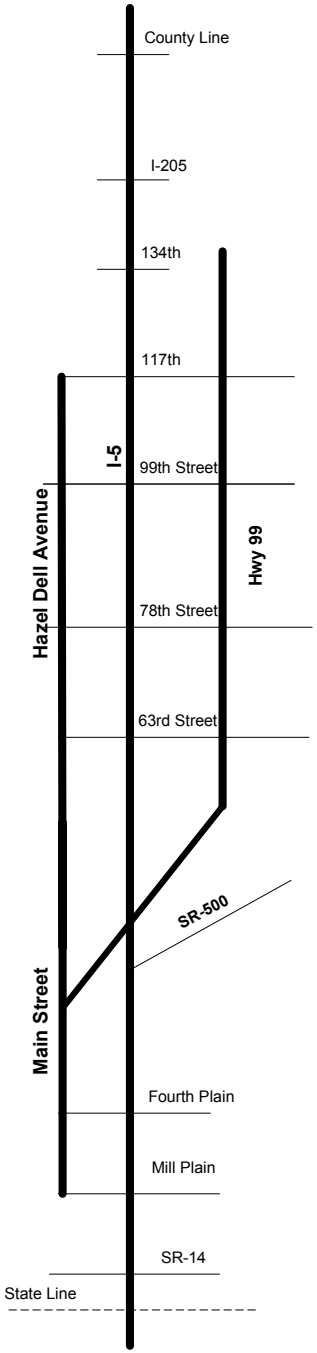
99th Street

28th/18th Streets

134th/139th Streets

SR-502

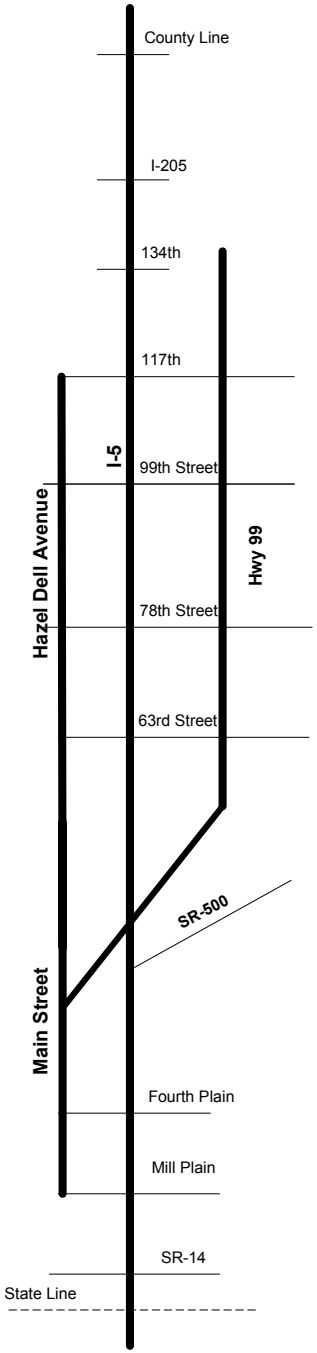
SR-501 & La Center Road



I-5 Corridor

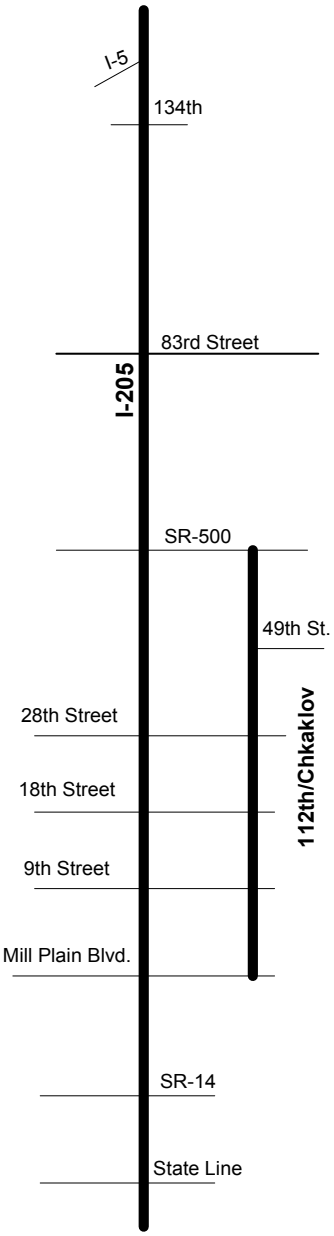
AM Peak			Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
			Length	Capacity	AM - Southbound/Westbound											
I-5																
County Line	-	319th St.	3.95	5400	1753	0.32	13%		218	65	93%					
319th St.	-	SR 501	2.64	5400	2170	0.40	13%		138	69	99%					
SR 501	-	SR 502/179th St.	4.72	5400	2430	0.45	13%	1.12	245	70	99%					
SR 502/179th St.	-	I-205	1.54	5400	3430	0.64	13%		91	60	101%	135,173	36	80	45.0%	
			12.85		**3430**	**0.44**	**13%**	**1.12**	**691**	**69**	**97%**	**135,173**	**36**	**80**	**45.0%**	**2.2%**
I-5																
I-205	-	134th St.	0.17	3400	1765	0.52			10	64	106%					
134th St.	-	99th St.	2.31	3600	2800	0.78	10%		138	61	101%					
99th St.		78th St.*	0.98	4600	3060	0.67			57	62	103%					
78th St.	-	Main St.*	1.47	4600	3177	0.69	6%		87	61	102%	134,173	283	440	64.3%	
			4.93		**3177**	**0.72**	**8%**	**1.15**	**291**	**61**	**102%**	**134,173**	**283**	**440**	**64.3%**	**11.0%**
Hwy 99																
134th St.	-	117th St.	0.92	1700	752	0.44	9%		135	25	61%					
117th St.	-	99th St.	0.93	1700	426	0.25	6%		119	28	70%					
99th St.	-	78th St.	1.05	1700	496	0.29	6%		121	31	78%					
78th St.	-	63rd St.	0.75	1700	495	0.29	6%	1.12	95	28	81%	71	65	210	31.0%	
63rd St.	-	Ross St.	0.41	1700	741	0.44			39	38	95%					
			4.06		**752**	**0.35**	**7%**	**1.12**	**509**	**29**	**73%**	**71**	**65**	**210**	**31.0%**	**12.4%**
Hazel Dell																
117th St.	-	99th St.	1.70	800	424	0.53			197	31	89%					
99th St.	-	78th St.	1.00	1700	426	0.25			149	24	69%					
78th St.	-	63rd St.	0.73	800	496	0.62	3%		87	30	87%	6	32	120	26.7%	
			3.43		**496**	**0.47**	**3%**	**1.11**	**433**	**29**	**82%**	**6**	**32**	**120**	**26.7%**	**7.5%**
I-5																
Main St.	-	39th St.*	0.77	4000	3096	0.77	6%		61	45	75%	134,157,173,190	346	560	61.8%	
39th St.	-	4th Plain*	0.66	4200	4083	0.97	6%	1.15	70	34	57%					
4th Plain	-	Mill Plain*	0.49	4200	3960	0.94	6%		45	39	66%					
Mill Plain	-	SR 14	0.55	5400	4410	0.82	6%		64	31	52%					
SR 14	-	State line	1.08	5400	5349	0.99	7%		125	31	57%	105,134,157,190	506	920	55.0%	
			3.54		**5349**	**0.92**	**6%**	**1.15**	**364**	**35**	**62%**	**105,134,154,155**	**506**	**920**	**55.0%**	**25.6%**
Main Street																
Ross St.	-	39th St.	0.84	1700	1401	0.82	3%		166	18	52%					
39th St.		Fourth Plain	0.69	1000	800	0.80			138	18	60%	6,71	122	330	37.0%	
Fourth Plain	-	Mill Plain	0.50	1200	979	0.82			120	15	60%					
			2.03		**1401**	**0.82**	**3%**	**1.11**	**424**	**17**	**56%**	**6,71**	**122**	**330**	**37.0%**	**33.0%**

** Includes only general-purpose lane volume and capacity.*



I-5 Corridor

PM Peak			Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
			Length	Capacity	PM - Southbound/Westbound											
I-5																
County Line	-	319th St.	4.25	5400	2267	0.42	16%		223	69	98%					
319th St.	-	SR 501	2.59	5400	2833	0.52	13%		143	65	93%					
SR 501	-	SR 502/179th St.	4.76	5400	2865	0.53	13%		263	65	93%					
SR 502/179th St.	-	I-205	1.66	5400	4140	0.77	13%	1.23	96	62	104%	135,173	87	120	72.5%	
			13.26		**4140**	**0.54**	**14%**	**1.23**	**724**	**66**	**96%**	**135,173**	**87**	**120**	**72.5%**	**3.3%**
I-5																
I-205	-	134th St.	0.60	3400	2250	0.66	9%		32	67	112%					
134th St.	-	99th St.	1.89	3600	3150	0.88	9%	1.17	103	66	110%					
99th St.		78th St.	1.05	6000	4020	0.67	9%		59	64	107%					
78th St.	-	Main St.	1.09	6000	4750	0.79	6%		62	63	106%	134,173	221	440	50.2%	
			4.62		**4750**	**0.78**	**8%**	**1.17**	**256**	**65**	**109%**	**134,173**	**221**	**440**	**50.2%**	**11.0%**
Hwy 99																
134th St.	-	117th St.	0.90	1700	668	0.39	2%		177	18	46%					
117th St.	-	99th St.	0.92	1700	877	0.52	2%		103	32	81%					
99th St.	-	78th St.	0.98	1700	1145	0.67	2%		111	32	79%					
78th St.	-	63rd St.	0.81	1700	1285	0.76	2%	1.31	97	30	86%	71	79	240	32.9%	
63rd St.	-	Ross St.	0.52	1700	993	0.58	2%		72	26	65%					
			4.13		**1285**	**0.61**	**2%**	**1.31**	**560**	**27**	**68%**	**71**	**79**	**240**	**32.9%**	**14.1%**
Hazel Dell																
117th St.	-	99th St.	1.69	800	569	0.71	1%		180	34	96%					
99th St.	-	78th St.	1.00	1700	661	0.39	1%		157	23	65%					
78th St.	-	63rd St.	0.74	800	751	0.94	1%		141	19	54%	6	61	120	50.8%	
			3.42		**751**	**0.67**	**1%**	**1.24**	**478**	**26**	**74%**	**6**	**61**	**120**	**50.8%**	**7.5%**
I-5																
Main St.	-	39th St.	0.91	6000	5080	0.85	5%		51	64	107%	134,157,173,190	340	640	53.1%	
39th St.	-	4th Plain	0.70	6000	6289	1.05	4%	1.08	75	60	101%					
4th Plain	-	Mill Plain	0.56	5800	5630	0.97	4%		"	"	"					
Mill Plain	-	SR 14	0.59	5800	5390	0.93	6%		65	33	54%					
SR 14	-	State line	0.85	5400	5399	1.00	5%		83	37	67%	105,134,157,190	508	1080	47.0%	
			2.76		**6289**	**0.96**	**5%**	**1.08**	**275**	**36**	**64%**	**105,134,154,155**	**508**	**1080**	**47.0%**	**30.0%**
Main Street																
Ross St.	-	39th St.	0.59	1700	725	0.43	3%		65	33	94%					
39th St.		Fourth Plain	0.70	1000	687	0.69	2%		120	21	70%	6,71	160	360	44.4%	
Fourth Plain	-	Mill Plain	0.50	1200	365	0.30	2%									
			1.80		**725**	**0.52**	**2%**	**1.24**	**186**	**25**	**82%**	**6,71**	**160**	**360**	**44.4%**	**36.0%**



I-205 Corridor

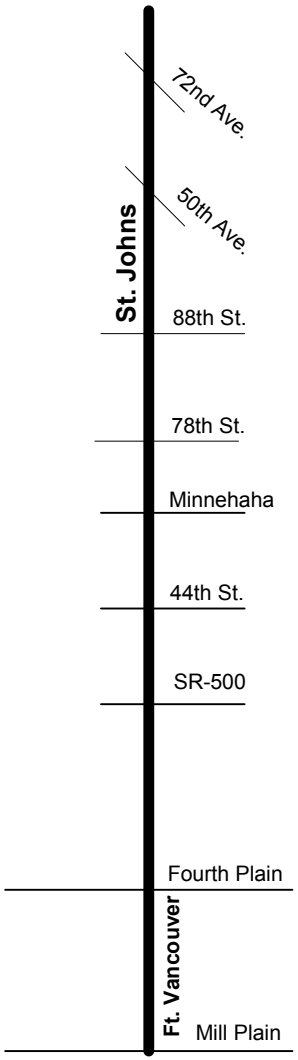
AM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		AM - Southbound/Westbound													
I-205															
I-5	- 134th St.	0.52	3200	1886	0.52	9%		32	58	96%					
134th St.	- 83rd St.	3.70	3600	2383	0.66	7%		212	63	105%					
83rd St.	- SR 500	2.07	3600	3807	1.06		1.10	112	67	111%					
		6.29		**3807**	**0.83**	**8%**	**1.10**	**356**	**64**	**106%**					
I-205															
SR 500	- Mill Plain	2.73	5700	5249	0.92			152	64	107%					
Mill Plain	- SR 14	1.06	5700	5746	1.01		1.03	60	63	106%	177	68	80	85.0%	
SR 14	- State line	2.57	7200	7568	1.05	4%		158	59	98%	164,165,177	348	560	62.1%	
		6.35		**7568**	**1.00**	**4%**	**1.03**	**370**	**62**	**103%**	**164,165,177**	**348**	**560**	**62.1%**	**11.7%**
112th Ave. NE / Chkalov Drive / Gher Road															
SR 500	- 49th St.	0.32	1700	895	0.53			44	26	75%					
49th St.	- 28th St.	1.00	1700	845	0.50			139	26	74%	80	24	120	20.0%	
28th St.	- 18th St.	0.51	1700	682	0.40	5%		49	37	106%					
18th St.	- 9th St.	0.50	1700	847	0.50			45	41	116%					
9th St.	- Mill Plain	0.56	1600	875	0.55			111	18	52%					
		2.89		**895**	**0.50**	**5%**	**1.11**	**387**	**27**	**77%**	**80**	**24**	**120**	**20.0%**	**7.1%**

I-205 Corridor

PM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		PM - Southbound/Westbound													
I-205															
I-5	- 134th St.	0.79	3200	2070	0.58	10%		42	68	113%					
134th St.	- 83rd St.	3.81	3600	2534	0.70	9%		215	64	106%					
83rd St.	- SR 500	2.17	3600	3909	1.09	9%	1.24	123	63	106%					
		6.76		**3909**	**0.86**	**9%**	**1.24**	**380**	**64**	**107%**					
I-205															
SR 500	- Mill Plain	2.59	5700	5162	0.91	6%		147	63	106%					
Mill Plain	- SR 14	0.86	5700	5415	0.95	9%	1.04	51	61	102%	177	131	160	81.9%	
SR 14	- State line	2.31	7200	7767	1.08	4%		151	55	92%	164,165,177	558	760	73.4%	
		5.76		**7767**	**1.00**	**6%**	**1.04**	**349**	**60**	**99%**	**164,165,177**	**558**	**760**	**73.4%**	**4.2%**
112th Ave. NE / Chkalov Drive / Gher Road															
SR 500	- 49th St.	0.30	1700	1528	0.90	2%		81	13	38%					
49th St.	- 28th St.	1.01	1700	1124	0.66	3%		140	26	74%	80	42	120	35.0%	
28th St.	- 18th St.	0.49	1700	1020	0.60	1%		92	19	55%					
18th St.	- 9th St.	0.50	1700	895	0.53	1%		82	22	63%					
9th St.	- Mill Plain	0.59	1600	920	0.58	2%		68	31	88%					
		2.88		**1528**	**0.65**	**2%**	**1.24**	**463**	**22**	**64%**	**80**	**42**	**120**	**35.0%**	**7.1%**



St. Johns Corridor

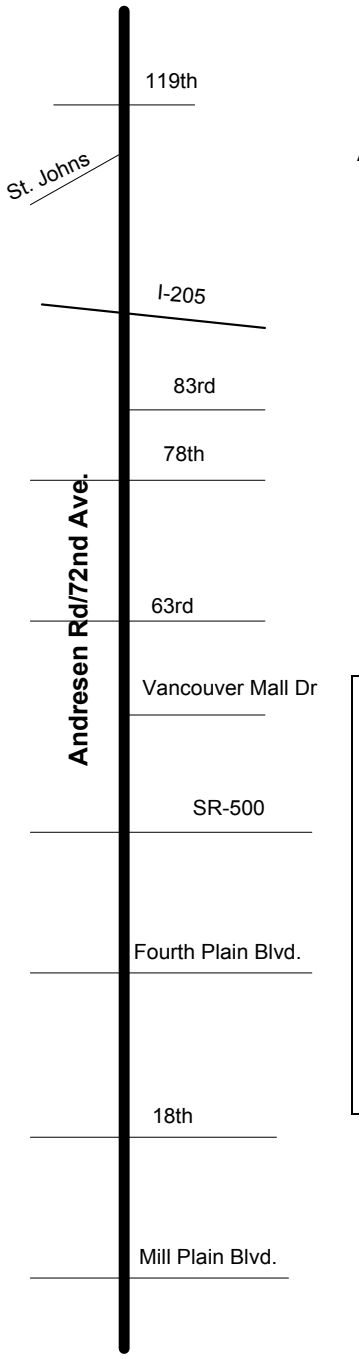
AM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
St. Johns Rd.															
NE 72nd Ave.	- 50th Ave.	1.37	800	494	0.62	3%		109	45	100%					
50th Ave.	- NE 88th St.	0.38	1700	830	0.49			48	28	70%					
NE 88th St.	- NE 78th St.	0.50	1700	912	0.54	6%		50	36	89%					
NE 78th St.	- NE Minnehaha St.	1.07	1800	808	0.45	8%		96	40	100%					
St. Johns Rd./St. James Rd.															
NE Minnehaha St.	- NE 44th St.	0.97	1800	1036	0.58			111	31	89%	25	22	120	18.3%	
NE 44th St.	- SR 500	0.51	1800	1103	0.61	4%		112	16	47%					
St. Johns Blvd.															
SR-500	- Ft. Vancouver Way	0.45	1000	770	0.77			65	25	100%					
Ft. Vancouver Way															
St. Johns	- Fourth Plain	0.22	1000	673	0.67			60	13	53%					
Fourth Plain	- Mill Plain	0.50	1800	911	0.51			69	26	104%					
		5.51		**1103**	**0.56**	**5%**	**1.11**	**720**	**27**	**69%**	**25**	**22**	**120**	**18.3%**	**6.7%**

St. Johns Corridor

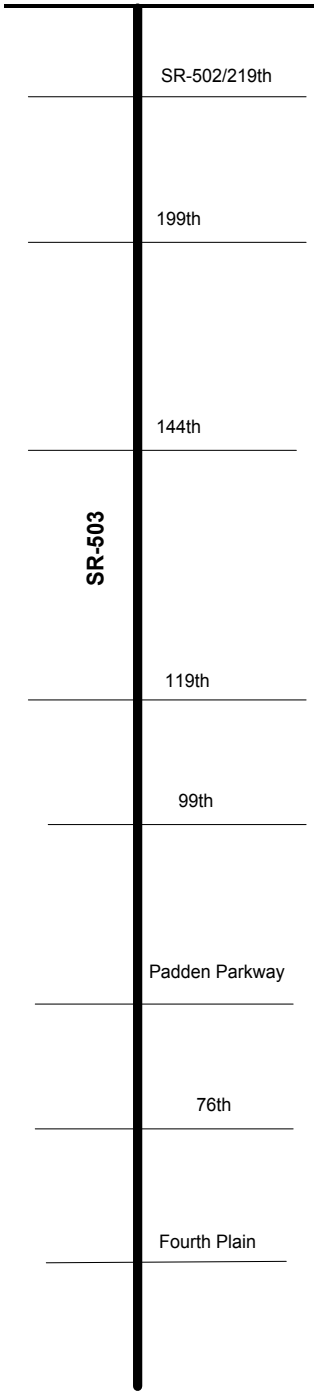
PM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
St. Johns Rd.															
NE 72nd Ave.	- 50th Ave.	1.36	800	575	0.72	4%		118	42	93%					
50th Ave.	- NE 88th St.	0.38	1700	963	0.57	3%		34	40	100%					
NE 88th St.	- NE 78th St.	0.50	1700	851	0.50	3%		58	31	78%					
NE 78th St.	- NE Minnehaha St.	1.09	1800	837	0.47	3%		143	27	68%					
St. Johns Rd./St. James Rd.															
NE Minnehaha St.	- NE 44th St.	0.94	1800	924	0.51	3%		131	26	74%	25	38	120	31.7%	
NE 44th St.	- SR 500	0.56	1800	1113	0.62	3%		62	33	93%					
St. Johns Blvd.															
SR-500	- Ft. Vancouver Way	0.44	1000	860	0.86	2%		166	10	38%					
Ft. Vancouver Way															
St. Johns	- Fourth Plain	0.22	1000	688	0.69	2%		41	19	78%					
Fourth Plain	- Mill Plain	0.50	1800	546	0.30	2%		95	19	76%					
		5.99		**1113**	**0.58**	**3%**	**1.24**	**848**	**25**	**64%**	**25**	**38**	**120**	**31.7%**	**6.7%**



AM Peak

Leg	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity



SR-503 Corridor

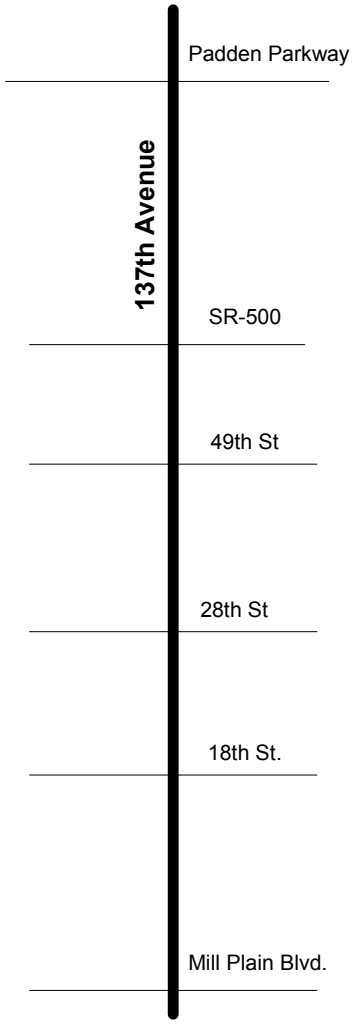
AM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		AM - Southbound/Westbound													
SR 503															
119th St.	- 99th St.	1.01	1800	1409	0.78	5%		95	38	95%					
99th St.	- Padden Parkway	0.78	1800	1478	0.82			93	30	76%	7	19	90	21.1%	
Padden Parkway	- 76th St.	0.30	1800	1248	0.69	7%		30	35	88%					
76th St.	- Fourth Plain/SR 500	0.72	1800	1349	0.75		1.09	123	21	53%					
		2.80		**1478**	**0.78**	**6%**	**1.09**	**341**	**30**	**74%**	**7**	**19**	**90**	**21.1%**	**5.0%**
SR 503															
SR-502	- 199th St.	1.01	1800	929	0.52	5%		74	49	90%					
199th St.	- 149th St.	2.56	1800	1173	0.65		1.11	181	51	93%					
149th St.	- 119th St.	1.51	1800	1331	0.74	3%		139	39	78%					
		5.08		**1331**	**0.66**	**4%**	**1.11**	**393**	**46**	**87%**					

SR-503 Corridor

PM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		PM - Southbound/Westbound													
SR 503															
119th St.	- 99th St.	0.98	1800	1151	0.64	4%		84	42	105%					
99th St.	- Padden Parkway	0.79	1800	1488	0.83	3%		70	41	102%	7	22	90	24.4%	
Padden Parkway	- 76th St.	0.29	1800	1425	0.79	2%		33	32	81%					
76th St.	- Fourth Plain/SR 500	0.74	1800	1844	1.02	2%	1.26	113	23	59%					
		2.80		**1844**	**0.84**	**3%**	**1.26**	**300**	**34**	**84%**	**7**	**22**	**90**	**24.4%**	**5.0%**
SR 503															
SR-502	- 199th St.	0.98	1800	962	0.53	4%		166	21	39%					
199th St.	- 149th St.	2.56	1800	1253	0.70	4%	1.23	209	44	80%					
149th St.	- 119th St.	1.52	1800	1474	0.82	4%		122	45	89%					
		5.06		**1474**	**0.72**	**4%**	**1.23**	**496**	**37**	**69%**					



137th Avenue Corridor

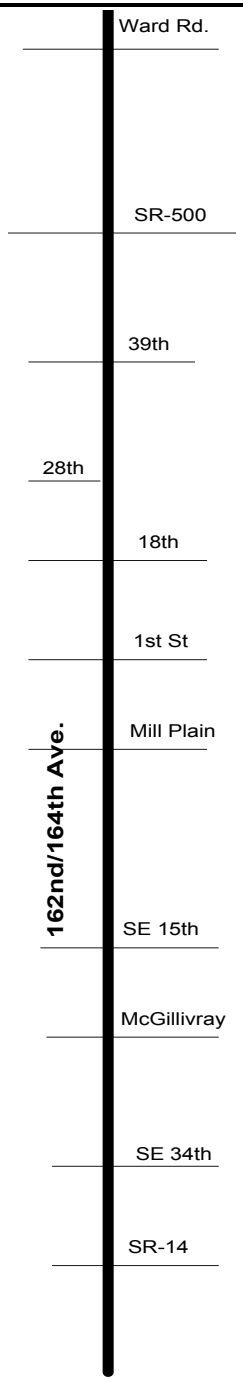
AM Peak

	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
	Length	Capacity	AM - Southbound/Westbound											
136th/137th/138th Avenue														
Padden Parkway - SR 500	0.70	800	541	0.68										
SR 500 - 49th St.	1.10	800	406	0.51										
49th St. - 28th St.	0.98	800	514	0.64										
28th St. - 18th St.	0.49	800	847	1.06	4%									
18th St. - Mill Plain	1.30	1800	733	0.41										
	4.57		**847**	**0.61**	**4%**	**1.11**								

137th Avenue Corridor

PM Peak

	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
	Length	Capacity	PM - Southbound/Westbound											
136th/137th/138th Avenue														
Padden Parkway - SR 500	0.70	800	612	0.77	3%									
SR 500 - 49th St.	1.10	800	576	0.72	2%									
49th St. - 28th St.	0.98	800	609	0.76	5%									
28th St. - 18th St.	0.49	800	760	0.95	2%		107	16	47%					
18th St. - Mill Plain	1.30	1800	934	0.52	2%		186	25	72%					
	4.57		**934**	**0.68**	**3%**	**1.23**	**293**	**22**	**63%**					



162nd/164th Avenue Corridor

AM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
162nd/164th Ave.															
Ward Rd.	- SR 500	0.88	1000	560	0.56			145	22	55%					
SR 500	- 39th St.	1.51	1000	791	0.79			159	34	86%					
39th St.	- 28th St.	0.51	1800	784	0.44			50	37	92%					
28th St.	- 18th St.	0.50	1800	1144	0.64	8%		46	39	98%	30	94	120	78.3%	
18th St.	- 1st St.	1.02	1800	1213	0.67	6%		89	41	103%					
1st St.	- Mill Plain	0.39	1800	1143	0.64	5%		37	38	95%					
		4.81		**1213**	**0.66**	**6%**	**1.11**	**526**	**33**	**82%**	**30**	**94**	**120**	**78.3%**	**6.7%**
162nd/164th Ave.															
Mill Plain	- 15th St.	0.37	2400	1144	0.48	5%		47	29	72%					
15th St.	- McGillvray	0.40	2400	1204	0.50	6%	1.10	37	39	97%					
McGillvray	- 34th St.	0.53	2400	1385	0.58	4%		49	39	97%	30,37,80	155	480	32.3%	
34th St.	- SR 14	0.34	2400	2325	0.97	3%		31	39	99%					
		1.64		**2325**	**0.67**	**5%**	**1.10**	**164**	**36**	**90%**	**30,37,80**	**155**	**480**	**32.3%**	**30.0%**

162nd/164th Avenue Corridor

PM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
162nd/164th Ave.															
Ward Rd.	- SR 500	0.87	1000	880	0.88	3%		98	32	80%					
SR 500	- 39th St.	1.49	1000	1099	1.10	2%		188	29	71%					
39th St.	- 28th St.	0.51	1800	1120	0.62	2%		58	32	79%					
28th St.	- 18th St.	0.50	1800	1370	0.76	3%		46	39	97%	30	31	120	25.8%	
18th St.	- 1st St.	1.02	1800	1080	0.60	3%		100	37	92%					
1st St.	- Mill Plain	0.38	1800	1346	0.75	2%		35	39	96%					
		4.77		**1370**	**0.83**	**3%**	**1.24**	**525**	**33**	**82%**	**30**	**31**	**120**	**25.8%**	**6.7%**
162nd/164th Ave.															
Mill Plain	- 15th St.	0.37	2400	1589	0.66	2%		39	34	86%					
15th St.	- McGillvray	0.40	2400	1588	0.66	3%	1.23	46	31	78%					
McGillvray	- 34th St.	0.53	2400	1520	0.63	2%		57	34	84%	30,37,80	163	480	34.0%	
34th St.	- SR 14	0.35	2400	2248	0.94	2%		86	15	36%					
		1.65		**2248**	**0.73**	**2%**	**1.23**	**227**	**26**	**65%**	**30,37,80**	**163**	**480**	**34.0%**	**30.0%**

SR-14 Corridor

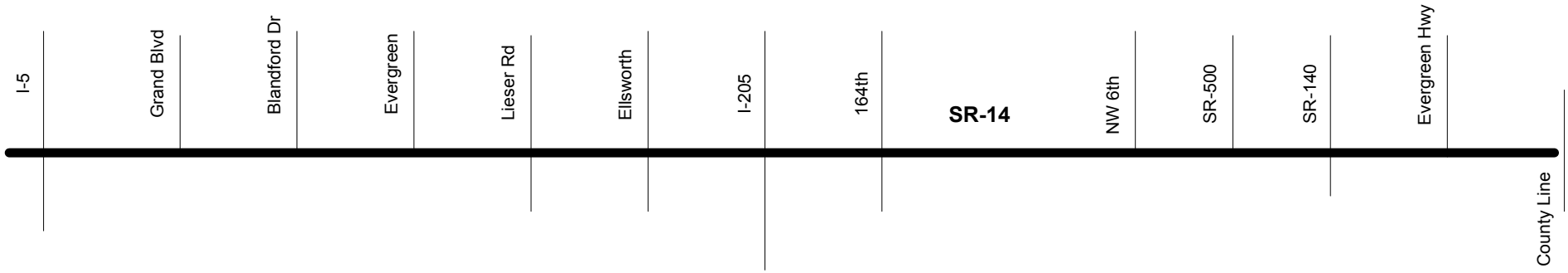
AM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		AM - Southbound/Westbound													
SR 14															
I-5	- Columbia Way	1.08	4000	2111	0.53	4%		63	62	107%					
Columbia Way	- Evergreen Blvd.	2.27	3600	2823	0.78		1.03	130	63	105%					
Evergreen Blvd.	- Lieser Rd.	0.86	3600	2899	0.81			49	63	105%	114	20	40	50.0%	
Lieser Rd.	- Ellsworth Rd.	0.97	3600	2979	0.83			55	64	107%					
Ellsworth Rd.	- I-205	0.68	3600	2676	0.74	4%		38	64	106%					
		5.86		**2979**	**0.75**	**4%**	**1.03**	**335**	**63**	**106%**	**114**	**20**	**40**	**50.0%**	**1.1%**
SR 14															
I-205	- 164th Ave.	2.57	3600	3819	1.06	4%	1.04	145	64	106%					
		2.57		**3819**	**1.06**	**4%**	**1.04**	**145**	**64**	**106%**					
SR 14															
164th Ave.	- 6th Ave. NW	3.72	3600	2022	0.56			207	65	111%	92,114	55	160	34.4%	
6th Ave. NW	- SR 500	2.23	1200	1171	0.98	12%		149	54	98%					
SR 500	- 32nd St.	2.42	1200	1085	0.90	4%		203	43	78%					
32nd St.	- Evergreen Hwy.	1.85	1100	240	0.22			117	57	103%					
		10.22		**2022**	**0.70**	**8%**	**1.10**	**676**	**54**	**98%**	**92,114**	**55**	**160**	**34.4%**	**4.4%**

SR-14 Corridor

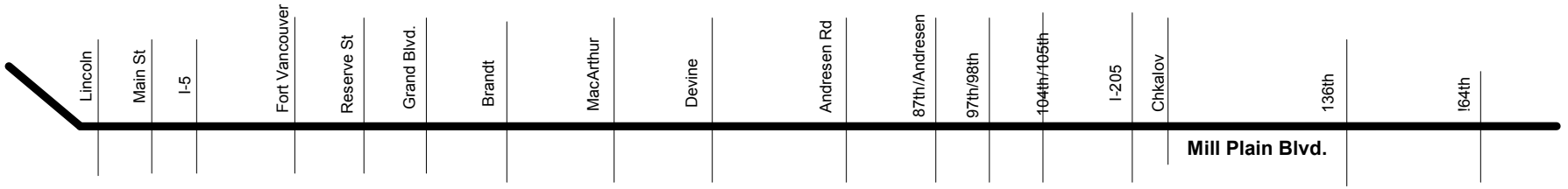
PM Peak

		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		PM - Southbound/Westbound													
SR 14															
I-5	- Columbia Way	1.08	4000	3056	0.76	4%		67	58	100%					
Columbia Way	- Evergreen Blvd.	1.92	3600	2989	0.83	4%	1.23	111	62	104%					
Evergreen Blvd.	- Lieser Rd.	1.35	3600	3043	0.85	4%		81	60	100%	114	12	40	30.0%	
Lieser Rd.	- Ellsworth Rd.	1.23	3600	2921	0.81	4%		75	59	99%					
Ellsworth Rd.	- I-205	0.47	3600	2628	0.73	3%		26	65	109%					
		6.06		**3056**	**0.81**	**4%**	**1.23**	**360**	**61**	**102%**	**114**	**12**	**40**	**30.0%**	**1.1%**
SR 14															
I-205	- 164th Ave.	2.43	3600	3451	0.96	3%	1.11	153	57	96%					
		2.43		**3451**	**0.96**	**3%**	**1.11**	**153**	**57**	**96%**					
SR 14															
164th Ave.	- 6th Ave. NW	3.79	3600	2023	0.56	5%		211	65	112%	92,114	59	160	36.9%	
6th Ave. NW	- SR 500	2.51	1200	1251	1.04	5%		155	58	106%					
SR 500	- 32nd St.	2.43	1200	1197	1.00	5%		184	47	86%					
32nd St.	- Evergreen Hwy.	1.80	1100	342	0.30	14%		107	61	110%					
		10.53		**2023**	**0.74**	**7%**	**1.04**	**657**	**58**	**104%**	**92,114**	**59**	**160**	**36.9%**	**4.4%**



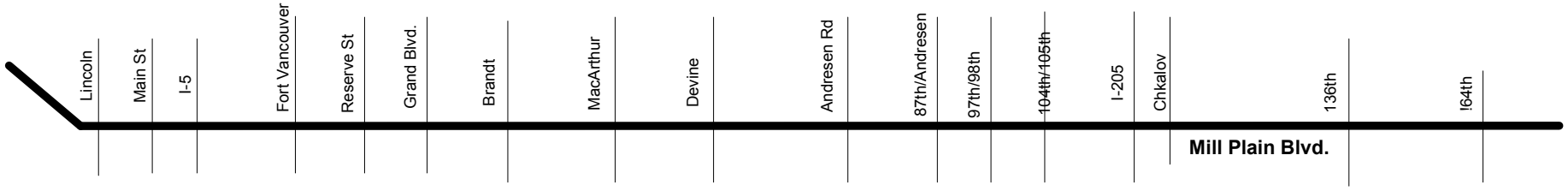
Mill Plain Blvd. Corridor

AM Peak		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		AM - Southbound/Westbound													
Mill Plain/SR 501															
I-5	- Main St.	0.34	2400	1470	0.61	9%		46	27	89%					
Main St.	- Lincoln	0.58	1800	541	0.30	16%		77	27	90%					
Lincoln	- Fourth Plain	0.81	1800	287	0.16	26%		76	39	129%					
		1.76		**1470**	**0.42**	**17%**	**1.11**	**199**	**31**	**104%**					
Mill Plain															
I-5	- Ft. Vancouver	0.17	1800	720	0.40	2%		19	33	95%					
Ft. Vancouver	- Reserve St.	0.46	1800	623	0.35	3%		76	22	62%					
Reserve St.	- Grand Blvd.	0.58	1800	585	0.33	1%		58	36	102%	37	79	240	32.9%	
Grand Blvd.	- Brandt Rd.	0.57	1800	516	0.29	6%		57	36	104%					
Brandt Rd.	- MacArthur Blvd.	0.51	1800	527	0.29	3%		52	36	102%	37,39	87	300	29.0%	
MacArthur Blvd.	- Devine Rd.	0.25	1800	666	0.37	4%		26	34	98%					
Devine Rd.	- Andresen Rd.	0.60	1800	684	0.38	3%	1.17	65	33	94%					
Andresen Rd.	- 87th/Leiser Rd.	0.81	1800	599	0.33	3%		108	27	77%					
87th/Leiser Rd.	- 97/98th Ave.	0.63	1800	877	0.49	3%		115	20	56%					
97/98th Ave.	- 104/105th Ave.	0.37	1800	767	0.43	3%		43	31	89%					
104/105th Ave.	- I-205	0.29	1800	970	0.54	3%		44	24	68%					
		5.24		**970**	**0.38**	**3%**	**1.17**	**663**	**28**	**81%**	**37,39**	**87**	**300**	**29.0%**	**16.7%**
Mill Plain															
I-205	- Chkalov Drive	0.20	3000	2230	0.74			19	38	110%	37	34	240	14.2%	
Chkalov Drive	136th Ave.	1.10	2400	1374	0.57		1.13	185	21	61%					
136th Ave.	- 164th Ave.	1.40	2400	1636	0.68	5%		173	29	73%					
		2.71		**2230**	**0.65**	**5%**	**1.13**	**377**	**26**	**69%**	**37**	**34**	**240**	**14.2%**	**12.0%**



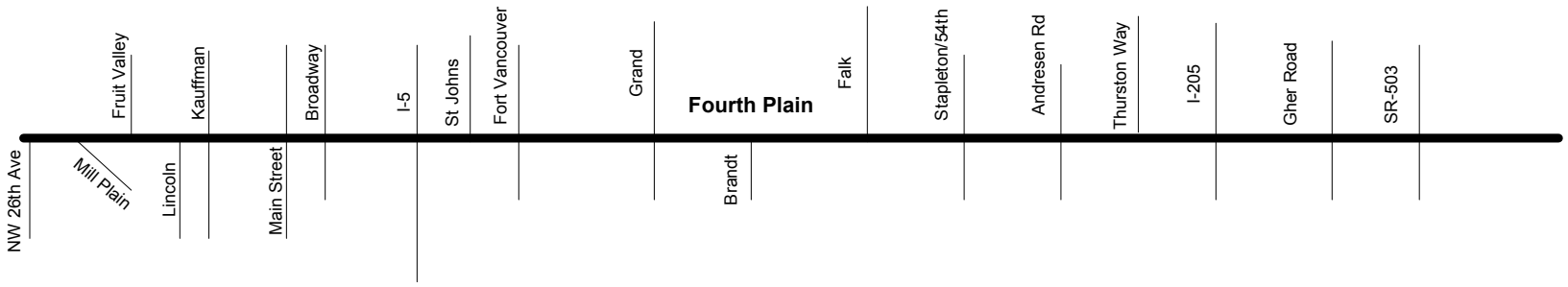
Mill Plain Blvd. Corridor

PM Peak		Segment Length	Segment Capacity	Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		PM - Southbound/Westbound													
Mill Plain/SR 501															
I-5	- Main St.	0.33	2400	1820	0.76	3%		71	17	56%					
Main St.	- Lincoln	0.58	1800	1020	0.57	5%		124	17	56%					
Lincoln	- Fourth Plain	0.84	1800	287	0.16	13%		74	41	136%					
		1.75		**1820**	**0.58**	**7%**	**1.17**	**269**	**23**	**78%**					
Mill Plain															
I-5	- Ft. Vancouver	0.16	1800	1103	0.61	1%		24	24	69%					
Ft. Vancouver	- Reserve St.	0.46	1800	828	0.46	2%		52	32	91%					
Reserve St.	- Grand Blvd.	0.58	1800	757	0.42	1%		83	25	72%	37	115	240	47.9%	
Grand Blvd.	- Brandt Rd.	0.58	1800	702	0.39	2%		65	32	91%					
Brandt Rd.	- MacArthur Blvd.	0.51	1800	823	0.46	2%		53	35	100%	37,39	142	300	47.3%	
MacArthur Blvd.	- Devine Rd.	0.25	1800	989	0.55	1%		33	27	76%					
Devine Rd.	- Andresen Rd.	0.58	1800	1230	0.68	1%	1.34	75	28	80%					
Andresen Rd.	- 87th/Leiser Rd.	0.92	1800	1182	0.66	1%		123	27	76%					
87th/Leiser Rd.	- 97/98th Ave.	0.54	1800	1312	0.73	1%		82	24	68%					
97/98th Ave.	- 104/105th Ave.	0.40	1800	1290	0.72	1%		65	22	64%					
104/105th Ave.	- I-205	0.25	1800	1458	0.81	1%		61	15	42%					
		5.23		**1458**	**0.61**	**1%**	**1.34**	**717**	**26**	**75%**	**37,39**	**142**	**300**	**47.3%**	**16.7%**
Mill Plain															
I-205	- Chkalov Drive	0.21	3000	2637	0.88	1%		120	6	18%	37	64	240	26.7%	
Chkalov Drive	136th Ave.	1.07	2400	1788	0.75	2%	1.25	183	21	60%					
136th Ave.	- 164th Ave.	1.38	2400	1889	0.79	2%		218	23	57%					
		2.66		**2637**	**0.78**	**2%**	**1.25**	**521**	**18**	**49%**	**37**	**64**	**240**	**26.7%**	**12.0%**



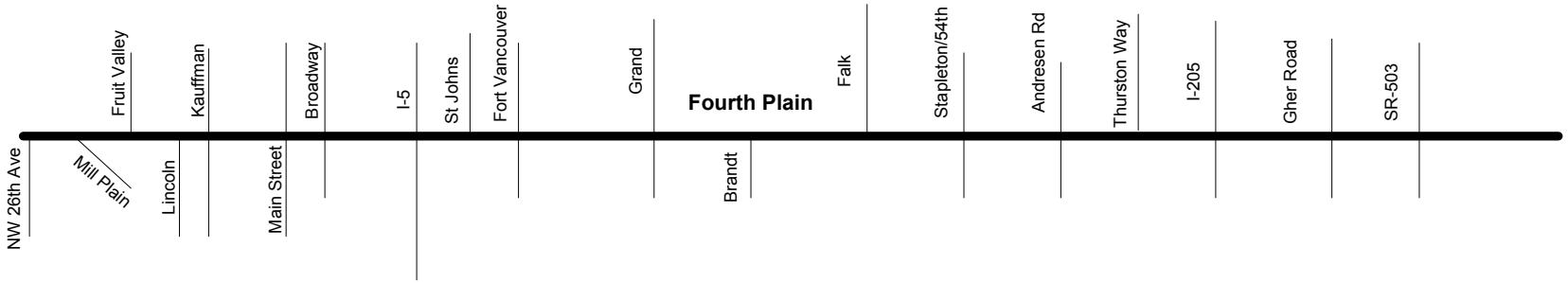
Fourth Plain Blvd. Corridor

AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
Fourth Plain/SR 501															
I-5	- Main St.	0.45	1000	495	0.50	9%		87	19	62%					
Main St.	- Kaufman	0.47	1000	381	0.38	13%		73	23	77%					
Kaufman	- Fruit Valley Rd.	0.56	1000	432	0.43	15%	1.09	61	33	95%					
Fruit Valley Rd.	- Mill Plain	0.13	1000	553	0.55	10%	1.03	52	9	26%	1	19	120	15.8%	
Mill Plain	- Port Office	0.46	1000	389	0.39	36%									
		2.07		**553**	**0.44**	**17%**	**1.06**	**273**	**21**	**65%**	**1**	**19**	**120**	**15.8%**	**6.0%**
Fourth Plain															
I-5	- St. Johns Blvd.	0.44	1700	456	0.27			61	26	86%					
St. Johns Blvd.	- Ft. Vancouver	0.33	1700	720	0.42			34	35	116%					
Ft. Vancouver	- Grand Blvd.	0.29	1700	622	0.37	4%		38	28	92%	4,39	162	300	54.0%	
Grand Blvd.	- Brandt Rd.	0.57	1700	542	0.32			78	27	88%					
Brandt Rd.	- Falk Rd.	0.21	1700	476	0.28			24	32	107%					
Falk Rd.	- Stapleton Rd.	0.49	1700	447	0.26			58	30	87%					
Stapleton Rd.	- Andresen Rd.	0.82	1700	701	0.41		1.14	119	25	71%					
		3.16		**720**	**0.35**	**4%**	**1.14**	**412**	**28**	**86%**	**4,39**	**162**	**300**	**54.0%**	**17.6%**
Fourth Plain															
Andresen Rd.	- Thurston Way	0.92	1800	422	0.23	5%		113	29	84%					
Thurston Way	- Van Mall Dr.	0.60	1800	502	0.28	4%		64	34	98%					
Van Mall Dr.	- Gher Rd.	0.87	1800	450	0.25	4%		102	31	102%	72,80	63	240	26.3%	
Gher Rd.	- SR 503	0.46	1800	1259	0.70			68	24	82%					
		2.85		**1259**	**0.41**	**4%**	**1.11**	**347**	**30**	**91%**	**72,80**	**63**	**240**	**26.3%**	**13.3%**



Fourth Plain Blvd. Corridor

PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
Fourth Plain/SR 501															
I-5	- Main St.	0.40	1000	733	0.73	4%		55	27	89%					
Main St.	- Kaufman	0.52	1000	545	0.55	5%		115	16	54%					
Kaufman	- Fruit Valley Rd.	0.57	1000	499	0.50	5%	1.22	57	36	102%					
Fruit Valley Rd.	- Mill Plain	0.13	1000	487	0.49	5%		19	25	71%	1	27	120	22.5%	
Mill Plain	- Port Office	0.47	1000	436	0.44	7%		52	33	93%					
		2.08		**733**	**0.56**	**5%**	**1.22**	**298**	**25**	**77%**	**1**	**27**	**120**	**22.5%**	**6.0%**
Fourth Plain															
I-5	- St. Johns Blvd.	0.44	1700	760	0.45	2%		57	28	94%					
St. Johns Blvd.	- Ft. Vancouver	0.32	1700	773	0.45	2%		54	21	70%					
Ft. Vancouver	- Grand Blvd.	0.30	1700	930	0.55	2%		50	21	71%	4,39	188	300	62.7%	
Grand Blvd.	- Brandt Rd.	0.57	1700	875	0.51	2%		76	27	91%					
Brandt Rd.	- Falk Rd.	0.22	1700	977	0.57	2%		26	31	102%					
Falk Rd.	- Stapleton Rd.	0.49	1700	947	0.56	2%		117	15	43%					
Stapleton Rd.	- Andresen Rd.	0.80	1700	1181	0.69	2%	1.32	142	20	58%					
		3.13		**1181**	**0.57**	**2%**	**1.32**	**521**	**22**	**68%**	**4,39**	**188**	**300**	**62.7%**	**17.6%**
Fourth Plain															
Andresen Rd.	- Thurston Way	0.94	1800	911	0.51	2%		152	22	64%					
Thurston Way	- Van Mall Dr.	0.75	1800	1011	0.56	2%		78	35	99%					
Van Mall Dr.	- Gher Rd.	0.53	1800	956	0.53	2%		122	16	52%	72,80	89	240	37.1%	
Gher Rd.	- SR 503	0.44	1800	1450	0.81	2%		107	15	50%					
		2.67		**1450**	**0.60**	**2%**	**1.24**	**460**	**21**	**64%**	**72,80**	**89**	**240**	**37.1%**	**13.3%**



SR-500 Corridor

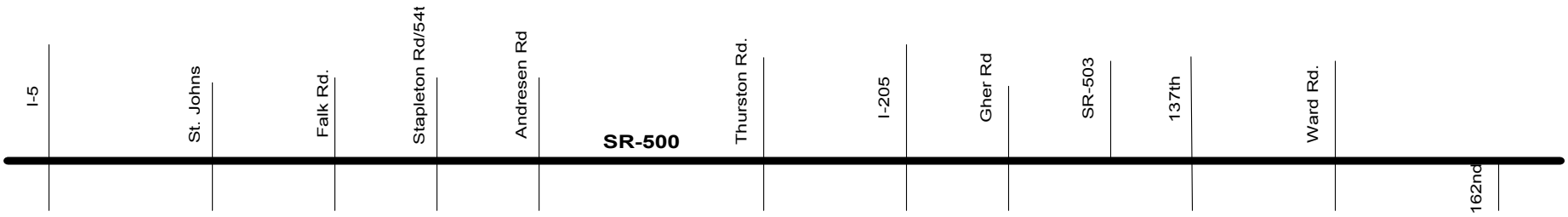
AM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
SR 500															
I-5	- St. Johns	0.46	2400	1967	0.82	5%		34	49	89%					
St. Johns	- Falk Rd.	0.64	2400	1930	0.80	4%		64	36	66%	157,190	21	90	23.3%	
Falk Rd.	- Stapleton Rd./54th	0.59	2400	1944	0.81			51	42	77%					
Stapleton Rd./54th	- Andresen Rd.	0.35	2400	1968	0.82		1.14	29	44	81%					
		2.05		**1968**	**0.81**	**5%**	**1.14**	**177**	**42**	**76%**	**157,190**	**21**	**90**	**23.3%**	**3.8%**
SR 500															
Andresen Rd.	- Thurston Way	0.69	3400	1897	0.56			44	56	103%					
Thurston Way	- I-205	0.69	3000	2414	0.80	3%		43	58	105%					
I-205	- Gher Rd.	0.67	3000	3140	1.05	5%		49	49	90%					
Gher Rd.	- SR 503	0.54	3000	1853	0.62			83	23	42%					
		2.59		**3140**	**0.81**	**4%**	**1.11**	**219**	**43**	**77%**					
SR 500															
SR 503	- 137th Ave.	1.07	1800	1477	0.82			136	28	71%					
137th Ave.	- Ward Rd.	0.50	1800	1197	0.67			55	33	66%					
Ward Rd.	- 162nd Ave.	0.75	1000	719	0.72	3%		64	42	85%					
		2.33		**1477**	**0.77**	**3%**	**1.11**	**255**	**33**	**72%**					

SR-500 Corridor

PM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
SR 500															
I-5	- St. Johns	1.27	2400	1926	0.80	4%		170	27	49%					
St. Johns	- Falk Rd.	0.66	2400	2110	0.88	3%		60	40	72%	157,190	23	150	15.3%	
Falk Rd.	- Stapleton Rd./54th	0.58	2400	2135	0.89	2%		53	39	71%					
Stapleton Rd./54th	- Andresen Rd.	0.72	2400	2149	0.90	2%	1.21	45	58	105%					
		3.24		**2149**	**0.86**	**3%**	**1.21**	**329**	**35**	**64%**	**157,190**	**23**	**150**	**15.3%**	**6.3%**
SR 500															
Andresen Rd.	- Thurston Way	0.79	3400	2214	0.65	2%		53	53	97%					
Thurston Way	- I-205	0.86	3000	3004	1.00	2%		53	59	107%					
I-205	- Gher Rd.	0.65	3000	3172	1.06	5%		107	22	40%					
Gher Rd.	- SR 503	0.53	3000	2008	0.67	3%		136	14	26%					
		2.84		**3172**	**0.89**	**3%**	**1.24**	**349**	**29**	**53%**					
SR 500															
SR 503	- 137th Ave.	1.08	1800	1806	1.00	3%		147	27	66%					
137th Ave.	- Ward Rd.	0.51	1800	1384	0.77	2%		46	39	78%					
Ward Rd.	- 162nd Ave.	0.73	1000	962	0.96	2%		122	21	43%					
		2.31		**1806**	**0.95**	**2%**	**1.24**	**315**	**26**	**58%**					



78th/Padden Parkway Corridor

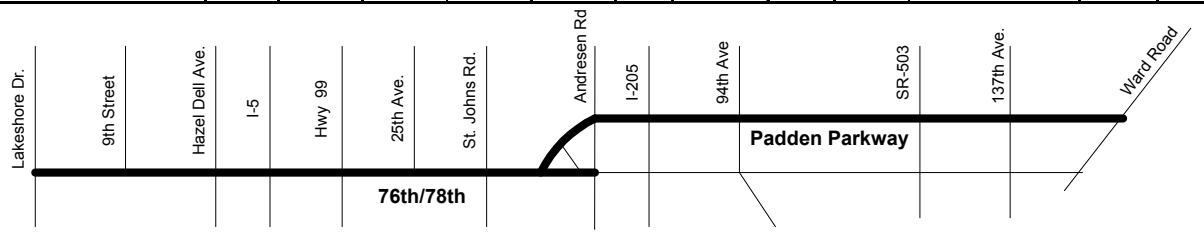
AM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
78th St./76th St.															
Lake Shore Av.	- NW 9th Av.	0.59	1800	494	0.27	7%		68	31	89%					
NW 9th Av.	- Hazel Dell Av.	0.52	1800	723	0.40	7%		52	36	103%					
Hazel Dell Av.	- I-5	0.21	1800	899	0.50	7%		25	30	86%					
I-5	- Hwy 99	0.12	1800	692	0.38	7%		17	26	75%					
Hwy 99	- 25th Ave.	0.77	1800	463	0.26	8%		95	29	73%	78	5	60	8.3%	
25th Ave.	- St. Johns Rd.	1.00	1800	522	0.29	7%		81	45	99%					
St. Johns Rd.	- Andresen Rd.	1.16	800	597	0.75	6%		136	31	73%					
Andresen Rd.	- Covington/94th	1.29	800	471	0.59			161	29	72%	7	19	90	21.1%	
Covington/94th	- SR 503 (117th)	1.14	800	460	0.58	5%		130	32	79%					
		6.81		**899**	**0.49**	**7%**	**1.11**	**765**	**32**	**80%**	**7**	**19**	**90**	**21.1%**	**5.6%**
Padden Parkway															
78th St.	- Andresen Rd.	0.35	2000	634	0.32			28	45	90%					
Andresen Rd.	- I-205	0.39	2000	824	0.41			60	23	47%					
I-205	- 94th Av.	0.89	2000	1271	0.64	3%		70	46	91%					
94th Av.	- SR 503 (117th)	1.14	2000	1267	0.63			101	41	81%					
SR-503	- 137th Av.	1.00	2000	811	0.41			95	38	76%					
137th Av.	- Ward Rd.	1.12	1200	655	0.55			115	35	70%					
		4.54		**1271**	**0.56**	**3%**	**1.11**	**442**	**37**	**74%**					

78th/Padden Parkway Corridor

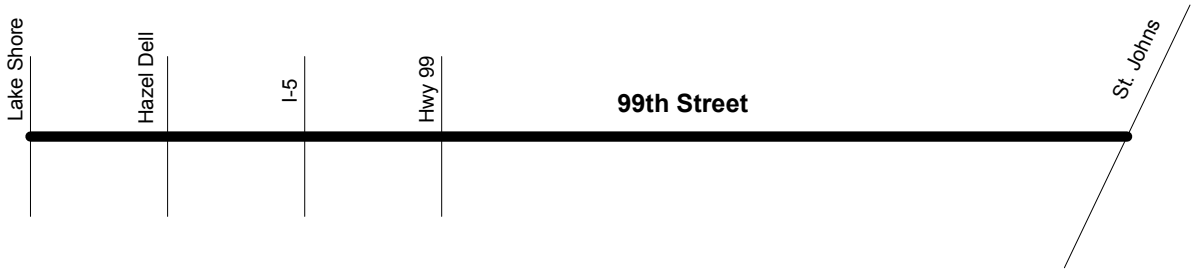
PM Peak

		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
78th St./76th St.															
Lake Shore Av.	- NW 9th Av.	0.59	1800	404	0.22	3%		56	38	109%					
NW 9th Av.	- Hazel Dell Av.	0.53	1800	764	0.42	3%		56	34	96%					
Hazel Dell Av.	- I-5	0.22	1800	1081	0.60	3%		82	10	27%					
I-5	- Hwy 99	0.13	1800	1094	0.61	3%		32	14	41%					
Hwy 99	- 25th Ave.	0.78	1800	836	0.46	3%		71	39	98%	78	13	60	21.7%	
25th Ave.	- St. Johns Rd.	0.99	1800	737	0.41	3%		95	38	84%					
St. Johns Rd.	- Andresen Rd.	1.14	800	886	1.11	4%		186	22	53%					
Andresen Rd.	- Covington/94th	1.30	800	560	0.70	3%		140	33	83%	7	24	90	26.7%	
Covington/94th	- SR 503 (117th)	1.13	800	556	0.70	2%		190	21	53%					
		6.79		**1094**	**0.65**	**3%**	**1.24**	**907**	**27**	**67%**	**7**	**24**	**90**	**26.7%**	**5.6%**
Padden Parkway															
78th St.	- Andresen Rd.	0.35	2000	1000	0.50	3%		27	47	93%					
Andresen Rd.	- I-205	0.44	2000	1009	0.50	4%		47	34	68%					
I-205	- 94th Av.	0.85	2000	1298	0.65	3%		95	32	65%					
94th Av.	- SR 503 (117th)	1.14	2000	1214	0.61	3%		137	30	60%					
SR-503	- 137th Av.	1.01	2000	1273	0.64	3%		87	42	83%					
137th Av.	- Ward Rd.	1.08	1200	831	0.69	3%		99	40	79%					
		4.53		**1298**	**0.62**	**3%**	**1.24**	**464**	**35**	**70%**					



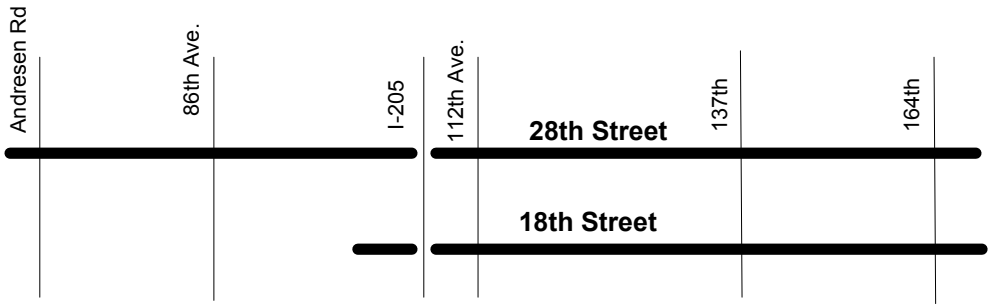
99th Street Corridor															
AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
99th Street															
Lake Shore Av.	- NW 9th Av.	1.09	1100	740	0.67										
NW 9th Av.	- Hazel Dell Av.	0.50	1800	765	0.43										
Hazel Dell Av.	- I-5	0.39	1800	900	0.50										
I-5	- Hwy. 99	0.23	1800	678	0.38	4%									
Hwy. 99	- NE 25th Av.	0.51	1800	509	0.28										
NE 25th Av.	- St. Johns Rd.	1.45	1200	447	0.37										
		4.18		**900**	**0.48**	**4%**	**1.11**								

99th Street Corridor															
PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
99th Street															
Lake Shore Av.	- NW 9th Av.	1.09	1100	886	0.81	2%		124	32	90%					
NW 9th Av.	- Hazel Dell Av.	0.50	1800	1041	0.58	2%		52	35	99%					
Hazel Dell Av.	- I-5	0.39	1800	1128	0.63	1%		78	18	52%					
I-5	- Hwy. 99	0.23	1800	1244	0.69	2%		51	16	47%					
Hwy. 99	- NE 25th Av.	0.51	1800	853	0.47	2%		53	35	87%					
NE 25th Av.	- St. Johns Rd.	1.45	1200	710	0.59	2%		152	34	86%					
		4.18		**1244**	**0.64**	**2%**	**1.24**	**509**	**30**	**79%**					



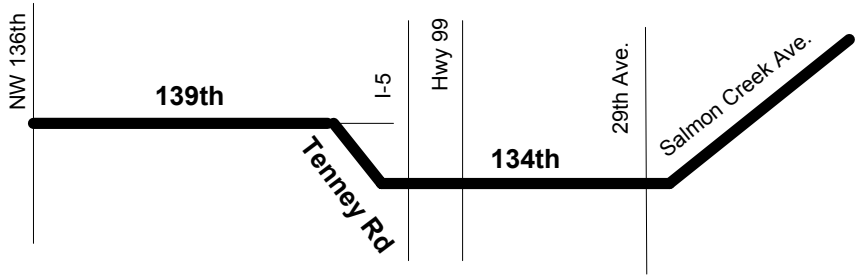
28th/18th Street Corridor															
AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
28th Street															
Andresen Rd.	- 86th Ave.	0.74	1200	679	0.57			96	28	92%	30	94	120	78.3%	
86th Ave.	- 112th Ave.	1.37	800	742	0.93	3%		153	32	92%					
112th Ave.	- 137th Ave.	1.32	800	1033	1.29			217	22	63%					
137th Ave.	- 164th Ave.	1.20	800	524	0.66			198	22	87%					
		4.62		**1033**	**0.97**	**3%**	**1.11**	**665**	**25**	**80%**	**30**	**94**	**120**	**78.3%**	**5.0%**
18th Street															
112th Ave.	- 137th Ave.	1.32	800	564	0.71	3%		159	30	86%					
137th Ave.	- 164th Ave.	1.20	800	568	0.71	6%		236	18	52%					
		2.52		**568**	**0.71**	**5%**	**1.11**	**395**	**23**	**66%**					

28th/18th Street Corridor															
PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
28th Street															
Andresen Rd.	- 86th Ave.	0.73	1200	711	0.59	2%		167	16	53%	30	31	120	25.8%	
86th Ave.	- 112th Ave.	1.35	800	944	1.18	2%		239	20	58%					
112th Ave.	- 137th Ave.	1.32	800	847	1.06	3%		221	21	61%					
137th Ave.	- 164th Ave.	1.19	800	560	0.70	2%		176	24	97%					
		4.59		**944**	**0.97**	**2%**	**1.24**	**803**	**21**	**66%**	**30**	**31**	**120**	**25.8%**	**5.0%**
18th Street															
112th Ave.	- 137th Ave.	1.31	800	591	0.74	2%		295	16	46%					
137th Ave.	- 164th Ave.	1.18	800	772	0.97	2%		168	25	72%					
		2.49		**772**	**0.86**	**2%**	**1.24**	**463**	**19**	**55%**					



134th Street Corridor															
AM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Speed/ Posted Speed**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**	**Transit Seats/Lane Capacity**
	Length	**Capacity**	**AM - Southbound/Westbound**											
134th St./139th St./Salmon Creek Ave.														
NW 36th Ave. - NW 11th Ave.	1.27	1200	885	0.74	3%	1.27	209	22	63%					
NW 11th Ave. - NE 10th Ave.	1.14	1800	993	0.55	6%		187	22	63%	2	12	120	10.0%	
NE 10th Ave. I-5	0.27	1800	999	0.56			44	22	63%					
I-5 I-205 NB Ramp	0.37	1800	900	0.50			105	13	36%					
I-205 NB Ramp - Salmon Cr. Ave.	0.47	1800	490	0.27	5%		48	35	101%					
Salmon Cr. Ave. - 50th Ave.	1.43	800	256	0.21	4%		127	41	101%					
	4.95		**999**	**0.55**	**5%**	**1.27**	**720**	**25**	**68%**	**2**	**12**	**120**	**10.0%**	**6.7%**

134th Street Corridor															
PM Peak	**Segment**		**Traffic Volume**	**CCI**	**Truck Percent**	**AVO**	**Travel Time (Seconds)**	**Speed (MPH)**	**Speed/ Posted Speed**	**Transit Lines on CMS links**	**Transit Riders**	**Transit Seat Capacity**	**Transit Capacity Used**	**Transit Seats/Lane Capacity**
	Length	**Capacity**	**PM - Southbound/Westbound**											
134th St./139th St./Salmon Creek Ave.														
NW 36th Ave. - NW 11th Ave.	1.27	1200	1038	0.87	2%	1.27	119	38	109%					
NW 11th Ave. - NE 10th Ave.	1.14	1800	1396	0.78	2%		136	30	86%	2	5	120	4.2%	
NE 10th Ave. I-5	0.27	1800	1396	0.78	2%		59	16	46%					
I-5 I-205 NB RPMp	0.37	1800	798	0.44	2%		139	10	27%					
I-205 NB RPMp - Salmon Cr. Ave.	0.47	1800	798	0.44	2%		47	36	103%					
Salmon Cr. Ave. - 50th Ave.	1.43	800	205	0.17	1%		139	37	93%					
	4.94		**1396**	**0.71**	**2%**	**1.27**	**639**	**28**	**76%**	**2**	**5**	**120**	**4.2%**	**6.7%**

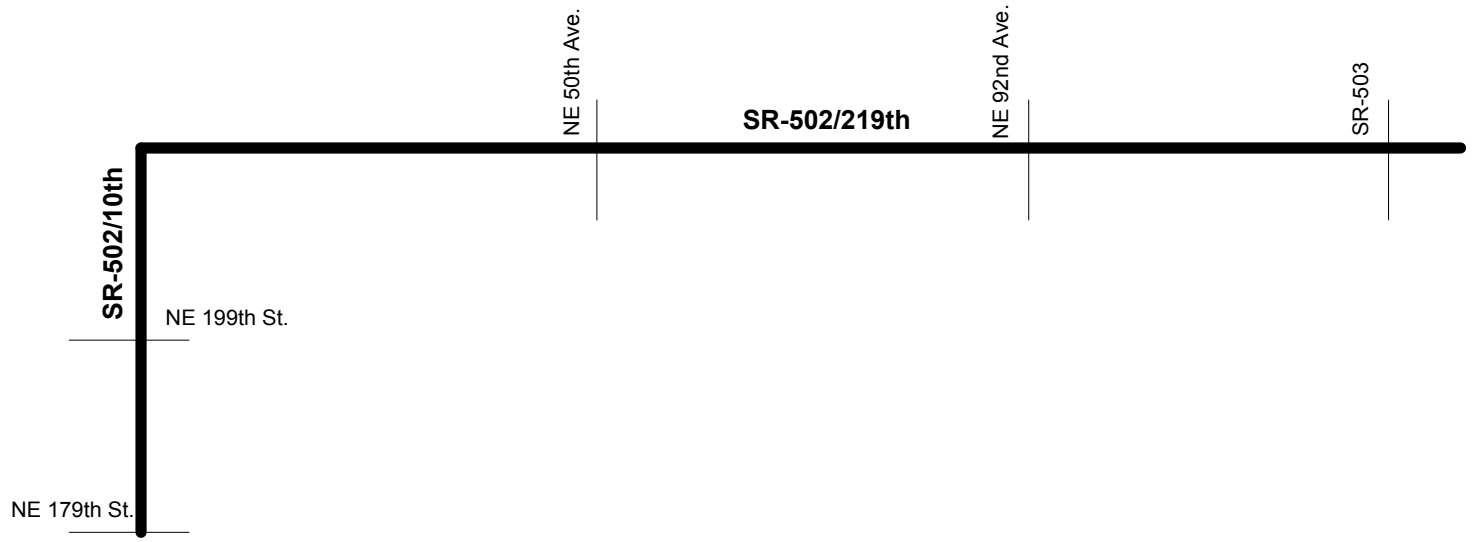


SR-502 Corridor

AM Peak	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
	Length	Capacity	AM - Southbound/Westbound											
SR 502														
179th St. - 199th St.	0.98	900	757	0.84	5%		94	38	76%					
199th St. 219th St.	1.01	900	650	0.72	7%		76	48	96%					
10th Ave. - 50th Ave.	1.99	900	607	0.67			147	49	98%					
50th Ave. - 92nd Ave	2.00	900	577	0.64		1.09	162	45	96%					
92nd Ave. - SR-503	1.54	1700	708	0.42	5%		151	37	79%					
	7.53		**757**	**0.64**	**5%**	**1.09**	**628**	**43**	**90%**					

SR-502 Corridor

PM Peak	Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
	Length	Capacity	PM - Southbound/Westbound											
SR 502														
179th St. - 199th St.	0.99	900	958	1.06	5%		83	43	86%					
199th St. 219th St.	0.99	900	698	0.78	6%		81	44	88%					
10th Ave. - 50th Ave.	1.99	900	633	0.70	6%		150	48	95%					
50th Ave. - 92nd Ave	1.99	900	633	0.70	5%	1.22	188	38	83%					
92nd Ave. - SR-503	1.52	1700	1158	0.68	3%		229	24	51%					
	7.48		**1158**	**0.76**	**5%**	**1.22**	**732**	**37**	**77%**					



SR-501 & La Center Road Corridors															
AM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	AM - Southbound/Westbound											
SR 501															
I-5	- NW 31st Ave.	0.72	800	360	0.45	14%		58	45	90%					
NW 31st Ave.	- 9th St.	1.79	800	254	0.32	5%		156	41	97%					
		2.51		**363**	**0.37**	**10%**	**1.11**	**213**	**42**	**95%**					
La Center Rd.															
I-5	- E. Fork Lewis Rv.	1.76	800	492	0.62	3%		127	50	100%					
		1.76		**492**	**0.62**	**3%**	**1.11**	**127**	**50**	**100%**					

SR-501 & La Center Road Corridors															
PM Peak		Segment		Traffic Volume	CCI	Truck Percent	AVO	Travel Time (Seconds)	Speed (MPH)	Speed/ Posted Speed	Transit Lines on CMS links	Transit Riders	Transit Seat Capacity	Transit Capacity Used	Transit Seats/Lane Capacity
		Length	Capacity	PM - Southbound/Westbound											
SR 501															
I-5	- NW 31st Ave.	0.74	800	429	0.54	6%		60	45	89%					
NW 31st Ave.	- 9th St.	1.77	800	295	0.37	3%		142	45	105%					
		2.51		**429**	**0.43**	**5%**	**1.24**	**202**	**45**	**94%**					
La Center Rd.															
I-5	- E. Fork Lewis Rv.	1.83	800	573	0.62	3%		150	44	88%					
		1.83		**573**	**0.62**	**3%**	**1.24**	**150**	**44**	**88%**