

# **Transit System Plan**

## **Goal 7:**

***To provide a downtown street and sidewalk system that results in efficient transit operations – both current and future, as well as safe and convenient pedestrian and bicycle access to public transportation services and facilities.***

### **Objective 7.1:**

Designate major streets as transit focal points in order to provide centralized access in the downtown area and to enable transit vehicles to operate effectively in mixed traffic.

### **Objective 7.2:**

Replace, where feasible, one-way traffic flow with two-way flow, to help provide more convenient and centralized transit access in the downtown.

### **Objective 7.3:**

Mitigate traffic operations impacts of major events as much as feasible in the downtown area to help transit operations.

### **Objective 7.4:**

Provide a downtown sidewalk system that results in pedestrian friendly access to transit stops and transit centers.

### **Objective 7.5:**

Provide sufficient downtown street and intersection capacity to accommodate future bus operations.



**Objective 7.6:**

Provide sufficient downtown street and intersection capacity to accommodate future potential light rail transit operations along a preferred rail alignment.

**Objective 7.7:**

Provide sufficient sidewalk capacity in the downtown area to accommodate transit facilities such as passenger shelters.

**Objective 7.8:**

Provide key pedestrian links between major activity areas (current and future) and transit focal points such as the 7<sup>th</sup> Street transit center.

## **Findings and Recommendations**

Downtown Vancouver currently serves as a major focal point for C-TRAN's fixed route system. This service involves local routes operating within Clark County, as well as routes serving Portland operated by C-TRAN and Tri-Met. While some restructuring of service can be anticipated in the future, downtown Vancouver will continue to serve as a major focal point for C-TRAN operations. Accommodating future bus volumes and routes, as well as passenger access to these services are addressed.

As noted in Chapter 3, the analysis of the future surface street system indicates that it will continue to operate well without additional streets or travel lanes. The analysis also addressed future bus volumes operating in the downtown area and how general traffic volumes will affect them. Of particular importance is the assessment of transit impacts resulting from potential conversion of Main Street and Broadway to two-way operations for general traffic, in which case the analysis showed that transit operations will improve on Main Street. This conversion will allow more centralized and convenient access for general traffic and transit service in the downtown area.

Given its central location in the downtown area, Main Street is a strong candidate as a north/south transit focal point. This focal point will complement the existing east/west focal point along the 7<sup>th</sup> Street transit center. Also, the analysis of the future surface street system indicates that the 7<sup>th</sup> Street transit center will not negatively impact future traffic circulation in the downtown area. Further reinforcement for Main Street as a transit focal point is provided through the high priority status of pedestrian improvements on this street as identified in *Section 4 – Pedestrian System Plan*.

In addition to general traffic conditions, the analysis of future traffic circulation also addressed special events that will occur in the downtown area. The analysis indicated no significant deficiencies in

operations of the existing transportation system, including transit service. Projected traffic volumes at parking garage access locations during special events will have some impacts on general traffic, including bus operations in the downtown. However, these impacts will occur after conclusion of the PM peak demand period for transit service.

Future high traffic volumes on I-5 will continue to impact the quality of traffic circulation in downtown Vancouver. Therefore, any efforts at expanding public transit capacity, including extension of Tri-Met's MAX light rail service along the I-5 corridor, will help address future traffic circulation in the downtown area. The analysis of the future surface street system also indicates that sufficient capacity will be available on Washington Street to accommodate potential two-way light rail transit (LRT) service. This finding is consistent with results of the Draft Environmental Impact Statement for the South-North Alternatives Analysis.

One operational issue not noted as part of the LOS and travel time analyses is the operations of I-5 in the vicinity of downtown. During AM peak hours, traffic on I-5 southbound typically queues beyond the SR-14 interchange. This condition results in congestion on SR-14 that causes for some traffic diversion off SR-14 through downtown Vancouver to access I-5. As traffic conditions worsen without capacity or mode shift changes in the I-5 corridor, accessibility to/from downtown Vancouver will become more difficult.

## **Project Identification**

The following projects address public transportation operations and passenger access needs in the downtown area. These projects address the above-noted findings and recommendations as well as items identified in other chapters of the Transportation System Plan. Three major categories are covered by these projects; 1) transit operations in the downtown area, 2) transit operations during special events, and 3) pedestrian access to transit services in the downtown area.



## **Transit Operations in the Downtown Area**

- **Main Street and Broadway Traffic Operations**

Convert current one-way traffic operations on Main Street and Broadway to two-way operations thereby allowing more centralized transit access to the downtown core. Ongoing monitoring of traffic conditions and bus operations will be necessary to ensure safe, convenient, and efficient service.

- **Mixed Flow Operations**

Maintain current mixed flow traffic operations in downtown Vancouver to accommodate bus service through the 2017 planning horizon. Monitor future traffic conditions and projected bus operations to identify possible future justification of dedicated bus lanes for downtown transit operations.

## **Transit Access to Major Events**

- **Event Management Plan**

C-TRAN should participate in development of an Event Management Plan (EMP) as called out in *Chapter 4 – Transportation System Management Plan*. Participation by C-TRAN should also be provided for any future Event Management Committee that would design, implement, and monitor the EMP.

- **Traffic Control Officers**

Traffic control officers should be strategically located along Columbia and 6<sup>th</sup> Street and at the intersections of 9<sup>th</sup> Street/Evergreen and 9<sup>th</sup> Street/Washington. Activities of these control officers should be coordinated with C-TRAN's supervisory staff as appropriate.

## **Pedestrian Access to Transit Services**

- **Pedestrian Access to Main Street**

## **Transit Corridor**

The designation of Main Street as a major downtown transit corridor will require convenient and safe access for pedestrians from other parts of downtown. Through strategies such as pathfinder signs and sidewalk enhancements, the Main Street transit corridor will be reinforced.

- **Pedestrian Access to 7<sup>th</sup> Street Transit Center**

Continuation of the 7<sup>th</sup> Street Transit Center will require convenient and safe access for pedestrians from other parts of downtown. New developments on the east side of Washington Street will likely generate higher levels of pedestrian travel to the 7<sup>th</sup> Street Transit Center and the Main Street transit corridor.

## **Implementation Strategies**

The following section outlines implementation strategies and potential future studies needed to accommodate public transportation service and facilities in downtown Vancouver.

### **Transit System Operations**

Consistent with the Transportation System Management Plan for downtown Vancouver, public transit operations should be continuously monitored. Bus operations, and their relationship with the existing roadway system, should be assessed from the standpoint of schedule adherence, capacity, safety, and passenger convenience.

### **Light Rail Transit**

The extension of MAX service into Vancouver is a key ingredient to the region's growth management strategy and the overall I-5 Corridor plan. The *Metropolitan Transportation Plan (MTP)* for Clark County (October 1999) identifies the I-5 corridor from the Oregon border to Clark College as an LRT corridor.

LRT in Vancouver would directly benefit the downtown area by improving access to downtown

Vancouver, particularly during the peak commuter hours. LRT service would also greatly improve the City’s ability to collect and disperse Special Event Center crowds. Key issues involving LRT include identifying an appropriate terminal location in Vancouver, which should be addressed as part of the City of Vancouver’s city-wide Transportation System Plan. Other, more regional issues revolve around funding and timing, which should be addressed in the I-5 Trade Corridor Study.

The City of Vancouver should take actions now that will support the Plan help make transit more successful for downtown Vancouver. These include:

- Designating Main and Washington Streets as transit streets — Main Street for local transit service and Washington Street for regional transit service.
- Restricting curb cuts along both Washington and Main Streets to improve the pedestrian environment, making it easier for people to avoid using their cars.
- Supporting increases in density and activity in the transit corridor.
- Allowing reduced parking requirements in the transit corridor.

**Bus Priority Systems**

Priority systems should be considered when and if it is determined that the downtown street system is unable to meet schedules in a reliable manner or it cannot effectively accommodate passenger demand.

**Pedestrian Access to Downtown Transit Service**

The growth in development occurring in the eastern section of downtown Vancouver will result in higher levels of pedestrian movements to and from the 7<sup>th</sup> Street Transit Center. This growth can be addressed through installation of pedestrian lights at key locations. Recommended locations for these lights are:

- Washington Street at 7<sup>th</sup> Street to connect

Esther Short Park with the 7<sup>th</sup> Street Transit Center;

- Columbia Street, between 6<sup>th</sup> and 8<sup>th</sup> Streets, to Esther Short Park and the 7<sup>th</sup> Street Transit Center; and
- 6<sup>th</sup> Street, between Esther Street and Columbia Street to connect Esther Short Park and the major event facility.

**7<sup>th</sup> Street Transit Center**

Maintain the current 7<sup>th</sup> Street Transit Center as a major focal point for transit service in the downtown area. The Preliminary Draft of the Comprehensive Operational Analysis being carried out by C-TRAN indicates that this facility will be required even with potential major service changes.

The current downtown shuttle operated by C-TRAN is popular with both residents and visitors to the downtown area. The City of Vancouver will work with C-TRAN and potentially downtown businesses to explore development of a fare-free zone within the downtown area. This type of service could be particularly effective in supporting future transportation demand management strategies that are identified in this Transportation System Plan.

**Downtown Shuttle/Fare-Free Zone**

The current downtown shuttle operated by C-TRAN is popular with both residents and visitors to the downtown area. The City of Vancouver should work with C-TRAN and downtown businesses to explore development of a fare-free zone within the downtown area. This type of service could be particularly effective in supporting future transportation demand management strategies that are identified in this Transportation System Plan.

**Concurrency (Growth Management)**

The City of Vancouver should coordinate with C-TRAN and explore concurrency-related policies directed at transit service quality. One potential policy involves concurrency relating to transit travel time to and within the downtown area. Future potential developments can be evaluated from the standpoint of potential impacts on transit travel time.



As part of this exploration the City should review the experience of the City of Renton which has been using this concurrency feature for the past several years. One potential area of concern is the extent and complexity of data gathering and monitoring associated with this concurrency strategy. As is the case with potential light rail extension to Vancouver, this concurrency strategy should also be considered as part of Vancouver's citywide Transportation System Plan.

### **Potential Areas for Future Study**

The analysis carried out under the *Transportation System Plan* indicated that once Main Street and Broadway are converted to two-way operations the following studies should be considered:

- **Bus Priority Systems**

This possible project would implement computer-controller traffic systems to foster more efficient transit operations. A signal controller forcing green time to be extended as much as feasible can detect approaching buses. The detected bus could also force the green phase to change sooner to give the bus priority.

- **Transit Contra Flow Lane**

This study would examine a transit contra flow lane using Washington and C Street. The east-most lane on Washington would be converted to a northbound transit only lane while the west-most lane on C Street would be converted to a southbound transit only lane.

Major issues that would need to be addressed as part of the study include the timing of converting Main Street and Broadway Street to two-way traffic operations, and the possibility of two-way LRT on Washington Street.