



## **INFORMATIONAL MEMORANDUM**

**TO: Transportation and Infrastructure Committee  
Community Development and Neighborhoods Committee**

**FROM: Henry Hash, Public Works Director  
Jack Pace, DCD Director**

**BY: Cyndy Knighton, Senior Program Manager; Moira Bradshaw, Senior Planner; and  
Lynn Miranda, Senior Planner**

**CC: Mayor Ekberg**

**DATE: September 21, 2018**

**SUBJECT: Tukwila International Boulevard Rechannelization and Zoning Changes  
Project No. 81710404**

### **ISSUE**

Update on current direction and schedule for implementing Tukwila International Boulevard (TIB) zoning changes and reviewing options that could include additional studies that impact possible TIB rechannelization and zoning changes.

### **BACKGROUND**

On May 1, 2017, the Congress for New Urbanism (CNU) delivered a report to the City Council on their recommendations for implementing the City’s adopted goals and policies for the TIB neighborhood, including transforming TIB into a “main street”, based upon the Comprehensive Plan’s direction and community workshops held over three days in February 2017. CNU discussed with Council the role of TIB in setting the main street character and environment for the neighborhood. The recommended alternative for achieving the change was to reduce the number of through lanes on TIB and add on-street parking and bicycle lanes. The zoning regulations for development located behind the sidewalk would need to be connected to the roadway design.

Tukwila contracted with Fehr & Peers, a transportation consultant, to study the impacts of the proposed road diet, or rechannelization on TIB. The information from the study was presented to the Transportation and Infrastructure Committee (TIC) on November 14, 2017. The Committee did not arrive at a recommendation but directed staff to conduct further study options and report back for further discussion. The Fehr & Peers study was updated in January 2018 to include and discuss alternative design options.

### **DISCUSSION**

The Fehr & Peers report shows that traffic impacts to TIB and the nearby residential streets will likely be significant. Mitigation measures to the residential streets have not been fully identified but could be expensive based upon staff’s assessment. Impacts to the roadways include increased congestion and travel time on TIB, significant volume increases on parallel residential streets, and impacts to emergency vehicle response routes and response times. Further changes to adjacent roads, such as Military Road in SeaTac (i.e., proposed South bound access to TIB closure) may further impact TIB. In addition, the takeover agreement with WSDOT for TIB (SR99) sought Tukwila’s assurance that this roadway would continue to function as a through, regional arterial and emergency detour if there is a problem on I-5. (See Attachment)

Based on this information, the direction is to not move forward with the rechannelization of TIB at this time and instead update the zoning code that works towards implementing the City’s adopted goals for the neighborhood and the CNU recommendations, whose focus is to create a walkable, pedestrian friendly, and vibrant neighborhood.

If the Council desires, it is possible to take more time and do additional studies prior to deciding final zoning changes for TIB. This would delay final implementation of the TIB zoning code changes by approximately six to twelve months. This study could further analyze the impacts and costs of rechannelization of TIB and best practice approaches to mitigate them.

The character of the neighborhood and the type of businesses that locate on a street are affected by the type of roadway, what it looks like, the amount and origin and destination of the motorists, the ratio of trucks, cars and pedestrians, how fast vehicles moves, and how easy it is to cross the street. The rechannelization with on-street parking and bike lanes on TIB was a key part to the CNU recommendations, but there was no detailed study of the actual costs or impact of these changes on the surrounding neighborhoods and traffic.

### **FISCAL IMPACT**

The fiscal impact to the City for additional studies could be up to \$140,000. Implementation of road changes or mitigation measures could add significant cost based on the final design chosen.

### **OPTIONS**

Option A - Administration Recommendation – Current Design and Updated Zoning Code: Assume no changes to the configuration of the TIB roadway. Move forward with the recommendations for development regulations for the TIB district. Plan for additional, safer pedestrian crossing improvements.

- Review and adoption anticipated in the 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2019;
- A minor extension of the moratorium may be needed.
- Additional funding may be necessary for design and construction of anticipated new pedestrian crossings.

Option B: Further Traffic and Mitigation Study: Allocate time and resources to fully study the traffic impacts and mitigation alternatives and implications on future land use, along with coordination with Sea-Tac and WSDOT. The study would develop ways to mitigate the impacts to the nearby residential streets and develop cost estimates for both the mitigation and rechannelization.

- The study would take approximately 6 months to complete. Review and adoption of development regulations would be delayed by approximately one to two calendar quarters past a roadway decision. The extent of revisions to development regulations would depend on the selected reconfiguration option for the TIB roadway.
- An extension of the moratorium would be necessary.
- Estimated cost for this study is \$100,000, which is currently unbudgeted. Funding would need to be appropriated in the 2019-2020 budget cycle or made available from other sources if the Council wants the study to begin sooner.
- If a road design change and mitigation measures are adopted, additional funds would need to be appropriated.

Option C: Further Traffic, Mitigation and Economic Benefit Study: Includes Option A plus evaluation of the cost and benefits associated with the various roadway options on redevelopment of the TIB area.

- Estimated total cost for this option is \$140,000, which is currently unbudgeted. Funding would need to be appropriated in the 2019-2020 budget cycle or made available from other sources if the Council wants the study to begin sooner.
- Similar options and impacts as identified in Option A
- If a road design change and mitigation measures are adopted, additional funds would need to be appropriated for the changes.

**RECOMMENDATION**

Discussion and possible committee recommendation to be discussed at a future Council of the Whole meeting.

**ATTACHMENT**

- Fehr and Peers TIB Rechannelization Study excerpt "Conclusion"
- CNU Legacy Project excerpt "Boulevard Improvements"
- WSDOT Letter to Mayor Mullet dated December 11, 2003



# **Tukwila International Boulevard Rechannelization Study**

**Prepared for:  
City of Tukwila**

September 2017

SE17-0561

**FEHR  PEERS**





## Chapter 6. **Conclusion**

The rechannelization of Tukwila International Boulevard between S 144<sup>th</sup> Street and S 152<sup>nd</sup> Street to remove one northbound and southbound travel lane and to install bicycle lanes and on-street parking would result in significant congestion for southbound vehicles entering the corridor under both 2017 and 2030 demand scenarios. The existing demand for vehicles travelling through the entire study corridor on TIB exceeds 700 vehicles in both directions during the PM peak hour. This demand is forecasted to increase by over 20% by 2030 due to new residential and commercial development near the study corridor. Removing a travel lane in each direction results in overcapacity conditions, especially for southbound drivers at S 144<sup>th</sup> Street. Delay, travel times, and vehicular queuing increase substantially in both 2017 and 2030 scenarios and would likely result in drivers choosing parallel routes as alternatives to TIB.

The travel time data and Streetlight OD data provide information on travel behavior for drivers currently using TIB. An analysis of the data suggests that at least 50% of existing travel on the roadway is pass-through trips. These trips represent non-local travel: trips that pass through the corridor without stopping or those not related to nearby residential or commercial land uses. Popular origins and destinations are SeaTac and Central Seattle. Since 2010, the traffic volumes on TIB have increased by 10% to 15% despite limited land use development near the study corridor. The increases in traffic volumes are likely due to spillover from congested regional routes as drivers seek less congested alternatives. If the existing volume of pass-through travel, approximately 800 vehicle trips during the PM peak hour, were to shift to alternative routes, the TIB corridor could accommodate the growth in traffic from planned development with the rechannelization and operate with a similar quality of service to that experienced today.

The traffic calming measures that would need to be implemented to prevent traffic from diverting onto 42<sup>nd</sup> Avenue S and Military Road S after the rechannelization of Tukwila International Boulevard would need to reduce vehicle speeds by at least 50%, compared with posted speed limits. This is beyond the range of effectiveness of most common traffic calming treatments and would require average travel speeds of 15mph on these facilities which would significantly impact local residents who live along these streets.

Alternatives to traffic calming measures are physical barriers or turn restrictions that prevent vehicles from using these parallel routes as alternatives to TIB: intersection diverters or short one-way segments. The most effective locations for installation of these preventative measures would likely be in the vicinity of S 144<sup>th</sup> Street. While these barriers occupy a small area, they are still an inconvenience for residents who are accustomed to traversing the area on Military Road or 42<sup>nd</sup> Avenue S.

If the proposed rechannelization is pursued, the City could further investigate the optimal design and placement of these devices which would prevent cut-through traffic while maintaining as much connectivity



as possible for local residents as well as students travelling to Foster High School or Thorndyke Elementary School. As part of a larger outreach program to promote this project, the City could also consider a temporary installation of the lane conversion on TIB to bicycle lanes and traffic calming devices on nearby streets to demonstrate to the local community how the project would be implemented and its potential benefits to all users. This “tactical urbanism” approach would also allow the City to quickly assess traffic operations conditions before and after implementation of the project.

The proposed rechannalization of TIB would necessitate a change in usage and perception for this facility. While the route today serves a high percentage of regional pass-through traffic, the reduction in vehicular capacity would likely limit the facility’s usage to local residents and employees. Even with the existing travel demand, a significant volume of trips would shift to alternate parallel routes to avoid the increased congestion along TIB. However, the removal of two travel lanes would allow for the installation of bicycle lanes and on-street parking which would contribute to a more amenable environment for all users.



CNU LEGACY PROJECT

17 APRIL 2017

Implementing the Vision

TUKWILA INTERNATIONAL BOULEVARD





THORNTON DESIGN GROUP

# TIB Evolution into Diverse, Walkable, Authentic, Main Street

## Boulevard Improvements

The evolution of TIB into a walkable main street may begin with two immediate changes.

The first is restriping the Boulevard from a five lane road into a three lane street. This includes the addition of new crosswalks and a protected bike lane (See page 32 for details). The second step is a change to the zoning ordinance to assure development will implement the vision. This change includes permitting greater diversity and capacity of uses while allowing incremental development in the short term (See page 42 for details).

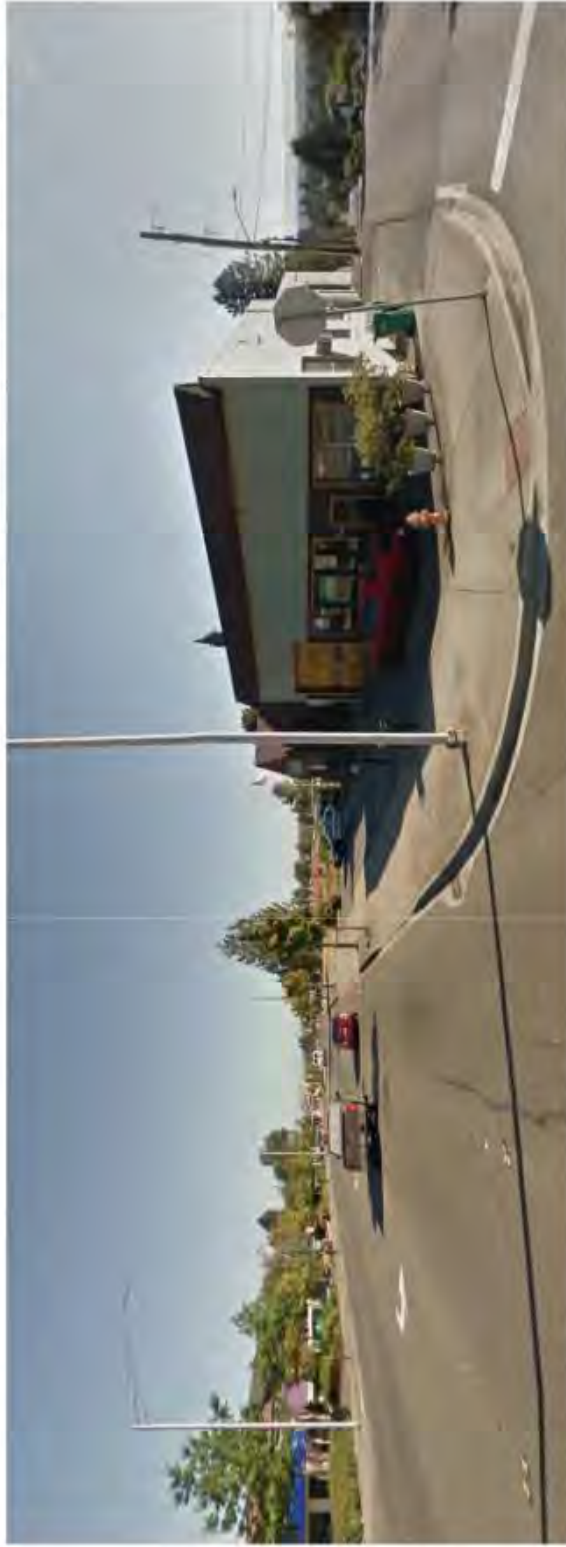


Image Credit: Andrew von Maur

## IMPLEMENTATION

Short term steps for implementation include re-striping the Boulevard and amending the zoning.

### RESTRIPIING PLAN

The initial step in the TIB evolution is a restriping plan for the Boulevard. Traffic studies must be done in advance of the work, but a schematic plan was developed during the workshop, shown on the next pages.

Some parts of TIB have distances as great as 2,500' without a crosswalk. This distance provides a dangerous environment where residents cross midblock with no protection. To build a robust main street environment, pedestrians must be able to easily cross the street to access shops on the other side. In addition to crosswalks, new RREBs are recommended.

pedestrian before using a crosswalk. The purpose of an RREB is to increase vehicle yielding at crosswalks. RREBs are attached to pedestrian crossing warning signs, and are also accompanied by piano key crosswalks and advance yield markings. The beacons are usually solar powered, and flash using an irregular pattern that is similar to emergency vehicle flashers on police vehicles.

#### KEY

-  Existing signal + crosswalk
-  Existing RREB

A RREB is an amber-colored flashing light (LED) that is activated by a



Image Credit: City of Bloomington, Indiana

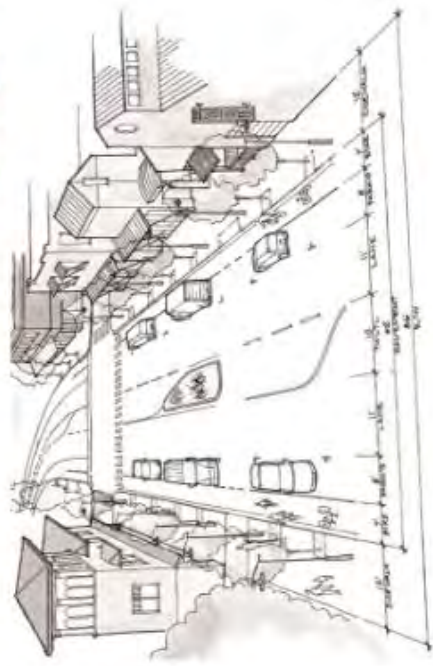


Existing Crosswalks

(City of SeerTac, King County, BLM, ESRI, Garmin, USGS, EPA, USDA)



(© Microsoft, 2017)



**KEY**

- New crosswalk
- New RRFB
- Restriping area
- New streets

The plan to the right shows a change from 5 lanes to 3 lanes beginning with S. 139<sup>th</sup> Street in the north to S. 152<sup>nd</sup> Street at the southern end. The new street section is illustrated above, as compared to the existing conditions in the upper right image.

In addition to the restriping, new pedestrian crosswalks and signals should be added. New RRFBs should be located at S. 141<sup>st</sup> Street and S. 146<sup>th</sup> Street. New crosswalks should be added at S. 142<sup>nd</sup>, S. 148<sup>th</sup>, S. 150<sup>th</sup>, and each new east-west street as they are developed over time as shown on the plan to the right.

To assure local traffic is managed well, provide additional development opportunities, and create a bicycle and pedestrian network, new streets should be added to provide multiple routes north/south and east/west.



**Restriping Plan**

(City of SeerTac, King County, BLM, ESRI, Garmin, USGS, EPA, USDA)

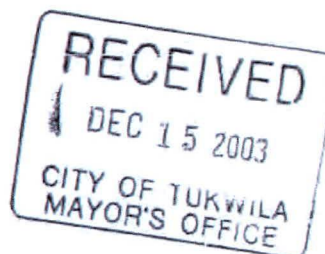


**Washington State  
Department of Transportation**  
Douglas B. MacDonald  
Secretary of Transportation

**Transportation Building**  
310 Maple Park Avenue S.E.  
P.O. Box 47300  
Olympia, WA 98504-7300  
360-705-7000  
TTY: 1-800-833-6388  
www.wsdot.wa.gov

December 11, 2003

The Honorable Steven M. Mullet, Mayor  
City of Tukwila  
6200 Southcenter Blvd.  
Tukwila, WA 98188



Dear Mayor:

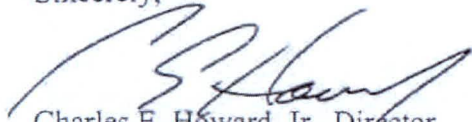
This letter confirms discussions recently held between WSDOT and the City of Tukwila related to the proposed route jurisdiction transfer of State Route 99. Through the route transfer process carried out by the Transportation Improvement Board and the last legislative session, WSDOT opposed the transfer to the city. WSDOT's position was to wait until the completion of SR 509 before realigning the state highway network in the area. Instead of continuing this disagreement, WSDOT is willing to agree to this legislative transfer with the following conditions: WSDOT seeks Tukwila's assurance that this section will continue to function as a through, regional arterial, and that the city will agree to cooperate with WSDOT by making this section of arterial available as an emergency detour if there is a problem on I-5.

We have noted that a project funded by the Legislature's 2003 Transportation Revenue Package (SR 99 between S. 138<sup>th</sup> St. Vic. To north of S. 130<sup>th</sup> - to be funded during the 07/09 biennium) may be affected by this transfer. While we assume that any route transfer will not affect the availability of the money for this project, should the route transfer take place, the funds will need to be transferred out of our state highway capital improvement program to WSDOT's local program so that the funds could then be granted to the City of Tukwila. This would be an issue for WSDOT and the city to work on with the legislature for the 07-09 biennium budget.

The Honorable Steven M. Mullet  
December 12, 2003  
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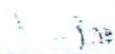
I am requesting that you countersign this letter to affirm the city's commitment. Having this commitment from the city, WSDOT agrees that jurisdiction of this route should be transferred to the City of Tukwila. We will forward our support of this proposal to Senators Horn and Prentice for their information in considering the transfer.

Sincerely,



Charles E. Howard, Jr., Director  
Strategic Planning and Programming

Concurrence

  
\_\_\_\_\_  
Steven M. Mullet  
Mayor  
City of Tukwila

cc: Paula Hammond/47316  
Lorena Eng/NB-82-105  
Ron Paananen/NB82-101