

City of
Bellevue



Transportation Commission Study Session

DATE: January 6, 2022

TO: Chair Marciante and Members of the Transportation Commission

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SUBJECT: South Downtown I-405 Access Study

DIRECTION REQUESTED

Action

Discussion/Direction

Information

Staff will provide an overview of the I-405 South Downtown Access Study, including the planning process and a description of the preferred alternative presented to the City Council on April 5, 2021. Next steps for Bellevue will include the update of the Transportation Improvement Program project list to include this project. No action is currently requested of the Transportation Commission.

BACKGROUND

The I-405 Corridor Program Master Plan approved in 2002 includes a new half-diamond interchange in the NE 2nd Street vicinity to improve vehicle access to/from the south. Since then, this proposed interchange has been included in the city's various long range planning documents. In spring 2020, the City, in collaboration with Washington State Department of Transportation (WSDOT), began the South Downtown I-405 Access Study as a conceptual planning effort to identify I-405 connection alternatives that meet the City's transportation needs and are consistent with the current land use plans and growth.

At the September 10, 2020, Transportation Commission meeting, staff provided a report on progress of the study. The study team identified a dozen initial options. Through Tier 1 analysis, a fatal flaw screening process, staff recommended five alternatives to carry forward for further analysis in Tier 2. Council unanimously approved staff's recommendation at the September 28, 2020, Council Study Session. The five options studied by the City were:

1. Lake Hills Connector southbound on-ramp;
2. SE 6th Street extension with southbound on-ramp;

3. SE 6th Street extension with express toll lane access to and from south;
4. NE 2nd Street extension to Wilburton; or
5. No Build, which serves a baseline to compare alternatives and is required by FHWA and WSDOT.

INFORMATION

The study team analyzed the five options using the following criteria as vetted with the stakeholders and approved by the Council:

- Existing plans and urban design considerations
- Congestion reduction/travel time consideration
- Access and safety considerations
- Property and economic development impact considerations
- Cost considerations

Described below are the results from the analysis.

Lake Hills Connector southbound on-ramp

This option provides a new southbound on-ramp from Lake Hills Connector. It complements the existing I-405 northbound off-ramp to Lake Hills Connector. Spoiler alert, this is the preferred alternative. More information later in this memo.

Alignment with adopted plans and urban design policies

- Adds auto access only; no bike lanes and sidewalks, no east-west connection. No significant policy conflict with existing land use and urban design policies.
- Aligns with the I-405 Master Plan and is compatible with the representative alignment for the Kirkland to Issaquah via Bellevue ST3 light rail project.
- The elevated structure causes permanent impacts including shade, lighting, noise, and water quality.

Travel time (compared to No Build)

- Saves 500 daily person hours.
- Reduces intersection PM delay by 6 percent.

Access and safety

- Restricts westbound left turns from NE 4th Street onto I-405 southbound, enhancing the connection between Downtown and Wilburton.
- May reduce the rate of vehicle rear-end collisions because of reduced congestion.



Impact on property and economic development

- No significant property impact identified.
- Added access to I-405 supports future economic development.

Cost estimate

- \$150 million, including right-of-way, environmental mitigation and construction escalated to 2030 dollars.

SE 6th Street extension southbound on-ramp

This option elevates and extends SE 6th Street over 114th Avenue SE and I-405 to Lake Hills Connector and builds an on-ramp to I-405 southbound. It complements the existing I-405 northbound off-ramp to Lake Hills Connector. It also provides bike lanes and sidewalks on the new east-west connection.

Alignment with adopted plans and urban design policies

- East Main Transit Oriented Development plan did not envision a ramp at SE 6th Street. Requires policy amendment and would add delay to the East Main land use code amendment work (complete).
- Aligns with the I-405 Master Plan and is compatible with the representative alignment for the Kirkland to Issaquah via Bellevue ST3 light rail project.
- The elevated structure causes permanent impacts including shade, lighting, noise and water quality.
- The added access to I-405 and multimodal east-west connection between East Main and Wilburton aligns with the City's multimodal policies.



Travel time (compared to No Build)

- Saves 700 daily person hours.
- Reduces intersection PM delay by about 10 percent.

Access and safety

- The added bike lane and sidewalk improves access and safety for non-motorized users.
- Extending SE 6th Street improves East Main - Wilburton connection but removes direct vehicle access to properties between 112th and 114th Avenues via SE 6th Street.
- May reduce the rate of vehicle rear-end collisions because of reduced congestion.

Impact on property and economic development

- Planter strip and potential parking lot impacts along 112th, 114th, and 118th Avenues SE and SE 6th Street.
- Requires approximately 0.82-acre of right-of-way from adjacent properties.
- Temporary impacts in the Wilburton park-and-ride lot during construction.
- Additional access to I-405 supports future economic development.

Cost estimate

- \$175 million, including right-of-way, environmental mitigation and construction escalated to 2030 dollars.

SE 6th Street extension inside access

This option elevates and extends SE 6th Street over 114th Avenue SE and I-405 to Lake Hills Connector and builds direct I-405 express toll lane access ramps to and from the south. This is the only option studied by the City that provides two new ramps. It also provides bike lanes and sidewalks on the new east-west connection.

Alignment with adopted plans and urban design policies

- The added access to I-405 and multimodal east-west connection between East Main and Wilburton aligns with City's multimodal policies.
- Aligns with the I-405 Master Plan and is compatible with the representative alignment for the Kirkland to Issaquah via Bellevue ST3 light rail project.
- East Main transit Oriented Development plan did not envision a ramp at SE 6th Street. Requires policy amendment and would add delay to the East Main land use code amendment work (complete).
- The elevated structure causes permanent impacts including shade, lighting, noise, and water quality.



Travel time (compared to No Build)

- Saves 1,400 daily person hours.
- Reduces intersection PM delay by about 7 percent.

Access and safety

- The added bike lane and sidewalk improves access and safety for non-motorized users.
- Extending SE 6th Street improves East Main - Wilburton connection but removes direct vehicle access to properties between 112th and 114th Avenues SE via SE 6th Street.
- May reduce the rate of vehicle rear-end collisions because of reduced congestion.

Impact on property and economic development

- Planter strip and potential parking lot impacts along 112th, 114th, and 118th Avenues SE and SE 6th Street.
- Requires approximately 0.64-acre of right-of-way from adjacent properties.
- Impacts about 40-50 parking stalls in the Wilburton park-and-ride lot.
- Additional access to I-405 supports future economic development.

Cost estimate

- \$325 million, including right-of-way, environmental mitigation and construction escalated to 2030 dollars.

NE 2nd Street extension

This option extends NE 2nd Street to 116th Avenue NE without ramp connections to I-405. This option also provides bike lanes and sidewalks on the new east-west connection.

Alignment with adopted plans and urban design policies

- The added east-west multimodal connections align with City's multimodal policies.
- The elevated structure causes permanent impacts including shade, lighting, noise, and water quality.
- Impacts approximately 0.16 acre of wetland on the east side of the freeway.

Travel time (compared to No Build)

- Saves 100 daily person hours.
- Increases intersection PM delay by about 7 percent. This is because extending NE 2nd Street to 116th Avenue NE would require elevating the roadway over 114th Avenue NE and I-405. It would eliminate the direct vehicular connection between 112th Avenue NE and 114th Avenue NE via NE 2nd Street and create problems for downtown circulation.

Access and safety

- Includes bike lanes and sidewalks on the north and south sides of NE 2nd Street.
- Requires elevating NE 2nd Street over 114th Avenue NE and I-405 to connect to 116th Avenue NE which removes the direct vehicle connection between 112th Avenue and 114th Avenue via NE 2nd Street.
- Drivers must use SE 6th Street to access properties along 114th Avenue SE.



Impact on property and economic development

- Requires approximately 1.54 acres of right-of-way from adjacent properties.
- Does not add freeway access capacity to support economic development.

Cost estimate

- \$125 million, including right-of-way, environmental mitigation and construction escalated to 2030 dollars. The actual cost is likely to be much higher if the proposed redevelopments adjacent to NE 2nd Street progress further along before funding to acquire the right-of-way is secured.

No Build (no new interchange)

This option assumes no transportation improvements. The City used this baseline to compare the other options studied.

Alignment with adopted plans and urban design policies

- Both the City's Comprehensive Plan and WSDOT's I-405 Master Plan call for a new interchange in the South Downtown area.
- Maintains existing conditions with no further critical area impacts.

Travel time

- No travel time benefits because of no improvements.

Access and safety

- The rate of vehicle rear-end collisions may increase due to increased congestions.

Impact on property and economic development

- Does not require acquiring property to build improvements.
- No additional access to support future economic developments.

Cost estimate

- No cost.

Community engagement

The project study team, with the support of consultant PRR Inc, carried out a robust community engagement process using several online venues due to COVID-19 restrictions. The process included the four stakeholder forums, two public open houses, and a series of meetings with individual stakeholders and interest groups.

Stakeholder feedback

Stakeholders were identified as people who may be directly impacted by WSDOT's I-405 project if and/or when that proposal is funded and moves forward. They include the following individual stakeholder groups:

- Business/property owners or developers within the study area
- Representatives of neighborhood associations that are entirely or partially located within the study areas:

- Downtown Bellevue Residents Association
- Surrey Downs Community Club
- Wilburton Community Association
- Bellecrest Neighborhood Association
- Woodridge Community Association

The study team shared the analysis results and conducted post-forum opinion polls. The three build alternatives including the Lake Hills Connector Southbound on-ramp and the two SE 6th Street alternatives received the most support while the NE 2nd St. Extension and the No Build received minimum or no support.

Community online open houses

In addition to Stakeholder Forums, the Study Team conducted two online open houses to discover issues the community may have with the options being studied. The City received over 350 comments from both virtual open houses (combined). The community feedback was diverse. Below are the key findings:

- Support and concern expressed for each option studied
- Support for improving I-405 access and reducing freeway merging and weaving
- Support for multimodal connections
 - Pedestrians
 - Bicyclists
 - Transit riders
- Concerns:
 - Would not solve congestion on I-405.
 - Would induce traffic impacts on local streets and contribute to climate change.
 - High cost and would divert resources from funding other high-priority transportation projects.
- Some downtown residents suggested reconsidering the Main Street option. (Note: This option did not pass the fatal flaw screening and is not described in this memo).

Presentation to interest groups

At invitation, project team members presented analysis findings to Bellevue Downtown Association, Bellevue Chamber of Commerce Transportation Committee, and Eastside Transportation Association. These groups provided helpful input.

PREFERRED ALTERNATIVE

Based on the findings from the Tier 2 analysis and input received from communities and a staff recommendation, the Council, at their April 5, 2021 meeting, unanimously identified the **Lake Hills Connector southbound on-ramp** as the option that best meets the City's needs for the following reasons:

- It meets the primary objective of providing additional access to I-405.

- It is aligned with urban design policies and allows the East Main TOD land use code amendment work to move forward without additional delay (now complete).
- It would provide significant travel time reduction benefits and reduce delays at intersections within the study area with minimal property and environmental impacts.
- It is expected to improve vehicle traveler safety and reduce rear-end collisions by reducing congestion.
- It is more feasible to fund than the most expensive option.
- Stakeholders are generally supportive.

In addition to the new ramp, the Council also directed the Transportation Department to expedite the construction of bike lanes and sidewalks along SE 8th Street between SE 112th Avenue and Lake Hills Connector to complement the new ramp and make it a truly multimodal solution.

NEXT STEPS

The Transportation Commission will recommend an update to the project list on the Transportation Improvement Program through a series of study sessions and a public hearing in Q1 and Q2, 2022. Staff will recommend that the I-405 South Downtown Access project be added to the TIP, and prior projects related to south Downtown access will be recommended for repeal.

Because I-405 is an Interstate facility, any addition or modification of access will require FHWA approval. Including the recommended new access in the City's TIP is a key step to move this project forward from planning to implementation. The results generated from this study will inform WSDOT's environmental review and access revision request processes when funding is secured for WSDOT's proposal. Environmental analysis, Federal Highway Administration (FHWA) approvals, and funding for the project are required before WSDOT formally selects a preferred alternative for eventual implementation.

ATTACHMENTS

None