OLYMPIA CITY COUNCIL
Olympia, Washington
May 4, 2010

West Olympia Access Study - Recommended Alternative

CITY MANAGER’S RECOMMENDATION:
Move to indicate a preference to the Washington State Department of Transportation (WSDOT) to:

Proceed with an Interchange Justification Report (IJR) on the Hybrid Alternative, with a plan to phase in the improvements;

Complete the Kaiser Road ramps as Phase 1 and the off-ramp extension in the westbound direction from Black Lake Boulevard to Yauger Way as Phase 2, with the need and timing of Phase 2 to be monitored.

STAFF CONTACT:
Lead: David C. Riker, Director of Transportation, 360.753.8441

Assigned Staff:
- Randy Wesselman, Transportation Engineering and Planning Manager, 360.753.8477
- David Smith, Project Engineer II, 753-8496
- Sophie Stimson, Senior Planner, 753-8497

ORIGINATED BY: Public Works Department

PRESENTERS AND OTHERS NOTIFIED:
Presenter: Randy Wesselman

Others Notified:
- George Kovich, Washington State Department of Transportation
- Thera Black, Thurston Regional Planning Council
- West Olympia Business Association (WOBA)
- Lakemoor Community Club (Ken Lake)
- Goldcrest Neighborhood Association
- Cooper Crest Neighborhood Association
- South Westside Olympia Neighborhood Association
- Thurston County Realtors Association
- General Notification to West Olympia Access Study Stakeholders

ATTACHMENTS:
3. Alternatives Comparison
4. Design Visualization of Alternatives
BUDGET IMPACT/SOURCE OF FUNDS: The total West Olympia Access Study budget is $960,410. The City of Olympia funded the study using Transportation Impact Fees in the amount of $460,410. WSDOT funded the study with $500,000 through the 2005 Transportation Partnership Package.

The IJR, including associated environmental documentation, will cost approximately $1,500,000 which is the City’s and WSDOT’s responsibility. Funding will come from local funds, Transportation Impact Fees, state grants or a federal appropriation.

Funding for the final improvements is anticipated to come from the City, including Transportation Impact Fees, along with state and federal funds in the form of grants or special appropriations. Other potential funding could come from developer contributions or a Local Improvement District.

PRIOR COUNCIL/COMMITTEE REVIEW:

- City Council - Special Study Session, April 20, 2010; West Olympia Access Study- Technical Issues
- City Council, March 23, 2010; West Olympia Access Study- Recommended Alternative
- City Council, October 6, 2009; West Olympia Access Study- Preliminary Findings
- Land Use and Environment Committee, August 17, 2009; Briefing on Alternatives
- City Council, March 10, 2009; Amendment to Interlocal Agreement for the West Olympia Access Study
- City Council, October 17, 2008; Status Report on West Olympia Access Study
- City Council, May 13, 2008; Status Report and Next Steps on West Olympia Access Study
- City Council, February 13, 2007; Briefing on West Olympia Access Study
- City Council Meeting, October 17, 2006; Approval of Contract/Interlocal Agreement with WSDOT

BACKGROUND: On March 23, 2010, City Council discussed staff’s recommendation to forward the Hybrid Alternative, as a phased improvement, to the IJR process. The City Council raised a series of technical questions concerning the study and asked staff to provide information pertaining to these. The Council also asked that an opportunity for stakeholder input be provided prior to Council expressing a preferred alternative. Refer to Attachment 1 which is an excerpt of the meeting minutes pertaining to this topic.

The West Olympia Access Study - Technical Issues staff report from April 20, 2010, (Attachment 2) addresses the Councils’ questions pertaining to technical information related to the study and provides background information on the study and specific information about each of the three alternatives under consideration.
ANALYSIS AND OPTIONS: The three alternatives reviewed for the West Olympia Access Study include the:

- Black Lake - Yauger Alternative
- Evergreen - Kaiser Alternative
- Hybrid Alternative

A comparison of the three alternatives is provided in Attachment 3. While this does not capture the extensive traffic analysis completed, it uses the technical information and provides a high-level summary of the differences between the three alternatives.

Design visualizations of the three alternatives are provided in Attachment 4.

Why Staff is Recommending the Hybrid Alternative

The Hybrid Alternative will:

- Do the best job in distributing traffic on the Westside street system, with three exit options in the westbound direction;
- Provide *redundancy* in the local street system, especially valuable to the hospital and medical facilities in the area;
- Provide the best local street operations; therefore, better for Transit operations. The new access ramps to and from US 101 will provide potential future service opportunities to West Olympia.
- Provide some of the advantages of the Black Lake-Yauger alternative which will allow the existing commercial area near Black Lake Boulevard, Cooper Point Road and Harrison Avenue to grow and intensify by relieving congestion. It may be advantageous to focus any additional growth in this existing commercial area because the infrastructure is in place; and
- Provide advantages of the Evergreen Parkway-Kaiser alternative by serving currently underdeveloped areas, nearly all of which have current development proposals in place, primarily housing and office. A new access to US 101 may create pressure to up-zone these areas: high densities and a different mix of uses.

Rationale for Phasing of the Hybrid Alternative and Including Both Phases of the Hybrid Alternative in the IJR Report

Phasing of the Hybrid Alternative will:

- Build on the current investment in and momentum of work completed for the West Olympia Access Study (WOAS).
- When Phase 2 of the Hybrid Alternative is determined to be needed, the City would not have to start over with a new IJR and restudy issues that are already addressed as part of the WOAS.
- Phase 2 of the Hybrid alternative is retained to potentially serve the intensifying land use beyond our current 20-year planning horizon. The City can plan for phasing the long-term funding of the design, right-of-way and construction of Phase 2.
rather than potentially wait and need all of the funds at one
time. The City can build a partnership with WSDOT overtime to
complete this second phase.

- Continue to demonstrate a comprehensive long-term strategy
and commitment by the City and WSDOT to improve access and
circulation to serve the land use and transportation needs
within the next 20-years and beyond.
- Completing the IJR traffic analysis elements on both phases of
the Hybrid Alternative insures the operation of the Black Lake
Boulevard to Yauger Way off-ramp and Kaiser Road off-ramp
are compatible and will not preclude the Phase 2 element in
the future.

By using a phased approach for the Hybrid Alternative it does not cost
any more to complete the IJR than just moving forward with the
Evergreen Parkway-Kaiser.

The Kaiser Road On and Off-ramps, Phase 1, will:

- Provide a cost effective and timely solution to current and
future access and circulation needs; and
- Serve existing land use and planned future land uses.

These ramps are recommended to be the first phase of this long term
project because it provides both on and off-ramps to US 101 as
compared to Yauger Way which only provides an off-ramp;

The Yauger Way Off-ramp, Phase 2, will:

- Allow even greater distribution of traffic serving both current
commercial and futures uses, as growth occurs as planned;
- Further alleviate growing traffic volumes at the intersection of
Black Lake Boulevard and Cooper Point Road; and
- Potentially provide access and circulation to the proposed
development land use changes for Friendly Village.

Council Direction Sought

Council's preference on which alternative to take to the IJR process is
sought. Staff recommends the Hybrid Alternative, as a phased
improvement, be forwarded to the IJR process. Council’s
recommendation will be forwarded to WSDOT.

WSDOT, whose authority it is to make decisions on interchange
modifications, will make the ultimate decision on which interchange
modification to pursue. WSDOT will consider the technical analysis
completed and preference expressed by the City Council as part of
their decision-making process.

WSDOT will issue a Finding of Engineering and Operation Acceptability
which will include conditions for phasing of the selected alternative
and allow design to proceed on the selected alternative. Having this
conditional approval on the Hybrid Alternative means the City would
not have to start over with a new IJR when Phase 2 of the Alternative is
determined to be needed.
Future Steps

Identify funding for IJR: Once a decision is made by WSDOT on the modification, the City will pursue funding to complete a formal IJR. Much of the WOAS work will be relevant in completing the IJR, but it is likely to cost up to $1.5 million. The City will need to identify funds for an IJR. A combination of funding from local, state, and federal sources will likely be pursued for the IJR. Staff recently submitted applications to this regions’ congressional delegation requesting a FY 2011 Transportation Appropriation request to fund the West Olympia Access - Interchange Justification Report.

Final Construction Project Funding: Funding will also need to be identified for the design, right-of-way and construction phases. As mentioned above, this will be a City project and a combination of funding sources (local, state, federal and private) will likely be pursued.

Follow-up on Local Street Network Issues: Addressing local access and circulation issues that are unresolved or emerged from the public involvement process during this “feasibility” phase of the West Olympia Access Study has always been contingent on remaining available funds after this phase is finished. Based on budget projections, there are not sufficient funds to complete follow-up work on local street network issues at this time. This will delay any decisions associated with this work. Staff will submit a request to consider funding this work as part of the 2011 budget.

Option 1:

Indicate a preference to the WSDOT to proceed with an IJR on the Hybrid Alternative, with a plan to phase in the improvements’ complete the Kaiser Road ramps as Phase 1 and the off-ramp extension in the westbound direction from Black Lake Boulevard to Yauger Way as Phase 2, with the need and timing of Phase 2 to be monitored.

Implications:
1. Provides greatest redistribution of traffic associated with the Black Lake Boulevard and Cooper Point Road intersection.
2. Better distribution of traffic on the street system.
3. Allows the existing commercial area to grow and intensify by relieving congestion and serves currently underdeveloped areas, nearly all of which have current development proposals in place, primarily housing and office.
4. A new access to US 101 may create pressure to up-zone these areas: high densities and a different mix of uses.

Option 2:

Indicate a preference to WSDOT to proceed with an IJR on the Evergreen-Kaiser Alternative. Include in the City’s long-range planning that the off-ramp extension in the westbound direction from Black Lake Boulevard to Yauger Way, as shown in the Hybrid alternative, be identified in the Comp Plan.

Implications:
1. While slightly less beneficial as compared to the Hybrid Alternative, this alternative provides significant access improvements, at the least cost.
2. This alternative facilitates planned development near Kaiser Road.
3. This alternative could contribute to a spreading of commercial activity away from the current hub near Black Lake and Cooper Point.
4. A new access to US 101 may create pressure to up-zone these areas: high densities and a different mix of uses.

**Option 3:**

Indicate a preference to WSDOT to proceed with an IJR on the Black Lake-Yauger Alternative.

**Implications:**

1. This alternative functions about equal to the Hybrid Alternative and slightly better than the Evergreen-Kaiser alternative. This alternative includes a more difficult on-ramp configuration.
2. This alternative is over three times the cost of the Evergreen-Kaiser alternative and more costly than the Hybrid alternative (phased proposal).
3. This alternative includes wall and ramps that could impact residents of the Ken Lake residential area.
4. This alternative intensifies the use of commercial land near Black Lake Boulevard and Cooper Point Road.

**Option 4:**

Other direction as identified by the Council.
OLYMPIA CITY COUNCIL MINUTES  
March 23, 2010 7:00 p.m.

ROLL CALL

PRESENT: Mayor Doug Mah, Councilmembers Joe Hyer, Craig Ottavelli, Rhenda Iris Strub, Karen Rogers, Stephen Buxbaum, and Jeannine Roe.

OTHER BUSINESS
   West Olympia Access Study - Recommended Alternative

City Manager Steve Hall introduced this issue and asked for additional stakeholder input. He said this will be scheduled for Council action in the near future.

Mr. Randy Wesselman, Transportation Engineering and Planning Manager, reviewed the alternative recommended by staff for the West Olympia Access. He provided an overview of the West Olympia Access Study alternatives, phasing options, and costs for each alternative.

He stated the Interchange Justification Report is required by Washington State Department of Transportation (WSDOT) and will need to be updated every five years at a cost of $50,000 to $100,000. He asked the Council to indicate a preference to WSDOT to proceed with an Interchange Justification Report on the Hybrid Alternative with a plan to phase in the improvements.

Questions and comments include the following:

- Funding for final improvements may include a Local Improvement District (LID).
- What would the LID boundary be?
- Phase I funding would not include an eastbound exit onto Kaiser because of spacing requirements.
- Look at possible transit transfer station near Kaiser Road.
- Kaiser road on/off ramps will influence zoning for future development.
- Between the Hybrid alternative and the Evergreen alternative, which requires more right-of-way acquisition?
- Phase 2 portion needs to be part of the IJR to demonstrate a long term strategy and commitment.
- This project can be in Comprehensive Plan without being in the IJR.
- What are the impacts to Ken Lake neighborhood?
- These options will address noise and stormwater impacts as part of the environmental work.
- Staff will provide a cost benefit analysis of the three options.
- Cost estimate assumptions include right-of-way and stormwater impacts.
- With inflation, what will the estimates look like in the future?
- Does one alternative generate more miles than the other?
- All alternatives are equally compatible with our existing system.
- Which alternative has the least impact on wellhead protection area?
- Which has most negative impact on 101 and I-5?
- Which alternative has multi-modal opportunities?
- Would like to see the Sustainable Action Map completed for this project.
- There is no required deadline for selecting the alternative and submitting the IJR, but a decision should be made fairly quickly in anticipation of funding.
• WSDOT can choose a different alternative from the City’s selection, but will take our input into consideration.
• An open house was held last summer on two alternatives, but not the hybrid alternative.
• Staff will schedule a Study Session to provide technical information, discuss data that formed the recommendation, and to allow stakeholders to comment on the Hybrid alternative.

The Executive Session adjourned at 9:45 p.m.
West Olympia Access Study - Technical Issues

CITY MANAGER’S RECOMMENDATION: Review and discuss technical information provided for the West Olympia Access Study access alternatives.

Provide guidance to staff on additional information needed in preparation for City Council’s decision, scheduled for May 4, 2010, indicating a preference on which access alternative to complete an Interchange Justification Report on.

STAFF CONTACT:

Lead: David C. Riker, Director of Transportation, 360.753.8441
Assigned Staff:
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• David Smith, Project Engineer II, 753-8496
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ORIGINATED BY: Public Works Department

PRESENTERS AND OTHERS NOTIFIED:

Presenter: Randy Wesselman

Others Notified:
• George Kovich, Washington State Department of Transportation
• Thera Black, Thurston Regional Planning Council
• West Olympia Business Association (WOBA)

ATTACHMENTS:

1. March 23, 2010, City Council Staff Report - West Olympia Access Study - Recommended Alternative and Draft Minutes
2. Alternatives Comparison
3. Follow-up Technical Information Responding to Councilmember Questions from March 23, 2010, City Council Meeting

BUDGET IMPACT/ SOURCE OF FUNDS:

The total West Olympia Access Study budget is $960,410. The City of Olympia funded the study using Transportation Impact Fees in the amount of $460,410. The Washington State Department of Transportation (WSDOT) funded the study with $500,000 through the 2005 Transportation Partnership Package.

The Interchange Justification Report (IJR), including associated environmental documentation, will cost approximately $1,500,000 which is the City’s and WSDOT’s responsibility. Funding will come from local funds, Transportation Impact Fees, state grants or a federal appropriation.
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BACKGROUND:

On March 23, 2010, City Council discussed staff’s recommendation to forward the Hybrid Alternative, as a phased improvement, to the Interchange Justification Report (IJR) process. The City Council raised a series of technical questions concerning the Study and asked staff to provide information pertaining to these. The Council also asked that an opportunity for stakeholder input be provided prior to Council expressing a preferred alternative.

City Council’s preference on which alternative to move forward to the IJR process, will be forwarded to WSDOT for consideration.

WSDOT, whose authority it is to make decisions on interchange modifications, will make the ultimate decision on which interchange modification to pursue. WSDOT will consider the technical analysis completed and preference expressed by the City Council as part of their decision-making process.

ANALYSIS AND OPTIONS:

Attachment 1 is a copy of the West Olympia Access Study staff report, from March 23, 2010, which provides background information on the Study and specific information about each of the three alternatives under consideration.

Attachment 2 provides a comparison of the three alternatives. While this does not capture the extensive traffic analysis completed, it uses the technical information and provides a high-level summary of the differences between the three alternatives.
Attachment 3 highlights some of the major technical items and distills down the information for easier understanding. Information contained in Attachment 3 includes:

- Table 1 - summarizes what will be completed as part of the IJR process;
- Table 2 - summarizes the timing and costs associated with the IJR process;
- Information on what the planning level construction cost estimates include. Table 3 provides a breakdown of the construction components of each of the Alternatives;
- Table 4 - projected vehicle miles traveled for each of the Alternatives;
- Table 5 - a summary of the comparison criteria used to evaluate the Alternatives;
- Table 6 - a summary of Level of Service (LOS) operations on US 101;
- Table 7 - a summary of the LOS at five key intersections in the West Olympia Access Study area; and
- Projected PM peak hour ramp volumes for each of the Alternatives.

**Why Staff is Recommending the Hybrid Alternative**

The Hybrid Alternative will:

- Do the best job in distributing traffic on the Westside street system, with three exit options in the westbound direction;
- Provide redundancy in the local street system, especially valuable to the hospital and medical facilities in the area;
- Provide the best local street operations; therefore, better for Transit operations. The new access ramps to and from US 101 will provide potential future service opportunities to West Olympia.
- Provide some of the advantages of the Black Lake-Yauger alternative which will allow the existing commercial area near Black Lake Boulevard, Cooper Point Road and Harrison Avenue to grow and intensify by relieving congestion. It may be advantageous to focus any additional growth in this existing commercial area because the infrastructure is in place; and
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**Rationale for Phasing of the Hybrid Alternative and Including Both Phases of the Hybrid Alternative in the IJR Report**

Phasing of the Hybrid Alternative will:
• Build on the current investment in and momentum of work completed for the West Olympia Access Study (WOAS).
• When Phase 2 of the Hybrid Alternative is determined to be needed, the City would not have to start over with a new IJR and restudy issues that are already addressed as part of the WOAS.
• Phase 2 of the Hybrid alternative is retained to potentially serve the intensifying land use beyond our current 20-year planning horizon. The City can plan for phasing the long-term funding of the design, right-of-way and construction of Phase 2 rather than potentially wait and need all of the funds at one time. The City can build a partnership with WSDOT overtime to complete this second phase.
• Continue to demonstrate a comprehensive long-term strategy and commitment by the City and WSDOT to improve access and circulation to serve the land use and transportation needs within the next 20-years and beyond.
• Completing the IJR traffic analysis elements on both phases of the Hybrid Alternative insures the operation of the Black Lake Boulevard to Yauger Way off-ramp and Kaiser Road off-ramp are compatible and will not preclude the Phase 2 element in the future.

The Kaiser Road On and Off-ramps, Phase 1, will:

• Provide a cost effective and timely solution to current and future access and circulation needs; and
• Serve existing land use and planned future land uses.

These ramps are recommended to be the first phase of this long term project because it provides both on and off-ramps to US 101 as compared to Yauger Way which only provides an off-ramp;

The Yauger Way Off-ramp, Phase 2, will:

• Allow even greater distribution of traffic serving both current commercial and futures uses, as growth occurs as planned;
• Further alleviate growing traffic volumes at the intersection of Black Lake Boulevard and Cooper Point Road; and
• Potentially provide access and circulation to the proposed development land use changes for Friendly Village.

Next Step

On May 4, 2010, staff will request the City Council indicate a preference on which alternative to take through the IJR Process.

Unless you direct otherwise, staff will:

○ Provide email notification to two specific stakeholder groups - the West Olympia Business Association and local realtors. They will be informed that may select representatives to provide comment on the alternatives at the May 4 Council meeting immediately following a brief staff presentation and before Council deliberation.
Email notification with a link to this staff report will be sent to the city’s stakeholder list for this topic. The email will include the usual information about how to comment to the City Council about an agenda item (by email, postal mail, or during Public Communication).

City Council will have the following options to consider at the May 4, 2010, meeting:

**Option 1:**
Indicate a preference to the WSDOT to proceed with an IJR on the Hybrid Alternative, with a plan to phase in the improvements. Complete the Kaiser Road Ramps as Phase 1 and the off-ramp extension in the westbound direction from Black Lake Boulevard to Yauger Way as Phase 2. The need and timing of Phase 2 will be monitored.

**Implications:**
1. Provides greatest redistribution of traffic associated with the Black Lake Boulevard and Cooper Point Road intersection.
2. Better distribution of traffic on the street system.
3. Allows the existing commercial area to grow and intensify by relieving congestion and serves currently underdeveloped areas, nearly all of which have current development proposals in place, primarily housing and office.
4. A new access to US 101 may create pressure to up-zone these areas: high densities and a different mix of uses.

**Option 2:**
Indicate a preference to WSDOT to proceed with an IJR on the Evergreen-Kaiser Alternative. Include in the City's long-range planning that the off-ramp extension in the westbound direction from Black Lake Boulevard to Yauger Way, as shown in the Hybrid alternative, be identified in the Comp Plan.

**Implications:**
1. While slightly less beneficial as compared to the Hybrid Alternative, this alternative provides significant access improvements, at the least cost.
2. This alternative facilitates planned development near Kaiser Road.
3. This alternative could contribute to a spreading of commercial activity away from the current hub near Black Lake and Cooper Point.
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**Option 3:**
Indicate a preference to WSDOT to proceed with an IJR on the Black Lake-Yauger Alternative.

**Implications:**
1. This alternative functions about equal to the Hybrid Alternative and slightly better than the Evergreen-Kaiser alternative. This alternative includes a more difficult on-ramp configuration.
2. This alternative is over three times the cost of the Evergreen-Kaiser alternative and more costly than the Hybrid alternative (phased proposal).
3. This alternative includes wall and ramps that could impact residents of the Ken Lake residential area.
4. This alternative intensifies the use of commercial land near Black Lake Boulevard and Cooper Point Road.

**Option 4:** Other direction as identified by the Council.
## West Olympia Access Study

### Alternatives Comparison

**May 4, 2010**

### Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Black Lake - Yauger Interchange Alternative</th>
<th>Evergreen Interchange Alternative</th>
<th>Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Built Environment Impacts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>• No displacements or disruptions of access identified</td>
<td>• Potential displacements and disruption of access to residential and commercial properties in the US 101/Kaiser Way interchange area</td>
<td>• No noise and visual impacts to Ken Lake neighborhood</td>
</tr>
<tr>
<td></td>
<td>• Elevated ramp is close to Ken lake residential area (noise and visual impacts)</td>
<td>• Potential displacements and disruption of access to residential and commercial properties in the US 101/Kaiser Way interchange area</td>
<td>• Potential displacements and disruption of access to residential and commercial properties in the US 101/Kaiser Road interchange area</td>
</tr>
<tr>
<td><strong>Right-of-Way Needs</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Less right-of-way acquisition-impacts to platted developments and existing commercial properties (3.8 acres)</td>
<td>• More right-of-way acquisition, mostly undeveloped parcels (5.5 acres)</td>
<td>• Includes both acquisition-impacts to platted developments, and existing commercial properties and acquisition of undeveloped properties.</td>
</tr>
<tr>
<td></td>
<td>• More difficult to construct - periodic and major disruptions to traffic during construction</td>
<td>• Longer to construct</td>
<td>• The most right-of-way needed when compared to other alternatives (7.2 acres)</td>
</tr>
<tr>
<td><strong>Natural Environment Impacts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wellhead and Wetlands</td>
<td>• Less water resource impacts based on proximity to Allison Springs (10-year travel time zone)</td>
<td>• Potentially more water resource impacts based on proximity to Allison Springs (1-, 5-, and 10-year travel time zone)</td>
<td>• Similar wellhead and wetland impacts as the Evergreen Alternative</td>
</tr>
<tr>
<td></td>
<td>• Slightly less wetland impacts (1.7 acres)</td>
<td>• Highest wetland impacts (2.5 acres)</td>
<td>• Moderate wetland impacts (2.1 acres)</td>
</tr>
<tr>
<td><strong>Impervious Surface</strong></td>
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<tr>
<td></td>
<td>• Slightly more additional impervious surface (8 acres)</td>
<td>• Slightly less additional impervious surface (7 acres)</td>
<td>• Highest impervious surface (14.2 acres)</td>
</tr>
<tr>
<td><strong>Constructability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>• More difficult to construct, periodic disruptions to traffic during construction</td>
<td>• Less difficult to construct: periodic disruptions to traffic, mostly can be built outside of roadway</td>
<td>• Moderately difficult to construct - periodic and major disruptions to traffic during construction</td>
</tr>
<tr>
<td><strong>Bridge and Walls</strong></td>
<td>• More bridge structures and retaining walls required</td>
<td>• No new bridge structures and less retaining walls required</td>
<td>• One new bridge structure and retaining walls required</td>
</tr>
<tr>
<td><strong>Relative Cost</strong></td>
<td>• Higher estimated construction cost: $86 million</td>
<td>• Lower estimated construction cost: $26 million</td>
<td>• Moderate estimated construction cost: $76 million</td>
</tr>
<tr>
<td>Criteria</td>
<td>Black Lake - Yauger Interchange Alternative</td>
<td>Evergreen Interchange Alternative</td>
<td>Hybrid</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Safety General</td>
<td>• Essentially equal with other alternatives • Potential design deviation and design issues</td>
<td>• Essentially equal with other alternatives • No design deviations identified and less design issues</td>
<td>• Essentially equal with other alternatives • Potential design deviation and design issues</td>
</tr>
<tr>
<td>Freeway Safety</td>
<td>• Slightly better due to fewer conflict points</td>
<td>• Slightly worse due to weaving section between Evergreen and Black Lake interchanges</td>
<td>• Essentially equal to Black Lake - Yauger due to fewer conflict points</td>
</tr>
<tr>
<td>Transportation Benefits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freeway Operations</td>
<td>• Slightly better, fewer failing segments</td>
<td>• Slightly more failing segments</td>
<td>Equal to Black Lake - Yauger Alternative</td>
</tr>
<tr>
<td>Local Street Operations and Improvements (of 10 comparative intersections evaluated)</td>
<td>• Slightly better local street system operations • 5 intersection improvements</td>
<td>• Slightly worse local street system operations compared to Black Lake - Yauger • 6 intersection improvements</td>
<td>• About equal to Black Lake - Yauger • 5 intersection improvements</td>
</tr>
<tr>
<td>Transit and Emergency Vehicle Access</td>
<td>• Slightly better local street operations, therefore better for transit • Direct access to hospital, but not significant</td>
<td>• Less direct access to hospital, but not significant</td>
<td>• Slightly better local street operations than Black Lake and Evergreen • Most direct access to hospital - multiple connections</td>
</tr>
<tr>
<td>Addresses Black Lake Cooper Point LOS</td>
<td>• Slightly better at resolving congestion at this intersection</td>
<td>• Not as good (minor difference) at resolving congestion at this intersection when compared to Black Lake Alternative</td>
<td>Slightly better at resolving congestion at this intersection as compared to the Black Lake or Evergreen</td>
</tr>
<tr>
<td>Access to Major Destinations</td>
<td>• Generally serves commercial trips more than residential • Slightly better access to: Capitol Mall, commerce in Harrison, Cooper Point, Black Lake triangle</td>
<td>• Generally serves residential areas more than commercial • Slightly better access to: College Station, new development on Kaiser and north of Harrison</td>
<td>• Best of both alternatives; best traffic distribution throughout the Westside • Serves both residential and commercial areas evenly • Good access to College Station, new development on Kaiser and north of Harrison • Good access to Capitol Mall, commerce in Harrison, Cooper Point, Black Lake triangle</td>
</tr>
<tr>
<td>Criteria</td>
<td>Black Lake - Yauger Interchange Alternative</td>
<td>Evergreen Interchange Alternative</td>
<td>Hybrid</td>
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</tr>
<tr>
<td>Land Use</td>
<td>• Continues to intensify existing commercial area</td>
<td>• Serves underdeveloped areas</td>
<td>• Continues to intensify existing commercial area</td>
</tr>
<tr>
<td></td>
<td>• Existing commercial area can grow by reducing congestion</td>
<td>• All undeveloped areas have current development proposals in place except for areas near Kaiser south of 101</td>
<td>• Existing commercial area can grow by relieving congestion.</td>
</tr>
<tr>
<td></td>
<td>• Advantageous to enhance the existing commercial area because infrastructure is in place</td>
<td>• May create pressure to up-zone</td>
<td>• Advantageous to enhance existing commercial area; infrastructure is in place</td>
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<td>• Primarily housing and office proposed in this area</td>
<td>• Serves underdeveloped areas</td>
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<td>• All undeveloped areas have current development proposals in place except for areas near Kaiser south of 101</td>
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<td></td>
<td>• Fewer structures and ramps needed compared to Black Lake/Yauger</td>
</tr>
<tr>
<td>Urban Form, Bike andPedestrian Impacts</td>
<td>• More structures and ramps, less visually appealing and less comfortable for walking and biking in the area</td>
<td>• Kaiser Road bridge and street expansion presents opportunity for bike and ped access to areas south of 101</td>
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<td>• Fewer structures and ramps needed compared to Black Lake/Yauger</td>
</tr>
</tbody>
</table>
Construct westbound off-ramp and eastbound on-ramp from Black Lake Boulevard Interchange to connect to Yauger Way. Picture #1 of 2.
Construct westbound off-ramp and eastbound on-ramp from Black Lake Boulevard Interchange to connect to Yauger Way. Picture #2 of 2.

Modification of Black Lake Boulevard Interchange to connect to a new extension of Yauger Way
Add westbound off-ramp and Eastbound on-ramp to US 101 from Kaiser Road.

Evergreen/Kaiser Road Modification
Hybrid Alternative

Add westbound off-ramp and Eastbound on-ramp to US 101 from Kaiser Road.

Construct westbound off-ramp from Black Lake Interchange to connect to Yauger Way.