Woodland Transportation Infrastructure Strategic Plan
Open House & Workshop Summary

Date and Time: August 16, 2007 6:00 – 8:00 pm
Location: Open House & Workshop, Woodland High School Commons, Woodland, WA

Staff Attendees
Jerry Sorrell, Cowlitz-Wahkiakum Council of Governments (CWCOG)
Rosemary Siipola, CWCOG
Anne Sylvester, Parametrix
Michael Harrison, Parametrix
Mara Krinke, Parametrix
Christine Sylvester, Parametrix
Dena Horton, Normandeau Associates, Inc.

Number of public attendees: 28 signed in

The public presentation began at 6:00 PM. Anne Sylvester provided a brief introduction to the project and introduced team members. This led into a PowerPoint presentation by Anne Sylvester and Michael Harrison. The presentation included a review of recent work including the Stakeholder Interview Report, Draft Project Vision and Desired Outcomes and Transportation Existing Conditions Report. After the presentation, participants were given an overview of the Open House structure and asked to divide themselves around discussion tables.

Participants broke into four groups around project area maps for small group discussions. Michael Harrison, Mara Krinke, Christine Sylvester and Dena Horton each led table discussions. At a separate station, Rosemary Siipola solicited comments on the Draft Project Vision and Desired Outcomes. Anne Sylvester and Jerry Sorrell circulated amongst the table discussions to provide technical assistance, as-needed.

The public comments received focused primarily on recommended transportation improvements and concerns over the existing transportation system. Some of the most often cited comments included:

1. Take care of SR 503, either widening or adding turn pockets and improve multi-modal transportation facilities in the corridor.
2. Alleviate congestion near I-5 Exits 21 and 22 by providing an alternate east/west crossing.
3. Address delays caused by railroad crossings. Options included constructing under or overpasses at crossings.

Though many suggestions and observations were supported by multiple attendees, some comments were contrary to, or variants on, the comments of others. The following is a summary of the public comments received at the open house:

Lower River Road/SR 503

- Widen SR 503 to include pocket turn lanes
- Install stop lights at Insel Road, Gun Club Road, and Scott Avenue
- Widen SR 503 to have bus pull out/turn out lanes for the school buses, especially needed between 7:00am – 9:00am and 2:30pm – 5:00pm

- Widen SR 503 to three lanes (two lanes and a turn lane) within the entire Woodland city limits so that you don't create a bottleneck going from 3 lanes to 2 and then back to 3 lanes.
- Construct sidewalks along the high accident segment of SR 503
- Widen SR 503 to five lanes or construct an SR 503 bypass
- Improve signage on SR 503 at Scott Avenue directing motorists to I-5 from Old Pacific Highway rather than always going to the main interchange at Exit 21
- Make Goerig/Pacific at SR 503 a T-intersection
- Turning out of the Woodland Commerce Center is currently very difficult because of its location close to the bridge over Lewis River
- There are big access issues along Treatment Plant Road
- Pumping station on Lewis River Road may be in the way of any future widening
- Build flyover from Millard Street to I-5 southbound
- Build a new road from Cherry Blossom to Old Pacific Highway so vehicles can bypass the SR 503 / Old Pacific Highway intersection

Scott Avenue

- Davis Sales located near Scott Avenue and Pacific Avenue is concerned that the flyway of a Scott Road overpass will cut off both of their access points to Pacific Avenue unless they are granted access to Pacific Avenue via the old Wimpy's restaurant site property
- An underpass should be considered at Scott but would likely not work because of the water table and flooding issues
- Putting an overpass at Scott Avenue will help east-west connectivity if a railroad overpass at Scott is also installed, otherwise cars will back up on the overpass. However, this could be addressed if an alternative route from Scott via Downriver Drive, Mitchell Avenue, Columbia Street to Pacific Avenue is established and improvements to that route are made
    - This overpass would improve emergency safety, provide improved access to the grocery store and attract more shoppers to downtown businesses
- Build an I-5 overpass north of Scott Avenue, that would connect Old Pacific Highway on the east side to Down River Drive on the west side. This option avoids blocking business access, particularly Davis Sales, to Pacific Avenue on the west side
- Construct a four-way stop at Pacific and Scott and straighten the intersection to form right angles
- If you widen Exits 21 and 22 similar to the intersections at I-5 and 99th or 78th Streets, then you may not need to add a Scott Road overpass
- Install signage to direct motorists to I-5 from Scott to avoid routing them south through a heavily congested area
- Clogging occurs every winter in the State's storm easements under the apartments near Scott and SR 503
- Improve dangerous turns from Scott Avenue to SR 503 eastbound
- Install signal at Scott and SR 503

Dike Access Road

- Widen the exit and add more lanes, because currently it is too narrow. If additional industrial development and the building a new high school occurs, the existing road and interchange will not be able to handle the congestion caused by an increase in truck traffic or school buses
- Make it wider and similar in design to the I-5 Exit at 99th Street or 78th Street
- Address the huge railroad bottleneck issue here, especially if the 3rd Rail comes through
- Need to address flooding issue, perhaps raise the freeway between Exit 21 and 22
- Regardless of changes, there needs to be better signage for people to know where they are going when they get on or off Exit 22

- The Port is concerned that mixed use developments along Dike Road, north of Guild Road, will slow Port traffic
- There is a potential for altered Port activities and increased Port facilities to increase industrial traffic on Dike Road to I-5
- Flooding at the Dike Road interchange is a problem
- Construct a bypass connecting Dike Road or Old Pacific Highway with SR 503 in the northeast corner of Woodland. Also connect this new bypass to a new overpass near Scott Avenue

Railroad Crossings

- Build an overpass over the railroad at Scott Avenue
- Build an overpass over the railroad at Davidson Avenue
- Realign Davidson Avenue to reduce the sharp turn just west of the tracks
- Rather than having the 3rd Rail come down the existing BNSF alignment, have the 3rd rail spur off towards the port and port property
- Cowlitz County should consider railroad improvements just as Clark County has
- Build an overpass over the railroad at Whalen Road
- An underground aquifer runs east/west near Scott Avenue and would be a problem when considering tunneling under railroad tracks

Other Traffic and Community Improvements

- Raise I-5 between Exit 21 and Exit 22. Raising the freeway will allow east-west connectivity to be re-established under it and would also allow the Fleetwood trucks to access the freeway in Woodland rather than having to drive down to La Center or Ridgefield for access because of the current height restrictions
- Extend Downriver Drive to include an overpass over the railroad tracks. Connect Downriver Drive directly to Dike Access Road, or connect Downriver Drive to Dike Access Road via Schurman Way
- It is not currently identified as a high industrial truck traffic area, but Pekin Road is heavily traveled by industrial truck traffic
- Extend Schurman Way to Goerig Road to help establish more north-south connectivity
- At the intersection of Davidson Avenue, Pekin Road, Goerig Road, and the BNSF Railroad, it is very dangerous because semi-trucks are interacting with speeding cars, and many people overshoot the turn. Recommend you install a stop sign or light at Pekin where it meets Davidson/Goerig
- Implement some safety measures at the corner of Caples Road and Pekin Road because it is very dangerous for semi-trucks to turn since the speed limit is 35mph and most people drive 50mph on that stretch of road
- Build new road connecting Insel and Old Pacific Highway
- Extend Pacific and Atlantic north connecting near Dike Road
- Extend Robinson Road east to Shurman Way
- Consider extending Howard Way rather than Shurman Way to the south
- Construct new road on right-of-way currently owned by the City east of the Railroad between Davidson and Beechwod to alleviate school traffic
- Make Pekin Road and Goerig/Davidson a T-intersection
- Make turn at Buckeye Goerig/Davidson a T-intersection
- Southwest section bordered by Caples and Pekin, just outside the City limits, is the most likely location of future growth
- Consider purchasing right-of-way west of Woodland to be used for future roadways

- Extend Pinkerton Road west to serve future developments southwest of the city, and funnel the traffic from these new developments around Downtown Woodland via Lakeshore Drive or a new I-5 Interchange south of SR 503
- The failing level of service at Buckeye and Goerig may be caused by commercial truck turning movements
- Consider realigning Shurman Way southern extension to match property boundary lines as much as possible
- Project staff should coordinate this project with utility companies (gas, PUD, phone, BNSF, cable and city facilities) which may be upgrading their facilities
- Consider a ferry to St. Helens
- Involve the local diking district to evaluate runoff and flooding impacts
- Construct more parks in town and consider locating a park south of SR 503 near Insel
- Transportation system needs to prepare for more growth east of the Woodland City Limits.
- Consider creating new interchanges in Woodland area from north of Dike Road to south of SR 503. At minimum new on/off ramps should be looked at
- Work with Railroad to raise rail line and also raise Dike Road to reduce flooding
- Consider a new SR 503 bypass from a new interchange south of the city limits, east along Lewis River, connecting with SR 503 east of the city limits.
- Construct a walking path along Horseshoe Lake

Funding Options

- Don't forget that Woodland is a Historically Underutilized Business Zone, so there may be additional funding available to assist businesses

Future Developments

- Commercial development is expected between Treatment Plant Road and the Lewis River
- Commercial development is expected between Atlantic Avenue and SR 503, near Cherry Blossom (as a part of this development, a new road may link SR 503 and Atlantic Avenue, which would serve this business area and improve emergency services)
- Commercial development is expected between Columbia Street and Scott Avenue and west of Pacific Avenue
- Residential development is expected between the north end of Scott Avenue and the southern end of Bozarth Heights
- Commercial development expected near CC Street

Meeting adjourned at 7:45pm.

Woodland

Transportation Infrastructure Strategic Plan

Public Open House & Workshop

August 16, 2007

Agenda

- Introduction of Team
- Why are We Doing this Study?
- What will the Study Address?
- What have We Done to Date?
- What have We Found?
- Project Vision
- Tonight's Activities
- What's Next?

Introductions

- Jerry Sorrell – COG Project Manager
- Rosemary Siipola – COG Staff
- Anne Sylvester – Consultant Project Manager
- Michael Harrison, Dena Horton, Mara Krinke, Christine Sylvester – Consultant Team

Project Team

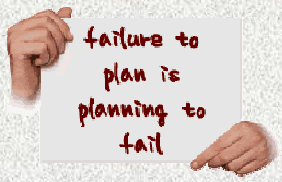
- Technical Team
  - City of Woodland
  - Port of Woodland
  - Cowlitz County
  - Washington State Department of Transportation
  - Cowlitz-Wahkiakum Council of Governments
- Citizens Advisory Committee

Why Are We Doing This Study?

- Woodland is growing:
  - 1990 to 2004
    - 65% increase in population
    - 32% increase in employment
  - Traffic congestion is growing 2-4% / year)
  - Growth expected to continue as development and jobs move north from Clark County
- Challenge is to retain the small town feel of Woodland while addressing problems of growth

Why Are We Doing This Study?

- There are also financial challenges
- Available funds are very competitive
- A community needs a plan and a strategy with priorities to be successful
- Limited funding is available for a short-term improvement on SR 503 – what should be done?
- Other project improvements will take longer, overall plan is a 20-year vision

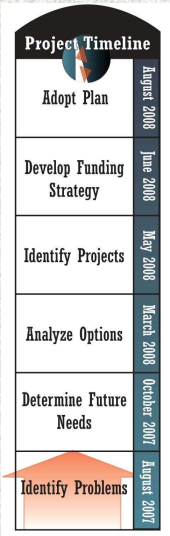


What will this Study Address?

- Build on the foundation of the City's 2005 Transportation Plan by fleshing out recommended improvements for:
  - I-5 interchanges (including flooding)
  - SR 503 safety problems
  - Possible extension of Schurman Way south to Goerig Street (new jobs and housing)
  - Added east/west connection(s) of I-5 and local street connections
  - Railroad crossings

Steps in the Process?

- Identify Problems / Define Vision
- Determine Future Needs
- Analyze Options
- Identify Projects
- Develop Funding Strategy
- Adopt Plan
- Begin to Assemble Funding
- Design, Permit and Build Projects



What have We Done to Date?

- Conducted technical evaluation of existing roadway system (congestion levels, safety, design)
- Interviewed stakeholders – define problems and discuss ideas
- Developed draft vision for the project and desired outcomes
- Identified financial baseline

What have We Found?

- Growing delays in the I-5 / SR 503 interchange area
- Long delays at:
  - SR 503/Goerig
  - SR 503/E Scott
  - Buckeye/Goerig
- SR 503 east of I-5 is High Accident Corridor

What have We Found?

- Lack of east/west connections forces everyone through the I-5 interchanges
- High levels of truck traffic at many locations
- Railroad crossing delays
- Roadway design issues (sight distance, physical constraints, confusion)
- Lack of bicycle / pedestrian facilities

Stakeholder Interviews

- 16 interviews conducted in June
- Purpose – identify community's key transportation issues, concerns and opinions
- Findings/Common Themes:
  - Congestion is a problem, getting worse
  - I-5 interchanges are biggest problems
  - Lack of convenient connections (east/west, north/south and to downtown) and safety concerns
  - Lots of project ideas
- Developed a project vision statement

Project Vision

- The City of Woodland's transportation system effectively and efficiently moves people and goods while reinforcing the City's small town feel, with improved connections between Woodland's residential neighborhoods, industrial areas, downtown, farms, parks, I-5 and recreational areas.

Desired Outcomes

- Results in a clear plan that:
  - Addresses needs,
  - Is supported by the community, and
  - Can be used by elected leadership to advocate for project priorities and secure funding

Desired Outcomes

- Provides a plan to manage traffic congestion
- Serves all forms of street travel
- Maximizes safety for all users
- Improves local street connections to reduce need to use I-5 Interchanges for local trips
- Accommodates growth
- Can be constructed in phases, is cost-effective and meets state and local requirements
- Provides for property access without degrading safety and capacity
- Enhances emergency vehicle access
- Improves links to recreational areas
- Addresses rail crossing and flooding issues

How Can You Help?

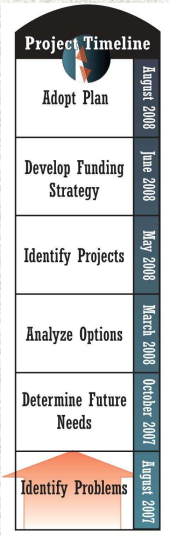
- Planning isn't done in a vacuum but should reflect the values and uniqueness of each community that undertakes it
- We would like your input on:
  - Do the existing conditions / problems we've identified match what you see?
  - Do you agree with the vision statement and desired outcomes? Any changes?
  - How you currently use the transportation system
  - Problems you encounter
  - Any ideas about needed improvements?

Tonight's Activities

- Break into table groups for discussion of:
  - Key issues, problems, needs and ideas
  - Thoughts about the project's vision statement and desired outcomes
  - If there is anything else you'd like us to know at the outset of this study?
- Comment form available
- Kids table and refreshment

What's Next?

- Next public meeting to be held in January 2008 to discuss development of improvement options
- Public meeting in May 2008 to discuss evaluation of improvement options, recommendations & priorities



Woodland Transportation Infrastructure Strategic Plan
Open House & Workshop Summary

Date and Time: January 24, 2008, 5:30 – 8:00 pm
Location: Woodland High School Auditorium, Woodland, WA

Staff Attendees
Jerry Sorrell, Cowlitz-Wahkiakum Council of Governments (CWCOG)
Rosemary Siipola, CWCOG
Anne Sylvester, Parametrix
Michael Harrison, Parametrix
Jim Phillips, Parametrix
Christine Sylvester, Parametrix
Megan Taylor, Parametrix
Dena Horton, Normandeau Associates, Inc.

Number of public attendees: 14 signed in

The public presentation began at 5:30 PM. Anne Sylvester provided a brief introduction to the project and team members. This led into a PowerPoint presentation that reviewed why this study is being conducted and what problems this study is seeking to address. Anne reviewed the Project Timeline, reminding attendees that we're in the midst of analyzing transportation options and that firm design decisions have not yet been made. Anne provided a brief introduction to roundabouts, mentioning the different situations where signals and roundabouts can be used. The presentation concluded with an overview of the various options currently being studied, including highway/railroad crossings and interchange congestion and safety improvements. After the presentation, participants were given an overview of the Open House structure and asked proceed to the stage for discussion of the options. Participants circulated between various staffed stations, reviewing and providing feedback on the design options, by geographic area. Jerry Sorrell, Anne Sylvester, Michael Harrison, Jim Phillips and Dena Horton presented information on the various design options and solicited feedback. The public comments received focused primarily on modifications to the various transportation improvement options presented.

Many suggestions and observations were made by the attendees. The following is a summary of the public comments received at the open house and scribed onto poster paper:

I-5 and Railroad Crossings

- Scott Avenue embankment options would create a new isolation problem and limit development along Scott Avenue
- Clarification needed regarding the expected construction timeline of the crossing (10 yrs or 20 yrs?)
- Area served by Downriver Drive is valuable industrial land and therefore access should be maintained to avoid isolating this parcel
- Area west of Pacific Avenue is also a prime development area
- Scott Avenue crossing appears to connect better with the SR 503 to East City Limits project (than other crossing options)
- Consider creating a Scott Avenue over-crossing that connects Downriver Drive to Old Pacific Highway, but leave the existing at-grade crossing with the railroad

- Consider a Scott Avenue over-crossing that connects Downriver Drive to SR 503 south of Scott Avenue's existing alignment
- Add new I-5 southbound on-ramp from Downriver Drive

I-5/Dike Road

- Restrict future access to parcels fronting Dike Road to existing streets, this would reduce future congestion on Dike Road by limiting the number of driveways/streets
- Roundabouts can be landscaped to create gateways into the community, which would serve as visual reminders to drivers that they are in town and should slow down
- Concern about the mix of young drivers, trucks and school buses at the potential single lane roundabouts on Dike Road. A suggestion was made that a two-lane roundabout at Shurman Way might be safer than a one lane roundabout and allow more room for the mix of traffic
- Signals provide a clearer sense of who has the right of way in an intersection
- Consider moving the I-5 north- and southbound off-ramps north of the existing interchange, to decrease the amount of traffic using Dike Road. This proposal would connect the new off-ramps with the intersection of Burke Road and Dike Road
- Emergency vehicles find it easier to use roundabouts. At signals drivers do unpredictable things which can lead to right angle accidents with emergency vehicles
- Attendee mentioned that Lacey, WA has roundabouts that are popular with the community because the commute is faster now that the signals have been replaced
- Consider extending N Pekin Road north of Scott Avenue and connecting it west to Shurman Way. This could go under the proposed Scott Avenue overcrossing of the railroad.
- Close I-5 northbound off-ramp at Dike Road and construct new off-ramp south halfway between Scott and Dike Road
- Provide connection from Atlantic Avenue to Old Pacific Highway

I-5/SR 503

- Concerns were expressed about the 87 passenger buses (school buses) being able to get through intersection regardless of roundabouts or signals.
- Be sure to look at traffic volumes at different times of day, also consider looking at 8 a.m. traffic because it is busier than 3 p.m. Consider getting traffic counts from 7:30 a.m. to 9:00a.m.
- If flooding occurs, it is important to consider how west side residents will evacuate and how emergency vehicles will access the area
- Roundabouts provide aesthetic benefits
- Concept 2B would relieve traffic congestion at Buckeye and Goerig
- Roundabouts improve sustainability by not using electric signals and help reduce energy use
- Consider the addition of trails, bike and pedestrian paths
- Fire trucks have no difficulty navigating roundabouts – no more than trying to get through a red light
- A preference was stated for roundabouts over the use of speed bumps
- Roundabouts are safer for emergency vehicles
- If roundabouts work well they would bring more business to the Port area
- Concerns were expressed regarding back-ups during peak traffic times with Concept 3B
- Look at Troutdale street system as an example, with businesses on both sides of the street; consider underpasses at Scott Avenue and Beechwood Street. Change Atlantic and Pacific Avenues into two-lane one-way streets with I-5 southbound on-ramp at Beechwood Street and keep I-5 northbound on-ramp at Scott Avenue. This would to help people do a loop and keep traffic flowing in both directions

- Consider constructing medians between CC Street and Millard Avenue as well as between Millard Avenue and the SR 503 turn south of the Goerig Street intersection
- Work with CUBS and Clark County on transit service

SR 503: Goerig to East City Limits

- Consider acquiring property southeast of SR 503/Goerig intersection

Meeting adjourned at 7:45pm.

Woodland

Transportation Infrastructure Strategic Plan

Open House

January 24, 2008

Agenda

- Introduction of Team
- Why are We Doing this Study?
- What will the Study Address?
- Steps in the Process
- What have We Done to Date?
- What have We Found?
- Project Vision
- Improvement Options
- Next Steps
- Tonight's Public Meeting

Introductions

- Jerry Sorrell – COG Project Manager
- Rosemary Siipola – COG Staff
- Anne Sylvester – Consultant Project Manager
- Other consultant team members - Michael Harrison, Dena Horton, Jim Phillips, Christine Sylvester, Megan Taylor

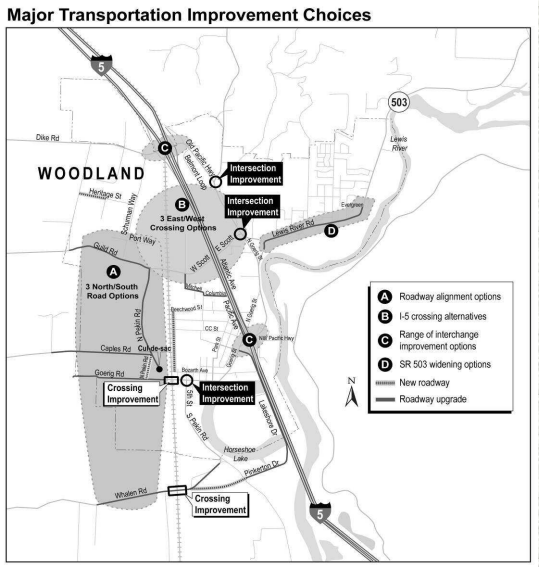
Project Team

- Technical Team
  - City and Port of Woodland
  - Cowlitz County
  - Washington State Department of Transportation
  - Cowlitz-Wahkiakum Council of Governments
- Citizens Advisory Committee
  - Bill Behrens – Chamber of Commerce
  - Jim Donald – Diking District
  - Darlene Johnson – Woodland Truck Line
  - Dennis Johnson – East side Resident
  - Sharon Knight – Chamber of Commerce
  - Joel Lengyel – Chamber of Commerce
  - Bill Raybell – PDM Steel
  - Larry Schlect – Schlecht Construction

Why Are We Doing This Study?

- Growth is coming – Need a plan with priorities to get funding
- Challenge is to retain the small town feel of Woodland while addressing problems of growth
- Solutions should be generated by the community – not outsiders
  - Without a plan, growth occurs and eventually constrains future solutions
  - No predetermined outcomes
  - Provides the basis for seeking funding from competitive sources
- This is not about any current or pending development

What will this Study Address?



What will the Study Produce?

- A phased strategy to improve the Woodland transportation system
  - Short-term to provide an intersection improvement along SR 503 that can be constructed with available funding
  - Longer-term plan to identify specific project proposals, priorities, costs, funding sources and grant opportunities
  - No decisions have yet been made, considering options

Steps in the Process?

- Identify Problems / Define Vision
- Determine Future Needs
- **Analyze Options**
- Identify Projects
- Develop Funding Strategy
- Adopt Plan (August 2008)
- Begin to Assemble Funding
- Interchange & environmental approval process
- Design, Permit and Build Projects

What have We Done to Date?

- Interviewed stakeholders – define problems and discuss ideas
- Conducted a public open house in August to get input on problems and potential solutions
- Three technical and citizen's advisory committee meetings
- Developed draft vision for the project and desired outcomes
- Conducted technical analysis of existing problems, growth potential and likely future traffic problems
- Began evaluation of improvement options

Project Vision

- The City of Woodland's transportation system effectively and efficiently moves people and goods while reinforcing the City's small town feel, with improved connections between Woodland's residential neighborhoods, industrial areas, downtown, farms, parks, I-5 and recreational areas.

Desired Outcomes of the Study

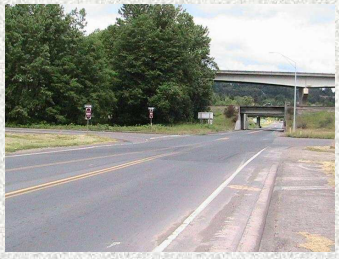
- Results in a clear plan that:
  - Addresses needs,
  - Is supported by the community, and
  - Can be used by elected leadership to advocate for project priorities and secure funding

What have We Found to Date?

- Existing conditions analysis identified several safety and congestion problems
- Future (2025) conditions analysis found traffic congestion problems grew at existing problem locations and expanded to most major intersections
- This analysis is based on adopted Comprehensive Land Use Plan, local population & employment forecasts, traffic growth trends on I-5

What we Heard at the Last Open House

- Lack of east/west connections forces everyone through the I-5 interchanges increasing congestion levels
- Roadway and intersection design issues (sight distance, physical constraints, confusion)
- High levels of truck traffic at many locations
- Railroad crossing delays
- Lack of bicycle / pedestrian facilities

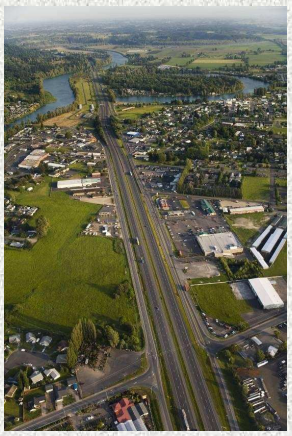


Lots of Ideas about Improvements

- Widen and improve the I-5 interchange areas
- Widen SR 503 to include pocket turn lanes & install stop lights at key intersections
- Build an I-5 overpass north of Scott Avenue to avoid blocking business access and make intersection improvements along Scott
- Install signage to direct motorists to I-5 from Scott
- Address the railroad bottleneck issue (at Dike Road and elsewhere)
- Address flooding issue
- Lots of ideas for local street connections

Improvement Options

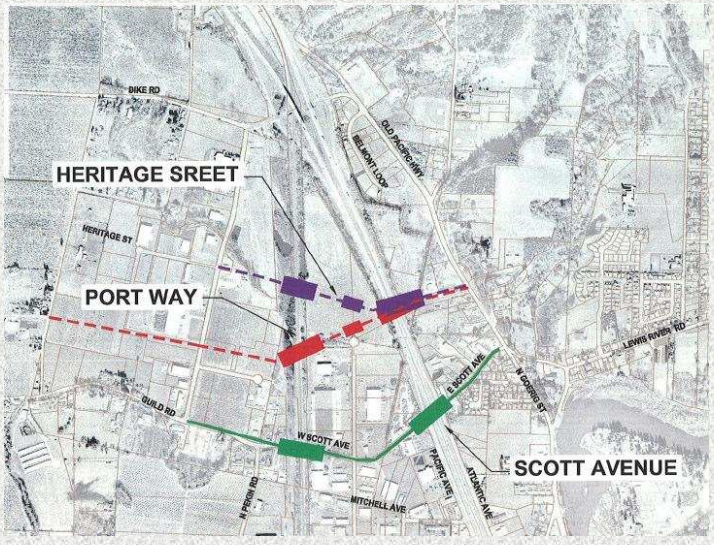
- Focused on improving interchanges and adding east/west and north/south capacity to the city's street system
  - I-5 and Railroad Crossing Options
  - I-5/Dike Road interchange
  - I-5/SR 503
  - SR 503 – Goerig to east city limits
- Independent of and unrelated to Wal-Mart & any other pending land use decision



Criteria Used to Evaluate Options

- Congestion improvement
- Bicycle & Pedestrian needs
- Possible environmental issues
- Making connections
- Land acquisition needs
- Safety
- Cost influences
- All considered equally

I-5 and Railroad Crossing Options



Woodland Transportation Infrastructure Strategic Plan

Objectives of Crossing Options

- Relieve traffic on Dike Road and SR 503 near I-5
- Add east/west connectivity across the freeway to provide for more travel choices
- Provide a grade-separated railroad crossing to serve growing industrial area and accommodate emergency vehicle access

Woodland Transportation Infrastructure Strategic Plan

Crossing Option Findings

- Scott Avenue options are more effective in diverting traffic from Dike Road and (to a lesser degree) SR 503
- Likely greater impacts to some existing properties with Scott Avenue options than Port Way or Heritage Street
- Little benefit to traffic relief with Heritage Street
- Both options can be connected with I-5 to/from the north

Objectives of Interchange Options

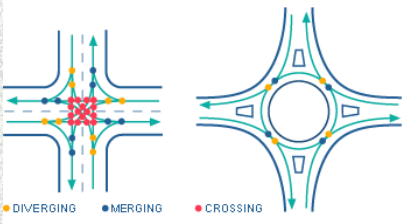
- Address existing and future congestion problems on local streets at interchanges
- Address potential for traffic back-ups onto I-5
- Address flooding in Dike Road vicinity
- Minimize land use impacts, right-of-way needs, while improving connectivity, safety and clarity
- Be cost-effective

Interchange Area Improvements

- A key choice is whether to install traffic signals on Dike Road and/or SR 503 at I-5 or multi-lane roundabouts
- No connection with interim improvement under consideration at Dike Road
- We are developing a long-term solution and investigating both options
- Overview of roundabouts since they may be unfamiliar

Safety Considerations

- Reduction in the number of conflict points



- Lower speeds on entry
  - Drivers slow down and must yield
  - Injuries and fatalities are reduced due to slower speeds
- Accident rates with roundabouts typically drop significantly

Crash Reductions in Golden, CO

- 4 signals changed to roundabouts
- 60% drop in crashes (mvm)
- 94% drop in injuries
  - 31 in 3 years to only 1 in 4 years
- No pedestrian crashes

Typically Much Less Delay

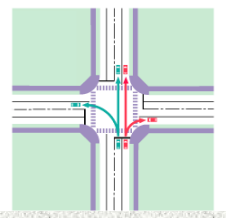
- Roundabouts are typically 30 percent more efficient that traffic signals
  - No wasted green time
  - Slower speeds provide more gaps for entering intersection
  - 2 lanes moving all the time have roughly the same capacity as 4 lanes stopped half the time at red lights.
  - Can be spaced more closely together than signals and not cause back-ups

Other Roundabout Benefits

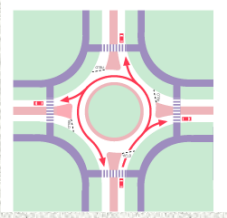
- Work at unusual intersections (including offsets, odd number of approach lanes, difficult angles)
- Often require less total right-of-way
- Lower on-going maintenance & operations costs (Can save up to $5,000/year in electricity costs)
- Environmental benefits
  - Can reduce air pollution by reducing number of idling vehicles
  - Less braking and accelerating can reduce noise impacts
  - Can be more aesthetic with landscaped center island

Lots of Different Design Options

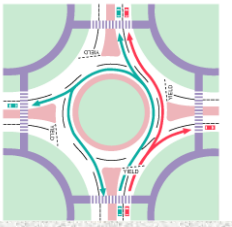
- Standard Intersection



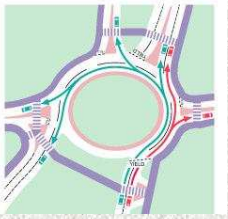
- Single lane Roundabout



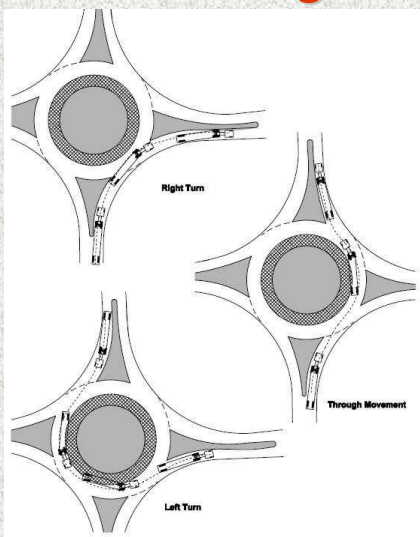
- Double lane Roundabout



- Double lane Roundabout (Couplet)



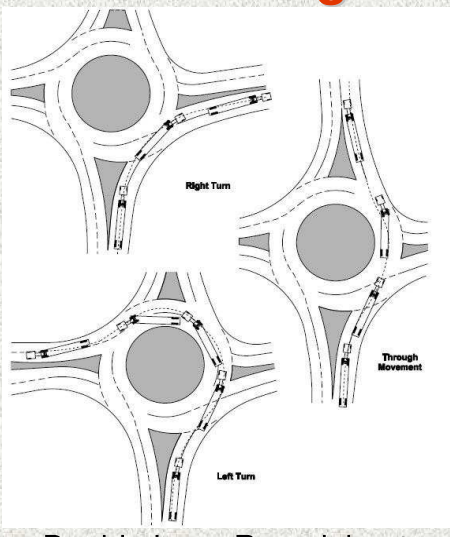
Can Also Serve Large Vehicles



Single Lane Roundabouts

Woodland Transportation Infrastructure Strategic Plan

Can Also Serve Large Vehicles



Double Lane Roundabouts

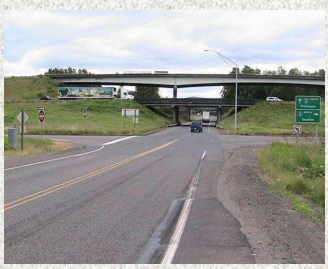
Woodland Transportation Infrastructure Strategic Plan

Conclusions

- Both signal and roundabouts are effective in managing traffic at intersections
- Each has its benefits and shortcomings, as well as its specific, appropriate applications
- Need to weigh all the pluses and minuses before making any recommendations

I-5/Dike Road Findings

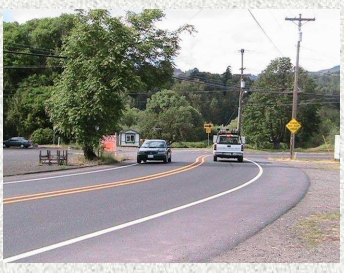
- Roundabout option would operate within WSDOT thresholds
  - Likely need additional eastbound lane between Schurman Way and I-5 southbound ramp
  - May not need to widen Dike Road – further investigation underway to confirm
- Signalized options will require widening of Dike Road and likely raising of railroad and/or some freeway segments
- Flooding problems need resolution



I-5/SR 503 Findings

- Both signal and roundabout options could work but will require major changes to existing interchange ramps and intersections
- Challenging to maintain all existing connections while minimizing property impacts

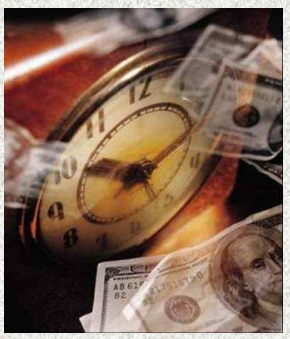
SR 503: Goerig - East City Limits



- Many options considered – involve widening for lefts with various improvements at key intersections
- Key findings:
  - Added left turn capacity at key local streets will help to improve safety
  - Options carried forward would include signals at Goerig and at Scott
  - Left turn lanes at Scott, consider restricting left turns at Goerig (requiring traffic to use Scott)

Final Product of this Study

- A strategic plan that identifies recommended concepts for improvement
- This plan will identify:
  - What's to be done
  - When it should be done
  - Who will do it
  - Potential funding sources



Process to Make Improvements at the I-5 Interchanges

- Once adopted into a local plan, WSDOT will take leadership role in cooperation with City, County, Port, CWCOG and others
- Interchange Justification Report (IJR) – agreement on changes by DOT and Federal Highway Administration
- Environmental review and federal concurrence
- Design and Funding
- Construction

Next Steps in the Study

- Refine the preliminary improvement options / alternatives based on community discussion
- Briefing & public meeting in May 2008 to discuss evaluation of improvement options, recommendations & priorities
- Develop funding and implementation strategy in June 2008
- City Council work session in July 2008 prior to adoption
- Adoption of plan slated for August 2008

Tonight's Public Meeting

- Brief presentation
- Break into table groups to get input on:
  - Discussion of options for Dike Road, SR 503 and crossings
  - Any ideas about needed improvements?
  - Are we on the right track?
- Comment form available
- Kids table and refreshments

Woodland Transportation Infrastructure Strategic Plan
Open House & Workshop Summary

Date and Time: July 1, 2008, 6:00 – 8:00 pm
Location: Woodland High School Commons, Woodland, WA

Staff Attendees
Jerry Sorrell, Cowlitz-Wahkiakum Council of Governments (CWCOG)
Rosemary Siipola, CWCOG
Jeff Barsness, WSDOT
Anne Sylvester, Parametrix
Michael Harrison, Parametrix
Jim Phillips, Parametrix
Christine Sylvester, Parametrix
Cassera Phipps, Parametrix
Dena Horton, Normandeau Associates, Inc.

Number of public attendees: 23 signed in

The public open house commenced at 6:00 PM. After signing in attendees were shepherded through six stations outlining background and overview information about the project (Stations #1 and #2) and delving into recommendations for the four key project study locations (Stations #3 through #6). Staff members were available at each station to explain the proposed projects, note how each project fits into the bigger picture for Woodland, and discuss what options where considered but rejected. The following details the purpose of each station and the information that was presented.

Station #1 Introduction – This station provided introductory information including the project purpose, timeline, committee membership lists and project vision statement.

Station #2 Overview – This station outlined the major improvement projects, and how they are interdependent including information about the magnitude of traffic that could be attracted to a Scott Avenue crossing and benefits to both Dike Road and SR 503 in the vicinity of the I-5 interchanges..

Station #3 Dike Road Interchange – This station highlighted the options that were considered for this interchange, identified the recommended option (which included three roundabouts), discussed the benefits and impacts of the recommended option, and presented a cost estimate. This station also presented a short summary related to the benefits of roundabouts and how to use them including both written and video information.

Station #4 Scott Avenue Crossing – This station discussed options considered for this crossing of I-5 and the BNSF railroad tracks that run parallel to and west of I-5. The recommended option was identified which included an undercrossing of I-5 (e.g., raising I-5 over Scott Avenue to maintain existing grade on the city street) and an overcrossing of the railroad. Benefits and impacts of this recommended option and an estimated cost were presented, along with a short discussion of two options for maintaining the connectivity of Pekin Road. The Pekin Road extension to connect with Port Way was recommended as the preferred means of maintaining this connectivity.

Station #5 SR 503 at I-5 Interchange – This station presented a short discussion of the options considered for this interchange which ranged from widening with signals, to roundabouts, to a one-way couplet. The recommended option would involve relatively minor widening east of the freeway, added turn lanes and the relocation of CC Street, and would be dependent on the traffic volume reduction

anticipated with the Scott Avenue crossing. Benefits and impacts of this recommended option and the estimated cost were also presented.

Station #6 SR 503 Corridor – This station illustrated the options considered for this corridor, and highlighted both the recommended interim and full widening projects. This station discussed the benefits and impacts of these recommended options and the associated costs including interim widening, full widening, and improvements at the intersections of SR 503 with Goerig Street and Scott Avenue.

Attendees circulated between various staffed stations, reviewing and providing feedback on the design options by geographic area. Jerry Sorrell, Rosemary Siipola, Anne Sylvester, Michael Harrison, Jim Phillips, Christine Sylvester and Dena Horton presented information on the various design options, solicited feedback, and answered questions. Attendees were also asked to complete comment forms stating their preferences and prioritizing the recommended projects. Attendees were asked to answer the following questions:

1. Do you support the recommended projects? If not, what would you change about these projects?
2. If the recommended projects proceed, which projects are most important to you and why?

Six comment forms were returned at the open house with one additional form arriving in the mail. In these forms all but one attendee supported the recommended projects. These public comments focused primarily on prioritization of recommended transportation projects. The following is a summary of responses received to question #1:

- Add an I-5 off-ramp northbound at Scott Avenue or just before
- A Scott Avenue undercrossing is well thought out and very doable
- Add stoplights at Gun Club and Insel for the Full Widening Option on SR 503
- Extend the off-ramps at Scott Avenue and put in stop lights instead of roundabouts (presumably at the Dike Road interchange)
- Roundabouts (at Dike Road) make flow of traffic smoother and safer

The following is the order of preference in which projects should be completed as indicated by the responses to question #2.

1. Scott Avenue crossing
2. SR 503 widening
3. SR 503 interchange improvements
4. Dike Road interchange

The meeting adjourned at 8:00 PM.