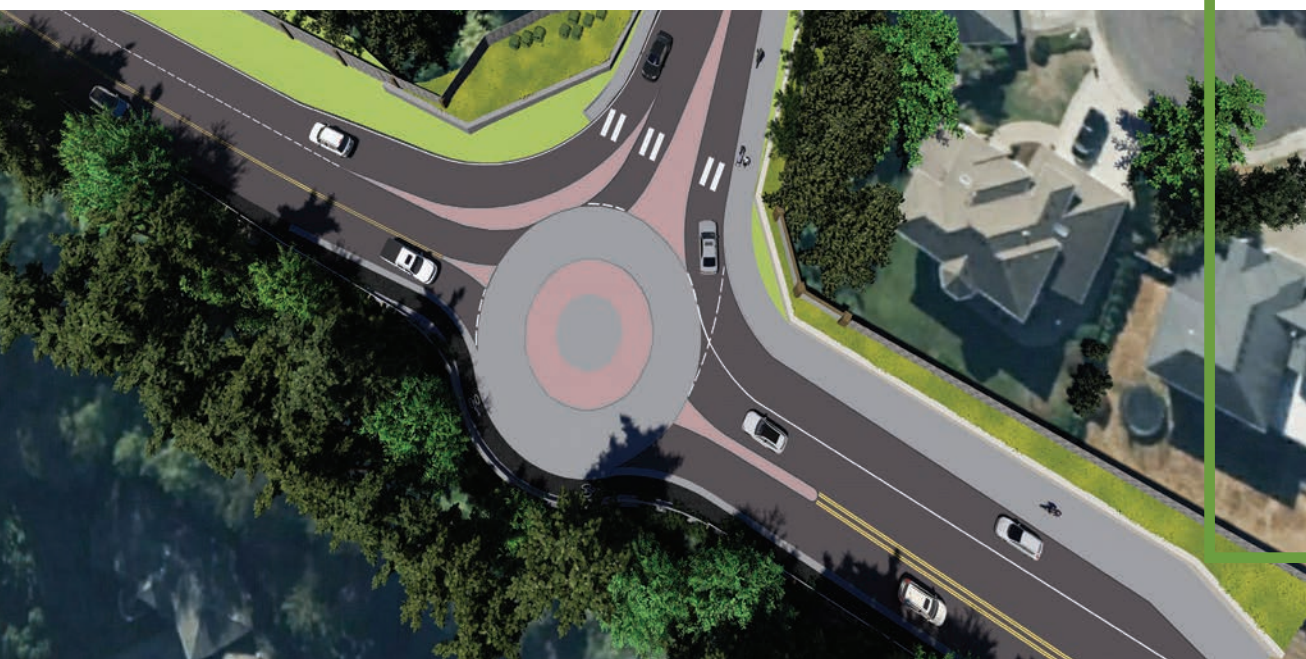


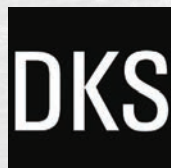


Council Workshop Update and Decision

NW Lake Road and NW Sierra Street Intersection

July 15, 2024





Council Workshop Update

NW Lake Road and NW Sierra Street Intersection

Presented By:

James Carothers
Engineering Manager
City of Camas

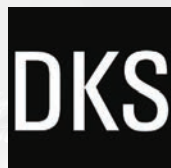
Jason Irving
Senior Project Manager
MacKay Sposito

Adrienne Dedona
Public Engagement Manager
JLA Public Involvement

Presentation Goal:

Provide a summary of public engagement work and results, answer City Council's questions, and discuss recommendations and next steps.

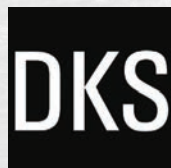
Project History



Why are we considering improving the intersection?

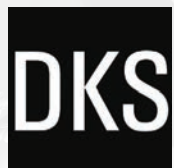
- » **2019:** Through public comment and testimony Council added the project to the Six Year Transportation Improvement Program (TIP) as priority project #40.
- » **2019-2022:** Continued community concerns regarding intersection safety and wait times on Sierra St., project moved to priority #8 on the TIP.
- » **Fall 2022:** Funding included in the 2023-24 Biennial Budget for intersection improvements as a Capital Decision Package item. Council approved \$600K of Transportation Impact Fees for this project.
- » **March 2023:** Request for Qualifications issued for professional engineering services for an intersection Alternative Analysis.

Project History



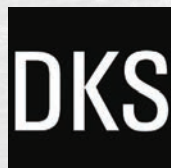
- » **July 2023:** City Council approves Alternatives Analysis contract with MacKay Sposito.
- » **January 2024:** Alternatives Analysis completed and City Council requests public outreach of recommended alternatives (PSA Amendment #1).
- » **January-June 2024:** Public outreach.
- » **June 2024:** Project moved to #3 priority on the TIP. On June 3rd, 2024, a public hearing was held for the TIP, no public comments received.

Project Need - Safety



- » **Vehicles turning onto Lake Rd.**
 - » **Higher speeds**
 - » **Limited sight distance**
- » **Sight obstructed by turning vehicles**
- » **Lack of vehicle gaps**
- » **Vehicle queuing (stacking) for left turns from Lake Rd.**
- » **Lack of dedicated right turn lane onto Sierra St.**
- » **Lack of east bound bicycle lane**





Project Need - Traffic Delays

- ✓ Current traffic delays on Sierra St. do not meet City concurrency standards
- ✓ Average peak hour delay

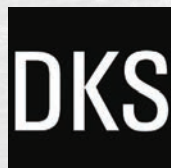
Existing

- » Sierra St. 40 seconds (LOS E)
- » Lake Rd. 10 seconds

2045 Forecast w/o Improvements

- » Sierra St. greater than 100 seconds (LOS F)
- » Lake Rd. 16 seconds

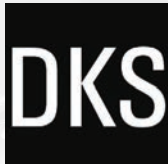




Public Engagement Activities Summary

- ✓ Citywide postcard mailer (13,000 households)
- ✓ Social media post and responses (5 posts; ~200 responses)
- ✓ Property owner outreach (6) and meetings (3)
- ✓ Stakeholder interviews (4)
- ✓ Online survey and responses (188)
- ✓ Open house and attendance (~60 attendees)
- ✓ Yard signs (4)
- ✓ Webpage on Engage Camas (687 site visits, 141 sign ups)

Mailers



616 NE 4th Ave.
Camas, WA 98607

YOU'RE INVITED!

NW Lake Road and NW Sierra Street
Intersection Improvements

Open House
Wednesday, May 29
6:00–7:30 p.m.

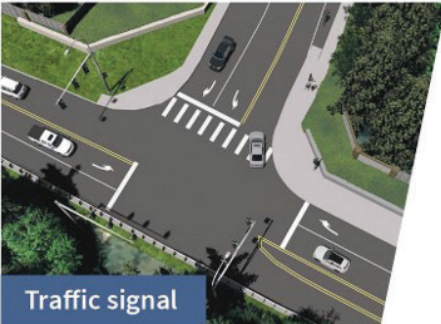
A brief presentation will
take place at 6:15 p.m.

Lacamas Lake Lodge
227 NE Lake Road, Camas

For more information, visit: engagecamas.com »



Roundabout



Traffic signal

NW Lake Road and NW Sierra Street

Help us improve the intersection



The City is considering whether to add a new **TRAFFIC SIGNAL** or **ROUNDBABOUT** to the intersection at NW Lake Road and NW Sierra Street.

Either option would:

- Reduce traffic backups, mainly for northbound motorists on NW Sierra Street trying to enter onto NW Lake Road.
- Improve safety and mobility by reducing the likelihood of high-speed collisions and upgrading sidewalks and bicycle lanes.



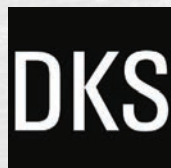
Share your experiences and help us select a preferred option:

- Attend an open house on **Wednesday, May 29** from **6–7:30 p.m.** at Lacamas Lake Lodge, 227 NE Lake Road.
- Visit **EngageCamas.com** to learn more and complete a survey between **May 22** and **June 10**.

For more information, contact James Carothers, Engineering Manager
jcarothers@cityofcamas.us | 360-817-7230 | Or visit: engagecamas.com »



Property Owner Outreach



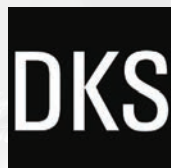
- ✓ Requested meetings with four property owners through mailed letters.
- ✓ Met with three property owners between April and May 2024.

All were supportive of the project. One expressed concerns regarding potential property impacts, such as increased noise, and potential property impacts to landscaping and fences.

Two preferred a roundabout over a traffic signal.

One preferred the traffic signal over a roundabout.

Stakeholder Interviews



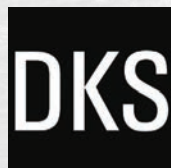
- ✓ Requested meetings with five area stakeholders by email: Camas School District, Camas Emergency Services, bike and pedestrian groups, and representatives of the Lake Pointe and Lake Heights homeowner associations.
- ✓ Meetings were held in May and June 2024.

Bike and pedestrian representatives were both supportive of a roundabout. They shared insights to cyclists' preferences, as well as suggestions for future bike infrastructure improvements.

Homeowners association representatives were supportive of improvements to the intersection and preferred the roundabout option. They inquired about impacts to property owners, landscaping and trees.

Camas-Washougal Fire Department representative preferred the roundabout for increased safety and traffic operations. They shared a desire for a pedestrian crossing on Lake Rd. and on Sierra St.

Open House Event



May 29, 6:00 – 7:30 p.m. at Lacamas Lodge

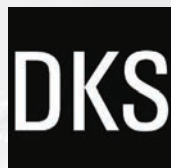
Attendance: Around 60 attendees

Style of Event: Presentation followed by information stations

Stations:

- ✓ Welcome/Project Overview and Purpose
- ✓ Traffic Signal Option
- ✓ Roundabout Option
- ✓ Next Steps and Timeline

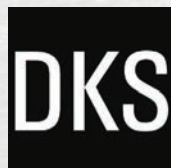
Approximately 30 written comments were received. Approximately 14 expressed support for a roundabout, seven preferred neither option or no action, and five supported a traffic signal.



Open House Event: Key Take-Aways

Attendees were generally supportive of the project and several expressed support for a roundabout over traffic signal, noting that it would allow a continuous flow of traffic.

- ✓ **Safety is a shared concern but opinions vary on solutions.** Alternate ideas included: three-way stop, increasing police patrol, speed monitoring.
- ✓ **Roundabout is supported** due to its longer-term benefits and aesthetics, and allowing continuous flow of traffic.
- ✓ **Some people do not think the intersection warrants the investment,** and shared concerns about project cost.

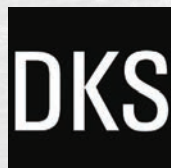


Online Survey

Survey was live from May 22 through June 10, 2024 (20 days)

Received 188 responses

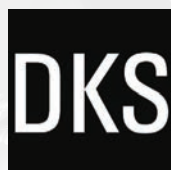
- ✓ **98% of respondents live in or near the project area.**
- ✓ **Roundabout is more supported than traffic signal.** 61% strongly support roundabout and 34% strongly support traffic signal.
- ✓ **76% support improving the intersection,** this includes those supportive of either option and those supportive of general improvements.
- ✓ **25% support improvements but do not like either option.** 9% of participants do not support any improvements.
- ✓ **Recurring concerns** regarding the intersection include poor visibility, speeding, and traffic delays.



Written Comments & Emails

Approximately 20 written comments were received by the City via e-mail.

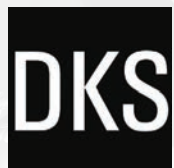
- ✓ Of these comments:
 - » At least eight were concerned with cost and/or were supportive of no action.
 - » At least three indicated support for a roundabout.
 - » At least two others indicated support for a three-way stop.
 - » One indicated support for a radar reader board.
 - » Another indicated support for either option being proposed.



Themes from Community Feedback

- ✓ **Safety was a shared concern** and various contributing factors were cited including lack of gaps for turning vehicles, poor visibility, and speed.
- ✓ **The roundabout option is preferred over the traffic signal option.** However, there are some concerns with roundabouts; primarily cost and confusion navigating.
- ✓ **Neighbors are concerned about increased noise and air pollution.**
- ✓ **Most people are in favor of improving the intersection** and indicated support for either option or suggested other ideas. Some people are in favor of not making any changes at the intersection.
- ✓ **Popular ideas: three-way stops and increasing police patrol** during peak commuting hours.

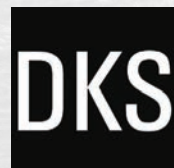
Council Questions



Is staff looking into sound barriers and a noise study? Would this affect property acquisition? What are the associated costs?

- » Preliminary feedback from noise consultant:
 - Under federal highways criteria project very likely does not qualify for sound walls.
 - Limited noise reduction due to topography and distance from roadway to homes.
 - Slowing traffic will significantly reduce traffic noise.
- » Sound walls may increase need for property acquisitions.
- » Wall cost estimated at \$400K to \$700K.

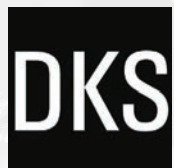
Council Questions



What are the safety benefits and ideas for bike users for the roundabout option?

- » Roundabouts promote slower vehicular speeds.
- » A ramp will be provided for cyclists to access a wide shared-use path and cross Sierra St. in a marked crosswalk. Most users will use this option.
- » Some cyclists may choose to enter the travel lane with vehicles, similar to the existing condition, and travel through the roundabout.

Council Questions



What are the private property impacts for the roundabout option?

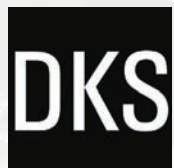
- » Preliminary private property impacts may include:
 - 3-5 trees
 - Property acquisition and/or temporary construction easements:
 - 5 to 8 properties
 - 40 to 500 square feet (0.3% to 4.5% of total property)
 - Primarily needed for retaining wall construction
 - Likely occur on roadway side of existing fences
 - Private utility relocations
 - Reduced noise and air pollution

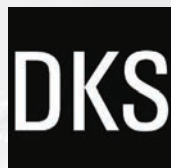
Council Questions

How did staff determine the two preferred options, and were no build, three-way stop, or right in/right out options considered?

» No build option was analyzed:

- Intersection currently does not meet City level of service standards.
- 2045 average traffic delays exceeding over 100 seconds per vehicle in the AM and PM peak.
- Increased risk of serious accidents and injury to pedestrians, bicyclists, and motorists.
- Future increased cost of improvements.





Concurrency and Level of Service

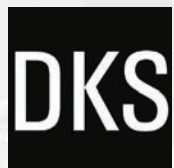
Goal: The City will maintain the adopted transportation LOS standards.

*From 2035 Comp Plan, Chapter 4.4 - Transportation, Goals and Policies
Section 4.4.7 Concurrency and Level of Service*

T-7.3: Utilize traffic impact fee studies, development traffic impact analyses, and corridor studies to identify deficiencies and plan improvements to maintain or improve LOS standards.

T-7.4: The City strives to maintain a LOS standard during peak hours as follows. The following table is based on the most current *Highway Capacity Manual (HCM)* of the Washington State Department of Transportation.

TABLE 4-1. TRANSPORTATION LEVEL OF SERVICE				
LEVEL OF SERVICE	A/B	C	D	E
Intersections	N/A	Local Access	Collectors and Arterials	State Highways of Non-Significance
Roundabouts	N/A	Local Access	Collectors and Arterials	State Highways of Non-Significance



Concurrency and Level of Service

From 2035 Comp Plan, Chapter 4.4 - Transportation, Goals and Policies
Section 4.4.7 Concurrency and Level of Service

TABLE 4-2. VOLUME TO CAPACITY RATIO

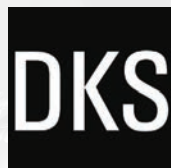
VOLUME TO CAPACITY RATIO	0.85	0.9
Roundabouts	Local Access and Collectors	Arterials and State Highways of Non-Significance
Roadways based on Average Speed	Collectors and Arterials	State Highways of Non-Significance

T-7.5: Take the following actions (not in priority order) if probable funding falls short of meeting identified needs:

- ✓ Delay development until programs, facilities, or services can be funded.
- ✓ Obtain needed revenue or revise the transportation plan to reflect known financial resources.
- ✓ As a last choice, change the transportation LOS standard.

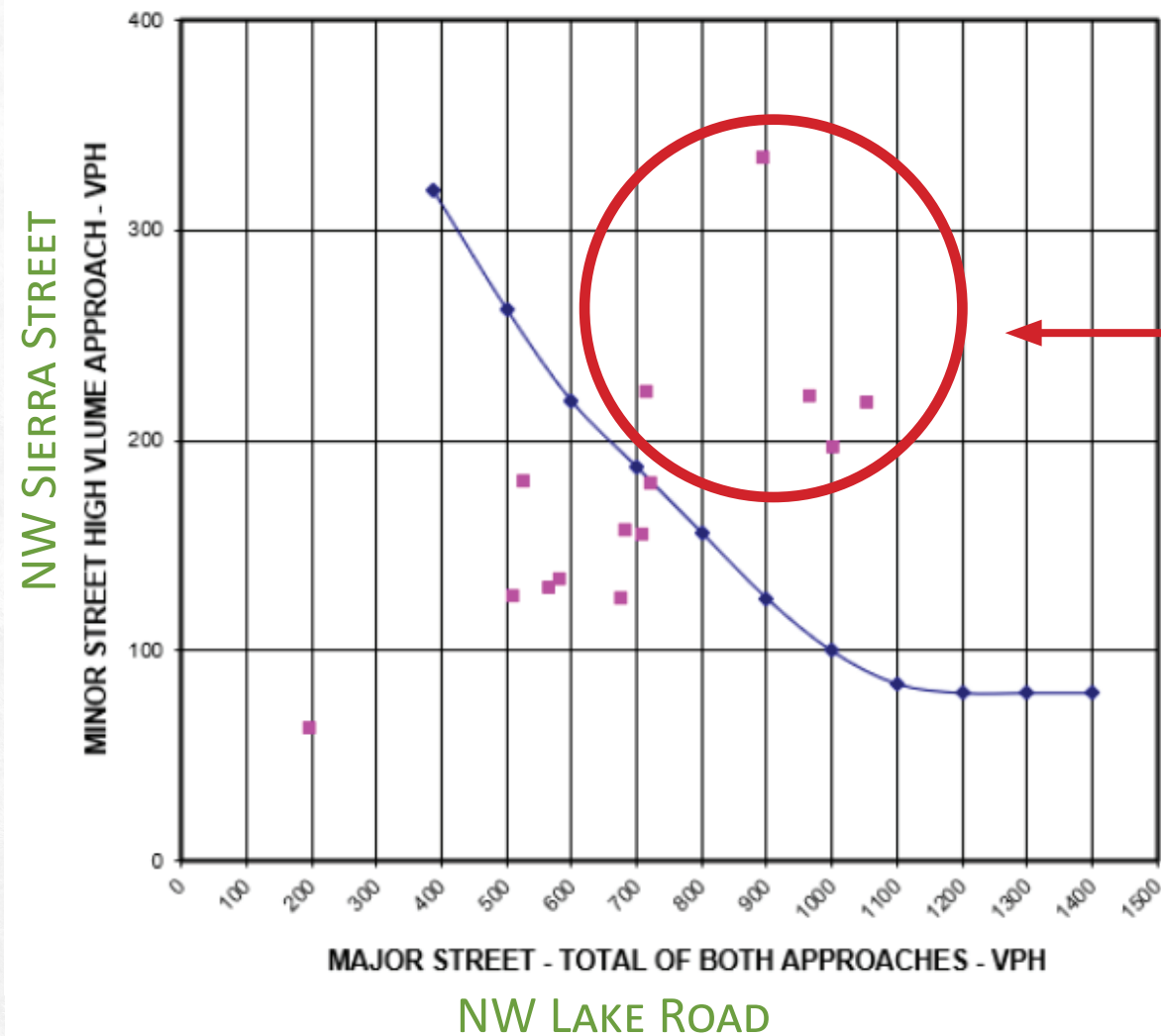
Council Questions

How did staff determine the two preferred options, and were no build, three-way stop, or right in/right out options considered?



Traffic Signal Warrant - Four Hour Vehicular Volume

Figure 4C-1 (Figure 4C-2 if using 70% Factor)
Warrant 2 - Four-Hour Vehicular Volume



Traffic Volume Data Points Exceeding Traffic Signal Warrant Threshold

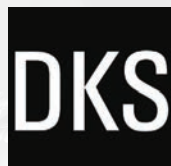
LEGEND

- National Signal Warrant Standard
- Lake/Sierra Traffic Volume Data

Council Questions

How did staff determine the two preferred options, and were no build, three-way stop, or right in/right out options considered?

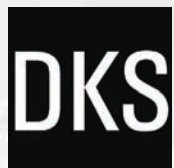
- » Fall 2023 traffic analysis considered all potential intersection improvement options.
 - Three-way stop considerations:
 - Will cause significant delays on Lake Rd. (currently over 10,000 vehicles/day).
 - Will encourage stop sign running in non-peak hours.



Council Questions

How did staff determine the two preferred options, and were no build, three-way stop, or right in/right out options considered?

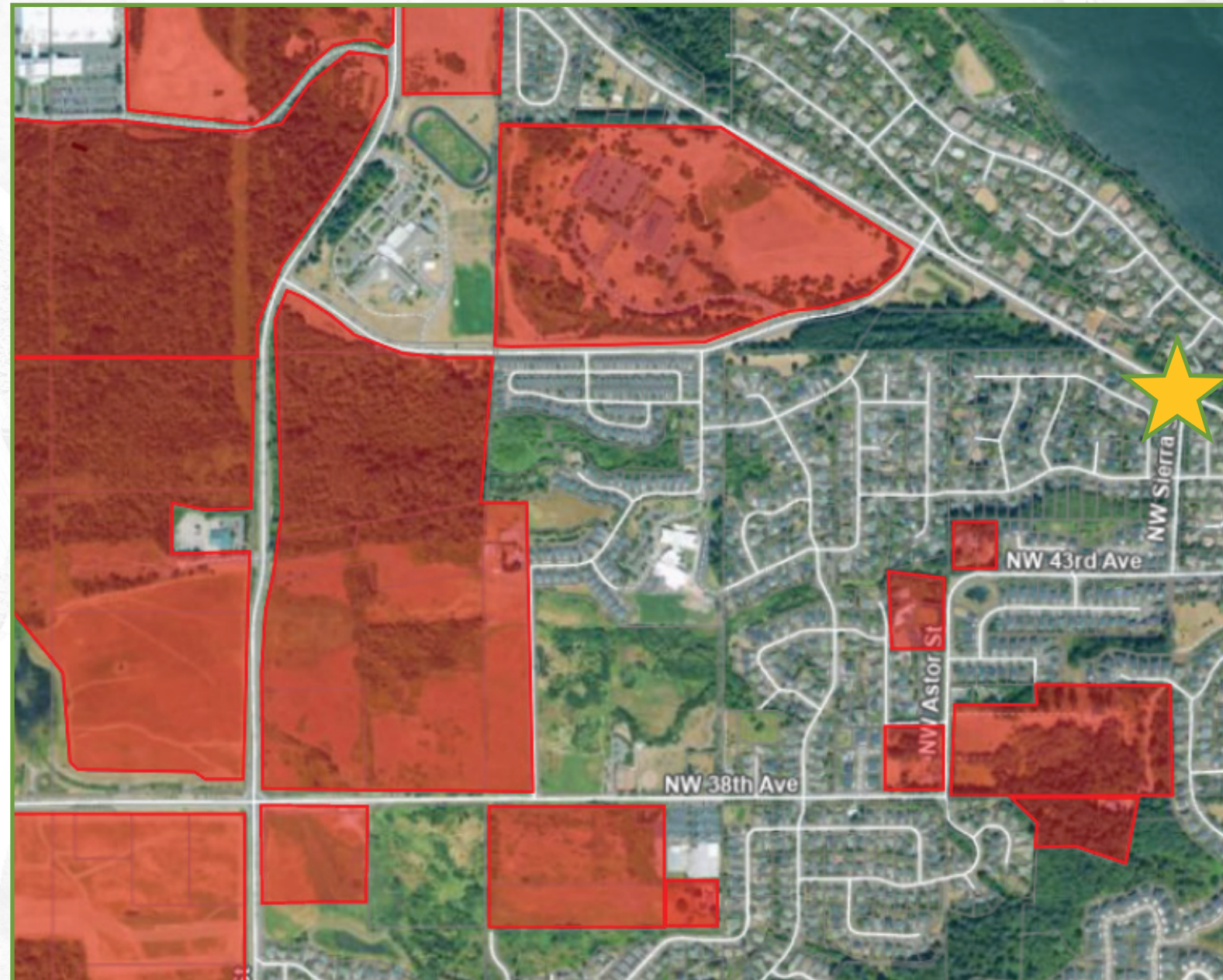
- » Fall 2023 traffic analysis considered all potential intersection improvement options.
 - Eliminating left turns (400/day between both AM and PM peak hours):
 - Improves intersection operations.
 - Diverts traffic through nearby neighborhoods - safety concern
 - Increases traffic at nearby intersections (e.g. unsignalized Lake Rd./Leadbetter Dr. (0.33 mile away) and Lake Rd./Lacamas Lane (0.85 mile away)).
 - Sierra St. is a collector route built to channel neighborhood traffic to the arterial.



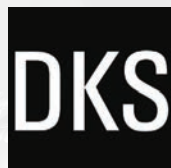
Council Questions

Where is future growth occurring? The Sierra St. corridor appears to be “built out”. Can this project wait until growth projections occur?

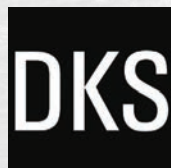
Underdeveloped Properties



Additional Trips may be generated due to new ADU Legislation



Council Questions



What is the cost difference for the traffic signal versus the roundabout, including maintenance costs?

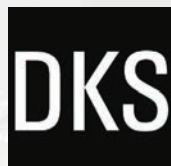
- » Cost estimates include all hard and soft costs.
- » Maintenance costs/considerations:

TRAFFIC SIGNAL		ROUNDABOUT	
PROJECT COSTS	MAINTENANCE	PROJECT COSTS	MAINTENANCE
\$1.7M Today's \$	\$5-10K/year*	\$3.1M Today's \$	\$500-1,000K/year for **
CONSIDERATIONS		CONSIDERATIONS	
Less than 20 year life due to projected increase in traffic volumes.		Minimal maintenance.	
Upgrade options include: -Modifying signal with additional travel lanes -Installing roundabout			

**Cost includes upgrades of components, ordinary maintenance and repairs. This cost does not include replacing/modifying signal due to future traffic volumes.*

***Sign Replacement*

Council Questions

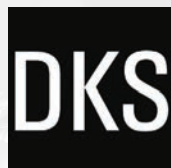


What are the options to fund the alternatives presented?

- ✓ **Project is currently fully funded through design and right-of-way.**
- ✓ **Additional funding needed for construction.**
- ✓ **Current and future additional funding options may include:**
 - » **Capital Funds**
 - **Real Estate Excise Tax (REET)**
 - **TIF (*can only be used for new capital within a plan*)**
 - » **General Fund (*flexible funding source*)**
 - » **Debt Services (*TIF payback okay*)**
 - **Public Works Trust Fund**
 - **Limited Tax General Obligation Bond**
 - » **Outside grant funding (TIB, WSDOT, FHWA)**
 - » **Other (Transportation Benefit District, etc.)**

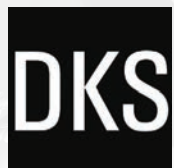
Council Questions

How do the City's budget funds differ in use? (General Fund versus Traffic Impact Fees [TIF]).



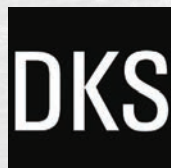
TIF	GENERAL FUND
Can only be used for improvements related to development activity (growth).	Revenue is collected by property tax.
Charges are collected proportionately from developers to expand capital facilities to mitigate development impact.	Most flexible revenue available.
Cannot be used for road maintenance, preservation, or reconstruction.	Supports traditional government programs and administration.
Developers pay a flat rate per new trip added to the transportation system.	

Council Questions



Is this project part of the six-year street plan and was this project included in the biennial budget?

- » **2019:** Project added to 6-year TIP as priority #40
- » **2019-2022:** Project moved up to TIP priority #8
- » **June 2024:** Project moved to TIP priority #3
- » **Fall 2022:** Council approved \$600k in 2023-24 Biennial Budget



Summary and Project Team Recommendations

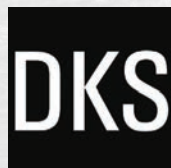
Summary:

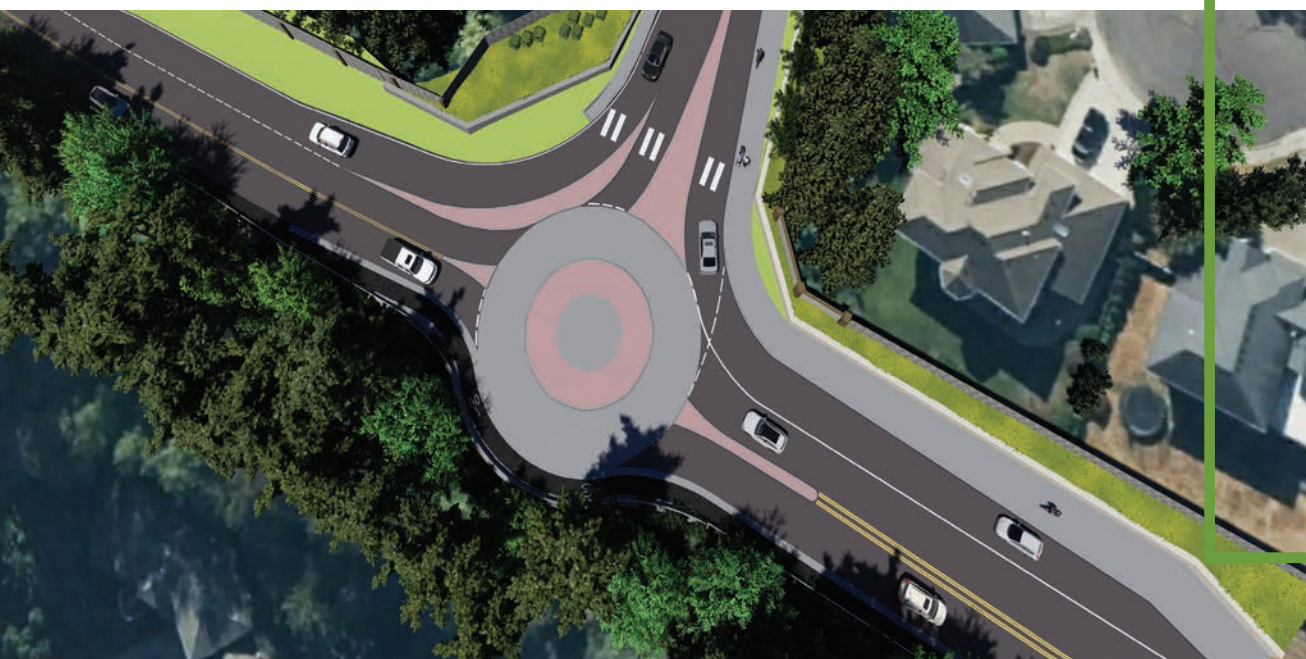
- ✓ Delaying improvements increases risk of serious accidents, traffic delays, and future cost of improvements.
- ✓ Based on public outreach:
 - » Majority of community agree intersection improvements are needed.
 - » A roundabout is the preferred option.

Staff Recommendation: The roundabout option addresses safety and meets current long term traffic operations. Staff recommends proceeding with roundabout design and identifying additional construction funding in future budget process.

Seeking consensus from council on path forward.

Additional Council Questions or Discussion





Thank You!

