

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Execute a Contract with McCann Construction Enterprises, Inc. in an Amount of \$321,405.50 for Construction of the Richmond Beach Rd Rechannelization Project
DEPARTMENT:	Public Works
PRESENTED BY:	Tricia Juhnke, City Engineer
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

Between December 28, 2017 and January 25, 2018, the City solicited bids for construction of the Richmond Beach Road Rechannelization Project. The engineer's estimate for construction is \$315,000. Bids were opened on January 25, 2018 and two bids were received. McCann Construction Enterprises, Inc. is the apparent low bidder. Council authorization is needed to award the contract.

As this item an Action Item before the City Council for the first time, as per Council Rule of Procedure 6.1(B), public comment for this item will follow the presentation of this staff report but proceed Council review and potential action. Tonight, Council is scheduled to take action on this item.

RESOURCE/FINANCIAL IMPACT:

This project is approved as part of the 2018-2023 Capital Improvement Plan and design was completed in 2017. The budget breakdown below is for the 2018 budget:

Project Expenditures:

Project Administration:

Staff and other Direct Expenses	\$32,000.00
<u>Total Project</u>	<u>\$32,000.00</u>

Construction:

Construction Administration	\$50,000.00
Construction Contract	\$321,405.50
Contingency	\$32,140.50
<u>Total Construction</u>	<u>\$403,546.00</u>

Total Project Expenditures **\$435,546.00**

Project Revenue:

Roads Capital Fund: Richmond Beach Rd Rechannelization	\$360,000.00
<u>Roads Capital Fund: Traffic Safety Improvements</u>	<u>\$75,546.00</u>

Total Available Revenue **\$435,546.00**

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute a construction contract with McCann Construction Enterprises, Inc. in the amount of \$321,405.50 for the Richmond Beach Road Rechannelization Project's.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

Richmond Beach Road/NW 195th Street/NW 196th Street is the primary east-west route connecting the Richmond Beach neighborhood to Aurora Avenue N, Interstate 5, and the city center. In 2016, the City Council approved funding for 2017 to rechannelize the road from 24th Avenue NW to Dayton Avenue N (Attachment A).

The project corridor has a history of collisions and includes two high collision locations from the City's 2016 Annual Traffic Report: the intersection of 3rd Avenue NW and NW Richmond Beach Rd, and the segment of NW Richmond Beach Rd from 3rd Avenue NW to 8th Avenue NW. Rechannelization is recommended as mitigation for the collisions along the corridor.

The existing roadway has two lanes in each direction. This project will change the striping to include a center turn lane, one lane in each direction, and a bicycle lane in each direction. The purpose of the project is to improve driver, pedestrian, and bicyclist safety and mobility.

Due to high public interest in the project, extended public outreach was conducted. In 2017, staff held two public meetings to inform the community and seek input on the project. The project website was also utilized to solicit additional feedback. Based on the community feedback the design incorporated additional safety enhancements throughout the corridor.

Given the significant public interest, staff created a Frequently Asked Questions (FAQs) document for the project, which is included with this staff report as Attachment B. The FAQ document provides additional background on the extensive traffic modeling and research completed by staff to ensure that traffic flow would continue to be within the City's level of service standards.

The bid proposal included a base bid and an alternative so that the City could award work based on budget available. The base bid includes the treatments necessary to rechannelize the corridor and address the safety issues raised by the public. The alternative includes additional treatments such as colored pavement markings that would enhance to the overall project, but that are not necessary to accomplish the project's goals.

The award of contract per staff's recommendation will result in the following improvements to the corridor:

- Installation of a two-way center turn lane from 24th Avenue NW to just west of Dayton Avenue N, with left turn pockets at major intersections.
- Shifting and narrowing lanes at bus stops near intersections to allow the buses to pull further out of the travel lane.
- Realigning or tightening intersections for improved pedestrian safety at:
 - 24th Avenue NW,
 - 20th Avenue NW,
 - 15th Avenue NW, and
 - NW 190th Street.
- Installation of stop signs with led flashing lights at 15th Avenue NW.

- Installing a continuous bicycle facility from 24th Avenue NW to 3rd Avenue NW.

ALTERNATIVES ANALYZED

Between December 28, 2017 and January 25, 2018, the City solicited bids for construction of the Richmond Beach Road Rechannelization Project. The engineer’s estimate for the construction was \$277,000 for the base bid and \$315,000 for the base bid plus alternate. Bids were opened on January 25, 2018 and two bids were received. McCann Construction Enterprises, Inc. was the apparent low bidder.

Contractor Name	Base Bid	Bid + Alternate
Transportation Systems, Inc.	\$335,596.00	\$442,981.00
McCann Construction Enterprises, Inc.	\$321,405.50	\$422,737.70

City staff has determined that McCann Construction Enterprises, Inc. has a responsive bid and that they have met contractor responsibility requirements. Construction is anticipated to start in April 2018 with completion anticipated in the spring of 2018.

City staff has identified three options regarding the award of this contract:

- 1. Award Base Bid (Recommended)** – the base bid is within the project budget.
- 2. Award Base Plus Alternative** – this alternative exceeds the current project budget and based on staff review, the bids are excessive compared to the engineer’s estimate.
- 3. Don’t Award a Contract** – by not awarding the contract the project would not proceed.

Staff recommends awarding the base bid and pursuing alternate methods to complete the enhancements.

Public Comment and Council Action

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COUNCIL GOAL ADDRESSED

This project addresses Council Goal #2, improve Shoreline’s infrastructure to continue the delivery of high-valued public service. This project will help to meet this goal by constructing transportation facilities as identified in the 2011 Transportation Master Plan.

This project also addresses Council Goal #5, promote and enhance the City’s safe community and neighborhood programs and initiative. This project will help to meet this goal by using a data driven process to address safety issues and concerns in school zones and the Innis Arden, Richmond Beach, Richmond Highlands, and Hillwood neighborhoods.

RESOURCE/FINANCIAL IMPACT

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Total Available Revenue **\$435,546.00**

RECOMMENDATION

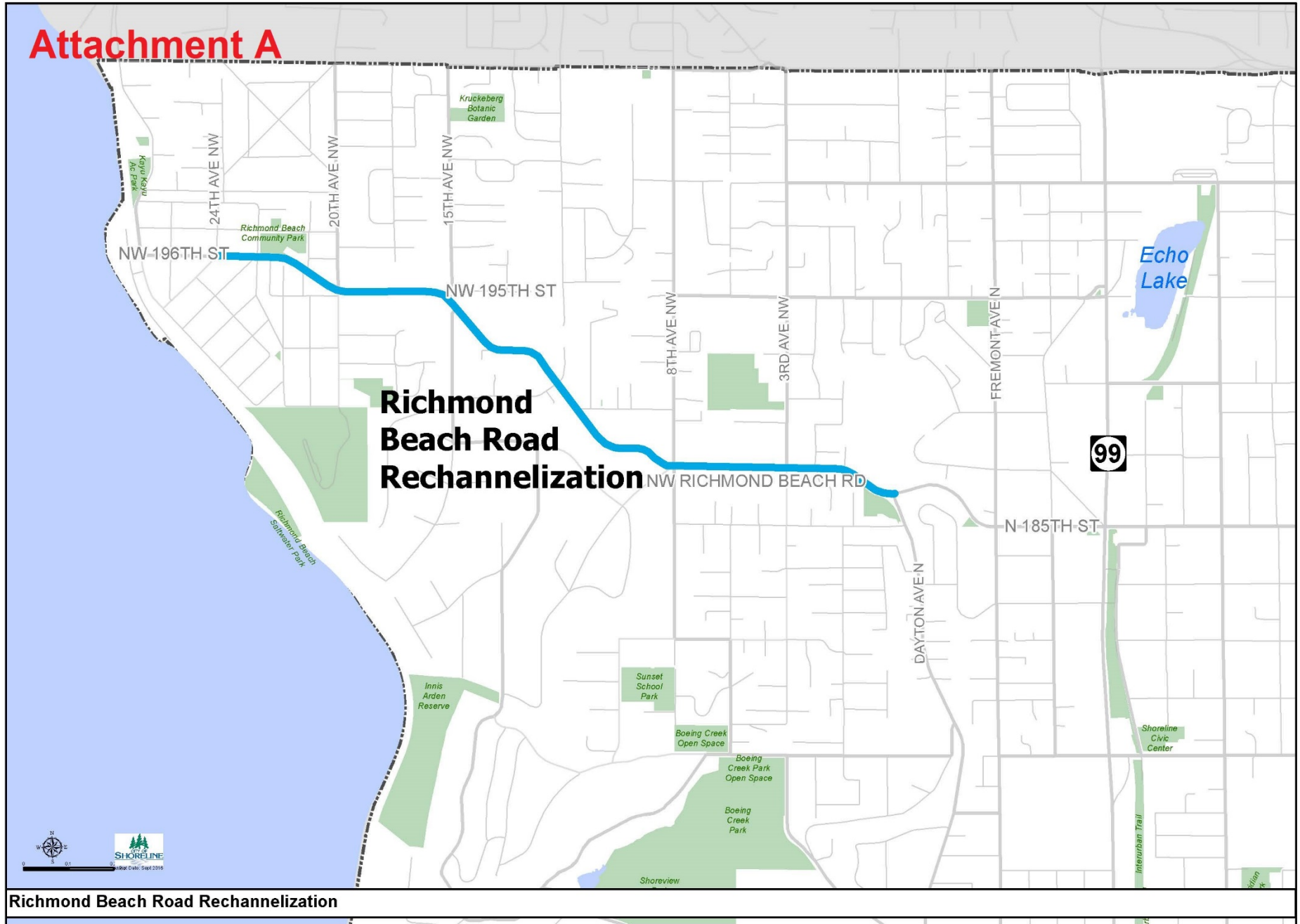
Staff recommends that Council authorize the City Manager to execute a construction contract with McCann Construction Enterprises, Inc. in the amount of \$321,405.50 for the Richmond Beach Road Rechannalization Project.

ATTACHMENTS

Attachment A - Richmond Beach Road Rechannalization Project Site Map

Attachment B – Richmond Beach Road Rechannalization Frequently Asked Questions

Attachment A



Richmond Beach Road Rechannalization

Frequently Asked Questions (FAQs)

October 2017 (Revision 3 - 10/11/17)

This project will rechannelize Richmond Beach Road/ NW 195th Street/ NW 196th Street from 24th Avenue NW to Dayton Avenue N from four lanes to one vehicle lane in each direction and a center turn lane. The primary goal of this project is to improve driver, pedestrian, and bicyclist safety and mobility. The rechannelization also provides the ability to implement on-street bicycle lanes as well as pedestrian refuge space for pedestrians crossing the street between controlled intersections. We have taken the frequently asked questions and grouped them into categories to assist the reader in quickly finding specific information. Taken together, these answers provide the broader context for the project as a whole.

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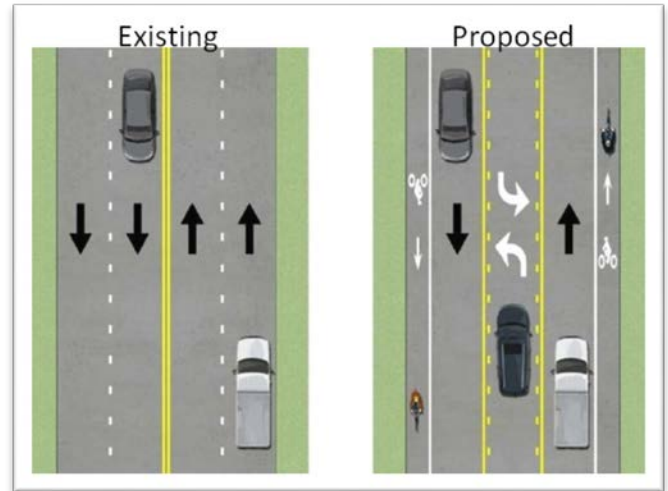
For more information please see our project website:

shorelinewa.gov/RBRechannelization

Background

1 What is a rechannelization?

A “rechannelization” is when the lane striping along a street is changed. In this case Richmond Beach Road would change from a street with two travel lanes in each direction (diagram - left) to a street with one travel lane in each direction, a two-way center-turn lane, and bike lanes in each direction (diagram - right). Rechannelizations address safety and mobility concerns for a relatively low construction cost because they do not involve paving, purchasing right-of-way, or other high-cost treatments. The Federal Highway Administration has deemed this rechannelization method a proven safety countermeasure for roads like Richmond Beach Road, **reducing collisions by 19-47%**.



2 Why is the City proposing a rechannelization on Richmond Beach Road?

The City is proposing to rechannelize Richmond Beach Road to improve driver, pedestrian, and bicyclist safety and mobility. The corridor has a history of vehicle, pedestrian, and bicycle collisions, and includes two of the City’s high collision locations from the [2016 Annual Traffic Report](#). Based on existing roadway characteristics, collision history, traffic data, and numerous case studies performed across the country, the City believes that a rechannelization would work well on Richmond Beach Road.

SAFETY	<ul style="list-style-type: none"> From 2010-2016, there were 154 total collisions in this corridor, west of Dayton Ave N to 24th Ave NW. Of these collisions, 20 were injury collisions, including 1 fatality. 10 of these collisions involved pedestrians, and 3 involved bicyclists. There is significant speeding in the corridor which increases the risk of collision frequency and severity. Traffic data west of 8th Ave NW shows that 55% of drivers are exceeding 35 mph. That means most drivers are speeding more than 5 mph over the posted speed.*Updated 10/11/17
TRAFFIC & MOBILITY	<ul style="list-style-type: none"> Traffic volumes on this corridor are supported by a 3 lane design, ranging from 2,800 vehicles per day west of 20th Ave NW to approximately 16,000 vehicles per day east of 3rd Ave NW. Studies have shown the proposed channelization to work well – reducing collisions while maintaining traffic delay level of service standards - on roadways with average daily traffic volumes up to 20,000 vehicles per day. Existing sidewalks are narrow with no buffer between cars and pedestrians. Protected crossing opportunities are limited, making access to bus stops and interaction between north and south neighborhoods very challenging. Most pedestrian collisions occur when trying to cross (more than 90%). The City’s 2011 Bicycle Master Plan includes on-street bike lanes for this street. Bicyclists currently use this roadway and collisions have occurred. Many bicyclists have expressed they would use the corridor if vehicle speeds were lower and dedicated bike lanes in place.

For more information please see our project website:

shorelinewa.gov/RBRechannelization

Unique corridor characteristics and challenges which will be carefully considered:

- Uphill segment between 15th Ave NW and 8th Ave NW; slow moving vehicles & blockages.
- Bus Routes (4 maximum, per direction during the peak hours).
- Proposed Point Wells development in Snohomish County.
- Intersection and roadway geometry.

3 How did we get to this point?

- [2011 Transportation Master Plan \(TMP\)](#) – Slated bike lanes for the corridor.
- [Annual Traffic Report](#) – Has consistently identified the need for safety improvements based on collision patterns.
- [Capital Improvement Plan \(CIP\)](#) – Project concept was added to the 2016-2021 CIP, and adopted by Council.

4 What is the public’s role?

Updated 8/31/17 to reflect project’s current status

To kick off the design phase, the City hosted a public meeting on June 22nd and had a public comment period which helped shape the design. An additional public meeting will be held on October 12th which will be an opportunity for the public to see how their comments and questions were incorporated into the project, and to have a chance to comment on the 60% design before the project is finalized.



5 Didn’t the City fix the safety issues with the signal changes at 3rd Avenue NW?

New 8/31/17

As described in the 2016 [Annual Traffic Report](#) the signal timing changes have helped in reducing some of the left turn collisions at the 3rd Avenue NW signal. Collision rates at this location are still high. In the 10 months following the signal timing changes there were a total of six collisions at this intersection, two of which were injury collisions. Before the signal timing changes there was, on average, 7.22 collisions per 10 month period (based on the table from page 25 of the Annual Traffic Report). This intersection would still be ranked 9th overall in the 2016 traffic report and would benefit from additional safety improvements. The proposed changes also significantly improve pedestrian safety at this intersection where since 2010, 4 non-motorized collisions have occurred. This is especially important given the intersection’s proximity to Einstein Middle School, as there are many children who use it walking to and from school.

No new collisions have occurred as a result of the removal of the previously restricted 3rd Ave NW southbound right turn on red to Richmond Beach Road, which is better than we typically see for right turn on red movements at signalized intersections. Given this, we will not be restoring the right on red restriction at this time. Drivers who do not feel safe turning right on red can always continue to wait until they receive a green light.

For more information please see our project website:

shorelinewa.gov/RBRechannelization

6 Will this project move forward?

This project has been authorized and funded by the City Council. It is needed to address collision history on the corridor. Best practices and case studies throughout the country show this kind of 3 lane configuration is the best way to meet the safety improvement objectives for this corridor. However there are many design details which can vary for which we are soliciting comments. Based on input from the public, the City will develop a final design.

Mobility

7 How will all of the vehicles on Richmond Beach Road fit into fewer lanes?

A 4 lane roadway often functions like 3 lane roadway as turning vehicles, bicycles, busses and delivery trucks block one of the travel lanes. Case studies show that 3 lane roadways can function quite well – reducing collisions while maintaining traffic delay level of service standards – at average daily traffic volumes of up to 20,000 vehicles. This corridor’s volumes are well below that. Thorough traffic analysis has been conducted and will continue to be refined as described in the following sections.

8 How will this affect my commute along Richmond Beach Road as a driver? *Updated 10/11/17*

The City has conducted preliminary PM peak (4-6 PM) traffic analysis. The existing and proposed travel times and speeds are shown below. Existing travel times were verified by actual travel time runs conducted in the field, calibrating the model to within 7 seconds of the real life average.

PM PEAK - Westbound from West of Fremont Ave N to 23rd Ave NW

	Existing	Proposed	Difference
PM Peak Travel Time	4 min 37 sec	5 min 25 sec	48 seconds
Cumulative Intersection Delay	85 seconds	100 seconds	15 seconds
Average Travel Speed (includes stoppages)	24 mph	21 mph	3 mph

The City has conducted preliminary AM peak (7-9 AM) traffic analysis. The existing and proposed travel times and speeds are shown below. Existing travel times were verified by actual travel time runs conducted in the field, calibrating the model to within 8 seconds of the real life average.

AM PEAK - Eastbound from 23rd Ave NW to West of Dayton Ave N

	Existing	Proposed	Difference
AM Peak Travel Time	4 min 03 sec	4 min 45 sec	42 seconds
Cumulative Intersection Delay	84 seconds	99 seconds	15 seconds
Average Travel Speed (includes stoppages)	23 mph	20 mph	3 mph

If you are turning onto Richmond Beach Road from a signalized side street, additional delays will also be a consideration. In some cases however, turning from the side street will become easier and less delayed which is a great benefit for locations with limited sight distance or challenging geometry. Staff has developed various intersection improvement concepts that would help to maximize efficiency and signals will be optimized to minimize stopping.

For more information please see our project website:

shorelinewa.gov/RBRechannelization

9 How can we trust the traffic analysis?

Technical staff has thoroughly analyzed the corridor with traffic modeling software but understands these models aren't perfect. In order to provide modeling that is as close to reality as possible, staff conducted weekday PM peak travel time runs in the field to check and calibrate the existing model and better understand driver behavior on the corridor. In doing so, the "Existing Configuration" model was calibrated within 7 seconds of the real life average travel time for the PM peak and within 8 seconds of the real life average travel time for the AM peak. The same considerations will be applied to the "Proposed Configuration" model in order to achieve the most accurate results possible, erring on the higher/conservative side in estimating delay. We will also conduct after studies to verify these estimates and ensure the roadway is operating as intended.

10 What about future growth?

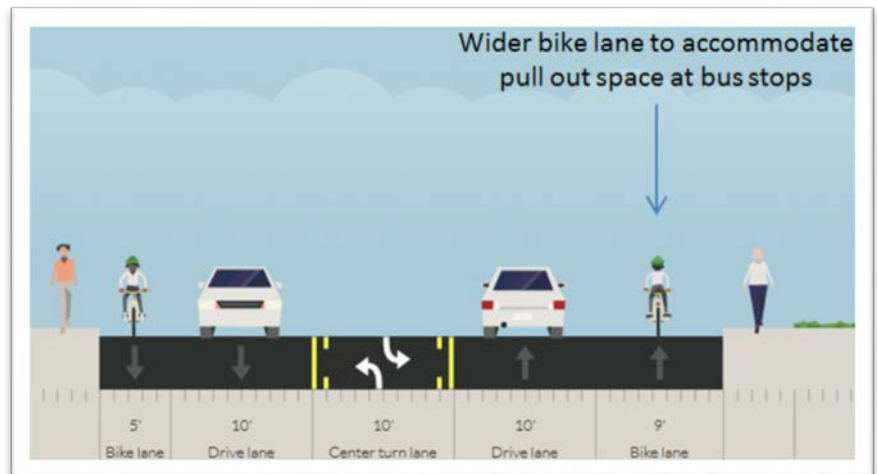
City projects and private developments are subject to maximum travel delay standards, also known as Level of Service (LOS) standards or concurrency. These standards require the following:

1. A LOS D (Average of 35-55 seconds of delay per vehicle) at signalized intersections on arterial streets and at unsignalized intersecting arterials; and
 2. A volume to capacity (V/C) ratio of 0.90 or lower for principal and minor arterials.
- The V/C ratio on one leg of an intersection may exceed 0.90 when the intersection operates at LOS D or better.

Based on traffic counts and modeling for the proposed configuration, the corridor and all intersections are anticipated to operate well within the bounds of these standards. Future development will have to provide traffic analysis showing added project related trips still fall within the Level of Service standards, or provide mitigation to meet standards. Otherwise, permits cannot be issued.

11 Are cars going to get stuck behind buses when they stop?

No. One alternative provides a wider bike lane at bus stops to accommodate a wider bus stop area that will allow buses to pull out of through traffic (see diagram). Staff are also working with King County Metro to identify potential bus stop removals and/or relocations. With a maximum of 4 buses per hour in either direction in the peak commuting hours, the frequency of buses is fairly low which makes their impact minimal. In addition, it is legal to go around a stopped bus.



For more information please see our project website:

shorelinewa.gov/RBRechannelization

12 What happens when a large truck is going slow uphill?

Law prohibits slow moving vehicles from holding up 5 or more following cars if they can pull off to let cars pass. The design alternative that provides wider space at bus stops so vehicles can pass also provides space for trucks to safely pull into if they are delaying following drivers. In addition, the City will work with the asphalt plant to determine a reasonable operating strategy when this project is implemented if slow moving vehicles prove to be problematic.

Current traffic data as well as information from previous traffic studies show there are about 5-7 tanker trucks using the corridor staggered throughout the day. Buses and other large vehicles operate at or above the 30 mph speed limit uphill as verified by field studies. Due to the infrequent occurrence of tanker trucks on the corridor, staff was not able to measure their speed uphill but will capture this for design documentation in the future.

Considering that most drivers are traveling in excess of 35 mph, and nearly 10% of drivers are exceeding 45 mph on this hill segment, addressing a majority speeding problem remains the priority over potential infrequent truck delays. As a contingency plan, staff has developed a climbing lane alternative for the hill that could be implemented if slow moving vehicle delays prove to be a much greater impact than anticipated by traffic modeling.

13 What happens when a delivery truck or garbage truck is stopped?

It is legal to go around stopped vehicles or obstructions ([RCW 46.61.100\(1\)\(b\)](#)). This is how every other two lane roadway with no-pass striping operates, many with traffic volumes higher than segments of this corridor. It is illegal to pass another **moving** vehicle by utilizing the center turn lane space.

14 How will the City address cut through traffic as a result of diversion?

City staff does not expect to see significant diversion based on the traffic analysis results however, we would still like to hear your thoughts on routes you'd expect to see cut through traffic. Once we have this information, we can collect "Before" traffic data in advance of implementation for some of the primary identified routes, and monitor with follow up collection after project implementation. Based on this information, we can work with neighborhoods to implement traffic calming as part of our [Neighborhood Traffic Safety Program](#), where warranted.

15 Does the City really expect people to use this as a bike route?

- Region wide, biking is up 7.8% since 2011 as indicated by the Washington State Bicycle and Pedestrian Documentation Project.
- Traffic data and collision history confirms that bicyclists are currently using the roadway.
- The "If you build it, they will come" principle - providing facilities produces the effect of inviting more people to use them.
- Although topography is challenging, some riders will choose to use this corridor both to commute and for leisure when it is the most direct route. In addition, power assisted bikes are becoming popular, making the barrier of topography less of an issue.
- Alternate routes are still available for those who would prefer them, however topography is a consideration on those routes as well.
- The route will be more attractive for bicyclists with less vehicle speeding.

For more information please see our project website:

shorelinewa.gov/RBRechannelization

16 Is the City trying to turn Shoreline into another Seattle?

No, the City’s goal for this project is to responsibly and cost effectively improve safety, however this will not be done at the expense of the City’s travel delay standards. The City of Seattle has implemented this 4 lane to 3 lane conversion on streets with traffic volumes exceeding 20,000 vehicles per day, which can be a tipping point for causing residual congestion. The heaviest trafficked corridor, between 3rd Ave NW and Dayton Ave NW, only carries about 16,000 vehicles per day which is below that rule of thumb tipping point.

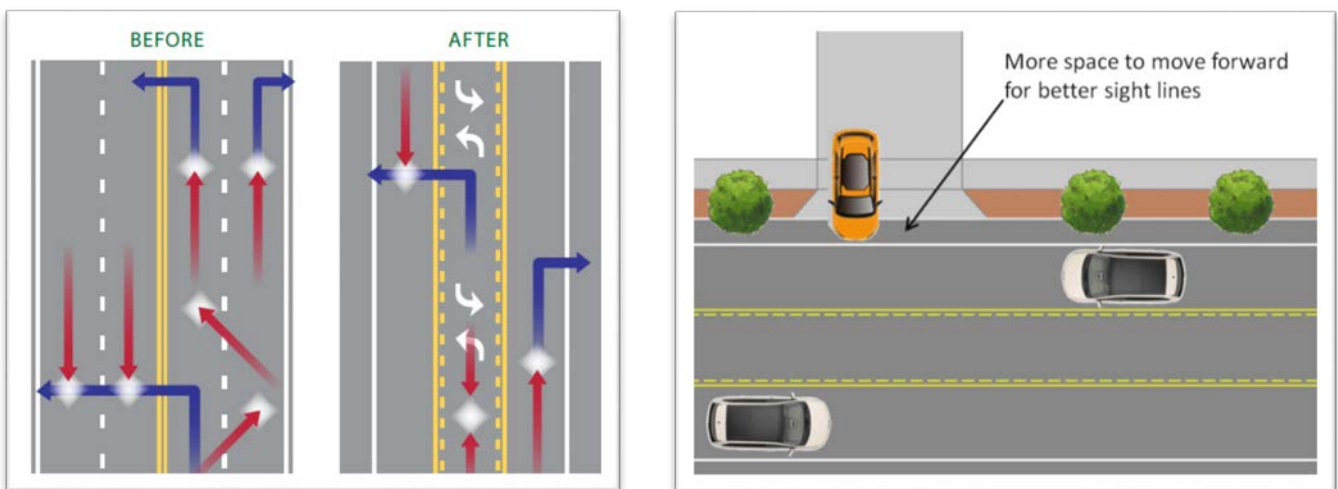
Another big difference between Shoreline and Seattle are our adopted travel delay standards, otherwise known as Level of Service or concurrency. Shoreline’s standard is significantly more conservative than Seattle’s standards meaning that we generally accept less travel delay than Seattle is comfortable with. The City of Shoreline requires roadways to meet adopted standards. This means that any large development must provide analysis to show that they will not exceed these standards. If the standards are exceeded, the development is required to provide mitigation for their added trips to meet those standards or it cannot proceed.

Safety

The Federal Highway Administration (FHWA) has deemed this 4 lane to 3 lane conversion as a proven safety countermeasure for roadways with characteristics similar to Richmond Beach Road, aggregating case studies from around the country which show a collision reduction of 19 to 47 percent. Detailed below are the factors that contribute to this proven collision reduction strategy.

17 How will the rechannelization improve vehicle safety?

- ✓ Reduces speeding and high variability between vehicle speeds, a main cause of collisions.
- ✓ Reduces conflict points and provides dedicated left turn space (diagram - left).
- ✓ Creates a space for better sight distance when turning from a side street or driveway. Currently, many driveways and side streets along the corridor have limited sight distance. The added bike lane space allows more room for vehicles to creep forward for better views without conflicting with vehicle traffic (diagram - right).



For more information please see our project website:

shorelinewa.gov/RBRechannelization

18 So I'm supposed to block the bike lane when pulling out of my driveway? *New 8/31/17*

The yield task when entering the roadway remains the same. This is the same principle as pulling into the pedestrian/sidewalk space within a driveway when trying to gain a better view to enter a roadway. The hierarchy is as follows:

Stop before the pedestrian crossing zone (sidewalk, crosswalk, shoulder). If no pedestrians are present, pull forward and stop before the bike lane. If no bicyclists are present, pull forward into the bike lane space to gain adequate views of cross traffic and select an appropriate gap to enter.

This yielding hierarchy implies that you may have to do a two stage stop in locations with limited sight distance, as is shown in the below diagrams. It is still the responsibility of the vehicle entering the roadway to yield to the vehicles (including bicyclists) traveling along the main road.



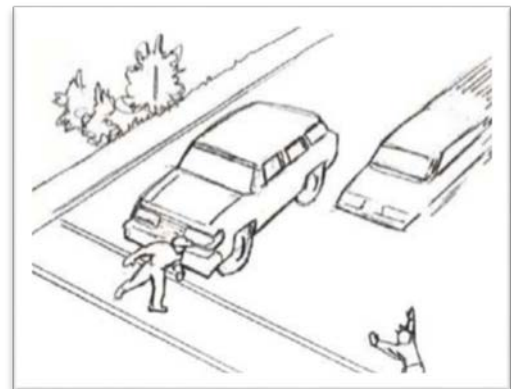
- Bike/vehicle on main road's line of sight
- Vehicle entering from driveway's sight triangle

For more information please see our project website:

shorelinewa.gov/RBRechannelization

19 How will the rechannelization improve pedestrian safety?

- ✓ Over 90% of pedestrian collisions occur when people cross the road, as opposed to while walking along the road. The rechannelization creates space for “Pedestrian Refuge” for safer crossings (see following diagram - left). In the absence of dedicated refuge space, there are still less lanes to cross which is safer.
- ✓ Eliminates the pedestrian “multi-lane threat” scenario - where one vehicle stops to allow a pedestrian to cross, but the adjacent lane fails to see the pedestrian and does not stop (see following diagram - right).
- ✓ Bike lane space adds 6 more feet between pedestrians and vehicle traffic.
- ✓ Discourages speeding, a main indicator in pedestrian crash survival, since the prudent driver sets the speed for the following platoon.

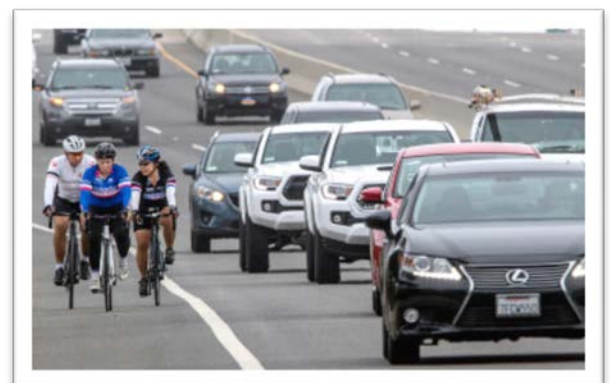


20 How will the rechannelization improve bicycle safety?

The rechannelization provides a dedicated space for bicyclists instead of having to share the lane with vehicles. Collision history on this roadway indicates that the existing roadway is not as safe as it could be for bicyclists. Bike lane markings provide the expectation for drivers to encounter bicyclists, improving their awareness and attentiveness to non-motorized users while driving. Reduction of speeding and improved sight lines as previously discussed, also provide a safety benefit to bicyclists.



VS



For more information please see our project website:

shorelinewa.gov/RBRechannelization

21 Won't this new configuration cause terrible head on collisions?

New 8/31/17

The new configuration is expected to decrease the potential for head on collisions. Currently, the main streams of traffic are only separated by a yellow centerline, with only a foot or two between opposing directions. The new configurations separates the majority of traffic in opposing streams by placing the 10 foot center lane between them. The following table describes and illustrates the geometric benefits to the 3 lane configuration with regard to head on collision types.

Existing Roadway: High volumes of opposing traffic very close to each other. A small error (2-3 feet difference) has the potential to cause a high speed head on collision.



Proposed Roadway: Two way left turn lane is unoccupied most of the time. More separation between the main streams of traffic. Drivers typically slow as they enter the turn lane, making it easier to adapt to opposing traffic, and less catastrophic in the event of collision.



Since 2010, there have been 34 reported “Opposite Direction” related collisions reported on City streets which resulted in injury. The collision types shown below are all considered “Opposite Direction” and have been included for reference. The type most similar to the head on collisions we’ve heard concerns about is the bolded “opposite direction – head-on” category. There has only been one of these collisions in the City since 2010 and it was not within a center turn lane.

- ✓ From opposite direction – turn related
- ✓ From opposite direction – sideswipe
- ✓ From opposite direction – all others
- ✓ **From opposite direction – head-on**

The following table summarizes where the 34 reported “Opposite Direction” injury collisions occurred throughout the City of Shoreline.

2010-2016 “Opposite Direction” injury collisions by Roadway		
Roadway	# of Collisions	Roadway Characteristics at Collision Site
Aurora Ave N	8	Configuration – 2 lanes in each direction + BAT Lanes + Dedicated turn lanes. Collisions at intersections.
Ballinger Way	2	Configuration – 2 lanes in each direction plus turn lane. Both occurred at the signalized intersection of 19 th Ave NE.
15th Ave NE	5	Configuration varies 3-4 lanes. All but one collision occurred within the 4 lane section as opposed to the 3 lane section. In addition, all were related to intersection turning movements.
15th Ave NW	1	Configuration – 1 lane in each direction.
5th Ave NE	2	Configuration – 1 lane in each direction.
8th Ave NW	1	Configuration – 1 lane in each direction.
Linden Ave N	1	Configuration – 1 lane in each direction.
N 175th St	2	Configuration – 4 lanes (2 in each direction).

For more information please see our project website:

shorelinewa.gov/RBRechannelization

N 185th St	1	Configuration – 3 lane (1 each direction + center turn lane). Collision occurred at Wallingford, resulting from a turning movement.
N 200th St	1	Configuration – 2 lanes (1 each direction)
N 205th St	1	Configuration – 3 lane (1 each direction + center turn lane) Collision occurred within the 300 Block – only true head on collision. Impact location was in westbound general purpose lane, not in turn lane.
N/NE 155th St	2	Configuration varies, 2-3 lanes. The collisions on N 155 th Street occurred at the signalized intersection of Meridian Ave N and at 5 th Ave NE.
NE 175th St	1	Configuration – 4 lanes (2 in each direction)
NW Richmond Beach Rd	4	Configuration – 4 lanes (2 in each direction). Collisions occurred at 3 rd or 8 th .
Westminster Way N	2	Configuration – 4 lanes (2 in each direction)
Total	34	

In reviewing all types of these “Opposite Direction” collisions, only 4 out of 34 have occurred on segments of roadway with the 3 lane configuration, and all 4 of these collisions happened at intersection locations with dedicated left turn lanes. **From 2010 to 2016, there have been zero opposite direction collisions resulting in injury that occurred within a two way left turn lane.**

By comparison, in the same time period, there have been more than 100 pedestrian and bicycle injury collisions throughout the City, which clearly indicates the need to focus on the non-motorized safety benefits this project achieves. A full breakdown of injury collisions by type from 2010-2016 is shown in the table to the right. Collisions between two cars moving in opposite directions and colliding head on represent the smallest proportion of reported injury collisions. Non-motorized collisions and turning related collisions represent the highest proportion of injury collisions in Shoreline. This project is expected to greatly reduce risk of injury collisions as the lane reduction and dedicated turn space directly contribute to mitigating the non-motorized and turning related collision types.

Type of Collision	Number of Collisions	Percent of Total
Vehicle - pedestrian	65	20.6%
Entering at angle	57	18.0%
Fixed object	41	13.0%
Vehicle – bicyclist	37	11.7%
Same direction - rear End	31	9.8%
Opposite direction - turn related	26	8.2%
Parking related	21	6.6%
Same direction - sideswipe	8	2.5%
Same direction - turn related	8	2.5%
Vehicle overturned	8	2.5%
Same direction - all others	5	1.6%
Opposite direction - sideswipe	4	1.3%
From opposite direction - all others	3	0.9%
Opposite direction - head-on	1	0.3%

Miscellaneous

22 Why doesn't the City just test the rechannelization east of 8th Avenue NW? *New 8/31/17*

There are safety concerns (such as vehicle vs bike and vehicle vs pedestrian collisions) occurring west of 8th Ave NW that can't be ignored. The proposed channelization would improve sight lines, slow vehicle speeds, provide a buffer for pedestrians and add a designated space for bicyclists. The City has been hearing support from the residents who live on the hill between 15th Avenue NW and 8th Avenue NW on Richmond Beach Road because they currently have trouble accessing and leaving their homes due to sight distance constraints and high speeds. In addition, traffic volumes are significantly lower west of 8th; 3 lanes can adequately handle existing traffic volumes.

For more information please see our project website:

shorelinewa.gov/RBRechannelization

23 Why can't the City just widen the existing sidewalks?

This restriping effort is a low-cost project at approximately \$215,000, and is the most cost effective strategy for addressing the collision history on the corridor. By comparison, widening sidewalks would likely cost more than 4 million dollars and wouldn't address the corridor's history of collisions. Additionally, throughout much of the corridor the back of the existing sidewalks is concurrent with the Right of Way line. This means in order to widen for bigger sidewalks or bike lanes, the City would need to acquire private property which significantly increases the cost of improvements. For more information on what Shoreline is doing to develop and maintain our network of sidewalks, please visit our webpage at:

<http://www.shorelinewa.gov/government/departments/public-works/capital-improvement-plan/sidewalks-priority-routes>

24 How has this treatment worked on other streets?

This treatment has been successful both regionally and throughout the Country. Within just a few miles of this corridor are multiple examples of 3 lane roadways including N 155th Street and N 205th Street (pictured) which carry comparable volumes. One example of a nearby successful rechannelization in Seattle, NE 75th Street from 15th Ave NE to 35th Ave NE, provides a comprehensive before and after study, documenting the safety and mobility benefits. This study is available online at:

<http://www.seattle.gov/transportation/docs/NE75thRechannelizationReportFINAL.pdf>



Additionally, the Federal Highway Administration (FHWA) has deemed this 4 lane to 3 lane conversion as a proven safety countermeasure, aggregating case studies from around the country which show a collision reduction of 19 to 47 percent. FHWA also summarizes that most streets can well accommodate average daily traffic volumes of 15,000 and higher in many cases. The Federal informational guide is available online at: https://safety.fhwa.dot.gov/road_diets/info_guide/

25 What about Point Wells?

Updated 8/31/17 to reflect project's current status

The Point Wells property is located in unincorporated Snohomish County. Currently its only road access is through the Richmond Beach neighborhood of Shoreline. A development proposal for the property continues in the Snohomish County permitting process. The developer for the Point Wells site, Blue Square Real Estate (BSRE) submitted revisions to the project on April 17, 2017 to Snohomish County. The Snohomish County website states the revised plans "retain the basic overall concept in the original submittal, but add a second access road through the Town of Woodway and make some adjustments internal to the site in response to the County comments". The county provided preliminary review comments on May 10, 2017 and expect a revised application from the development. Work on the Draft Environmental Impact Statement is on hold while the County awaits for a new submission with "a satisfactory new alternative" as determined by Snohomish County Planning and Development Services staff.

In 2014, the City and BSRE undertook a joint effort to conduct a "Transportation Corridor Study"; a process for public input on the proposed project as required by a [Memorandum of Understanding](#) the City entered into with the developer in 2013. In addition, the City's current [Point Wells Subarea Plan](#) relates changes to traffic volume restrictions on Richmond Beach Drive to a finalized Transportation Corridor Study. The Transportation Corridor Study was never finalized as the

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shorelinewa.gov/RBRechannelization

City reached an impasse with BSRE’s technical staff in determining an appropriate mitigation strategy to meet the City’s traffic standards (Level of Service) for their proposed number of vehicle trips added to Shoreline streets.

Regarding the proposed three lane roadway configuration and its relationship to potential future Point Wells traffic, it is prudent the City not postpone necessary projects to improve safety and mobility for a relatively low cost over impacts from an uncertain future development at Point Wells that is unlikely to occur for a decade or more. The City’s bike master plan slates on-street bike facilities for Richmond Beach Road and this is only accomplished through a 3-lane configuration without additional Right of Way.

As stated previously the primary purpose of this change is to address safety issues, but in response to questions from the community regarding how this affects potential traffic from Point Wells, based on traffic analysis fewer lanes through the corridor means less traffic can be added to the system within the City’s level of service requirements. In other words, fewer additional vehicular trips before significant mitigation would be required to meet the City’s level of service. City of Shoreline staff will continue to review any submittals to Snohomish County for consistency with the City’s adopted plans and regulations applicable to this development and previously submitted staff comments on the project.

For more information on the proposed Point Wells Development visit the City and County’s websites at the links below.

Snohomish County Point Wells web page: <https://snohomishcountywa.gov/1511/Point-Wells>

City of Shoreline Point Wells web page: <http://www.shorelinewa.gov/government/departments/planning-community-development/planning-projects/point-wells>

Next Steps

- **October 12, 2017 – 2nd Public Meeting** to show refined 60% design and get additional feedback on minor design revisions
- Winter 2017 – Final design
- Winter 2017/2018 – Award contract
- Summer 2018 – Implement improvements

Thursday, October 12th
Public Meeting

When: 6pm – 8pm
Where: Shorewood High School Commons
17300 Fremont Avenue N
Shoreline, WA 98133

PROJECT SCHEDULE



For more information please see our project website:

shorelinewa.gov/RBRechannelization