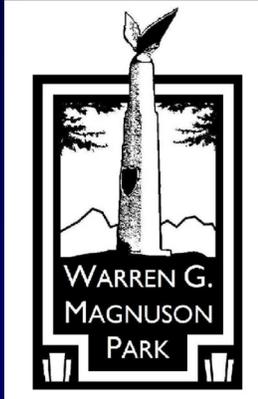


NE 65th Street Bicycle and Pedestrian Improvements

September 19th, 2012



Slide 1

Format of Open House

*Presentation:
40 minutes*

*Open House:
20 minutes*



Slide 2

Bicycle and Pedestrian Safety

- Project Goals and Network Gaps
- All Ages and Abilities
- Project Proposal
 - What is a Cycle Track?
 - Project Overview
 - Intersection Enhancements
 - Lane Separation
- Parking and Traffic Changes
- Funding

Slide 3

Project Goals & Benefits

- ***Family-friendly*** connection between Burke-Gilman Trail and Magnuson Park for ***all ages and abilities***
- ***Healthy*** transportation options – people riding to commute, riding for recreation, and walking around the neighborhood.
- ***Safer and more comfortable*** streets for everyone
- ***Parks***, not parking lots – decrease the need for more parking at Magnuson Park.

Slide 4

All Ages and Abilities

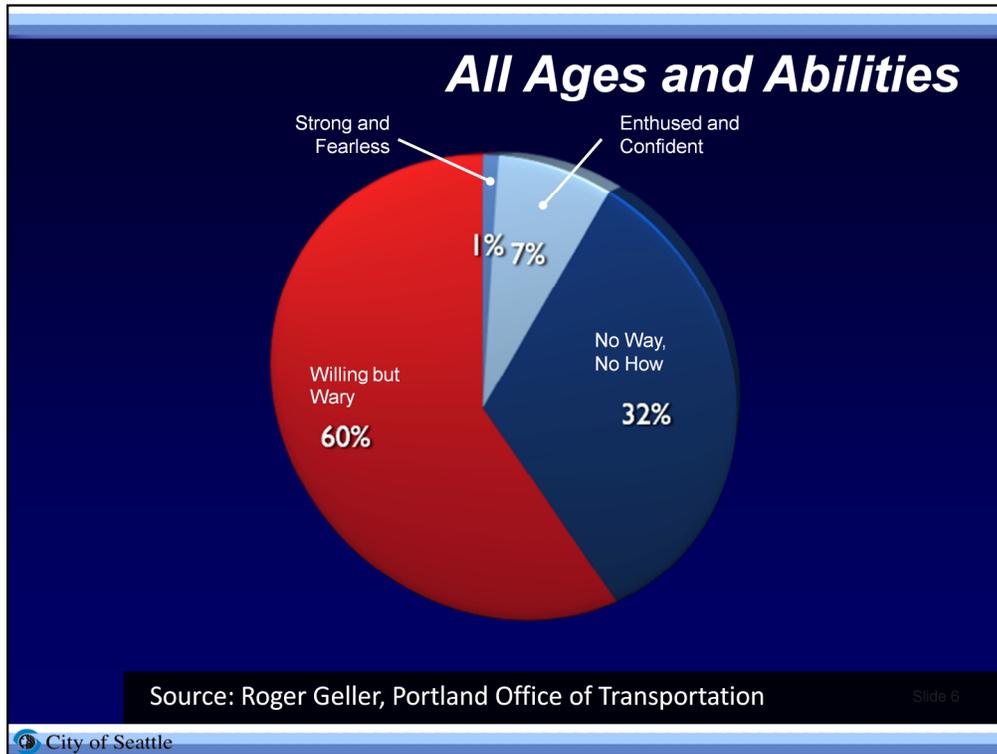


Slide 5

This picture shows pretty well what we mean when we say we want to serve people of all ages and abilities.

Seattle has installed more than 100 miles of bike lanes and shared lane markings in a relatively short period of time - but they aren't always the type of place where kids, families, and riders of all ages and abilities will feel comfortable.

However, if we make facilities that meet the needs of these people, we'll be meeting the needs of all types of riders.



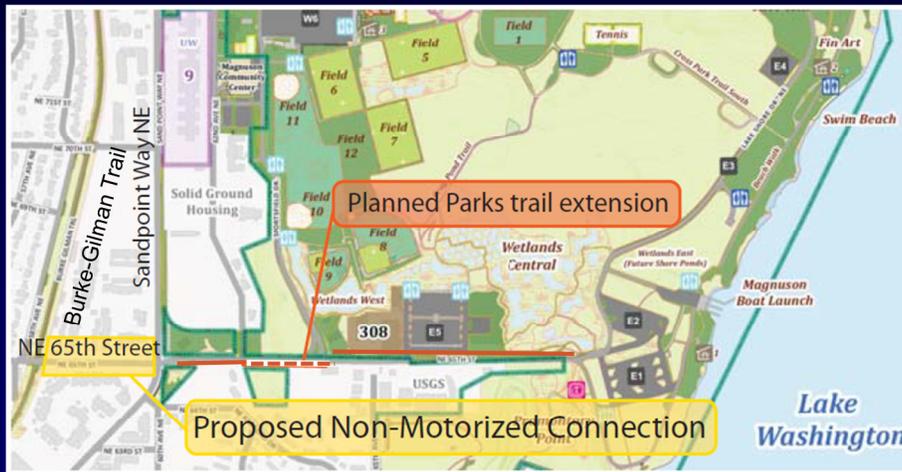
Here's another way to think about all ages and abilities.

Research in Portland has shown that only about 8 percent of the population is comfortable biking on the streets that we have now. These people are classified as the “strong and fearless” or the “enthused and confident.” These are the people you see riding in the bike lanes on busy arterial streets today.

There's another third of the population that's never going to try biking no matter what we do – they fall in the “no way, no how” category.

But most people, 60 percent, are in the “willing but wary” category. These people are interested in biking but don't feel comfortable riding on the streets as they are today. But they might be willing to give it a try if we make the streets safer, more inviting and more intuitive so they can find their way around the neighborhood easily and comfortably on a bicycle.

Project Proposal: Cycle Track and Pedestrian Improvements



Slide 7

That's particularly important for this connection. On the Burke-Gilman Trail, if you're on a bike, you only need to be concerned about cars at the intersections. You don't need to worry about a car riding too close, a car cutting in front of you to park, being struck while overtaken by a car, or having someone in a parked car open a door into you as you're riding by.

At the south end of Magnuson Park, after the completion of an upcoming Seattle Public Utilities project, people on bikes will be able to use the 12' wide asphalt path on NE 65th Street to reach the waterfront and ride the waterfront promenade and other paths – without ever having to ride with cars. But there's a gap – there's no connection between the Burke-Gilman Trail or Magnuson Park that matches the level of riding comfort on the trail and in the park. The Parks Department has been getting requests for that type of connection for years – and we hear the same thing from the Parks Foundation, Magnuson Park tenants, and other Park users. SDOT has spent the last year talking to Seattleites to update our Bicycle Master Plan – and what we hear from people is that they want facilities with a higher degree of safety and comfort, and they want to be able to use those facilities to get to the places they value – places like Magnuson Park.

When they don't have those facilities, some people ride anyway but are uncomfortable, others ride on the sidewalk – which is legal, but not comfortable for pedestrians or people on bikes, and many people don't bike at all. You see that a lot in Magnuson Park, where people will get in a car to drive to the park, then unload their bikes and bike around the park.

To improve that situation, SDOT is proposing to create a two-way cycle track on the south side of NE 65th Street, with pedestrian enhancements at the intersection of NE 65th & Sand Point Way, to provide off-street access all the way from the Burke-Gilman Trail to the waterfront. That would provide safer and more comfortable off-street access all the way from the Burke-Gilman Trail to the waterfront trails, to the Radford court multifamily housing, and provide access to the low volume park roads and the sports fields.

What is a Cycle Track?



Slide 8

City of Seattle

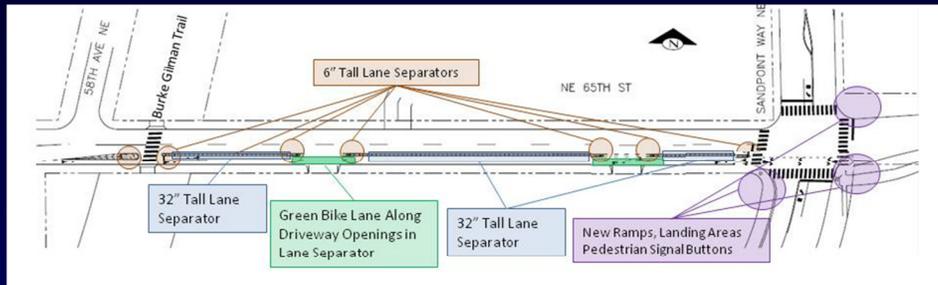
A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor vehicle traffic and distinct from the sidewalk.

They greatly reduce the risk and fear of collisions with vehicles – particularly being struck while being overtaken by a car, or being hit when a car door opens. “Compared with bicycling on a reference street...these cycle tracks had a 28% lower injury rate.”*

The cycle track pictured here is in Vancouver, and is very similar to what we’re proposing (except ours won’t be landscaped, at least at first). It’s 10’ wide, or the same width as two standard bike lanes side-by-side. It has 3 feet of horizontal separation from traffic, and vertical separation as well. Like this cycle track, what we’re proposing meets the guidelines of the National Association of City Traffic Officials, which is one of the main guides we use at SDOT to ensure we provide quality facilities.

*Lusk, A., Furth, P., Morency, P., Miranda-Moreno, L., Willett, W., Dennerlein, J. (2010). [Risk of injury for bicycling on cycle tracks versus in the street](#). Injury Prevention.

Project Components

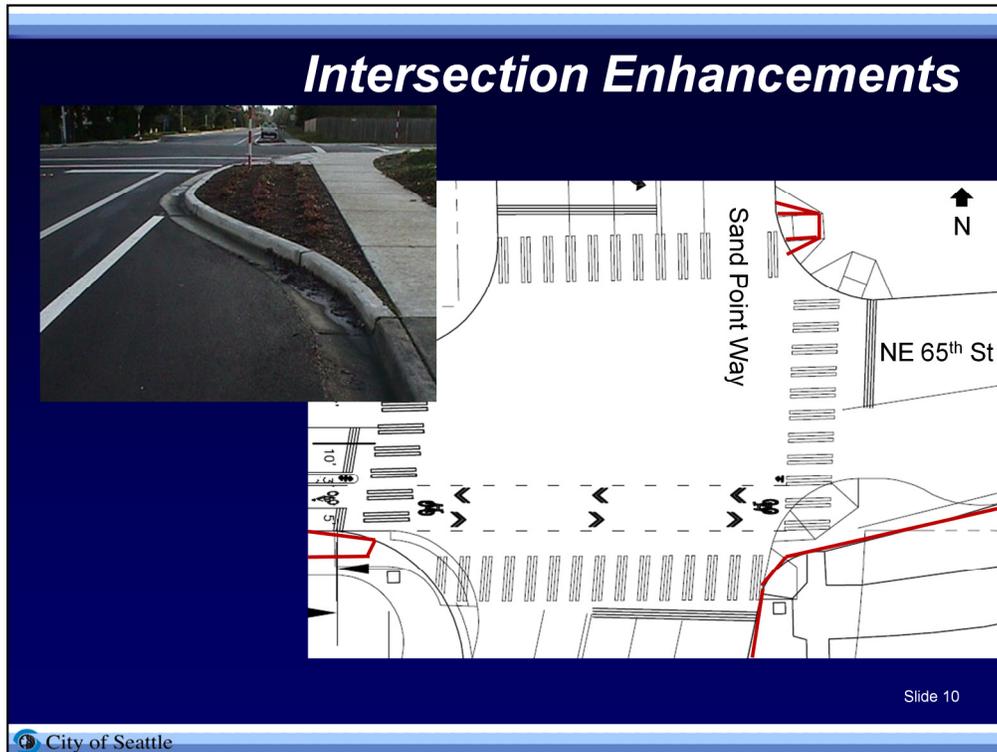


Slide 9

Here's the project in total.

Moving from east to west – the project includes pedestrian enhancements at three of the four corners of the intersection.

Across the intersection, the cycle track begins, separated from traffic at first by a 6" tall curb, and then by a 32" tall lane separator. As you approach the points where the driveways enter the right of way, the height of the barrier steps down and then opens completely. At the trail, the cycle track opens again at the crosswalk. In front of the driveways, we use green bike lanes to provide extra warning to motorists.

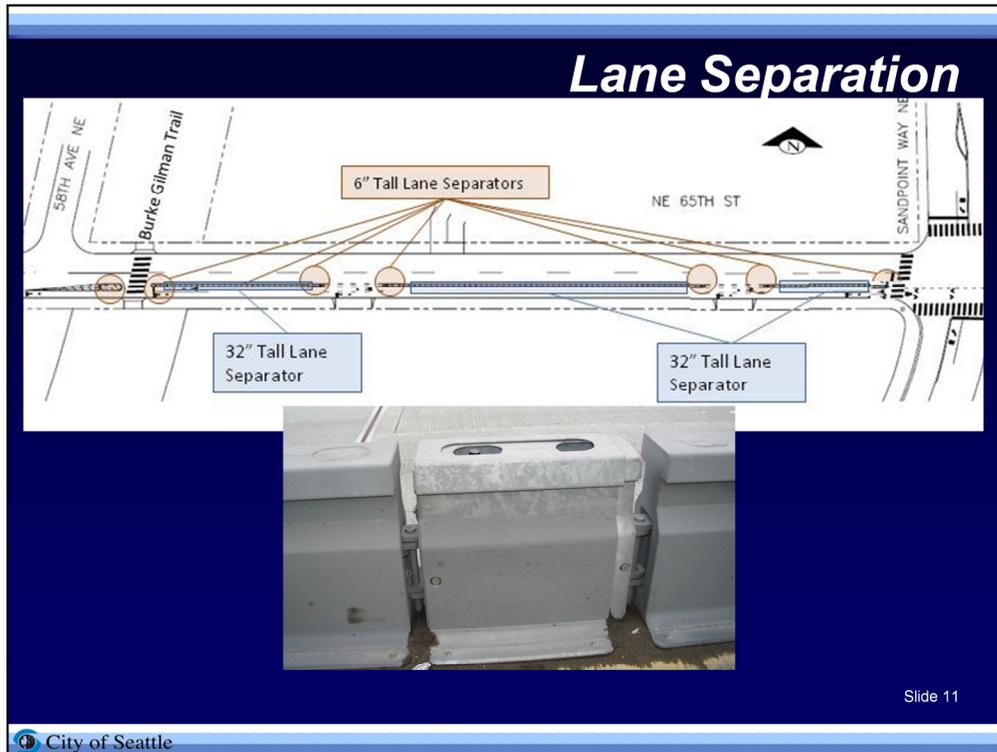


Intersection enhancements:

The existing curb lines are shown in red. We're taking the southeast corner and extending the curb so that the intersection tees up correctly. This shortens the crossing distance of NE 65th, which means that people on foot or on bike are sharing space with cars for much less time. You can see what that looks like in the photo at the left. We're also creating a much larger waiting area, newer and better ramps for people with strollers, walkers, wheel chairs, and other mobility challenges.

At the same time, Seattle Public Utilities (SPU) is funding the extension of the sidewalk at the SW corner, which again shortens the crossing distance. They are also addressing the drainage issues there. SPU is also rebuilding the NE corner and ramps. Finally, we'll be restriping these crosswalks so that they're more visible to drivers.

At the very lower right edge of this slide you can see the beginning of the asphalt multi-use path. Again, SPU is completing the missing link in this path between 62nd Ave and Sportfield drive so that - with the cycle track - there will be off-street access all the way from the Burke-Gilman Trail to the waterfront.

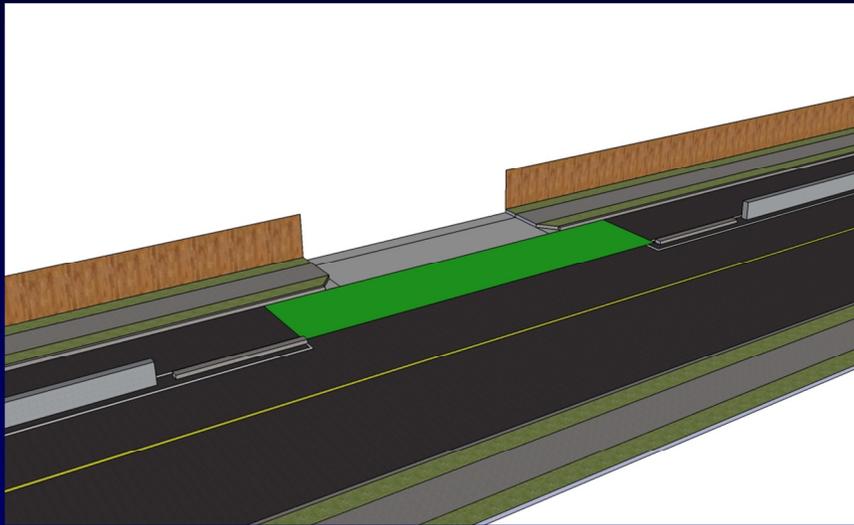


The cycle track begins across Sand Point Way. Again, at the entrances and at the approach to the driveways, the cycle track is separated from cars using a 6" high tall curb. The majority of the cycle track is separated using this steel lane separator, which is one foot wide and 32 inches tall, with "feet" that extend six inches in both directions.

This separator is designed with sightlines in mind – at 32 inches tall it is lower than the driver's eye level in passenger cars (41 inches) – so that both people driving and people riding bikes have unobstructed sightlines. It has spaces at regular intervals to maintain current storm water flow.

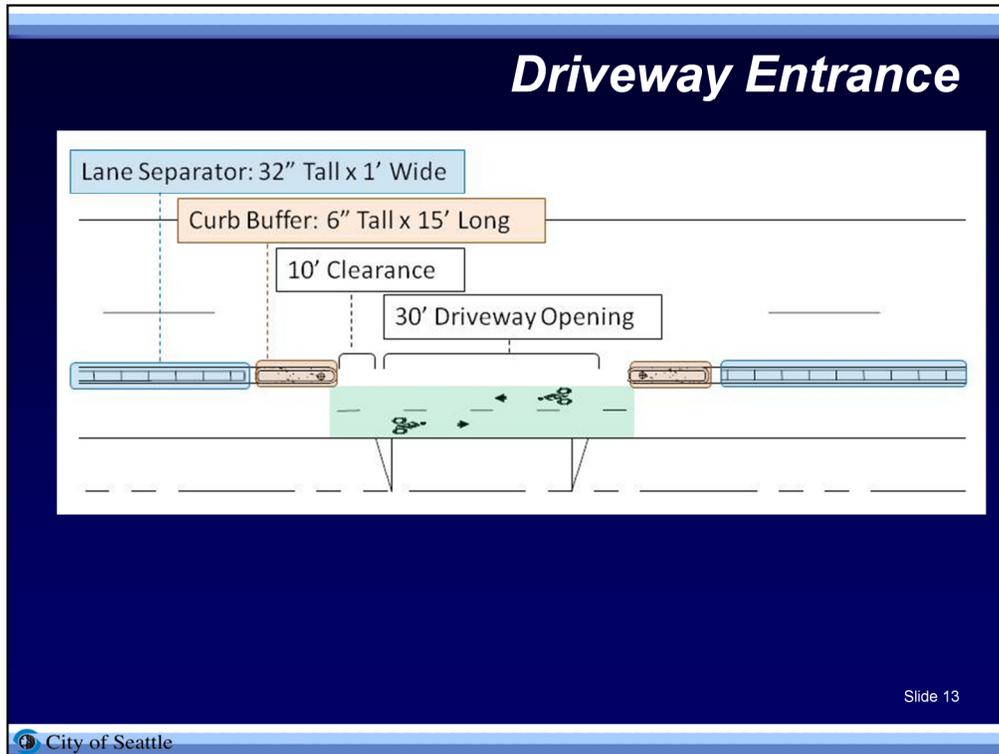
Here's the reason we've designed the project with these lane separators: If you're riding up hill with the little girl from the previous slide, on a wide street with cars speeding past, you're going to feel much more comfortable with some vertical separation between you and those cars.

Lane Separation



Slide 12

Here's a conceptual sketch at a driveway to illustrate the stepped down concept that I'm talking about. This view looks south across NE 65th Street. As you can see the lane separation steps down from 32" tall, has 2' of open space and 15' of curb to maintain separation between people on bikes and cars, and then another 10' of clearance before the driveway. This means that you can still see over the lane separator, but now drivers have even better sightlines as they enter the public right of way from the driveway. Note, this sketch doesn't show the lane separators' segmentation for storm water flow, its reflectors or warning markers, etc.



Here's the overhead view of the same image.

This design allows adequate turning radii for delivery and other larger vehicles, and continued emergency vehicle access, in addition to providing the sightlines for all road users.

There will be no changes near the driveway on the north side of the street, nor any of the adjacent properties' Sand Point Way driveways.

Driveway Entrance



Slide 14

Here's a look at one of the driveways on the south side of NE 65th Street. As you can see, the more cautious bikers use the sidewalk to travel in either direction, which means they're hidden from view until just before they clear the fence.

With a cycle track, people on bikes would be more likely to ride on the road rather than on the sidewalk. This does two things:

- 1) Since they're farther from the driveway, drivers can see them from further away –they won't be hidden by the fence
- 2) Drivers would have more reaction time as they pull out from the condo complex because people on bikes would be further away from the edge of the driveway.

Cross-Bikes & Green Bike Lanes

- Pavement markings
- Signing



Slide 15

We use two techniques to call extra attention to the presence of bikes along the length of the cycle track. At the intersection of NE 65th & Sand Point Way, we'll be using crossbikes – these are similar to crosswalks. You can see them on the left. They do two things:

- 1) They alert drivers that there is a higher likelihood of people crossing at the location
- 2) They provide people on bikes with their own area of the street – so they're less likely to share the crosswalk location with pedestrians. That makes bicycle and pedestrian conflicts less likely.

The second technique is a green bike lane, which we'll use where the driveway enters the right of way. You can see one on the right. We use these throughout the city to call motorists' attention to areas where people on bikes are more likely to be.

Parking Studies



- Maximum Observed Use
 - North: 3 out of 21
 - South: 3 out of 23
 - Combined: 5 out of 44

	B-G Trail	Sand Point Way
NE 65 th St	3 / 21 spaces (14%)	
	3 / 23 spaces (13%)	

Slide 16

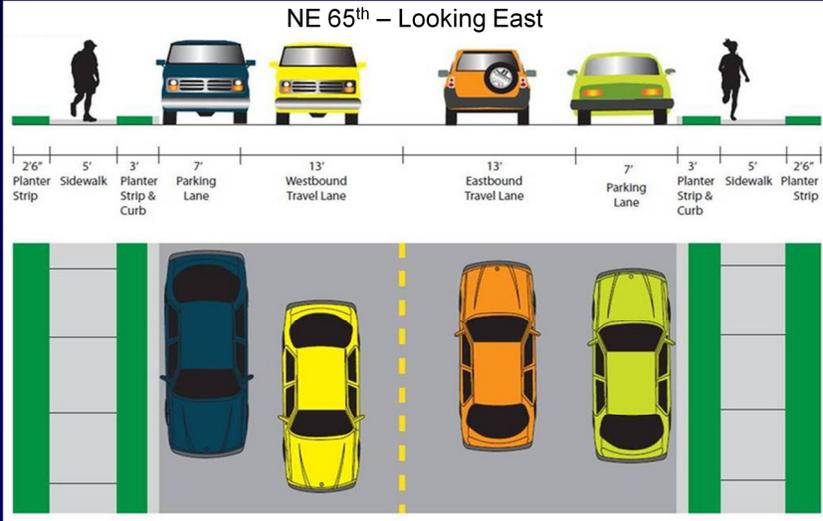
In order to make these changes, we would also make changes to the parking and lane alignment of NE 65th Street. First, we'd be consolidating parking from the south to the north side of the street.

We conducted a parking study to see how the street parking is currently used. These studies look at parking utilization during mornings, afternoons, evening, and late nights – both on weekdays and weekends. We found that the street typically looks as you see in the upper left corner. We never observed more than five of the 44 parking spaces in use (north and south sides combined).

After some initial feedback from the community, we conducted a second study, and confirmed those results. We also looked at the next block to the west and found that 15 of the 19 spots were typically available.

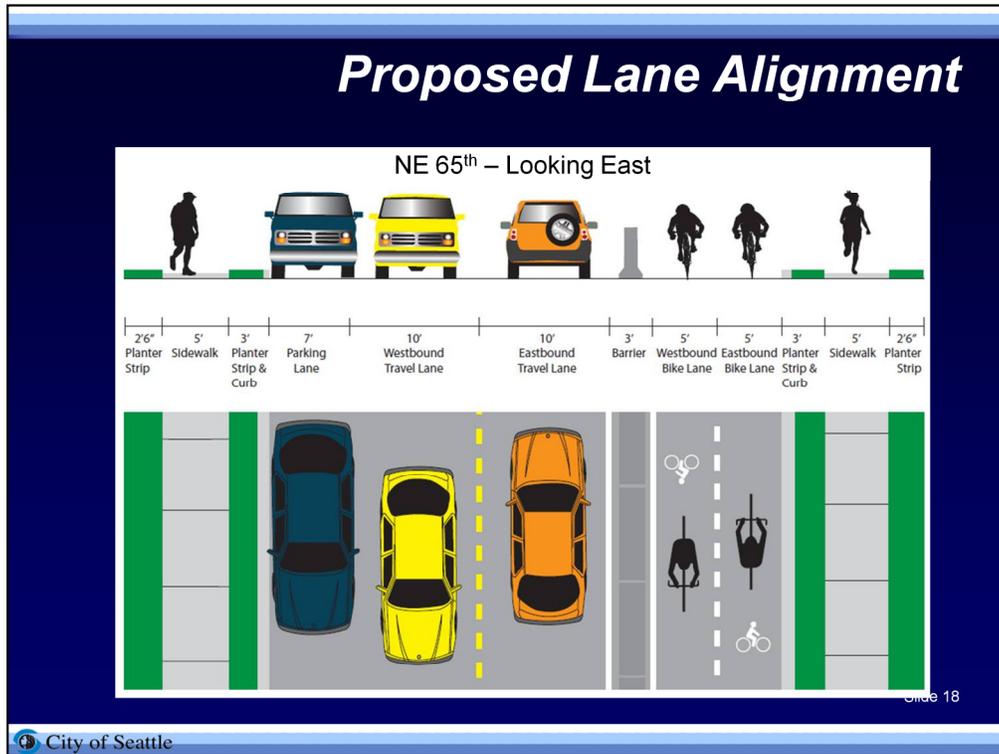
When we did observe people parking on the street, it tended to be close to the trail entrance, as the adjacent properties provide off-street parking for their residents.

Existing Lane Alignment



Slide 17

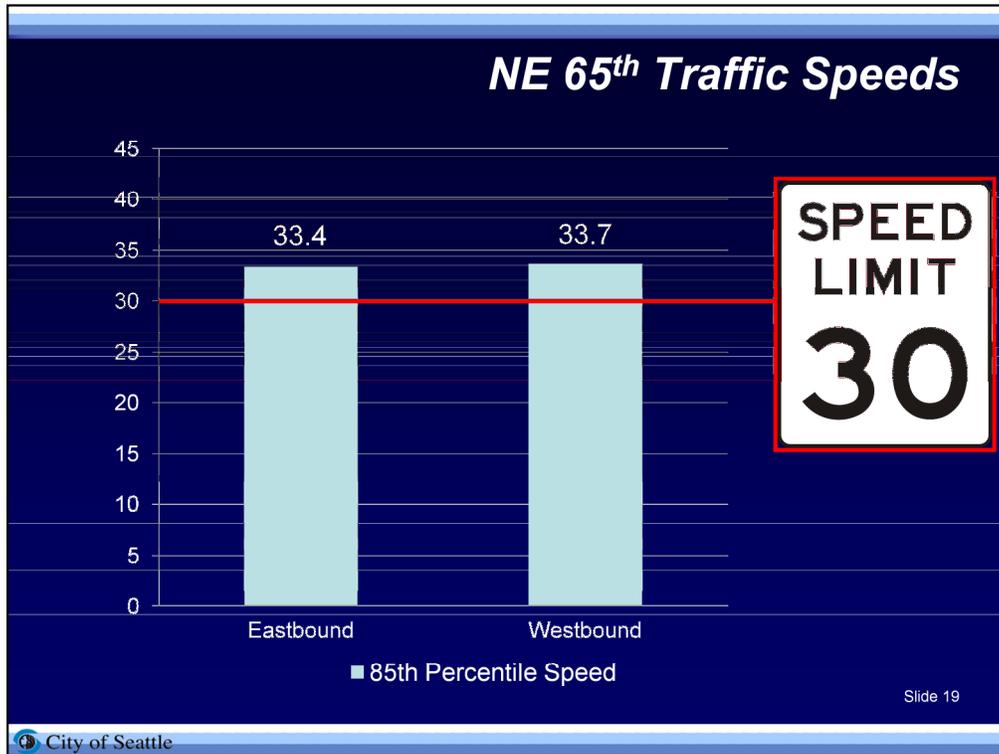
The project would also require some lane adjustment. Currently, the travel lanes are 13' wide –which is wider than a typical freeway lane. Additionally, there's 7 feet for parking, for a total of 20' on either side of the centerline.



After the realignment, the street would look like this:

10' on the south side for the cycle track, and three feet of separation with the foot-wide lane separator in the middle (again with a break for driveway access). The lanes would be realigned to provide more typical travel widths for a street like NE 65th. This would create a 10' eastbound travel lane, a 10' westbound travel lane, and 7' for parking.

These widths are standard for minor arterials like NE 65th Street; for example, 8th Ave NW from NW Market to Leary Way NW and northbound 5th Ave NE from Banner Way NE to NE 85th Street both have standard 10-foot travel lanes and 7-foot parking areas.



This realignment should also lead to traffic calming for the neighborhood. We measured the speeds along this segment of NE 65th and found that people are currently driving faster than the 30mph speed limit. The 85th percentile speed – the speed that most people are driving – is 33.4 mph eastbound and 33.7 miles westbound. That eastbound speed in particular is why we've designed the proposal using the lane separators - if you're biking with your child or grandchild, or another cautious person on a bike, you're going to feel more comfortable with physical separation between you and moving cars.

NE 65th Volume

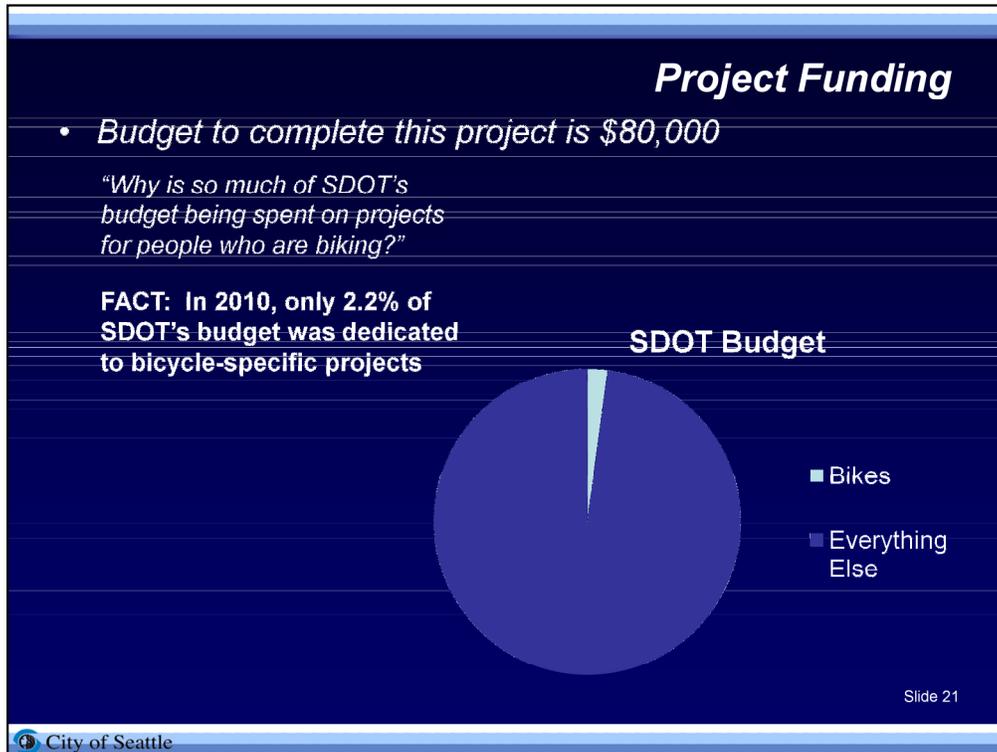
- Daily Vehicle Volume:
 - Eastbound: 1,789
 - Westbound: 2,000
- Weekday PM Peak Travel Hour Volume
 - Motorized Vehicles: 372
 - Bicycles: 27
- Turns at PM Peak Travel Hour
 - AM: 22/72 Eastbound vehicles turn right
 - PM: 68/190 Eastbound vehicles turn right

Slide 20

We measured the daily volume on NE 65th Street between the Burke-Gilman Trail and Sand Point Way. A little less than 4,000 vehicles make a trip along that stretch per day – 1,800 eastbound, and 2,000 westbound. That's a low volume for a minor arterial. To give some context to those numbers, closer to the highway NE 65th carries more than 17,000 cars a day, and at 35th Avenue NE it carries a slightly more than 15,000 cars a day. NE 65th functions more like many of our local streets, which have an daily vehicle volume of about 1,000 cars a day.

We also analyzed travel patterns at the signal: currently, if you're traveling eastbound and there are people waiting at the light, you can drive around them to make a right turn. During the busiest hour of the day, about a third of people (68 out of 190) make that turn. After the change, you'll still be able to make a right turn on red, but not if there are other drivers waiting at the light, so we do anticipate a minimal amount of additional signal delay. Our analysis indicates that during the busiest traffic hour of the day, the average delay for eastbound travelers will increase by just 10 seconds. During the rest of the day it will be less.

This change also provides a benefit to pedestrians and people on bikes. Free right turns on red can make it harder for people to walk or ride across intersections, so a reduction in those movements can yield safety benefits to the street's most vulnerable users.



The estimated cost to complete the project is \$80,000, including \$30,000 for the pedestrian improvements at the intersection. This funding comes out of a budget line that has been allocated to bicycle projects.

Sometimes we hear people say that SDOT is spending a lot of money on bikes. In 2010, SDOT’s entire budget was \$310 million, of that amount approximately 2% was spent on bicycle-specific projects.

We do all we can to maximize that budget. This project is an example of that – we’re cost sharing with SPU on the intersection enhancements and co-designing projects. Projects that provide safety and comfort benefits to people of all ages and abilities – and provide the level of pedestrian enhancements that this one does – are going to cost more than simply striping a bike lane.

Project Process

- Met with representatives from condo boards
- Met with Seattle Bicycle Advisory Board
- Met with Parks Foundation
- Met with Cascade Bicycle Club
- Met with NE District Council
- Met with Magnuson Park Advisory Council
- Briefed elected officials
- Coordinated with Solid Waste, SPD, SPU
- Meeting with View Ridge Community Council
- Open House #1
- Open House #2
- *Comment period – through October 1, 2012*
- *SDOT review and revision based on community feedback*
- *Construction (proposed) – Fall, 2012*
- *Project review after one year*

Slide 22

We've been talking to community members and responding to their concerns as we've progressed. Based on those concerns, we collected more data on parking movements and turning movements, revised the plan to include green bike lanes to provide a higher degree of warning to people driving vehicles, created turning movement schematics to demonstrate the continued access, and did a lot of double-checking to make sure that this project was desired by the community and would be used by people on bikes.

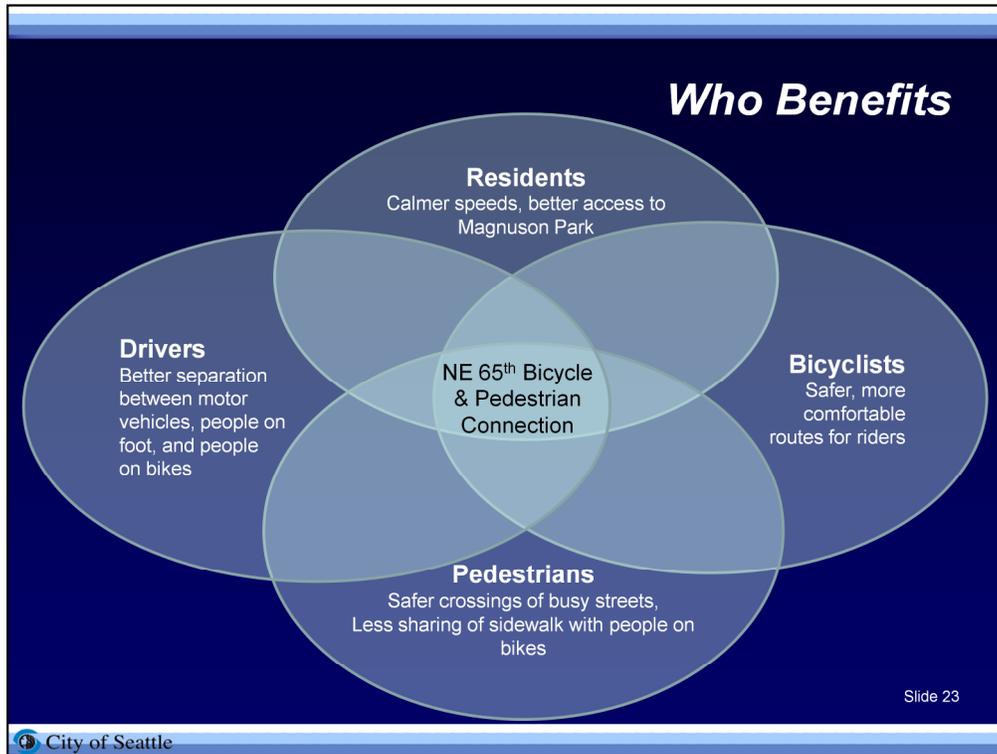
Initially we met with representatives from the condo boards of the condos on either side of the street. We met with the Seattle Bicycle Advisory Board – a group of citizens appointed by the Mayor and City Council to provide guidance on bicycle-related issues in Seattle – they've just sent us a letter to let us know that they support the project. We met with the Parks Foundation, who endorsed the project as it supports their members' desire to connect Seattle's parks system to the neighborhoods. We met with the Cascade Bike Club – who not only endorsed the project but volunteered to adopt the cycle track for the first year. We've also met with the Northeast District Council (NEDC), the Magnuson Park Advisory Council (MPAC), briefed several elected officials on the project, and continued to coordinate with SPD and SPU. We've also met with the View Ridge Community Council and we promoted the open house by mailing 3,000 households, plus over 600 people who had attended past open houses at Magnuson. Finally, we emailed Magnuson Park tenants and the Magnuson Park Community Center Advisory Council.

There are four steps remaining in the process. First, our official comment period extends through the end of September. You can contact us at any time to provide feedback, but if you'd like to see a response in the official question and answer sheet, you'll need to get that to us by the end of September.

Second, at the end of the comment period, we'll review the plans and the community feedback and make any revisions necessary.

Third, we'll continue to coordinate the construction with the other projects that are happening in Magnuson Park. It looks like the least disruptive time for us to construct the project would be in October of this year.

And fourth, a year after the project is constructed, we'll do a before and after study to determine if additional changes are needed. Obviously, we'd be out sooner if there are urgent changes needed.



We've designed this project to benefit people who walk, people who bike, people who live work and play in the neighborhood, and people who drive through the neighborhood.

For people who live along the cycle track, it provides calmer speeds.

For people biking it provides a new, safer and more comfortable option for riders of all ages and abilities.

For people walking, the project improves the crossing of Sand Point Way and encourages willing but wary cyclists to ride in their own comfortable space rather than the sidewalk.

There's even benefits for people driving, as we've provided better separation between motorized and human powered traffic.

Thank You!



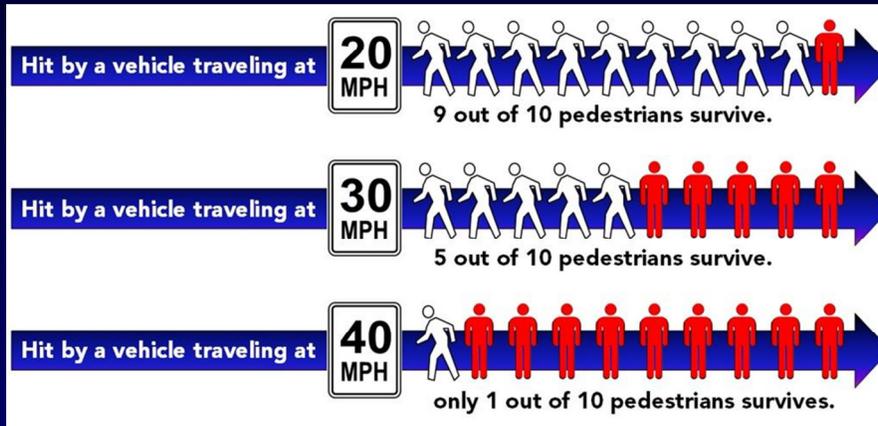
<http://www.seattle.gov/transportation/ne65th.htm>

walkandbike@seattle.gov.....(206) 684-ROAD (684-7583)

Slide 24

All the project details can be found at the website address shown on the slide. You can also email us at walkandbike@seattle.gov or call 684-ROAD.

Collisions



Slide 25

This final slide is a good reminder of why these kinds of projects are important. A pedestrian struck at 40 miles per hour has only a 1 in 10 chance of surviving, while the odds increase dramatically to 9 out 10 at 20 mph.