

# Roy St Safety Upgrade

Roy St from 5th Ave N to Queen Anne Ave

## Applicant Problem

Seattle Center, Uptown, and South Lake Union are densely populated, active, and exciting neighborhoods. These vibrant city neighborhoods are close to each other along flat routes -- making them ideal for biking between, which could help alleviate our traffic problems and give people a cheap and healthy transportation option.

However, biking between our neighborhoods is not safe or comfortable currently. One of the problems is that the Roy St bike lanes are not up to the current standards. A four inch line of paint between your hip and a garbage truck is not a comfortable amount of separation for most people. And we know that the design is not up to the latest safety standards.

In our increasingly dense community we should make it safe and comfortable for people of all ages and abilities to walk and bike around.

### PROJECT TYPE

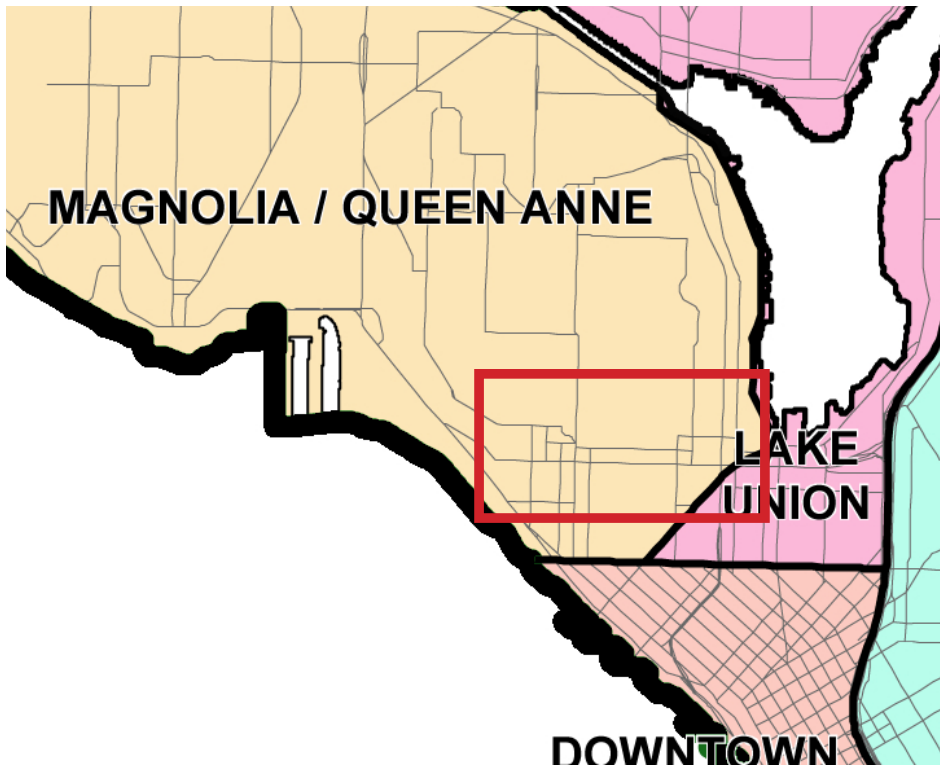
Bicycle Improvements

### APPROXIMATE LENGTH

2,250 lf

### COST ESTIMATE

\$405,000



## Applicant Solution

We walked the project with an experienced traffic engineer and he told us it would be relatively simple and inexpensive to reconfigure the bike lane to the latest safety standards:

By simply swapping the bike lane and the row of parked cars on the north side of the street, we could protect people who are biking west with parked cars. As per best practice, there would be a three foot buffer between people parking and the bike lane. Load zones, short term parking, and disabled parking would be accommodated for adjacent businesses and residents.

By adding a foot to the bike lane on the south side of the street, there is enough space to install a three foot buffer with a protecting barrier such as posts or hit rated planter boxes with flowers or low shrubs (more expensive but more aesthetically pleasing and safer). This can be done by narrowing the drive lanes to ten feet from eleven feet, which is the best practice to encourage safe speeds and yielding to pedestrians according to the National Association of City Transportation Officials.

These upgrades would dramatically increase safety, not remove parking or travel lanes, and be relatively inexpensive.

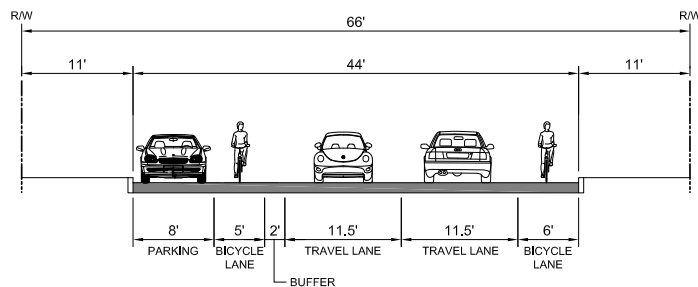
We would be open to other safety improvements for people walking in addition to these bike lane upgrades.



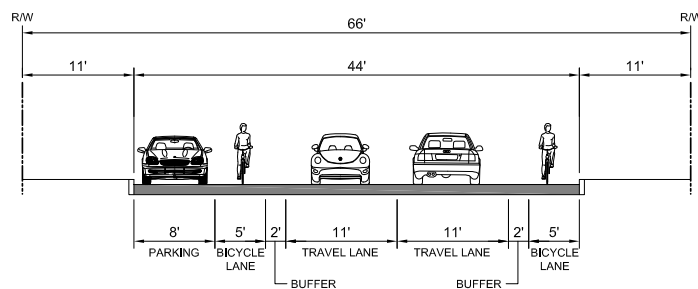
Roy St: Warren Ave N to 1st Ave N



Roy St: 1st Ave N to 5th Ave N



Existing cross section of Roy St, 1st Ave N to Warren Ave N



Existing cross section of Roy St, Warren Ave N to 5th Ave N



Roy St at 3rd Ave N looking west

# Seattle Department of Transportation (SDOT) Review

## Project Description

Roy St is a principal arterial street with one lane of traffic in each direction. There are existing buffered bike lanes along the corridor between 1st Ave N and 5th Ave N. There is on-street parking on the north side of the street. Five of the 8 intersections along the corridor are signalized. The remaining three are controlled by stop signs on the side streets.

Based on field visits and a review of the infrastructure, a protected bike lane can be installed on this corridor between 1st Ave N and 5th Ave N. The cross section would be two 10-foot general purpose lanes, 8-foot parking on the north side of the street, 3-foot buffer, and two 5-foot bike lanes. The intersection of Roy St and 3rd Ave would be modified to remove the eastbound and westbound left turn lanes. The parking lane would be discontinued on the north side in advance of the intersection and create a shared 17-foot wide lane which could be used by right turning vehicles.

The bike lane would be protected using white plastic posts, raised reflective pavement markers, and pavement markings. Because the protected bike lane is single-direction, no bicycle specific signal phasing would be installed, however green bike lane markings would be added at each intersection and crossing each intersection.

The intersection of Roy St with Queen Anne Ave N does not have space to install either a conventional bike lane or protected bike lane without the removal of the right or left turn lane. An in depth traffic study is recommended to review the operations of this intersection to determine if one of the lanes can be removed to facilitate the installation of a protected facility. This study would also review the signal operations to determine whether special phasing is possible to create a connection between the offset legs of Roy St. This project includes funding for an in-depth traffic study along with funding to implement signing, channelization, and signalization improvements recommended in that study.

## Constructability

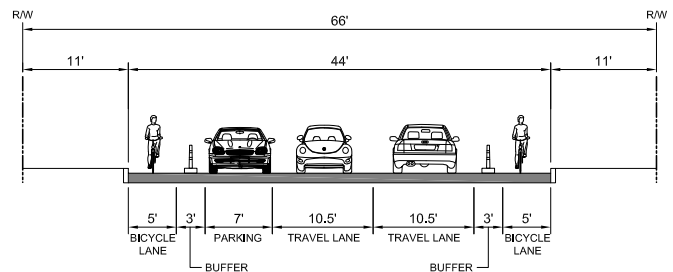
- Work will be limited to pavement markings and signal modifications, including signal head readjustments at 3rd Avenue N and new loop detector installation.

## Impacts

- Parking will be removed on the east leg of 3rd Ave N to allow the installation of a right turn lane. Parking may also be restricted near the side streets and at each driveway to increase visibility of people on bikes to turning motorists.

## Benefits

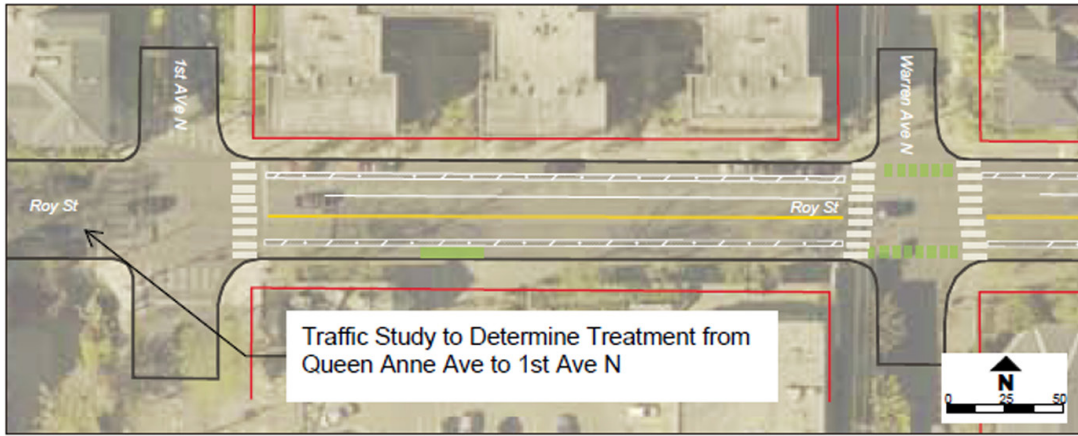
- Enhanced safety for bicyclists along the corridor. Meets the requirement of the Bicycle Master Plan.
- Increased safety for pedestrians with shorter crossing distances.



*Proposed cross section of Roy St, 1st Ave N to 5th Ave N*



# Seattle Department of Transportation (SDOT) Review



Roy St, Queen Anne Ave N to 3rd Ave N

# Seattle Department of Transportation (SDOT) Review



Roy St, 3rd Ave N to 5th Ave N