The First Modern Roundabout Plan in San Leandro, California

Wednesday, June 26, 2019
ITE Western District Annual Meeting
Project Background - Project History and Timeline

2006 – Intersection analysis and roundabout feasibility study.

2008 – Preliminary geometric design and cost estimate. Project put on hold.

2014 – Project resumes. Traffic study was updated per Caltrans recommendations.

2015 – Traffic study was completed.

2016 – Preliminary investigations / initiate detailed design phase were prepared by BKF. In September 1st Public Meeting was conducted.

2017 – Supplemental traffic analysis to support the proposed roundabout project was prepared by W-Trans. In July 2nd Public Meeting was conducted.

2018-2019 – For acquiring additional right-of-way, City continues process of negations with City of Oakland and Caltrans

2019-2020 - PS&E

2020-2021 – Construction
Project Background
Project Background – 2014 Peak Hour Counts
Project Background – Current Problems

- Long wait times (poor Level of Service)
- Speeding / reckless driving
- Accident rate is over three times higher than statewide average based on traffic volume
Project Goals

- Reduce accident rate
- Decrease wait time for cross traffic (Foothill Blvd and Superior Ave)
- Provide traffic calming to reduce speeds
Project Background – Options Considered (Traffic Signal or Roundabout)
What is a Roundabout?

A roundabout is a circular intersection configuration that forces drivers to slow down as they approach the intersection and limits drivers' circulating and exit speeds (15 to 25 mph). Entering drivers yield to those already circulating the roundabout. Roundabouts do not include "STOP" signs and traffic signals and are not the same as a traffic circle.

A roundabout was the recommended intersection control in both the 2006 and 2015 studies of the MacArthur/Superior intersection.
Bike ramps will allow bicyclists to ride around the roundabout.

Code exception will be needed to allow for adult cyclists to ride on the sidewalk.
Design Consideration – Truck Movements
Design Consideration – Fire Engine Movements
Previous Conceptual Design

- Roundabout Planting: Low, colorful, low-maintenance, drought-tolerant plants with bold patterns encouraging circular movement.
- Opportunity Area: Optional median island planting with low, drought-tolerant, low-maintenance plants.
- Existing driveway, Typ.

- New bike ramp for cyclists wishing to dismount & avoid cycling through roundabout.
- Concrete island nosing, Typ.
- Planting berm, Typ., to discourage pedestrians from entering roundabout travel lanes.

- Existing tree, Typ.
- New tree for sitting area.
- Low seatwall.
Conceptual Design A
Roundabout with Separated Bike Lanes

EXHIBIT 47: ELEMENTS OF ROUNDABOUTS WITH SEPARATED BIKE LANES

1. Bicycle Crossing
2. Yield Markings
3. Bicycle Stop Line
4. 5 ft. Curb Radius
5. Channelizing Island
Project Cost Estimates and Timeline

- Total project cost - $1.4 Million Dollars, including $1.0 Million Dollars for Construction Phase

- PS&E – to be completed in 2019 or 2020

- Construction – 2020 to 2021
Questions & Comments

Reh-Lin N. Chen –
rchen@sanleandro.org
510-577-3438

Kyle Lie –
klie@sanleandro.org
510-577-3302