Presentation Overview

» Project Planning Process
» Project Components
» Project Implications
» Future Steps
West Bound On-Ramp
Injuries + Fatalities: 38% above State Average
Total: 52% below State Average

West Bound Off-Ramp
Injuries + Fatalities: 19% below State Average
Total: 115% above State Average

East Bound Off-Ramp
Injuries + Fatalities: 3% below State Average
Total: 33% below State Average

East Bound On-Ramp
Injuries + Fatalities: 95% above State Average
Total: 35% above State Average

Interchange is also identified by the City of Berkeley as “high stress” for bicyclists.
Source: 2017 City of Berkeley Bicycle Plan
## Past Studies

- West Berkeley Parking and Circulation Study (1998)
- Gilman Street Interchange Improvement Study (2005)
- Project Study Report-Project Development Support (PSR-PDS) (2014)

**These studies concluded:**
- Signalization and stop signs would both fail.
- No room for diamond interchange.
- Only workable solution is roundabouts.

## Project Partners

- Caltrans
- Alameda County Transportation Commission (ACTC)
- City of Berkeley
- City of Albany

## Consultant Team Key Members

- Parsons – Project Management
- OMNI-MEANS – Roundabout Design
- TJKM – Traffic Engineering
- PlaceWorks – Public Engagement
Project Purpose

» Improve safety for all modes of transportation.
» Simplify and improve the navigation, mobility, and traffic operations at the I-80/Gilman Street interchange.
» Reduce congestion, vehicle queues and conflicts at the I-80/Gilman Street interchange.
» Improve local and regional bicycle connections and pedestrian facilities through the I-80/Gilman Street interchange.

Project Planning Meetings To Date

» March 15, 2016: Meeting with Public Agencies
» March 17, 2016: Meeting with Community Based Organizations
» March 24, 2016: Meeting with Business Owners
» April 14, 2016: Meeting with Pacific Steel Casting
» April 27, 2016: Open House
» May 4, 2016: Meeting with Business Owners
» August 26, 2016: Meeting with Golden Gate Fields
» August 29, 2017: Meeting with Business Owners
» Late 2017 – 2018: On-going meetings with City of Berkeley, City of Albany, and other stakeholders
Design Elements

» Two roundabouts
» Landscaped areas
» Sidewalks and at-grade path through interchange
» Pedestrian / bike overcrossing (POC) over I-80 to the north or south
» Gilman Street cycle track to new signal at Fourth Street
» Bike improvements from Gilman / Fourth Street to Codornices Creek
» New access to Golden Gate Fields stables
» Bay Trail gap closure at foot of Gilman Street

Illustrations are conceptual drafts subject to change
Design Elements

Northern POC Option

Roundabout Operations

- Only need to watch for traffic coming from one direction at a time
- Shorter, simpler pedestrian crossings
- Slower traffic
- Pedestrian refuges
- Landscape separation
- Shared-use path
Roundabout Safety – Why Roundabouts?

» Improves overall safety
» According to the Federal Highway Administration, installing a roundabout typically results in:
  • 76% reduction in injury collisions
  • 90% reduction in fatality collisions
  • 40% reduction in pedestrian injuries
  • 75% fewer conflict points compared to standard intersections

Travel Paths Through Roundabouts
From Gilman St To Golden Gate Fields and Eastshore State Park
Illustrations are conceptual drafts subject to change

Travel Paths Through Roundabouts
From Eastshore State Park to I-80 East
Illustrations are conceptual drafts subject to change
Travel Paths Through Roundabouts

From West Frontage Road south Gilman Street to I-80 East

Illustrations are conceptual drafts subject to change

Travel Paths Through Roundabouts

From I-80 East to Gilman Street

Illustrations are conceptual drafts subject to change
Travel Paths Through Roundabouts
From I-80 West to Gilman Street

Bike and Pedestrian Improvements at the Roundabouts

- Bike only exit
- Sidewalk or shared use path on north side
- Gilman St crossing
- Shared Use Path on south side
- Bike and Pedestrian Connection
Travel Paths Through Roundabouts
Pedestrian/Bicycle route from West Frontage Road, north of Gilman Street, to east

Illustrations are conceptual drafts subject to change

Travel Paths Through Roundabouts
Pedestrian/Bicycle route from West Frontage Road, south of Gilman Street, to east

Illustrations are conceptual drafts subject to change
Roundabout Visual Simulation

*Eastern Roundabout viewed from northwest near Golden Gate Fields*

Pedestrian Overcrossings

*Southern POC Option*

Illustrations are conceptual drafts subject to change.

Illustrations are conceptual drafts subject to change.
Pedestrian Overcrossings

Northern POC Option

Tom Bates Regional Sports Complex
Golden Gate Fields
Bay Trail
W Frontage Rd
Bay Bridge east span path
University Avenue bike/pedestrian overcrossing

Pedestrian Overcrossing Features

Separate bicycle and pedestrian areas

Bay Bridge east span path
University Avenue bike/pedestrian overcrossing

Illustrations are conceptual drafts subject to change
South Pedestrian Overcrossing Option

Visual simulation from Interstate 80 Eastbound looking north

Illustrations are conceptual drafts subject to change

South Pedestrian Overcrossing Option

Visual simulation from Bay Trail southwest of Gilman Street

Illustrations are conceptual drafts subject to change
South Pedestrian Overcrossing Option

Visual simulation from Eastshore Highway southeast of Gilman Street

North Pedestrian Overcrossing Option

Visual simulation from Interstate 80 Westbound looking south

Illustrations are conceptual drafts subject to change
North Pedestrian Overcrossing Option

Visual simulation from west end of Gilman Street

North Pedestrian Overcrossing Option

Visual simulation from Harrison Street looking west
Two-Way Cycle Track

- Bancroft Way, Berkeley
- San Pablo Ave, Albany

Gilman Street Cycle Track (Southern POC)

- Illustrations are conceptual drafts subject to change
Gilman Street Cycle Track (Northern POC)

- Gilman St
- 2nd St
- 4th St
- Red-D-Arc
- Cycle Track

Illustrations are conceptual drafts subject to change

Gilman St to Codornices Creek Connection

- Restriped parking and crosswalks
- New bicycle sharrows
- New traffic signal at Gilman and 4th St
**Project Implications**

» Vehicle Queuing
» Right-of-Way issues
» Change in access between Gilman and Eastshore Highway
» Changes to Golden Gate Fields access
Wesobound Vehicle queues extend 183’

Vehicle Queue

Illustrations are conceptual drafts subject to change

Right-of-way acquisition for Northern POC

The project requires ROW takes on west side of freeway.

Southern POC requires no additional right-of-way acquisitions on east side of freeway.

Northern POC requires limited right-of-way acquisition at Red-D-Arc / Airgas, Pacific Steel and Budget Rent-a-Car (where curb cuts will be moved from Gilman to Second).

Right of way take

Illustrations are conceptual drafts subject to change

Right-of-Way Acquisition
Change in Vehicular Access

Illustrations are conceptual drafts subject to change

From I-80/Gilman St to Southbound Eastshore Highway

Northbound Eastshore Highway to Gilman St/ I-80 ramps

SB Eastshore Highway Access via Second St

Illustrations are conceptual drafts subject to change
Options to Address Change in Access

» Enhanced paving, streetscape and signage

» Full roundabout access northbound
  • Access to and from Eastshore Highway north of Gilman
  • Includes right turn from Gilman westbound to Eastshore Highway northbound
  • Access from Gilman to Eastshore Highway southbound would still be closed

» Right turn only northbound
  • From Gilman westbound to Eastshore Highway northbound only

» One-way Second Street south of Gilman Street
  • From Gilman to Page Street

Illustrations are conceptual drafts subject to change
New Paving, Enhanced Streetscape and Signage

Options to Address Change in Access

Full Roundabout Access Northbound

- Bike and vehicle access to northbound Eastshore Highway from the roundabout
- Right turn lane from Gilman westbound
- Would not include direct access from roundabout to Eastshore Highway southbound

Illustrations are conceptual drafts subject to change

Visual simulation of Second Street looking north from Gilman
Options to Address Change in Access

**Full Roundabout Access Northbound**

**Implication #1**

Longer, unacceptable queuing

**Implication #2**

Three right turns from a single lane could confuse motorists
Additional right of way impacts to buildings result in full parcel take and relocation of business.

**Options to Address Change in Access**

**Full Roundabout Access Northbound**

**Implication #3**

Full take of Red-D-Arc building and business

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**Options to Address Change in Access**

**Right Turn only from Gilman St westbound to Eastshore Highway northbound**

Illustrations are conceptual drafts subject to change
Options to Address Change in Access

Right Turn Only Implications

- Queuing returns to previously predicted levels
- Shorter queuing length means that adequate signage could be provided
- Same ROW take as for roundabout with full northbound access

Illustrations are conceptual drafts subject to change

From I-80/Gilman St to Southbound Eastshore Highway
Northbound Eastshore Highway to Gilman St/ I-80 ramps

Illustrations are conceptual drafts subject to change

SB Eastshore Highway Access via Second St
Changes to Golden Gate Fields Access

Future Steps

» City presentations
  • Berkeley Transportation Commission: February or March
  • Albany City Council: February or March

» On-going outreach

» Preparation of environmental document

» On-going design and project refinement

» Construction: Late 2019 through 2022