

# City of San Diego Prefabricated Permanent Roundabouts

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# Cycle 11 vs Cycle 12

Taylor St. & Hotel Circle North/South

- Version 1: \$400k B/C = 13 (failed to meet threshold)
- Version 2: \$220k B/C = 27 (successful grant award)







**Credit: FHWA Small Business Program.**



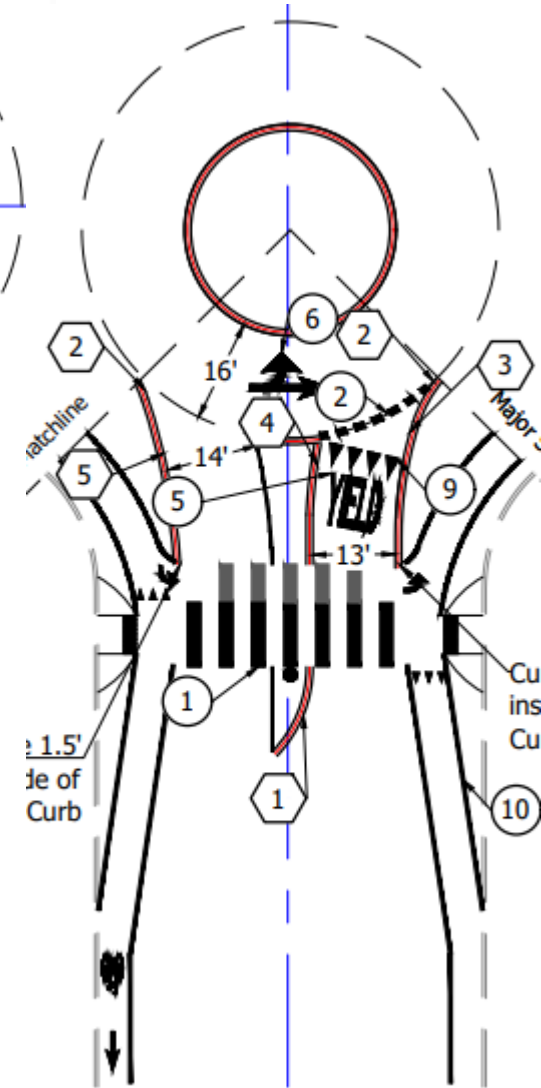
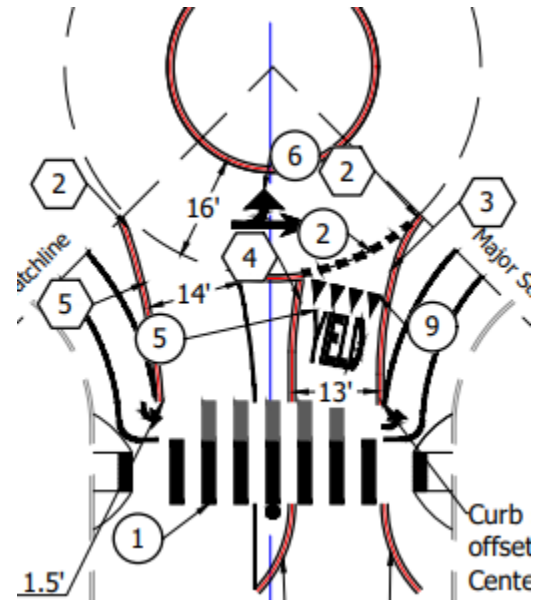
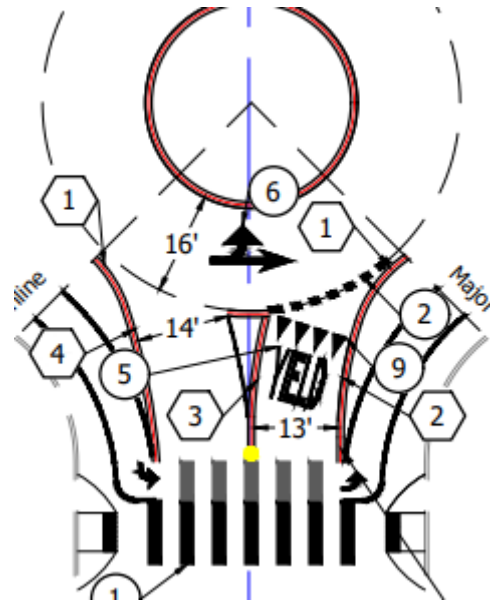
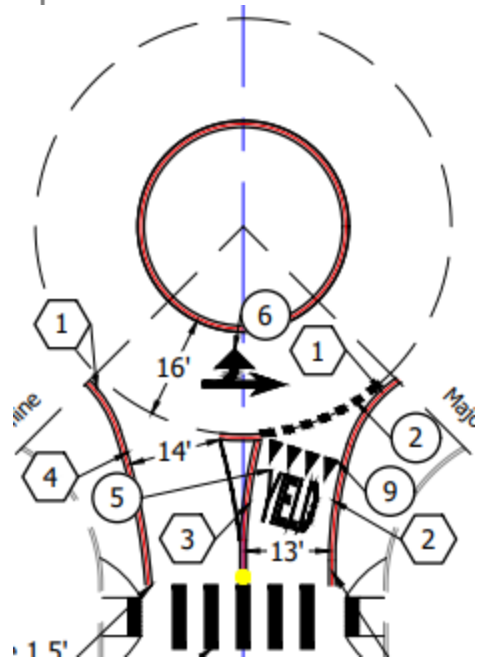


- Perimeter-only
  - Interchangeable parts
  - Painted islands
- Pilot innovations:**
- Quick-build ped ramps
  - Quick Design
  - Quick Layout





**Quick-build Pedestrian Ramps**



# The ultimate intersection solution *(2-layer protection for redundancy)*

## Driver Workload Layer

- Direct, Simple, Spaced  
*because people make mistakes*



## Crash Energy Layer

- Angle, Speeds (no severe conflicts)  
*because people are fragile*





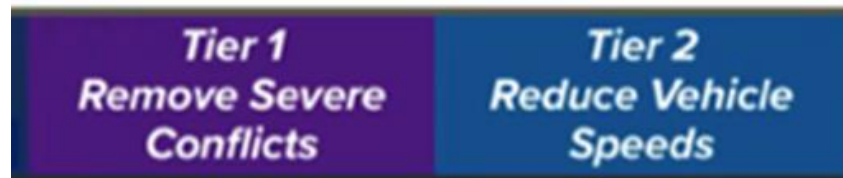
# First principles -> Empirical evidence

- **Driver workload**



- **Cuts 90%-100% of fatal crashes**

- **Crash energy**

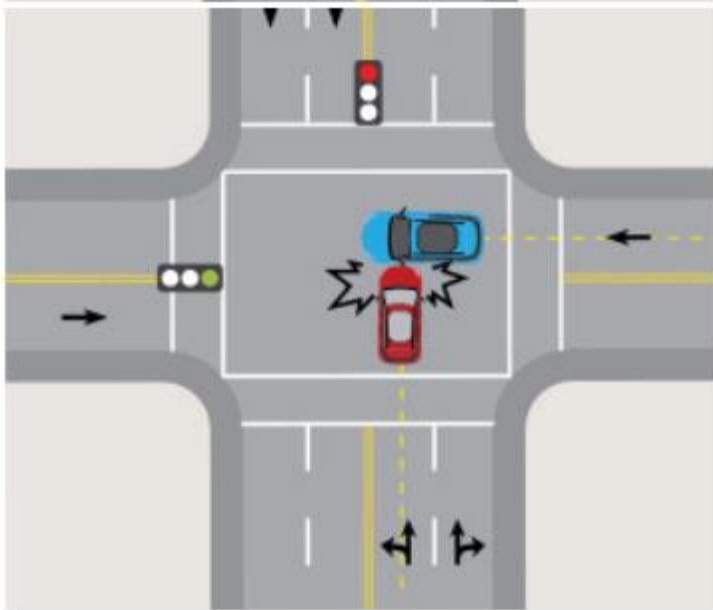


- **Cuts 99.9% of fatal ped/bike crashes**



# Past fatals are poor predictors

## Most common features?



- 4x2
- Transit routes
- 3+ injury crashes



# A high production rate solves many ills.

## ROW

- screen for 4x2

## Capacity

- screen for 1-lane
- removable, use today's traffic

## Design

- screen for templates

## Outreach

- pressure is off, efficient
- focus between the RABs



# Ribbon cutting > everything else.

- Political support is only rewarded if installation happens before re-election
- The public hates construction
- You don't have to sell the value of saving money
- Every week, 1 life is lost in SD
- Only installation saves lives





# You got this!

