

VALLEY CENTER ROAD CORRIDOR CONCEPT PLAN

Tradeoffs & Best Practices



MARCH 12, 2019

Intersection Controls | Roundabouts

- Vehicles yield to traffic that is already in the roundabout
- Traffic travels counterclockwise around a center island
- Bikes merge with traffic before entering the roundabout, or dismount and use sidewalks



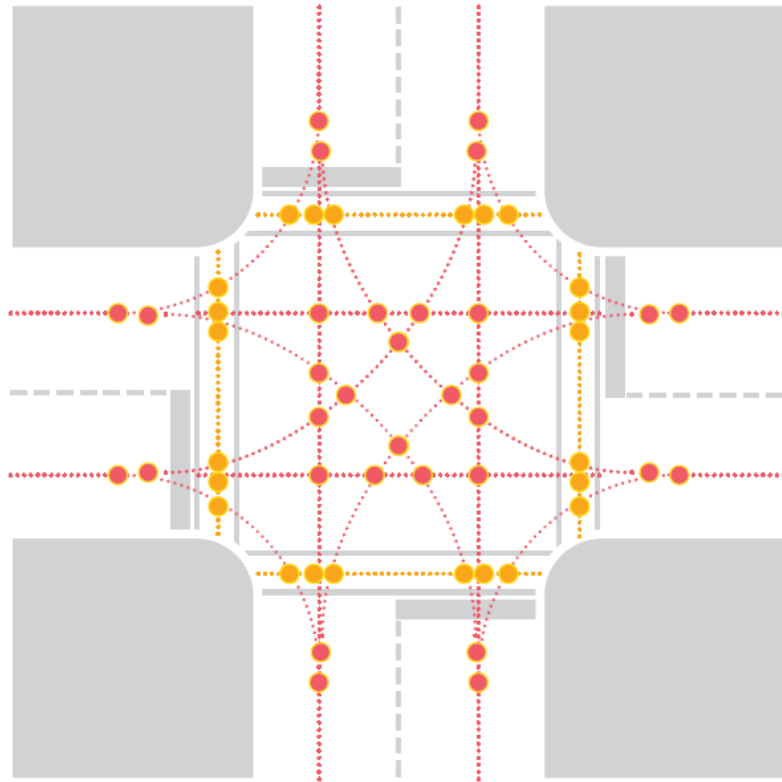
Flickr.com: Grand Canyon National Park (CC BY 2.0)

Intersection Controls | Signalized Intersections

- Vehicles comply with traffic signals, coming to a full stop at a red light
- Traffic travels in opposite directions
- Bike lanes continue through intersection



Roundabouts vs. Intersections | Conflict Points



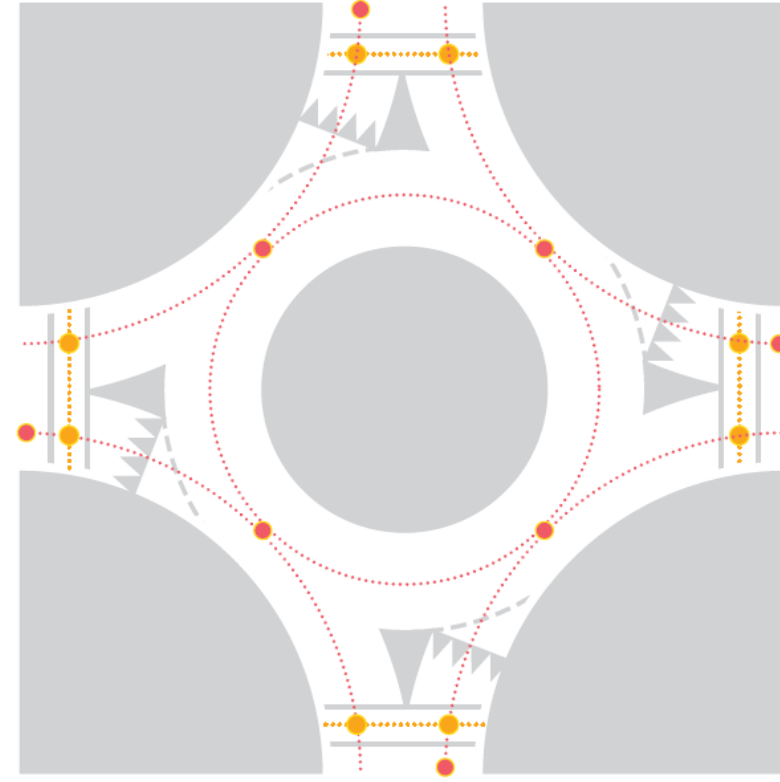
Four Way Stop



32 Vehicle Conflicts



24 Pedestrian Conflicts



Roundabout



8 Vehicle Conflicts

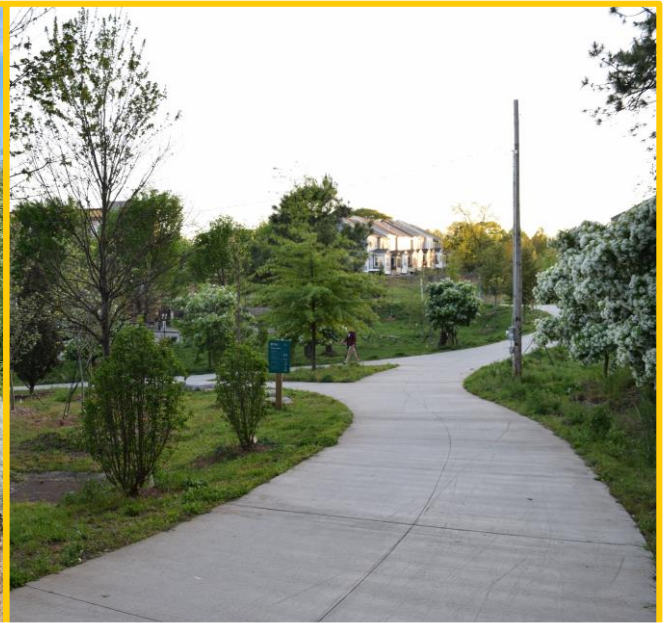
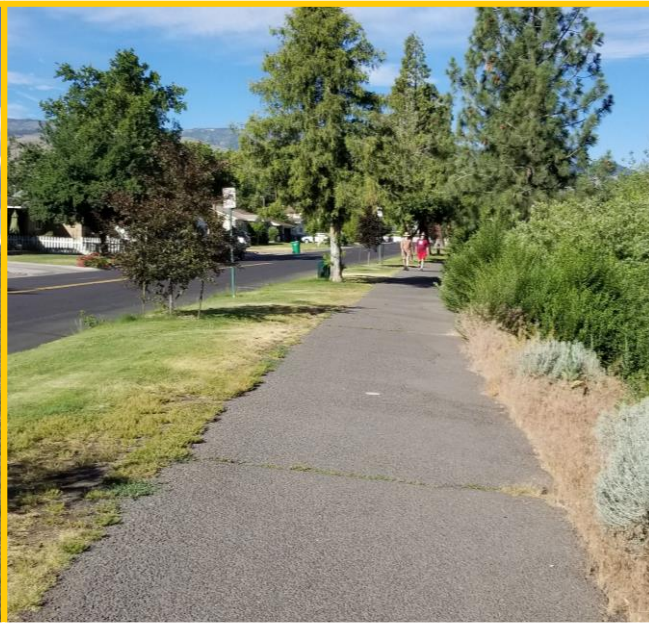


8 Pedestrian Conflicts

Roundabouts vs. Signalized Intersections | Advantages of Each

	ROUNDABOUTS	INTERSECTIONS	WHY?
# of Injury Collisions	✓		Vehicles must slow down to enter roundabouts
Collision Severity	✓		Vehicles in roundabouts travel in the same direction
Roadway Space		✓	Signalized intersections require less space
Traffic Flow	✓		Vehicles yield at roundabouts but are not required to stop
Comfort		✓	People are familiar with how signalized intersections work
Visual Features	✓		Roundabout center islands present opportunities for community entry features/landscaping
Construction Cost		✓	Signalized intersections can be less expensive to construct
Operating Cost	✓		Roundabouts can be less expensive to maintain and operate after construction

PATHS & TRAILS



NATURAL SURFACE TRAILS

SIDEPATHS

SHARED USE PATHS

Accessibility



Cost



Comfort



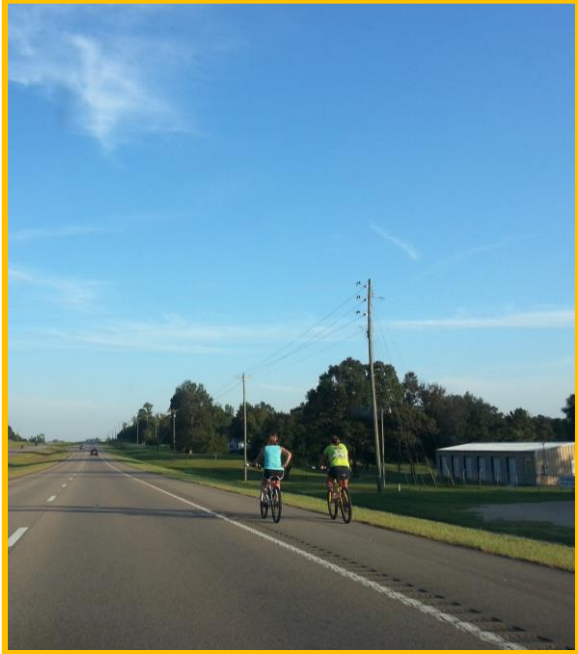
Safety



Natural Aesthetics



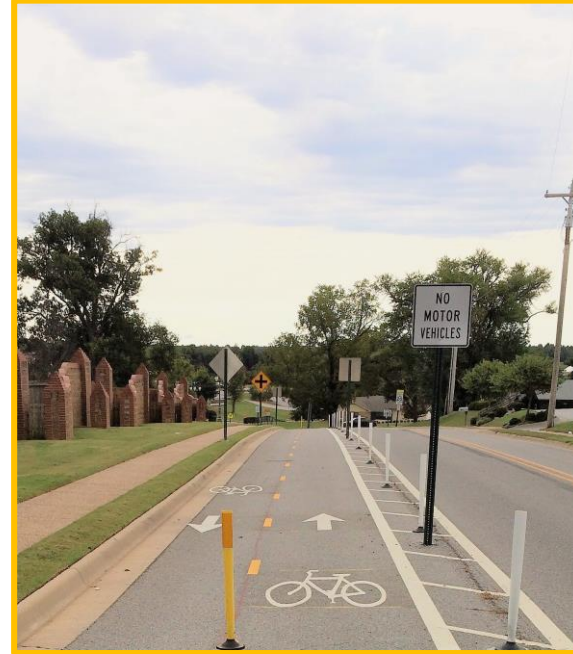
Bikeways



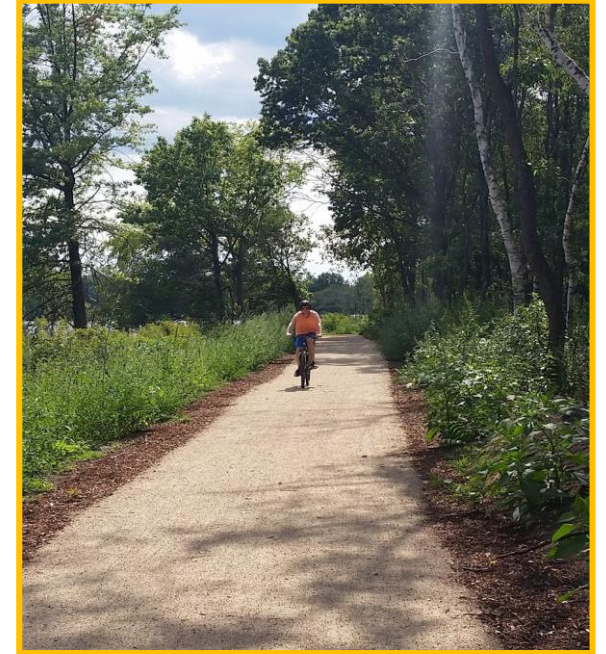
WIDE SHOULDER



BIKE LANE



CYCLE TRACK



BIKE PATH

Accessibility, cost, comfort, and safety increase

Traffic Calming



RAISED MEDIANS



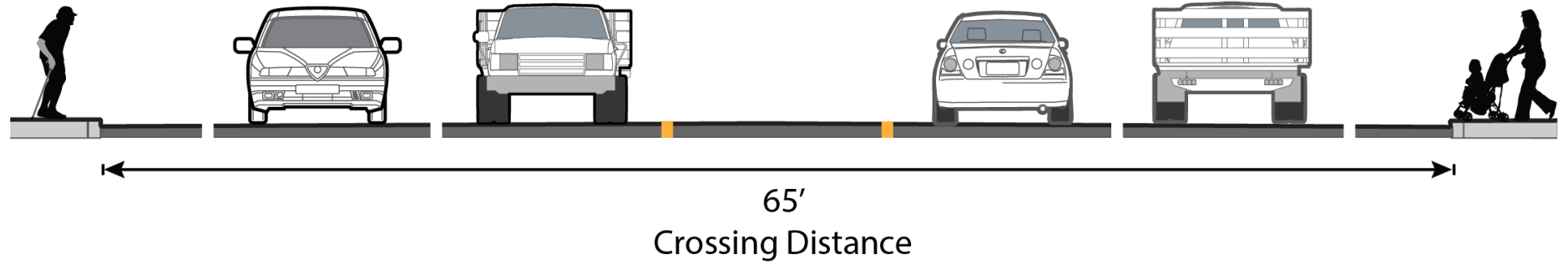
BULB-OUTS



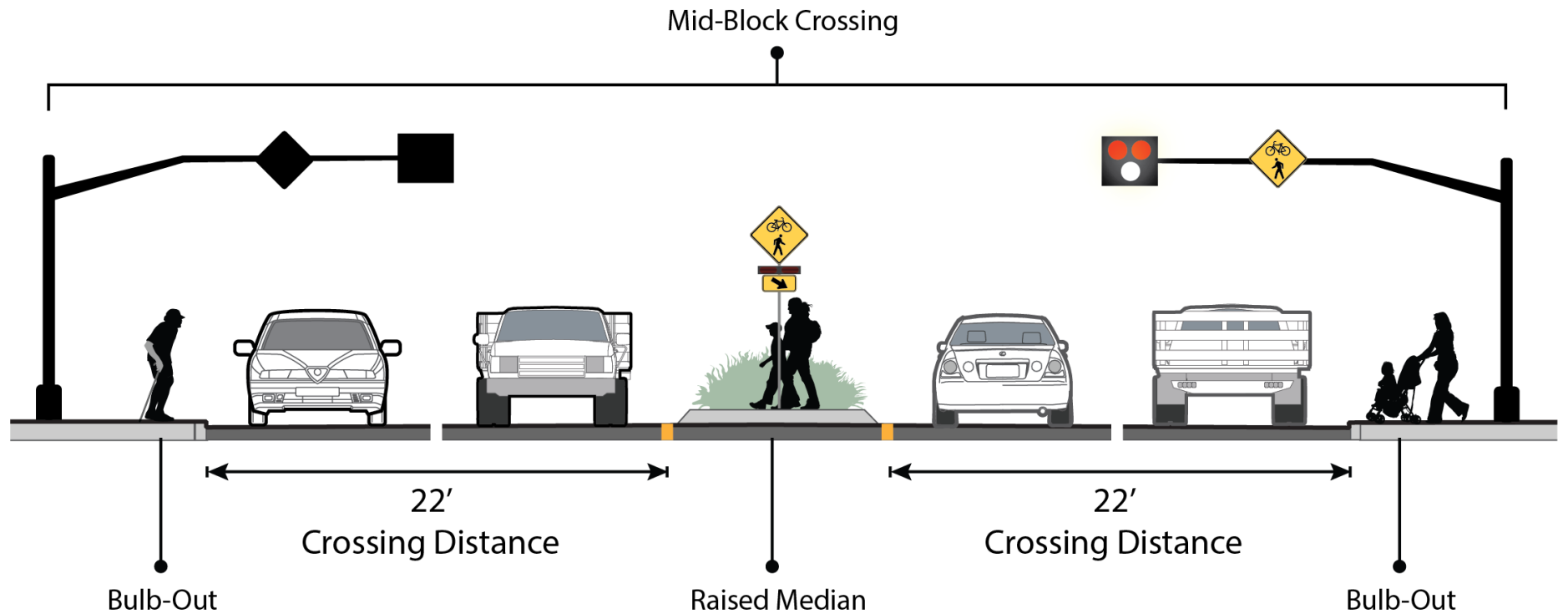
MID-BLOCK CROSSINGS

 Improved accessibility, comfort, and safety for people walking

WITHOUT TRAFFIC CALMING



WITH TRAFFIC CALMING



Other Features



COMMUNITY ENTRY FEATURES

LANDSCAPING

LIGHTING

	COMMUNITY ENTRY FEATURES	LANDSCAPING	LIGHTING
Cost		✓	
Comfort		✓	✓
Safety		✓	✓
Air Quality		✓	
Branding	✓		