

# W. San Antonio Street Roadway Reallocation Project



# Roadway Reallocation

Provides opportunities to consider how street space affects the competing priorities of:

Safety

Access

Mobility

Parking

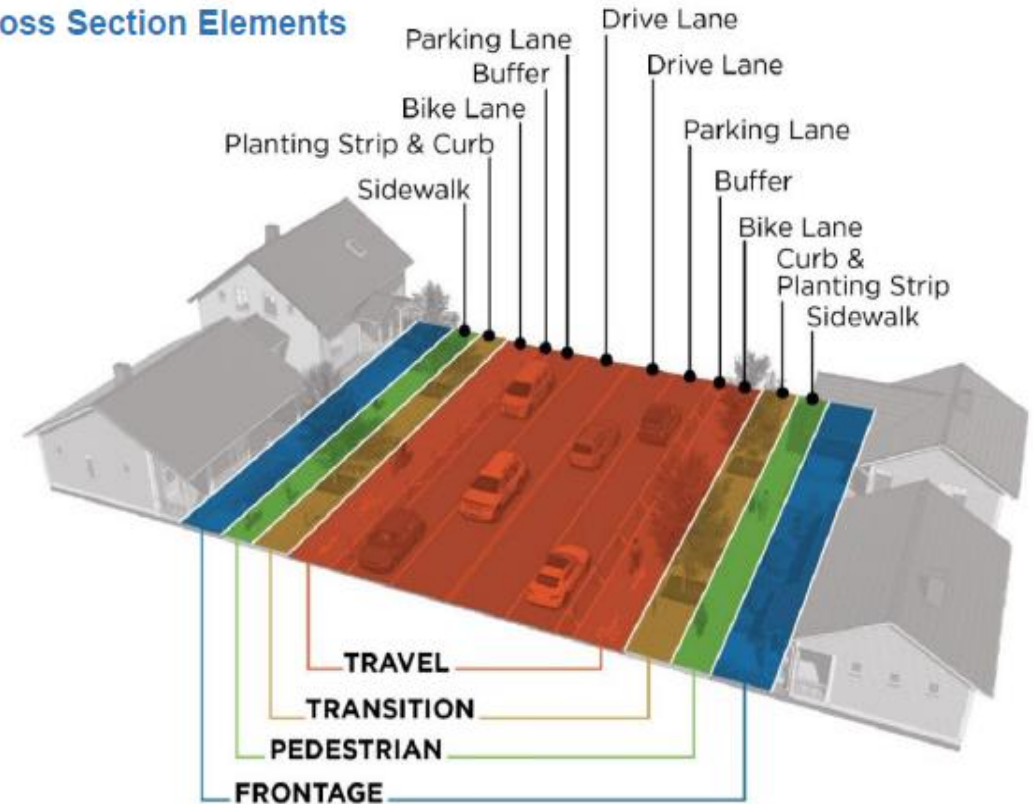
Economy

Environment

# Reallocation = Street Redesign = Tradeoffs

- Reallocation looks at elements within the public right-of-way
- Changing cross section elements will have impacts (+/-)
- It can take time to realize the full benefits of change

Figure 3: Cross Section Elements



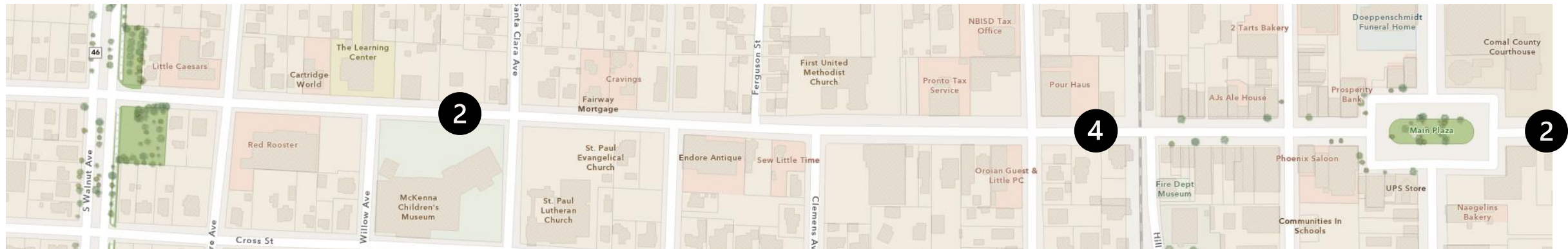
*NCHRP Report 1036*

# Reallocation Framework

- ▲ Define limits and goals
  - Driving, walking, access, parking, aesthetics, etc.
- ▲ Consider the context through safety
- ▲ Is there enough space?
- ▲ Develop design options
- ▲ Evaluate and choose the cross-section that serves the community's vision and needs

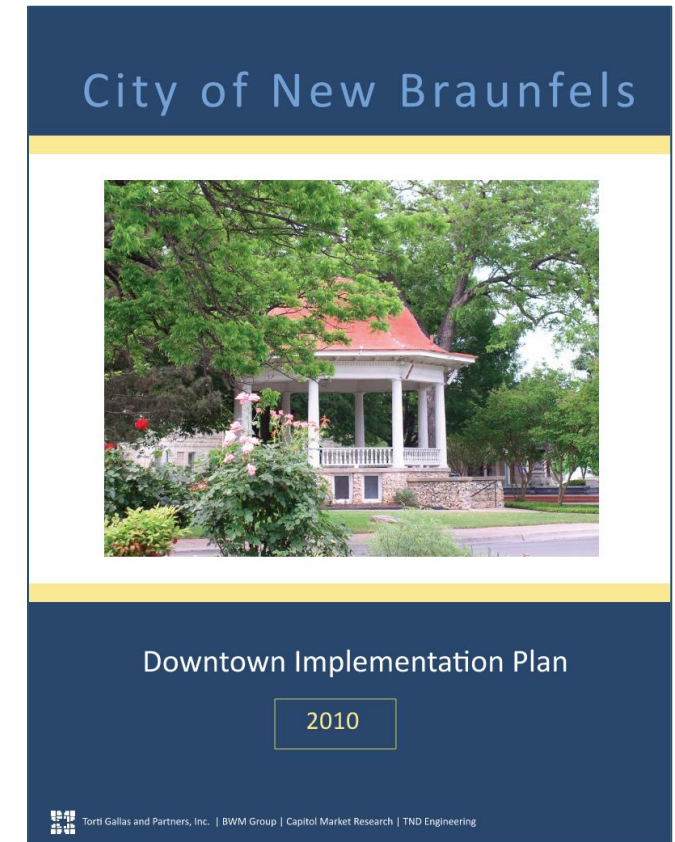
# W San Antonio St (S Walnut Ave – Main Plaza)

- ▲ East-west arterial through downtown
- ▲ Access from IH 35/Spur St, S Walnut Ave, and Main Plaza
- ▲ Primarily serves adjacent commercial and residential areas
- ▲ Sidewalks and on-street parking
- ▲ Right-of-way and travel



# W San Antonio St – Goals and Needs

- City of New Braunfels Downtown Implementation Plan (2010) Recommended Actions
- Circulation & Walkability: Implement “pilot” and potentially permanent traffic calming/connectivity improvements to W San Antonio St
- Aesthetics & Pedestrian Infrastructure: Fill in pedestrian gaps, which may include street furniture, landscaping, trees, and shade



# W San Antonio St – Goals and Needs

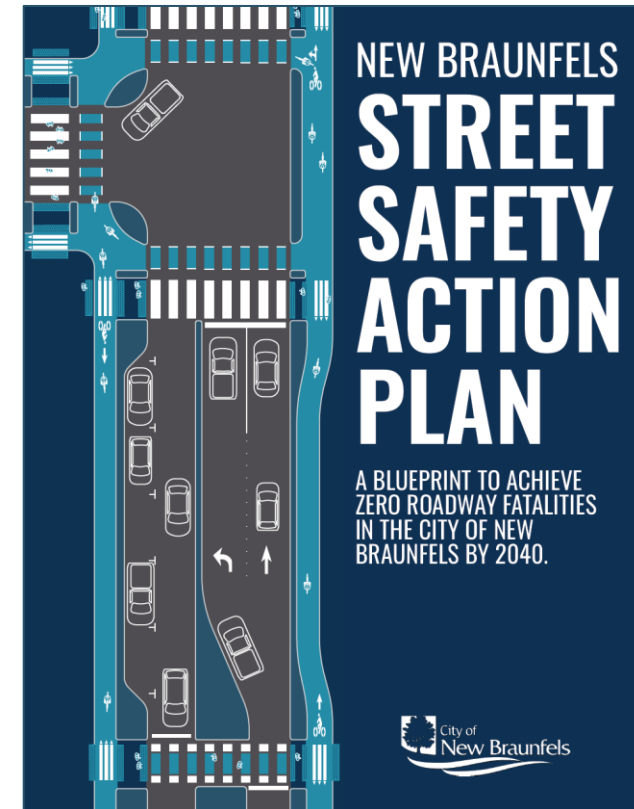
## City of New Braunfels Street Safety Action Plan (Draft 2024) Priority Network

### ■ Clemens Ave – Main Plaza | 2018-2022

- 38 Crashes
- 2 resulting in serious injuries
- 3 involving pedestrians
- 2 involving bike users

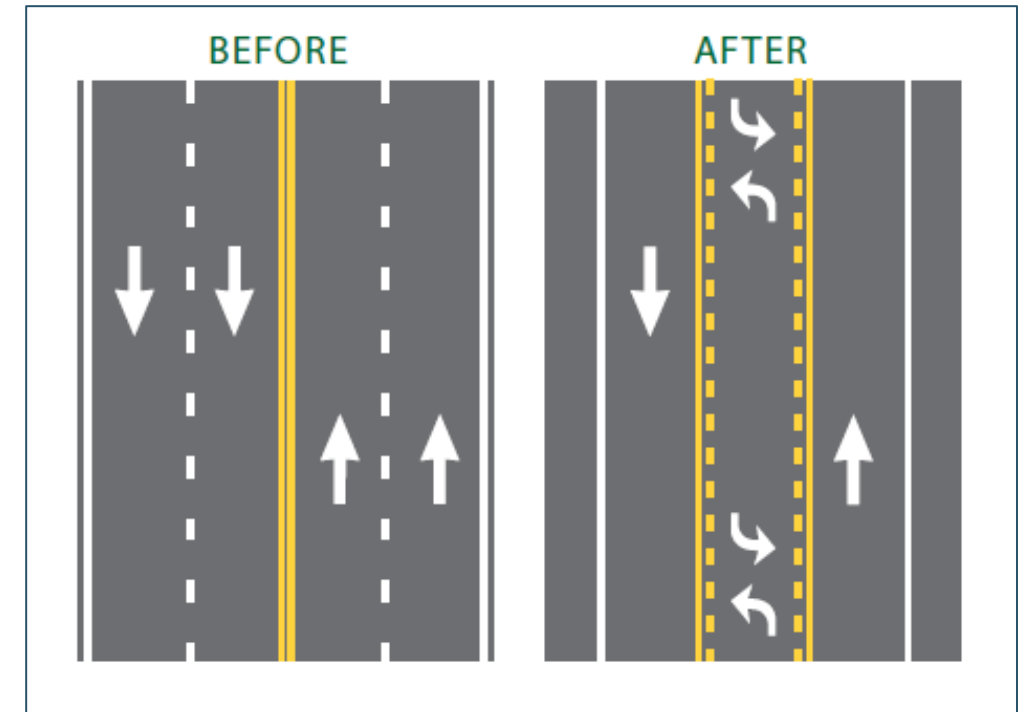
### ■ Factors

- Lane Change
- Speed
- At intersection
- Left turns



# Reallocation Opportunities

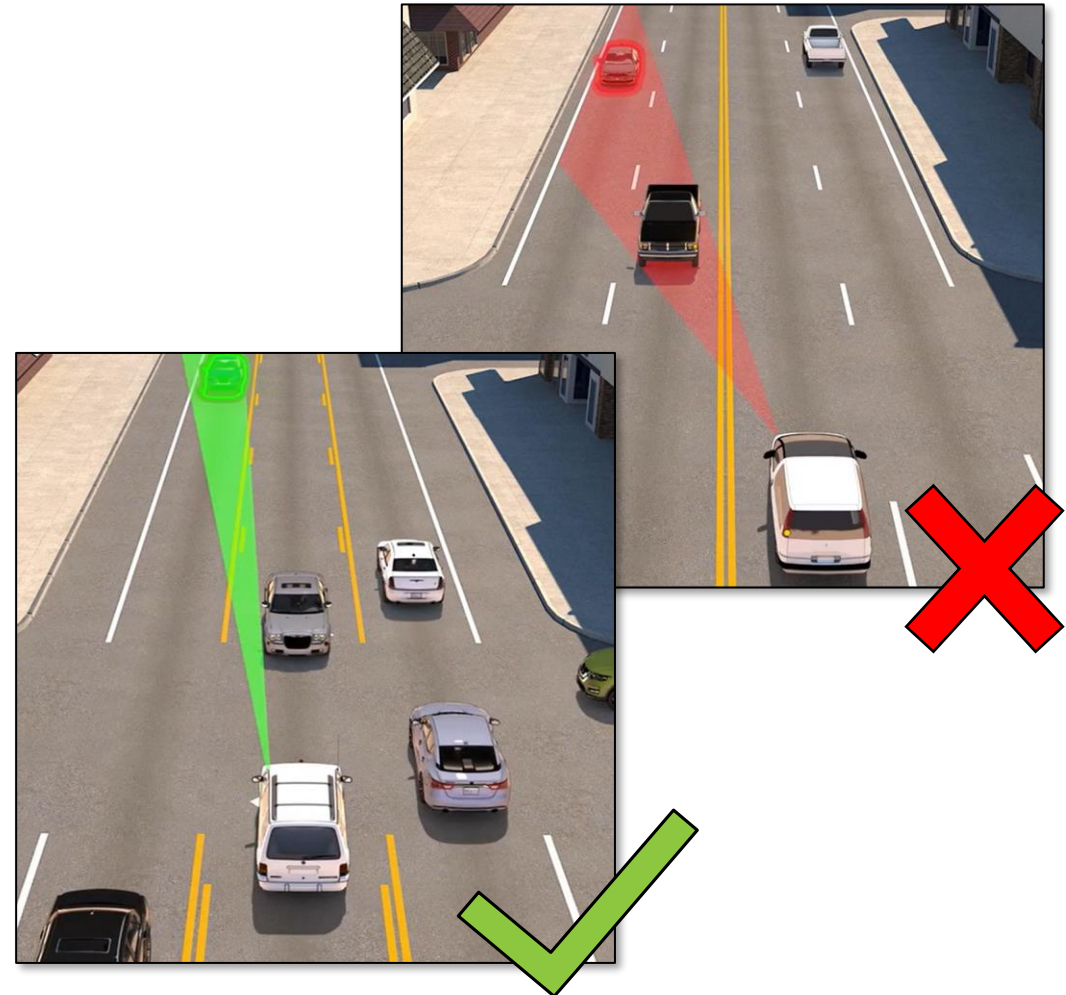
- ▲ Reduce travel lanes from four through lanes to two through lanes with a center turn lane
  - Improves vehicle and ped safety
  - Improves operations at signals
- ▲ Updated parking layout
  - More parking
  - Allows for a buffer between parking and travel lanes
  - Expect delays and lower speeds with parking maneuvers
- ▲ Additional medians and curb extensions





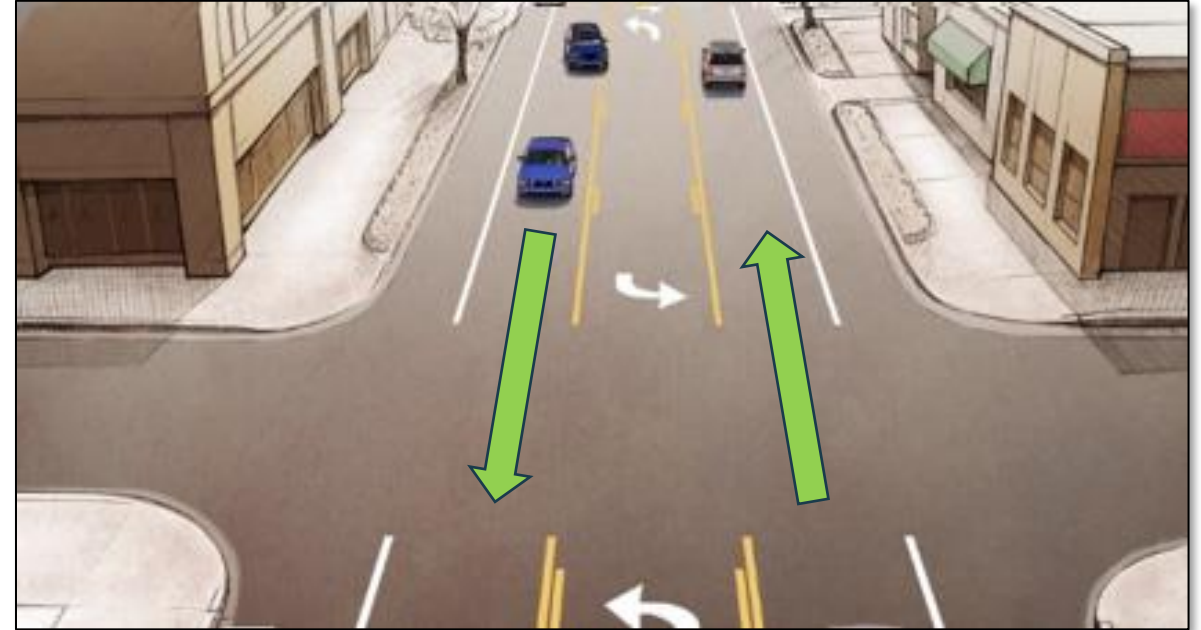
# Improved Vehicle Safety

- ▲ Fewer vehicle crashes by up to 47%
  - Without dedicated turn lanes, drivers slow/stop at any time to make left turns
    - Rear-end crashes
    - Sideswipes
    - Quick lane changes
- ▲ Without turn lanes, drivers can not see the outer opposing lane of traffic
  - Center turn lanes allow drivers to see traffic



# Improved Vehicle Safety

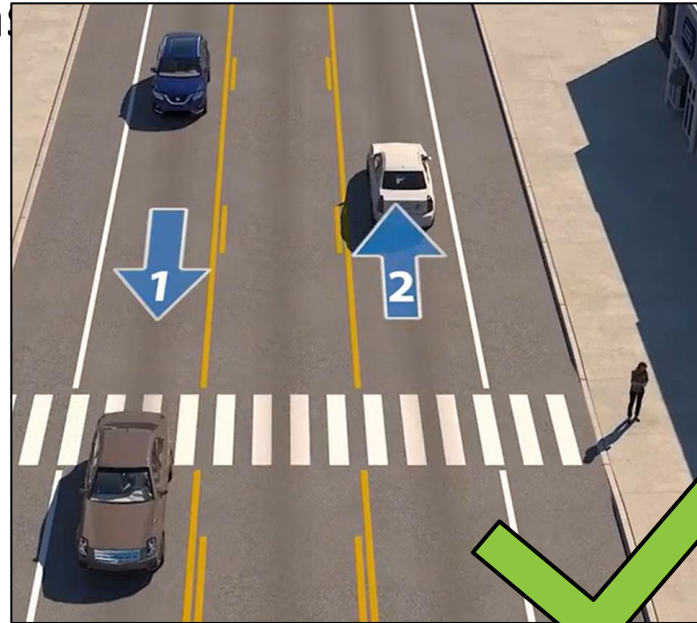
- ▲ Dedicated turn lane allows vehicles slowing/stopping to exit lanes of traffic
- ▲ Three-lane road configurations eliminate frequent lane changing
  - Minimizes traffic flow disruptions
  - Decreases likelihood of conflict



# Improved Pedestrian Safety

## Three-lane roads are safer for pedestrians

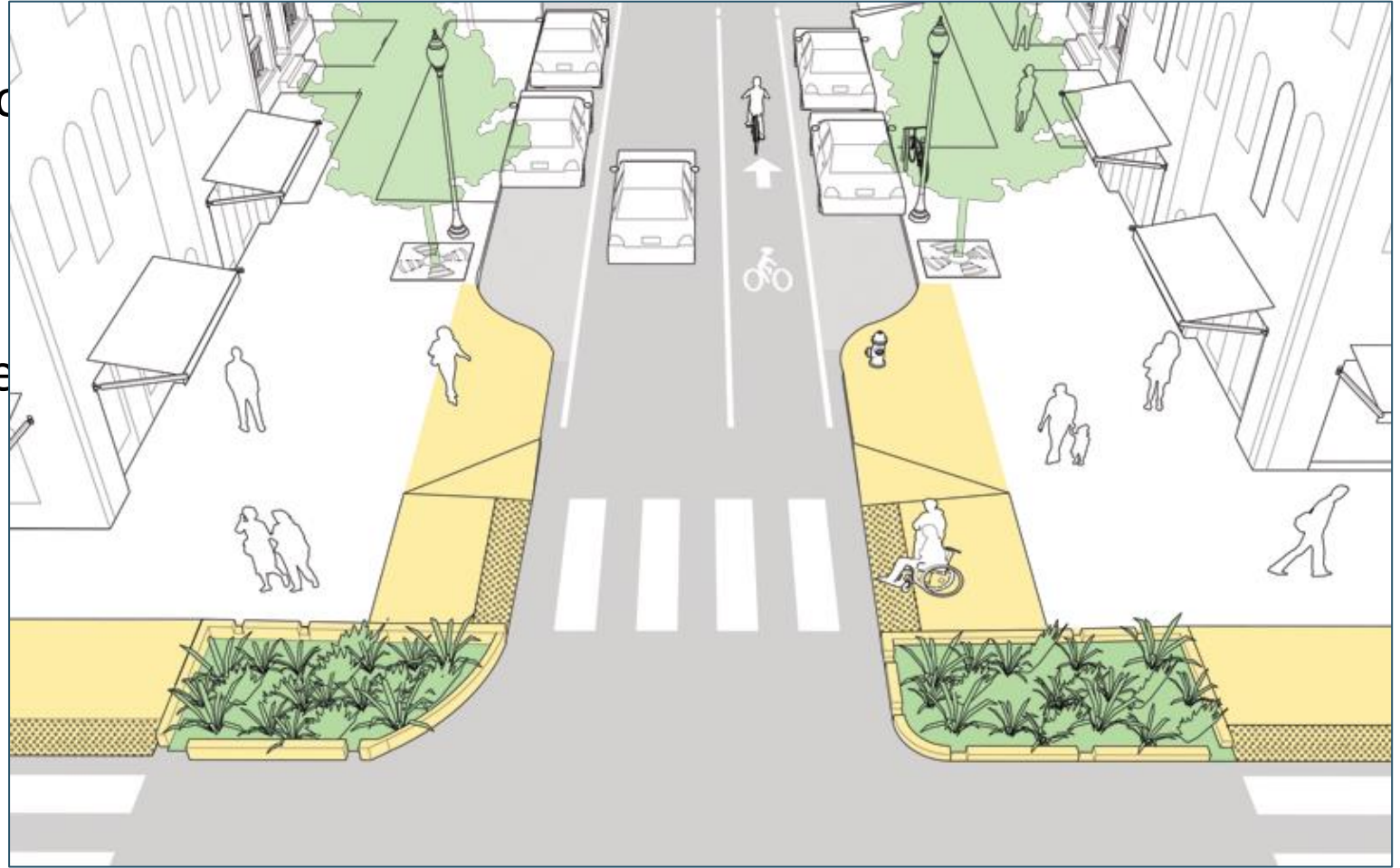
- Fewer lanes to cross
- Easier for pedestrians to judge how quickly traffic is moving
- Easier for drivers to see pedestrians



# Improved Pedestrian Safety

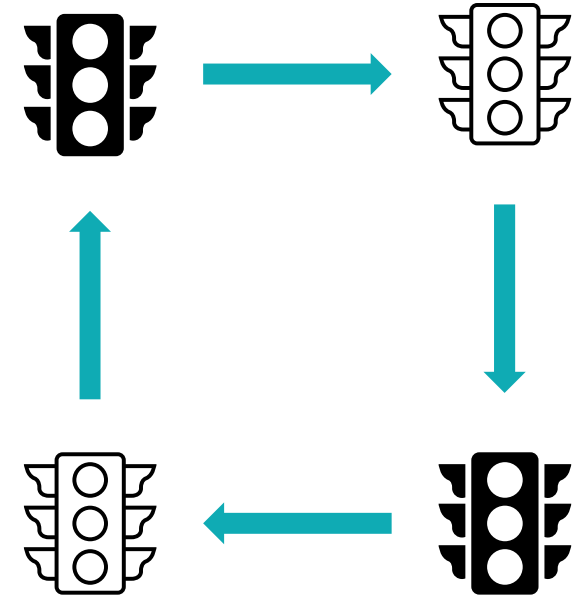
## ▲ Curb extensions

- Increase overall visibility of crosswalks and for pedestrians
- Aligned with the parking lane
- Reduces crossing distance



# Improved Traffic Signal Operations

- With separate left turn signals, traffic signal timing can be optimized to better suit the reduced lanes
  - Allows for changes in signal phasing
  - Provides protected and permitted left turns
  - Sync left turn and pedestrian movements





# Alternative Transportation & Aesthetic Improvements

- Reallocation allows for the addition of pedestrian-friendly features
- Reallocation allows for additional space for enhanced landscaping and pedestrian safety features



# W San Antonio St Reallocation Considerations

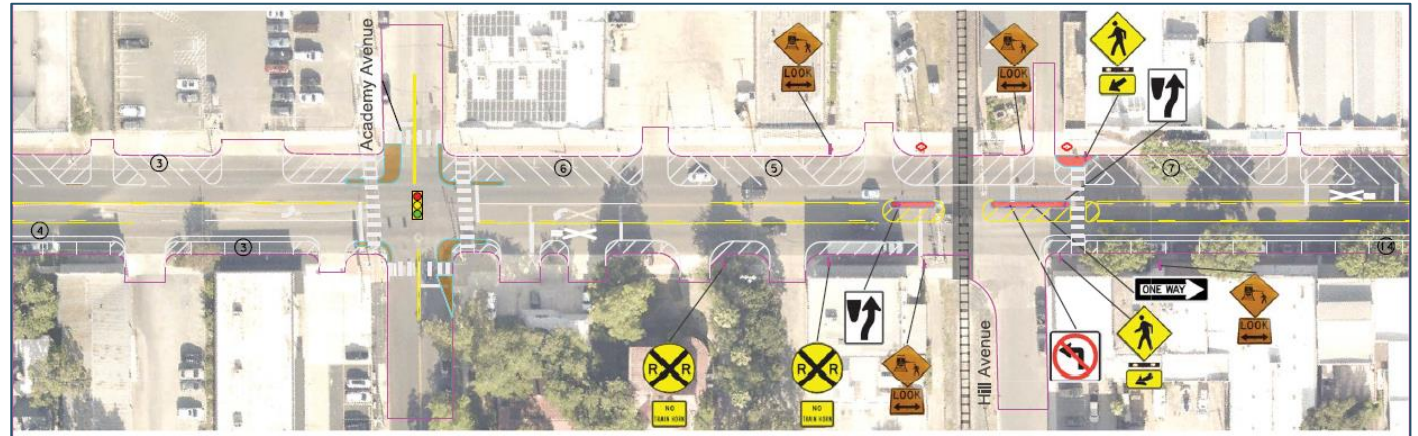
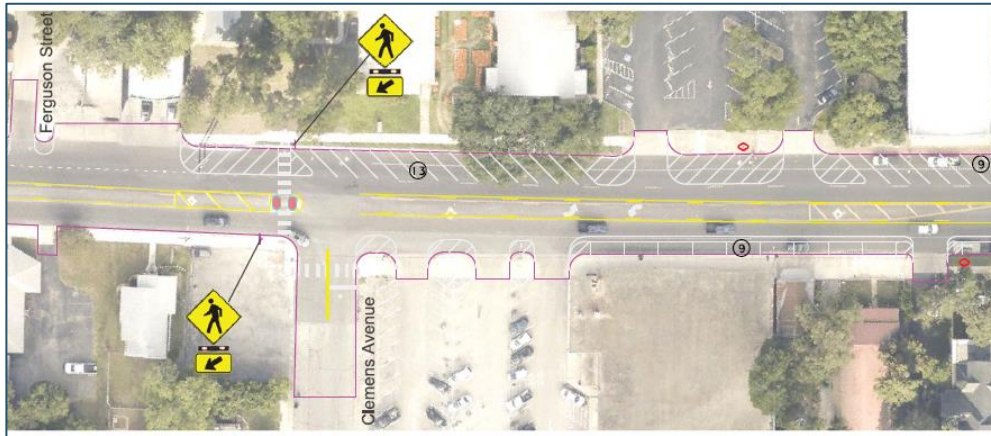
- ▲ Traffic Study completed in 2021 based on TxDOT's Main Plaza Study recommendations and potential three-lane reallocation
  - Option 1 – Angle parking north, parallel parking south
  - Option 2 – Parallel parking with buffer north and south
- ▲ On-Street Parking Comparison
- ▲ Roadway Safety and Capacity
- ▲ Intersection Capacity and Level of Service
- ▲ UPRR Rail Grade Crossing



# W San Antonio St – Ferguson to Main Plaza

## Option 1:

- Three-lanes with angle parking on the north side and parallel parking on the south side
- Add approximately 29 parking spots to existing 82 (111)





# Option 1 - W San Antonio St & Castell Ave

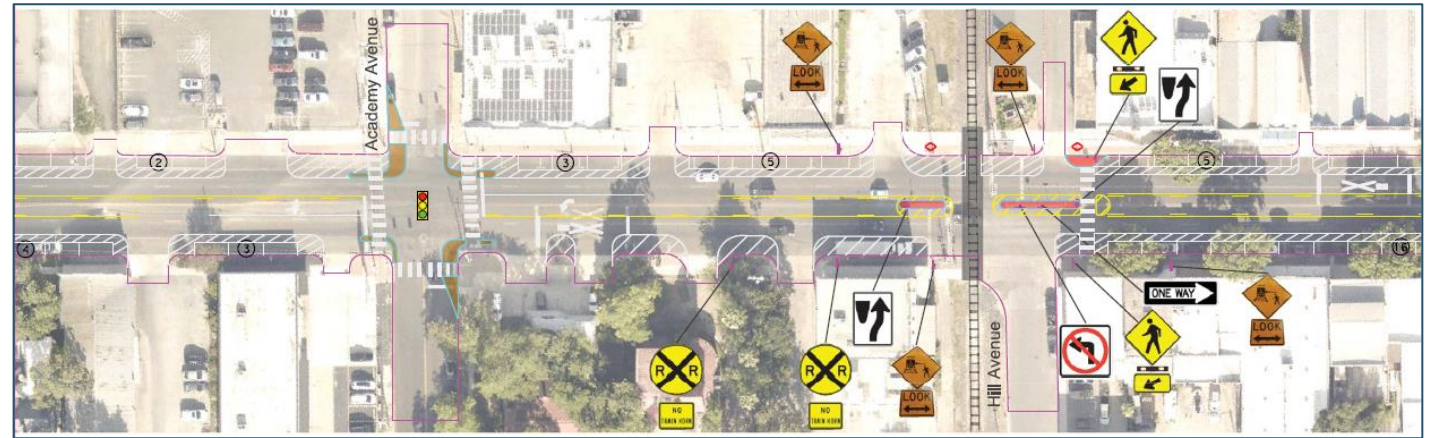
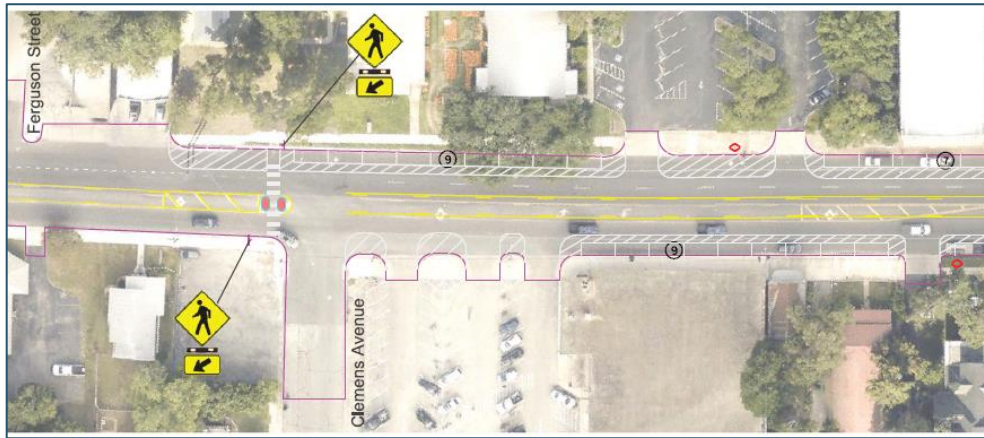




# W San Antonio St – Ferguson to Main Plaza

## Option 2:

- Three-lanes with parallel parking and buffer space on the north and south sides
- Add approximately 10 parking spots to existing 82 (92)





# Option 2 - W San Antonio St & Castell Ave



# Traffic Study Summary

- ▲ Increased parking
  - Delays are expected with parking maneuvers
- ▲ Anticipated reduction of crashes
- ▲ No significant impacts on circulation and capacity within the study area
  - Delays are expected with rail crossing
- ▲ Opportunities for
  - Art
  - Landscaping
  - Center-lane pedestrian protection areas
  - Increased walkability



# W San Antonio St from Main Plaza





# E San Antonio St from Main Plaza



# Proposed Next Steps

- ▲ City Council presentation and direction
- ▲ Downtown Board presentation and feedback
- ▲ Transportation & Traffic Advisory Board presentation and feedback ←
- ▲ Engagement with stakeholder groups including Downtown Association and downtown property owners and businesses
- ▲ City Council follow-up on feedback and direction
- ▲ Prepare short-term signing, marking, and traffic signal plans, and long-term conceptual design, and cost estimates