



# Homestead Road Bike Lane Study

BPAC Meeting #2  
May 18, 2023



# Agenda

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- Project Overview / Goal
- Progress to Date
- Recap of Data Collection & Analysis Findings
- Alternatives
- Next Steps



# Project Overview/Goal

## Project Description

- Some segments of Homestead Road have Part-time Bike Lanes from Bernardo Ave to Kaiser Entrance

### **Part-time Bike Lane:**

Parking is prohibited on weekdays from 7 a.m. to 6 p.m.  
At all other times, parking is allowed.

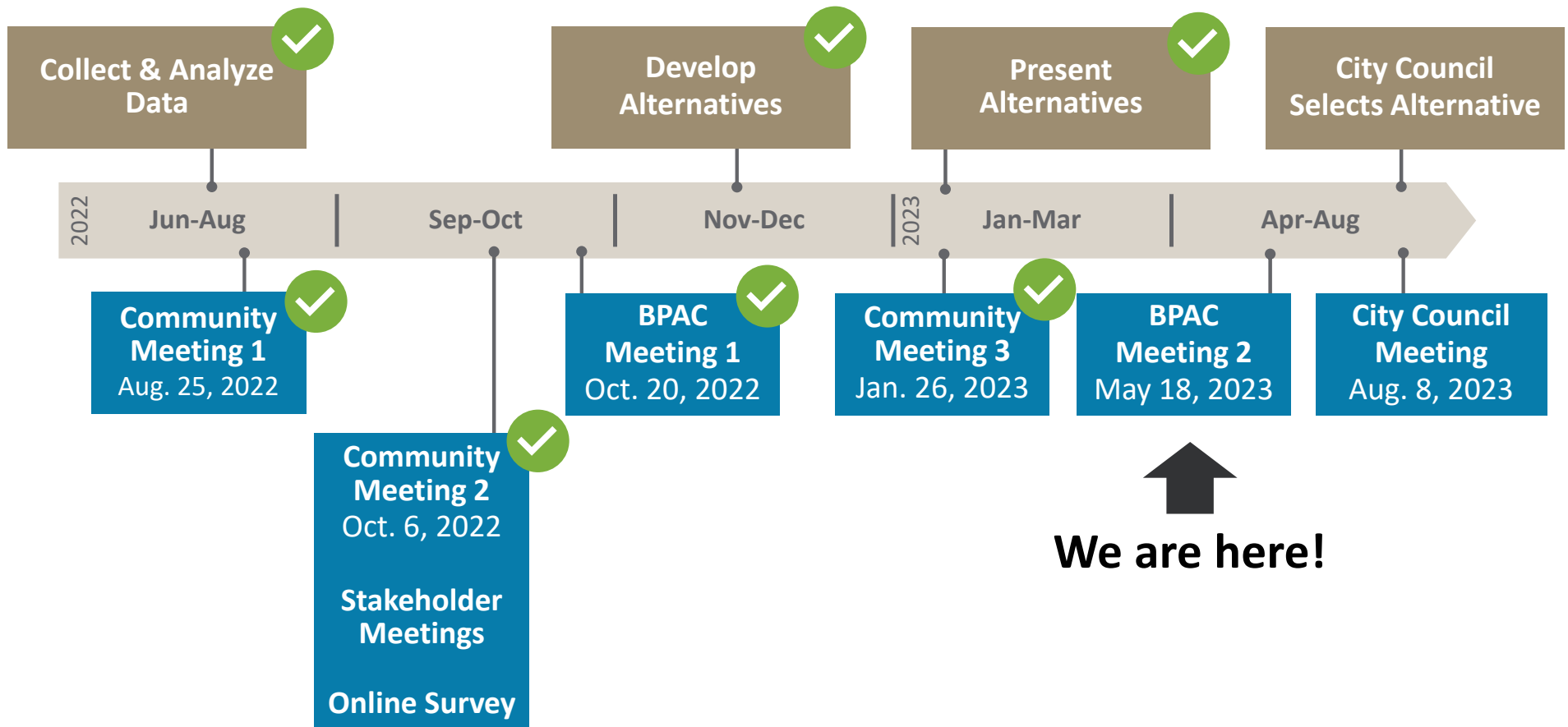
- Study Goal
  - ◆ To evaluate the potential of converting the part-time bike lanes into full-time bike lanes





# Progress to Date

## Study Process/Timeline





# Recap of Data Collection & Analysis Findings

## Recap of Data Collection & Analysis Findings

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- **Collision Data Review (2017 to 2021)**

- ◆ Total 99 collisions
  - 14 involved a bicyclists
    - ◆ 2 occurred midblock when parking is allowed in the bike lanes
  - 6 involved a pedestrian

- **Traffic Counts**

- ◆ Bicyclists observed in the part-time bike lanes when parking is allowed:
  - **Weekdays**
    - ◆ before 7 a.m. (2 to 7 bicyclists)
    - ◆ after 6 p.m. (8 to 54 bicyclists)
  - **Weekend days**
    - ◆ All hours of day (20 to 90 bicyclists)



## Recap of Data Collection & Analysis Findings

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- **Parking Lane Width**

- ◆ Several part-time bike lanes are less than 8 feet

- **Parking Data**

- ◆ 87% of the available on-street parking is not typically used
- ◆ Majority of side street parking have <80% utilization
- ◆ Feedback from residents: guests use on-street parking after part-time hours

- **Parking Citation Data (2017 to 2021)**

- ◆ 60 citations
  - 28 citations were violations due to illegally parking on the street in a bikeway, in a marked zone, during certain hours, or in locations with signage indicating parking restrictions.



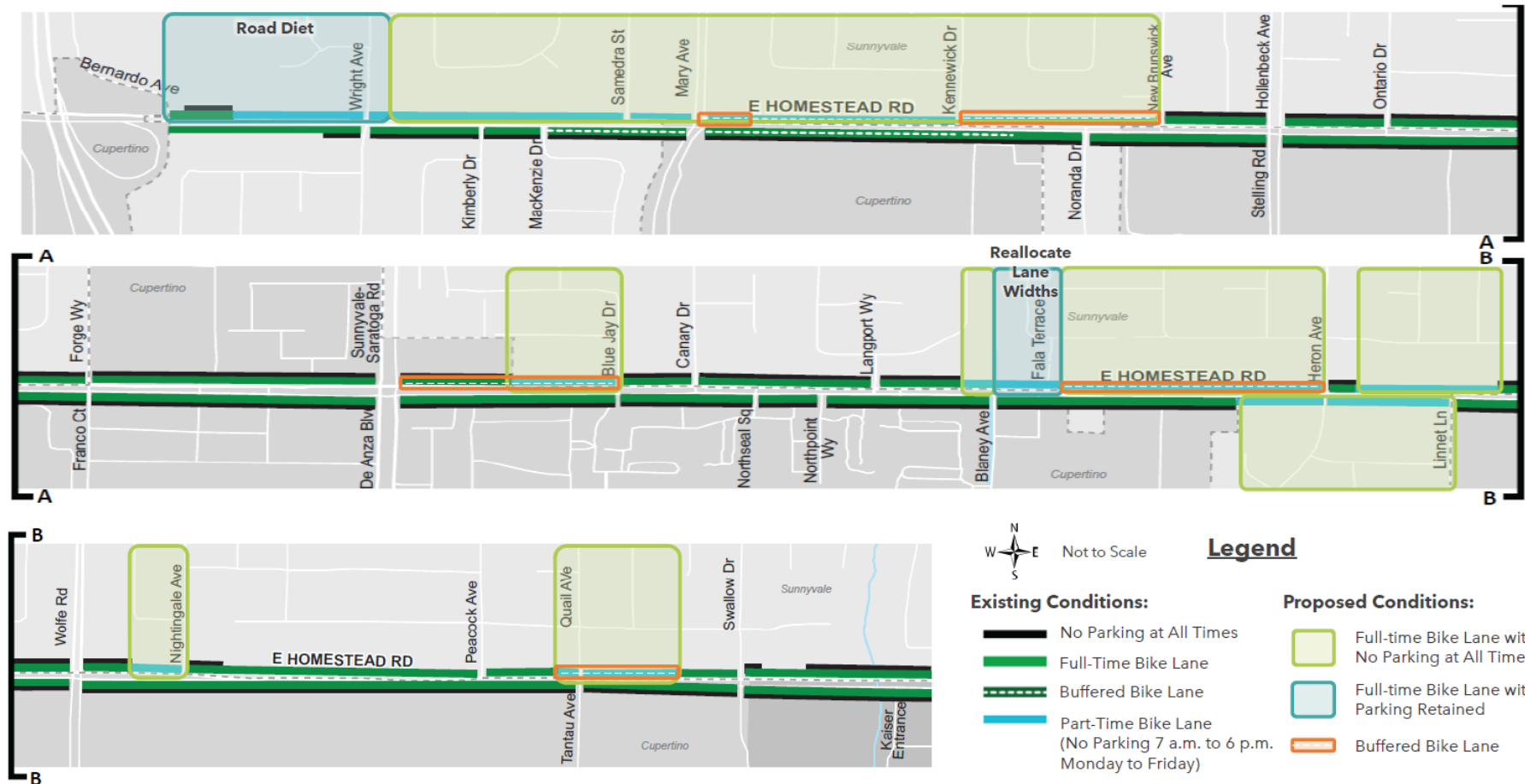
# Alternatives

## Alternatives Analysis

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- **Developed three alternatives based on:**
  - ◆ Data collected
  - ◆ Community input received
- **Options that were considered, but eliminated:**
  - ◆ Extending the part-time bike lane hours
  - ◆ Provide full-time bike lane and preserve parking by removing the center two-way left-turn lane
  - ◆ Converting some part-time bike lanes into full-time bike lanes

# Alternative 1: Convert all part-time bike lanes into full-time bike lanes and provide parking lane (where feasible)

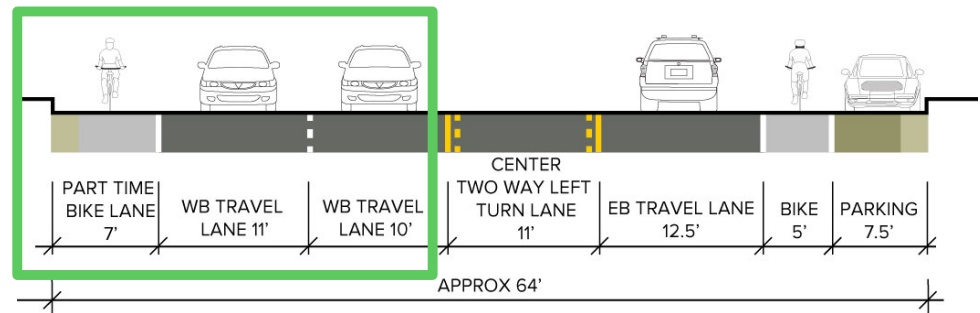


## Alternative 1 Features: Road Diet between Wright & Bernardo Avenues

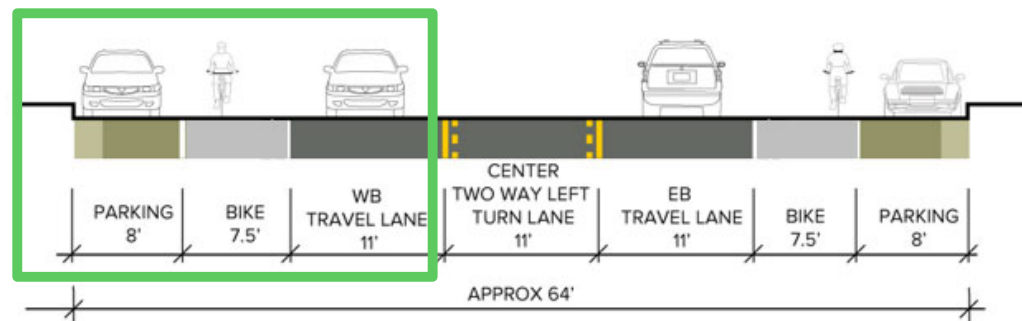
### What is a Road Diet?

- Remove a travel lane to provide enough space for:
  - ◆ full-time bike lane
  - ◆ parking lane

### Existing Conditions – Two Westbound Travel Lanes






### Alternative 1 – One Westbound Travel Lane

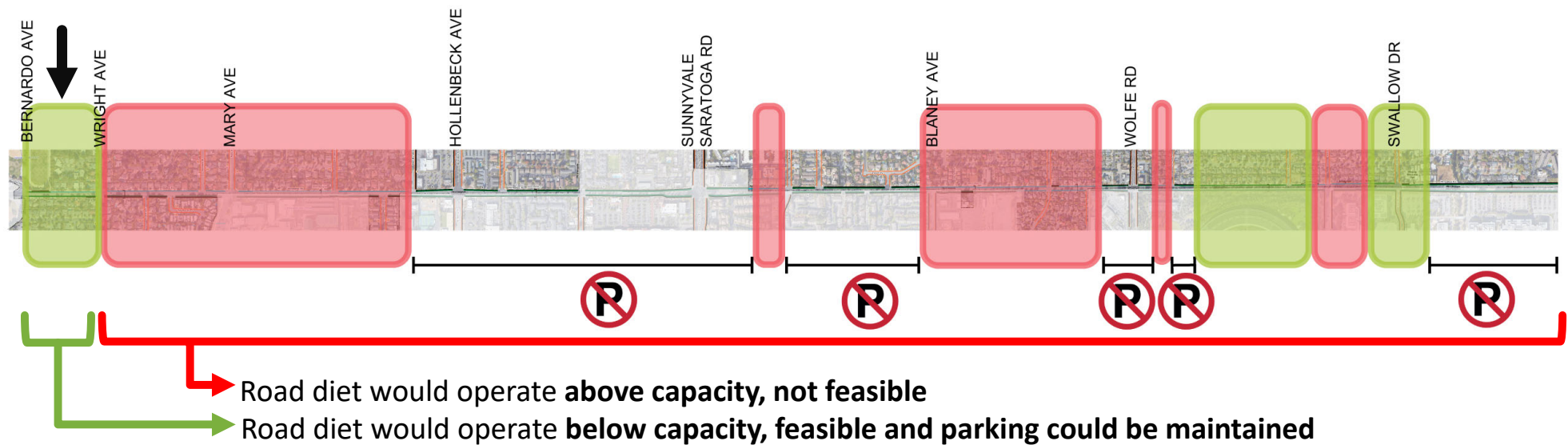


## Alternative 1 Features: Road Diet between Wright & Bernardo Avenues

### Why only between Wright & Bernardo Avenues?

- Feasibility was based on analysis of roadway capacity and impacts to operation

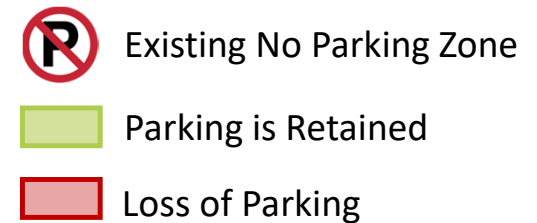
-  Existing No Parking Zone
-  Parking is Retained
-  Loss of Parking



## Alternative 1 Features: Reallocate Lane Widths from Blaney Avenue to approximately 500 feet east of Blaney Avenue

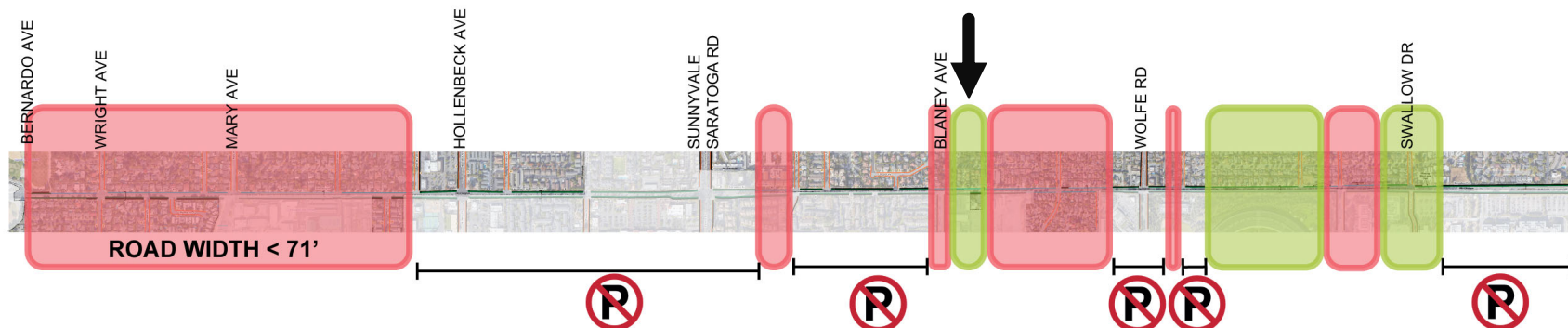
### What does reallocating lane width mean?

- **Restriping the roadway and use minimum lane widths to:**
  - ◆ Provide a full-time bike lane
  - ◆ Provide a parking lane



### Why only from Blaney Avenue to approximately 500 feet east of Blaney Avenue?

- Existing curb to curb width must be 71 feet or wider

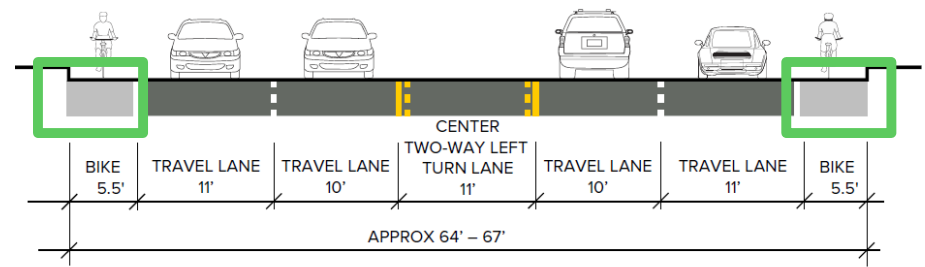


## Alternative 1 Features: Buffered Bike Lanes

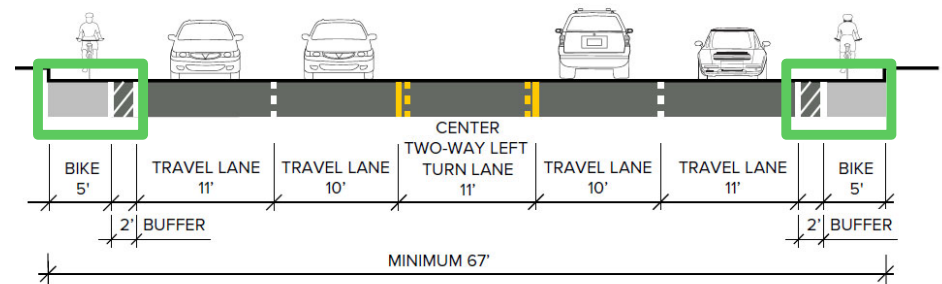
### What is a Bike Lane Buffer?

- Buffer space separates the bicycle lane from adjacent vehicle travel lanes

### Existing Conditions – Without Bike Lane Buffer



### Alternative 1 – With Bike Lane Buffer



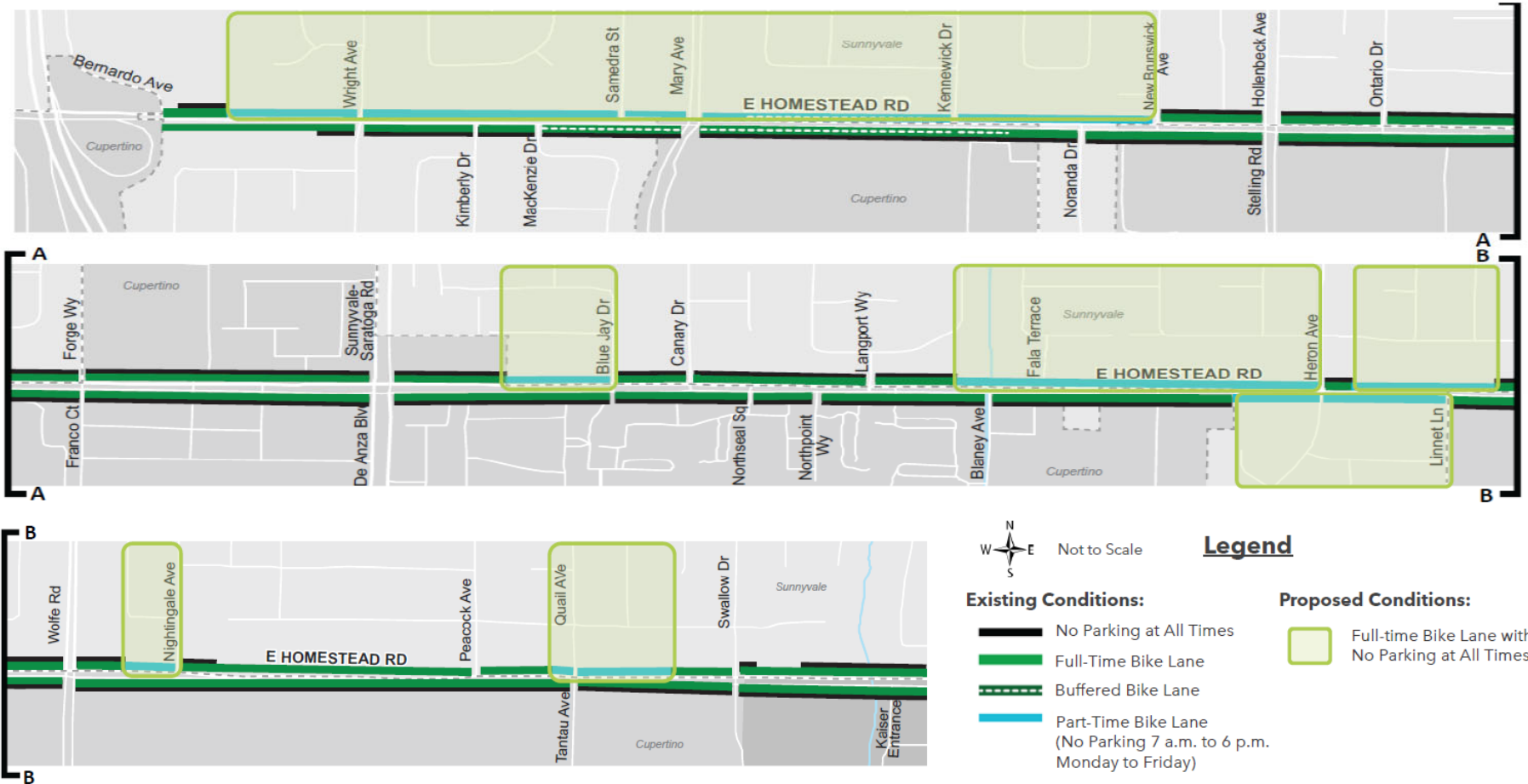


## **Alternative 1:** Convert all part-time bike lanes into full-time bike lanes and provide parking lane (where feasible)

### **Results**

- **Continuous bicycle facility for entire corridor**
  - ◆ Improve safety of bicyclists
- **Retain parking in segments where off-street parking is highly used**
  - ◆ Approximately 36 of 200 on-street parking spaces
- **Eliminate the remaining 164 on-street parking spaces**
  - ◆ Where roadway width is not wide enough for both a bike lane and on-street parking
- **Cost Estimate: \$270,000**
  - ◆ Includes Design and Construction (Resurface and restripe roadway and install signs and poles)

## Alternative 2: Convert all part-time bike lanes into full-time bike lanes



## Alternative 2: Convert all part-time bike lanes into full-time bike lanes

### Analysis

- Observed bicyclists in the bike lane when parking is allowed in the bike lane
- Low on-street parking utilization:
  - ♦ **13%** for entire corridor
  - ♦ **31%** maximum for any segment (Kennewick Drive to Mary Avenue)
- Side streets have available on-street parking

## Alternative 2: Convert all part-time bike lanes into full-time bike lanes

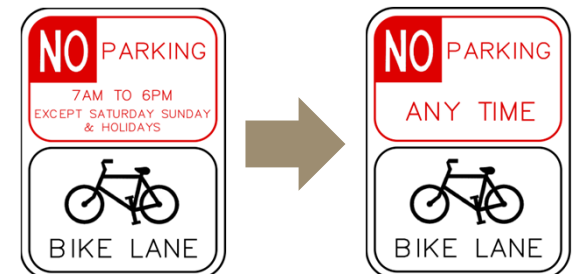
### Analysis

- Online Survey Results:
  - ♦ **78%** who live in Sunnyvale (not on the corridor) **support** this alternative
  - ♦ **87%** who live on Homestead Road **do not support** this alternative
- Longer walk times to side streets from part-time bike lane segments
  - ♦ **10%** of corridor:
    - Heron Avenue to Langport Way
    - Kennewick Drive to Mary Avenue

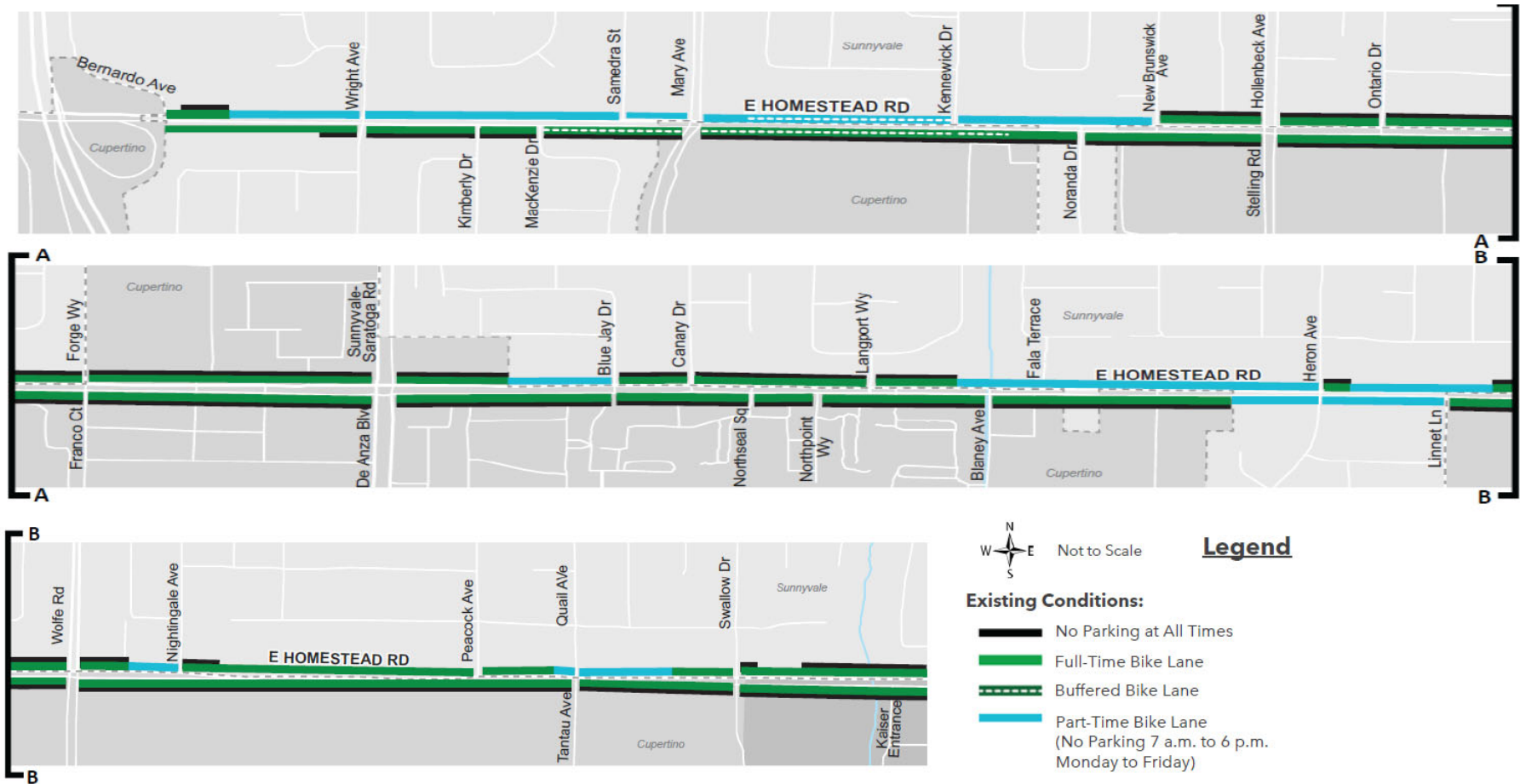
## Alternative 2: Convert all part-time bike lanes into full-time bike lanes

### Results

- **Continuous bicycle facility for entire corridor**
  - ◆ Improve safety of bicyclists
- **Eliminate parking for 200 on-street parking spaces**
  - ◆ Where roadway width is not wide enough for both a bike lane and on-street parking
- **Cost Estimate: \$142,000**
  - ◆ Includes Design and Construction (Remove and install signs and poles, refresh bike lane markings)



## Alternative 3: Maintain the part-time bike lanes the same as they are today



## **Alternative 3:** Maintain the part-time bike lanes the same as they are today

### **Results**

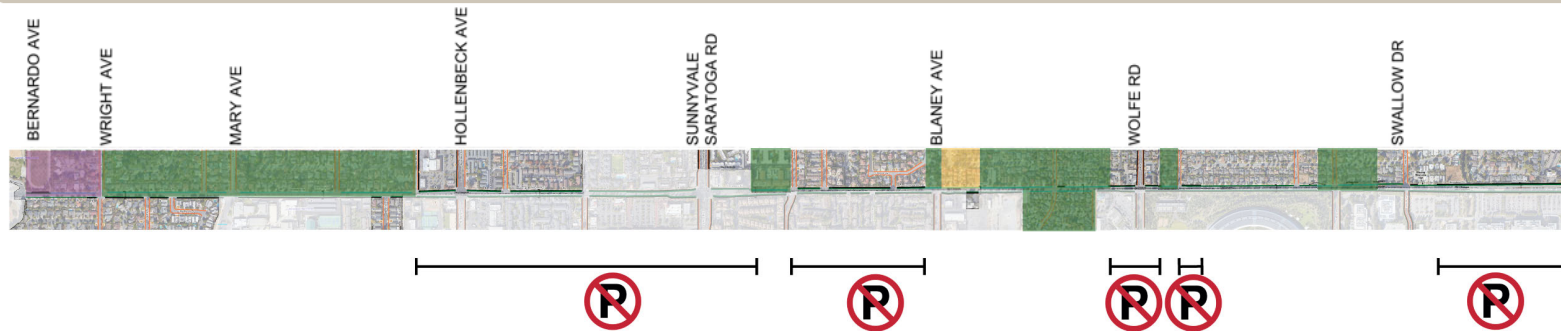
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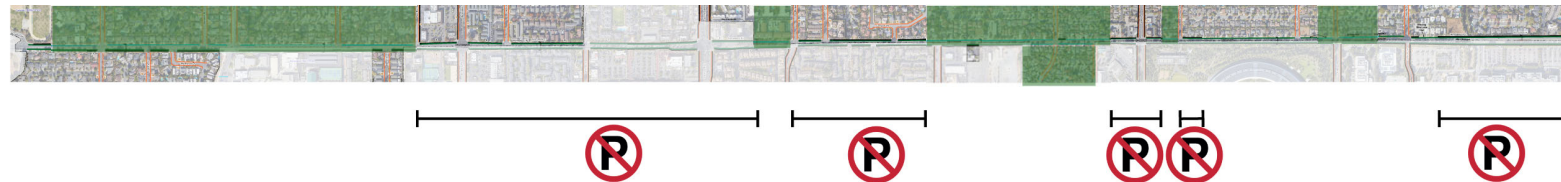
- Bicyclists would continue to share the lane with parked vehicles during parking hours
- Conflict with the City's policies of prioritizing the movement of bicycles, pedestrian, and vehicles over parking

# Considerations

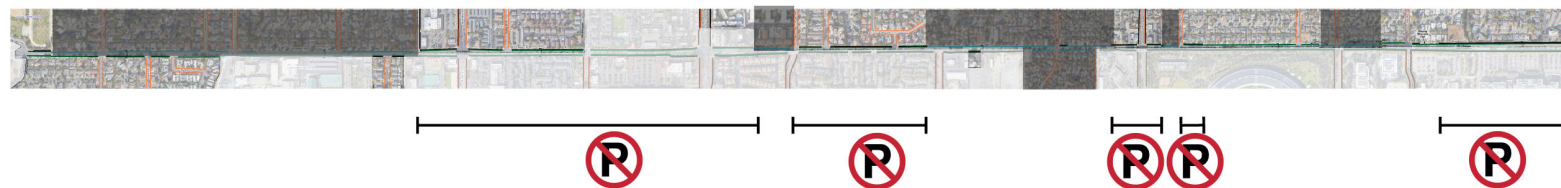
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



**Alternative 2:** Convert all part-time bike lanes into full-time bike lanes



**Alternative 3:** No Change, maintain part-time bike lanes and parking as is

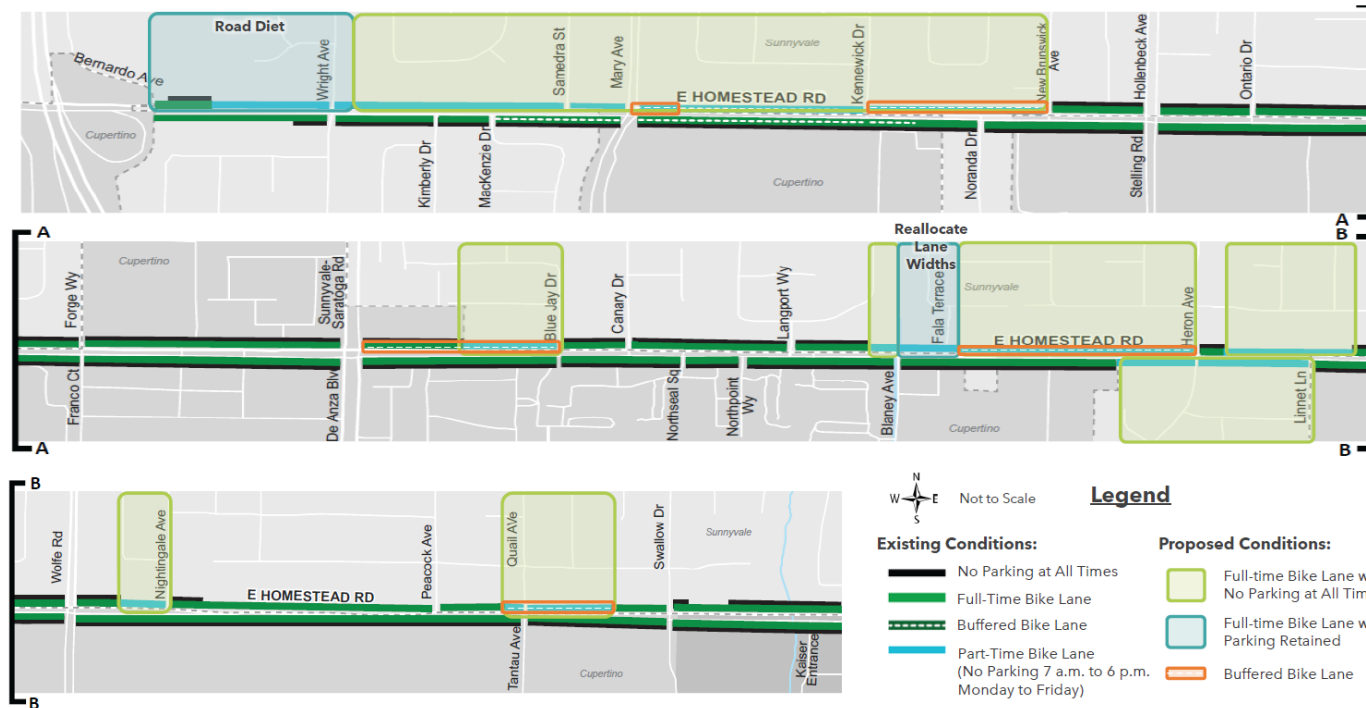


-  Road Diet
-  Reallocate Lane Widths
-  Convert to Full-time Bike Lane
-  Maintain Part-time Bike Lane
-  Existing No Parking Zones



# Staff Recommendation

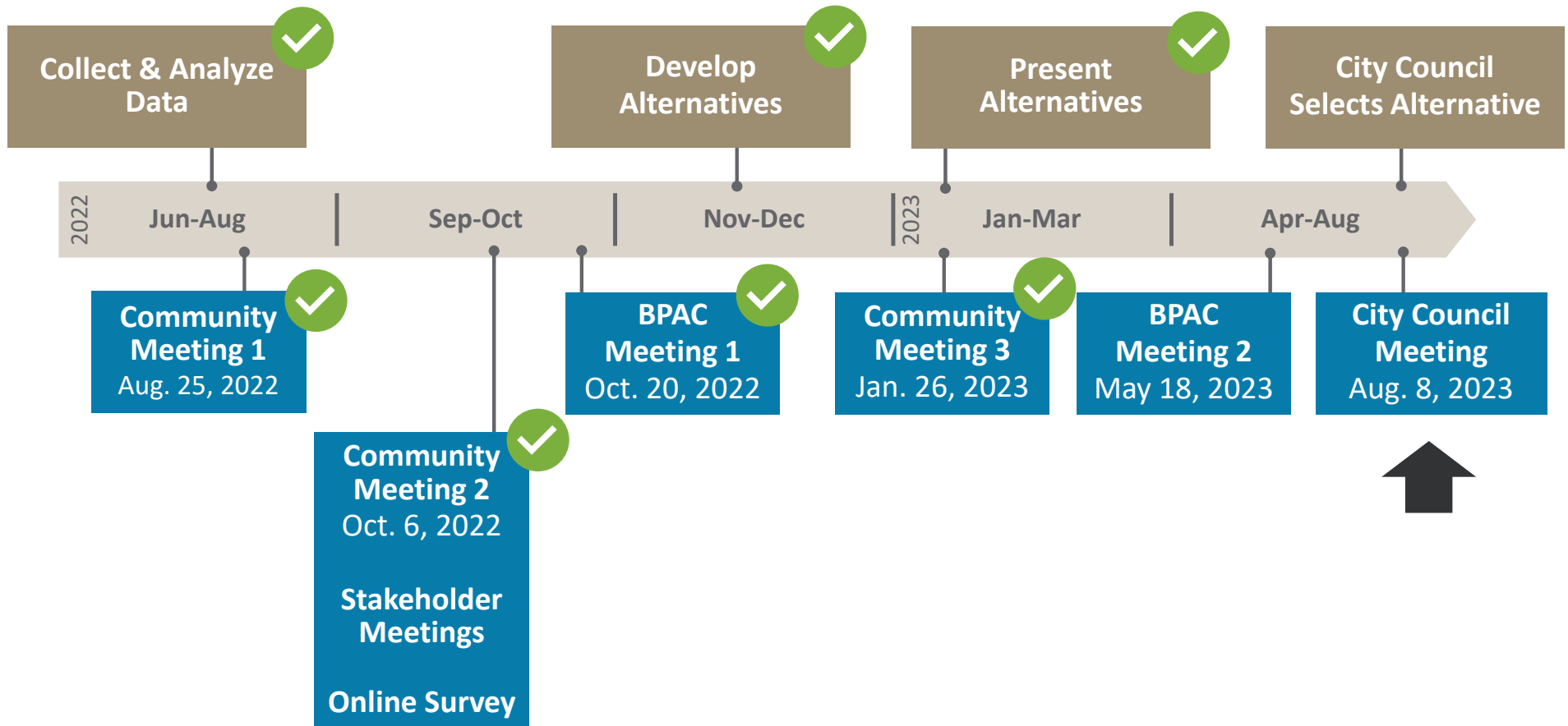
- **Alternative 1:** Convert all part-time bike lanes into full-time bike lanes and provide parking lane (where feasible)





# Next Steps

## Study Process/Timeline





Thank you