# MOUNTAIN AVENUE CORRIDOR STUDY AND RECOMMENDED PHASED IMPROVEMENTS

TRAFFIC & TRANSPORTATION COMMISSION (TTC) 1/27/2022

## **BACKGROUND**

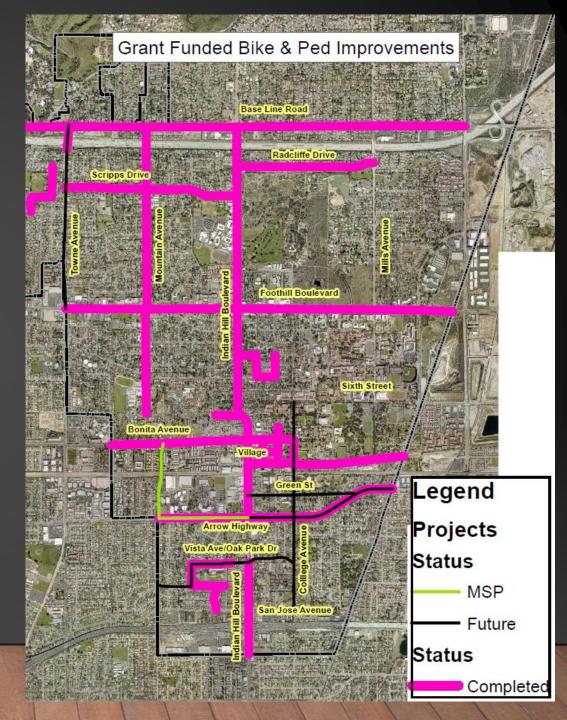
- Staff has seen an increased frequency in requests for traffic calming and bicycle/pedestrian improvements
  - Local agencies are required to follow State & Federal requirements
    - Roadway modifications
    - Installation of traffic control devices
  - Most of these requests require professional Traffic Engineering studies
  - Studies require data collection to perform analysis
- Requests received by Engineering Staff are compiled and prioritized
  - Shared with Claremont PD
    - Directed Enforcement to evaluate speeding concerns
    - Traffic Engineering Study (Consultant) to explore additional options

- Funding Issues
  - Prioritized list is processed as funding becomes available
  - Currently, there isn't a dedicated funding source to implement recommendations
    - With limited funding sources, the City of Claremont has been successful in obtaining numerous grants
- Over the past 15 years
  - 17+ Grants successfully obtained
  - Total combined grant amounts of over \$20 Million
    - The City has also historically prioritized the construction of projects that are adjacent to School sites
    - Primarily these projects are for improving Pedestrian and Bicycle Safety
    - Aside from grants, the City has incorporated, whenever possible, bicycle improvements with roadway maintenance projects
      - Mills Avenue
      - Sixth Street
      - Butte Street
      - Base Line Road

- Mapped Project Locations utilizing the following grants
  - HES Grant: Indian Hill at Harrison \$352,873
  - SR2S 6<sup>th</sup> Cycle: Mountain from Harrison to Foothill \$425,600
  - SR2S 7<sup>th</sup> Cycle: Towne Ave from Base Line & Thompson Creek \$895,950
  - ARRA: Arrow Highway from Cambridge to Mills \$895,000
  - ARRA TEA: Village Accessibility \$1.5 Million
  - Metro Call for Projects: Citrus Bikeway \$1.248 Million
  - BTA: BPZ Grant \$495,000
  - BTA: BPZ Expansion \$495,000
  - HSIP: Indian Hill Storm Drain \$1 Million
  - BTA: BPZ Expansion \$600,000
  - SRTS Non-Infrastructure: Bike Safety Programs \$356,000

- Mapped Project Locations utilizing the following grants (cont'd)
  - SR2S Cycle 10: Bike & Ped Improvements at 4 School Sites \$500,000
  - Foothill Boulevard Video Detection: \$\$127,000
  - MSRC Grant: Foothill Master Plan Improvements \$498,750
  - SB1 Local Partnership: Foothill Master Plan Improvements \$7 Million
  - Metro Multi Sub-regional (MSP): College Avenue at Green Street \$686,945
  - Metro Multi Sub-regional (MSP): \$3,000,000
    - Arrow Highway (Cambridge to Indian Hill)
    - Cambridge Avenue (Bonita to Arrow Highway)

- Mapped Project Locations
  - MSP Funded
    - Cambridge (Bonita Arrow)
    - Arrow Highway (Cambridge Indian Hill)
  - Future (Gold Line 1<sup>st</sup>/Last Mile Plan)
    - College Avenue
    - Green Street
    - Vista/Oak Park
    - San Jose Avenue
  - Completed Projects using Grant Funds
    - All prior projects constructed using grant funds for ped and bike improvements



# WORK PLAN

- July 27, 2021
  - City Council authorized City Staff to award a Professional Services contract to Advantec Consulting Engineers
- Contract Items
  - City-Wide Speed Survey Update
  - City-Wide Traffic Counts
    - Necessary for day-to-day traffic investigation requests
  - Traffic Calming Policy Update
    - The current policy is outdated
    - TTC will review and recommend approval
    - City Council will review for consideration

#### WORK PLAN CONT'D

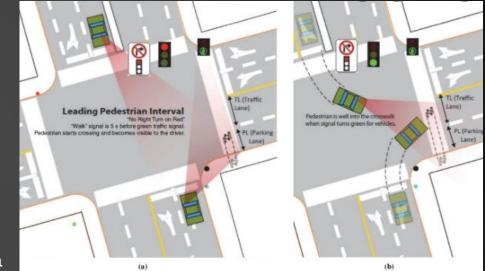
- Contract Items cont'd
  - City-Wide Traffic Studies, Analysis, and Design
    - Over 40 Locations/requests
    - Studies will be conducted
    - If necessary, recommendations for improvements will be developed
  - Mountain Avenue [Foothill to Base Line]
    - 1<sup>st</sup> study on the priority list
    - Recommendations presented to TTC for feedback and direction
    - Phased implementation being recommended

#### **RECOMMENDED PHASED IMPROVEMENTS**

#### • Phase l

**ON RED** 

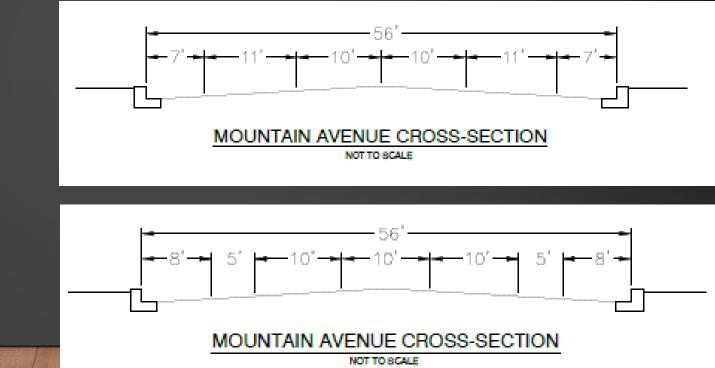
- Intersection Improvements on Mountain at Scripps
  - Install "No Right Turn on Red" at all 4 legs
    - 7 am to 9 am & 1:30 pm to 3:30 pm
  - Signal Timing Modification
    - Incorporation of a lead pedestrian phase for all 4 legs
    - Allows pedestrian access into the crosswalk
    - Drivers can see pedestrians before entering the intersection
- Estimated Cost to implement Phase 1 Recommendation \$10,000
  - Time line for installation
    - Immediate



• Phase 2

- Road Diet from Foothill to Base Line
- Lane reduction from 4 to 3 lanes (includes 2-way left turn lane in the middle)
- Class II Bike Lanes

• Existing Cross Section



Recommended Cross Section

- Phase 2 (cont'd)
  - This improvement is noted in the City's General Plan, Mobility Element
    - Allows for a reduction in lanes with ADT's less than 8,000 vpd
    - Current ADT is roughly 5,300 vpd

Description	# of Lanes	Calculated Daily Capacity* (vehicles/day)	Volume	V/C Ratio	LOS
Two lane roadway	2	15,000	7,500	0.50	A
Two lane roadway	2	15,000	10,000	0.67	В
Two lane roadway	2	15,000	11,500	0.77	С
Two lane roadway	2	15,000	12,500	0.83	D
For a Secondary Arterial, LOS D Minimum is the acceptable operations - Max Volume for LOS D	2	15,000	13,500 (Max Volume)	0.90	D
For a Secondary Arterial, LOS D Minimum is the acceptable operations - Max Volume for LOS E	2	15,000	15,000 (Max Volume)	1.0	Е
* Daily Capacity calculated using HCM, Transportation Resources Board 6th Edition methodology.					

- Phase 2 (cont'd)
  - Estimated Costs to implement Phase 2 recommendations \$200,000
    - Slurry Seal
    - New Pavement Striping
  - Staff will propose this implementation in the up-coming budget proposal
  - Implementation Schedule 2023 Summer Break

- Phase 3
  - Complete Streets Evaluation
  - Schedule 3 to 5 years
  - Staff will monitor Phase 1 & 2 improvements
    - Will evaluate potential additional Complete Streets Features
    - Will be presented to the TTC for review and consideration
  - Estimated Costs for potential implementation
    - \$2 Million
    - Grant Funding will need to be explored to fund the project

#### RECOMMENDATION

• Staff recommends that the Traffic and Transportation Commission direct Engineering Staff to move forward with the implementation of the recommended Phase 1 and Phase 2 improvements for the installation of the bicycle and pedestrian improvements on Mountain Avenue from Foothill Boulevard to Base Line Road.

