



Claremont Traffic and Transportation Commission Agenda Report

File #: 4085

Item No: 2.

TO: TRAFFIC AND TRANSPORTATION COMMISSION

FROM: MARIA B. TIPPING, CITY ENGINEER

DATE: JANUARY 27, 2022

Reviewed by:
Finance Director: N/A

SUBJECT:

MOUNTAIN AVENUE CORRIDOR STUDY AND RECOMMENDED PHASED IMPROVEMENTS

SUMMARY

Engineering staff receives a number of requests throughout the year for traffic investigations, and requests for pedestrian and bicycle improvements. These types of requests require that a study or field investigation be conducted by the City's traffic consultant.

On July 27, 2021, and with the purpose of addressing these types of requests, the City Council authorized staff to enter into a professional services agreement with Advantec Consulting Engineers for Professional Traffic Engineering Services.

This contract includes updating the City-Wide Speed Survey, collecting City-Wide Traffic Counts, updating the City's Traffic Calming Policy, and conducting various traffic studies, analysis, and design to address over 40 requests received since 2019.

At this time, staff is presenting the analysis performed by Advantec (Attachment) for Mountain Avenue, from Foothill Boulevard to Base Line Road, to the Traffic and Transportation Commission (TTC) for input, and review of the consultant's recommendations. This study includes an analysis of the intersection of Mountain Avenue at Scripps, within the study' scope.

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.

FINANCIAL REVIEW

The cost to prepare this study is \$10,500 and is covered under the Advantec contract for Professional Traffic Engineering Services.

The cost to implement Phase 1 of this project is estimated at \$10,000, which will need to be identified and appropriated.

The cost to implement Phase 2 of this project is estimated at \$200,000, which will need to be identified.

The cost to implement Phase 3 (Complete Streets) of this project will require further studies and at this point in time, there is no dedicated funding sources available to complete. It should be noted that based on previous projects and estimates, the cost to construct a complete streets project is estimated at approximately \$2 million per mile. Staff will seek grant funding to complete this phase of the project.

The cost to prepare this staff report is estimated at \$553 and is included in the operating budget of the Community Development Department.

ANALYSIS

Since the onset of the COVID-19 Pandemic, staff has received an increase in citizen requests for traffic calming and bicycle/ pedestrian improvements. The majority of these requests require the services of professional traffic engineers to collect the necessary data and conduct the required field investigations to address the requests. This is necessary because local agencies are required to follow State and Federal requirements when modifying roadway conditions or installing traffic control devices.

Requests received by the Engineering staff are shared with the Claremont Police Department, so the data collected through selective enforcement efforts can be used in the traffic calming evaluation process. Through this process, the data obtained through the directed enforcement efforts is evaluated to address the speeding concerns and if necessary, plan for additional steps. If the speeding issues are not resolved with sustained directed enforcement efforts, the Engineering Division is then required to conduct a traffic study of the area of concern using a third party traffic engineering consulting firm.

Since the majority of these requests are unfunded, staff has created and prioritized a list of the resident requests. Studies for these requests will be conducted as soon as funding becomes available. At the July 27, 2021 City Council meeting, the City council awarded a contract to Advantec Consulting Engineers to perform specialized traffic engineering services to address the recent influx in citizen requests for traffic studies.

Since this funding became available Engineering staff has begun the process of working through the prioritized list of requests. As part of the process, the necessary studies are conducted and, if justified, the consultant will recommend the changes that can be made to the considered roadway segment. Since these studies must be conducted under normal traffic conditions, there has been a delay due to COVID-19, in collecting the necessary traffic data. It should be noted that these studies and potential improvements (i.e. signs, signals, roadway modifications, traffic signal modifications) can be expensive and may fall outside of the city's budgeted funds for traffic studies and

improvements. As indicated, there are over 40 resident requests for traffic studies that the Engineering Division, the Claremont Police Department, and the City's traffic consultant are currently investigating.

- City-Wide Speed Survey
 - The City-wide speed survey will be taken to the Traffic and Transportation Commission for review and to City Council for consideration once completed. This study requires extensive data collection and data analysis.
- City-Wide Traffic Counts
 - These updated counts are necessary to assist with day-to-day traffic investigation requests and are valuable in determining the need for additional studies addressing residents' requests and/or City staff observations.
- Traffic Calming Policy
 - The current policy is outdated and requires an update to accommodate more current practices to address traffic calming requests.
 - This item will be taken to the Traffic and Transportation Commission for review. Once the policy has been developed and reviewed, it will be taken to City Council for consideration.
- Various Traffic Studies, Analysis, and Design
 - The City has received a large volume of traffic investigation requests since 2019 (over 40 requests), most of which require a professional traffic engineer to provide a determination.
 - Depending on the outcome of these traffic investigations, recommendations for improvements could be provided.
 - Mountain Avenue, from Foothill Boulevard to Base Line Road, is the first study on the current priority list to be presented to the TTC for feedback and direction, before proceeding with scheduling the implementation of the phased improvements.

Mountain Avenue Traffic Study, Foothill Boulevard to Base Line Road

Staff has received pedestrian safety concerns associated with traffic congestion around Condit Elementary School. These concerned residents shared observations commonly received in regard to intersections adjacent to school sites. The residents' requests list currently being worked on by Advantec contains many locations adjacent to other local schools.

Historically, traffic congestion and bicycle pedestrian safety issues around schools are the most common concerns shared by residents. In response, the City has focused on prioritizing projects that address bicycle and pedestrian safety adjacent to school sites, by applying for competitive grants. This has been a necessary route to fund these projects because the City does not have a dedicated funding mechanism to construct these projects. The City receives a limited amount of allocated local return funds, such as Gas Tax and SB1 funds, which are prioritized for roadway maintenance, as part of the City budget adoption process.

With limited resources, Claremont staff has been successful in obtaining numerous grants to fund projects to improve bicycle and pedestrian safety. The following summarizes the bicycle and pedestrian improvement projects constructed with the obtained grant funds. It should be noted that

grant funds received over the past 15 years exceed \$20 million dollars, which were all invested in the community for bicycle and pedestrian safety improvements, adjacent to schools or along routes connecting to schools.

- **HES Grant: Indian Hill/Harrison Pedestrian Improvements (\$352,873)**

Installation of pedestrian safety improvements at the intersection of Indian Hill/Harrison and at Bonita Avenue between Berkeley Avenue and Grinnell Avenue. The Indian Hill/Harrison component of the project included the reconfiguration of the northeast corner of the intersection to accommodate pedestrian safety features by removing the non-signalized, separated right turn lane. The Bonita Avenue component included the installation of sidewalk at the north side of Bonita (by narrowing the roadway), between Berkeley and Grinnell Avenues. ADA access was also upgraded within the limits of project to assist students walking to El Roble and Our Lady of the Assumption.

- **SR2S 6th Cycle (\$425,600)**

Mountain Avenue pedestrian and bicycle safety improvements. Project included road diet on Mountain Avenue from Harrison to Foothill, accessibility through construction of handicap ramps, bike/ped path along west side of Mountain View, installation of bicycle storage and bike racks at El Roble, installation of additional bike racks.

- **SR2S 7th Cycle (\$895,950.00)**

Towne Avenue between Base Line Road and the continuation of the Class I Thompson Creek Regional Trail to the south of the 210 Freeway Towne Ave. eastbound off ramp, to accommodate pedestrian and bicycle improvements along the continuation of the Thompson Creek Regional Trail. Project includes reconnecting the TCT at the west side of Towne Avenue with green bike lanes, widening of sidewalks along the bridge, new handicap ramps. Additional improvements include enhancements to the intersection of Base Line Road and Towne Avenue (ladder striping, audible signals, pedestrian count downs and bicycle video detection).

- **ARRA Arrow Highway (895,000)**

This project provided funds to roadway resurfacing, lighting, striping, on Arrow Highway from Mills to Cambridge.

- **ARRA TEA Village Accessibility (\$1.5 million)**

This project provided accessibility and sidewalk improvements and lighting improvements for Claremont downtown.

- **Metro Call for Projects/Citrus Bikeway (\$1.248 million)**

The construction of the Claremont portion of the Regional Citrus Bikeway. This project included the following:

- Bonita Avenue (city limit to College Avenue): roadway resurfacing to implement road diet (Carnegie to Indian Hill) to accommodate bike lanes, installation of sidewalk at the north side of Bonita (east of Berkeley), traffic signals at Bonita and Cambridge and Bonita and Mountain. These signals include bicycle video detection, pedestrian count down devices and audible features. Improved accessibility by upgrading handicap ramps and street lighting. Custom signage (Citrus Bikeway)
- Bonita Avenue (Indian Hill to College): roadway reconstruction to accommodate new handicap ramps and sharrows. Custom Citrus Bikeway signs.

- College Avenue (Bonita to First Street): roadway reconfiguration to accommodate bike lanes. Custom Citrus Bikeway signs.
 - First Street (College to Claremont Boulevard): roadway reconstruction and reconfiguration to incorporate bike lanes. Accessibility improvements at Claremont Boulevard and First Street, including bicycle video detection. Custom Citrus Bikeway signs.
- **BTA BPZ Grant (\$495,000)**
Provided bicycle detection at traffic signals within the Bike Priority Zone, and along the Indian Hill Boulevard portion of the Bike Priority Zone, including the signalized intersections at 8th and 10th Streets for being considered “preferred” bicycle routes.
- **BTA Expansion of BPZ Grant (\$495,000)**
Provided bicycle and ped improvements from Foothill to Base Line including accessibility on Mountain Avenue and Indian Hill Boulevard to improve connections to the BPZ.
- **HSIP Grant for Indian Hill Storm Drain/Pedestrian Improvements Project (\$900,000 + additional \$150,000)**
This project included the installation of a storm system on Indian Hill from American to Oak Park to dewater pedestrian facilities, including the I-10 handicap ramps. The project included accessibility features such as the provision or reconstruction of handicap ramps as well as enhanced crossing features at the intersection of Vista at Indian Hill.
- **BTA Grant (\$600,000) expansion of the BPZ**
These funds were used to expand the Bicycle Priority Zone (BPZ) outside its original boundaries, by providing bicycle related infrastructure and bicycle safety education opportunities. This grant scope of work included bicycle detection at seven different locations along Base Line Road and Scripps Drive. This project also included traffic calming features for Scripps and Radcliffe such as installation of edge lines, sharrows and bicycle and pedestrian signage.
- **SRTS Non Infrastructure (\$356,000) Program**
 - Implementation of this program included staff coordination with consultant, SRTS Task Force and the Claremont Bicycle Pedestrian Advisory Group (CBPAG)
 - The program provided bicycle and pedestrian safety education at all public elementary schools and at El Roble.
 - Adult and parent/student bicycle safety training classes.
- **SR2S Cycle 10 (\$500,000)**
This grant provided bicycle pedestrian improvements associated with 4 school sites: El Roble, Vista, Sycamore and Danbury. The project scope of work included new sidewalks, handicap curb ramps, ladder crosswalks, bike/ped signage, driver feedback signs, bike racks, upgrade traffic signal at Cambridge and Arrow Highway to add a protective left turn function with pedestrian detection, bike video detection, count downs devices and sharrows on Cambridge.
- **Foothill Boulevard Video Detection Installations (\$127,000)**
In an effort to continue to foster a bicycle friendly atmosphere, additional video detection systems were installed on Foothill Boulevard at Mountain Avenue, Indian Hill Boulevard, Dartmouth, Mills Avenue and Claremont Boulevard. Foothill Boulevard intersections equipped with these systems are now able to differentiate between bicycles and other vehicles to maximize vehicular traffic flow and provide safety to cyclists. The video detection system

detects vehicles and bicycles within the approaching traffic lanes, eliminating the need for separate bicycle exclusive detection systems such as loops installed in the pavement surface.

- **MSRC Grant (\$498,750)**

This grant scope of work included bicycle and pedestrian improvements associated with the Foothill Master Plan. These improvements include Class IV protected bike lanes, Class II bike lanes, bulb outs, ladder crosswalks.

- **SB1 Local Partnership Grant (\$7 million)**

This grant funds helped improve a 2.5-mile, four-lane divided corridor along Foothill Boulevard to include closing a 2,300-linear foot sidewalk gap, installing 2.35 miles of Class II bicycle lanes and 1.5 miles of cycle track (where no bicycle infrastructure existed), installing curb extensions, bulb outs, and pedestrian countdown heads along Foothill Boulevard at five main intersections (Towne Avenue, Mountain Avenue, Indian Hill Boulevard, Mills Avenue, and Claremont Boulevard), installing bioswales and storm water capture infiltration devices, improving lighting and signage, bus stop improvements, bike racks, planting carbon-sequestering trees and shrubs, and planting native grasses and plants that absorb transportation-related pollutants.

- **Metro MSP Subregional Program (\$686,945)**

This grant will pay for bike and pedestrian improvements on College Avenue at Green Street to serve students attending Oakmont Elementary.

- **Metro MSP Subregional Program (\$3 million)**

This grant will pay for bike and ped improvements along Arrow Highway from Indian Hill to Cambridge and bike and ped improvements on Cambridge between Arrow and Bonita.

The Advantec study evaluated the existing conditions on Mountain Avenue between Foothill Boulevard and Base Line Road and conducted a data collection process to determine potential improvements that can be implemented along this corridor to improve existing conditions. The study also took into consideration the suggestions received through the citizen's requests.

The study proposes a phased approach to implement proposed changes. The phased improvements for consideration on Mountain Avenue between Foothill and Base Line are summarized below:

Phase 1 (to be implemented immediately)

Intersection Improvements at Scripps Drive and Mountain Avenue

- Install "No Right Turn on Red" signs for the four legs of the intersection from:
 - 7:00 am - 9:00 am
 - 1:30 pm - 3:30 pm
- Signal Timing modification
 - Incorporation of a lead pedestrian phase - all directions
 - a. Assists with allowing pedestrians to access the crosswalk ahead of the green phase allowing vehicles right turns

The cost to implement this is estimated at \$10,000. Staff will review project savings under the current budget/projects to implement these changes.

Phase 2 (to be implemented Summer 2023 during school break)

Road Diet

- Lane reduction from a 4-lane roadway to a 3-lane roadway
- Allows for 2 travel lanes, 1 two-way left turn center lane, Class II bike lanes with separated on-street parking.
- This improvement has been noted in the City's General Plan, Mobility Element for this street segment
 - Allows for a reduction in lanes with the condition that the ADT is less than 8,000 vehicles per day.
 - The Current ADT is roughly 5,300 vehicles per day, which supports the proposed improvements.

The implementation of this road diet will require that the roadway surface be slurry sealed to create a new canvas to implement the new striping. This has been Claremont's approach to avoid conflicting street markings resulting from the sandblasting of the existing pavement markings. The cost to implement Phase 2 of this project is estimated at \$200,000, which will need to be identified with the upcoming budget.

Phase 3 (to be implemented in 3-5 years)

Complete Streets Evaluation-Additional Improvements

Staff will revisit this corridor in the next three to five years to review the performance of the implemented improvements as provided in Phase 1 and Phase 2, to evaluate the corridor from the Complete Streets Policy perspective. At that time, improvements such as intersection bulb outs, new sidewalks, handicap ramps, Green Street drainage improvements components, among others, will be evaluated and presented to the TTC as part of the Complete Streets protocol. This phase is currently unfunded for both design and construction. Moving forward, staff will seek funding opportunities to complete this project, through competitive grant applications. Based on past projects and project estimates, the cost to complete this phase could be around \$2 million dollars.

CEQA REVIEW

This item (Mountain Avenue Corridor Study) is not subject to environmental review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and Section 15060(c)(3) (the activity is not a "project" as defined in section 15378). CEQA Guidelines Section 15378(b) (2), (4), and (5) excludes "continuing administrative ... activities," "government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment," and "administrative activities of governments that will not result in direct or indirect physical changes to the environment" from its definition of "project."

Additionally, under CEQA Guidelines Section 15061(b)(3), it is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Presenting an update on a project to the Commission will not have a significant effect on the environment because the action will not result in or lead to a physical change in Claremont. Therefore, no additional environmental review is needed.

PUBLIC NOTICE PROCESS

The agenda and staff report for this item have been posted on the City website and distributed to interested parties. If you desire a copy, please contact Natalie Reagan at nreagan@ci.claremont.ca.us

Submitted by:

Maria B. Tipping, P.E
City Engineer

Attachment:

Mountain Avenue Corridor Traffic Study