

To: Max Navarro, City of Modesto

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Date: March 14, 2025

Re: Safety Project Prioritization Results

## Introduction

#### **Purpose**

The purpose of this memo is to summarize the methodology for the completed prioritization analysis for the City's Safe Streets for All (SS4A) Safety Action Plan.

# **Input Data**

Alta used the Modesto street centerline network as the basis of this analysis, which is segmented by block. Using OpenStreetMap, we also added centerlines for all nonmotorized trails that have separate alignments from roadways, because some of these were mentioned during the public feedback phase. These included the Hetchy Hetchy Trail, Virginia Corridor Trail, Helen White Memorial Trail, and the trail through Thousand Oaks Park and East La Loma Park. Other inputs are described below.

# Methodology

Road segments ("project locations") within the City of Modesto were scored based on eight categories for 30 possible points, as shown in Error! Reference source not found. The scoring categories include High Injury Network (HIN) alignment, Safety Risk Index alignment, community feedback, equity impact, transit access, school proximity, and mode shift support.

Each project was given a score for its:

- 1. **HIN Alignment:** The goal of the Safety Action Plan is to eliminate severe injuries and fatalities on Modesto's roadway network. Seven points were given if there was an overlap with any of the three HIN (All Collision Types, Pedestrian-Involved, and Bicycle-Involved) maps to ensure projects are improving locations with a history of severe injury and fatal collisions.
- Safety Risk Index Alignment: The Safety Risk Index identified locations with contextual characteristics or
  exposures associated with an increased likelihood of harm from a potential collision. A project location
  earned up to six points if it overlapped with any of the three Safety Risk Index (Motor Vehicle, PedestrianInvolved, and Bicycle-Involved) maps.
- 3. **Community Feedback:** Community Engagement is an integral part of the Safety Action Plan to ensure that we consider locations that might otherwise not be flagged as safety concerns in the data but are frequently identified by community members who have lived experiences in the area. In the Phase 1 Engagement and



Outreach, the Project Team attended six pop-ups, hosted a virtual workshop, and created a public input web map. A project location scored two points if it was identified as a priority project by any community member at the various engagement and outreach events.

- 4. **Equity Impact:** Priority projects in the Safety Action Plan should represent equitable investment in the safety needs of historically underserved communities. A project location earned three points if it would benefit Disadvantaged Communities as defined by Senate Bill (SB) 535.
- 5. **Transit Access:** Transit services allow transportation accessibility for those who may not have the monetary funds to have a personal vehicle, for those who choose not to drive, or those who are unable to drive for a variety of reasons such as age, disability, or comfort. Project locations that fall along a transit route and are near a stop earned up to three points depending on the type of route serving the area.
- 6. **School Proximity:** School-aged children are especially vulnerable to collision risk and impacts. Project locations near public schools received a score of three to promote safe routes to school.
- 7. **Mode Shift Support:** Because safety is also enhanced when trips need not occur or when they occur in safer modes, such as transit, project locations associated with lower vehicle miles traveled (VMT), such as those near mixed-use developments, commercial land uses, or the city's downtown earned up to three points.
- 8. **Nonmotorized Network Completeness:** The Nonmotorized Transportation Plan (NMTP) identified gaps in the existing bicycle and pedestrian networks, and these gaps act as barriers to more widespread adoption of sustainable travel. Project locations that overlap with a NMTP recommendation were given a score of three points.

Table 1: Prioritization Criteria

Category	Criteria	Score
HIN Alignment	Located on an HIN map	0 or 7 <sup>1</sup>
Safety Risk Index Alignment	Located on a Safety Risk Index map	0-6 <sup>2</sup>
Community Feedback	Identified at a Phase 1 event	0 or 2 <sup>3</sup>
Equity Impact	Defined as a Disadvantaged Community by Senate Bill 535	0 or 3 <sup>4</sup>
Transit Access	Located along transit route or near transit stops	1-3 <sup>5</sup>
School Proximity	Located near a Modesto public school	0 or 3 <sup>6</sup>
Mode Shift Potential	Located in an area likely to generate non-motorized trips	0-3 <sup>7</sup>
Nonmotorized Network Completeness	Located in an area that includes Nonmotorized Transportation Plan recommendations	0 or 3 <sup>8</sup>

#### Notes:

<sup>&</sup>lt;sup>1</sup> Projects were given a score of 7 if located on the All Modes, Pedestrian-Involved, or Bicycle-Involved HIN map.

<sup>&</sup>lt;sup>2</sup> Projects were given the following scores based on the safety risk index category: Risk index 0 – Score 0; Risk index 1 – Score 1; Risk index 2 – Score 2; Risk index 3-5 – Score 3; Risk index 6-8 – Score 4; Risk index 9-11 – Score 5; Risk index 12 or above – Score 6.



<sup>&</sup>lt;sup>3</sup> Projects were given a score of 2 if it is identified as a priority by one or more community member.

### **Results**

Figure 1 shows the final prioritized scores (out of a possible 30) of road segments throughout Modesto. Final scores ranged from 0 – 27. The segments in the two highest-scoring categories (22-24 and 25-27) are found throughout downtown as well as on most of Tully Road, McHenry Avenue, Coffee Road, and Yosemite Boulevard. All of these 338 road segments are on at least one HIN and all but two are in a disadvantaged community. Where there is variation of scores along the same corridor (such as 23 on some parts of Coffee Road and 25 on others), it is usually because one segment has a gap identified by NMTP recommendations, and one does not. It can also be due to differences in zoning (mode shift potential) or risk index scores.

Segments with mid-range scores (14-18 and 19-21) are found mostly on other arterial and collector roads throughout the city, including most of Orangeburg Avenue, Briggsmore Avenue, and Oakdale Road, as well as a number of blocks downtown. 86% of these segments are on at least one HIN and 83% are in a disadvantaged community.

**Table 2** shows the number of segments within each score and their share of centerline miles in Modesto.

Table 2: Modesto Roadways by Prioritization Score

Category	Number of Segments	Share of Centerline Miles
25-27	53	0.5%
22-24	285	3.4%
19-21	395	4.8%
14-18	529	6.0%
9-13	1185	14.4%
5-8	3349	35.5%
0-4	3829	35.3%
Total	9625	100%

<sup>&</sup>lt;sup>4</sup> Projects were given a score of 3 if it is located within or directly adjacent to an SB 535 Disadvantaged Community.

<sup>&</sup>lt;sup>5</sup> Projects within 0.25 miles of any transit stop were given a score of 1, project within 0.25 miles of a stop that serves a commuter route were given a score of 2, and project within 0.25 miles of a route that serves stops of interest were given a score of 3.

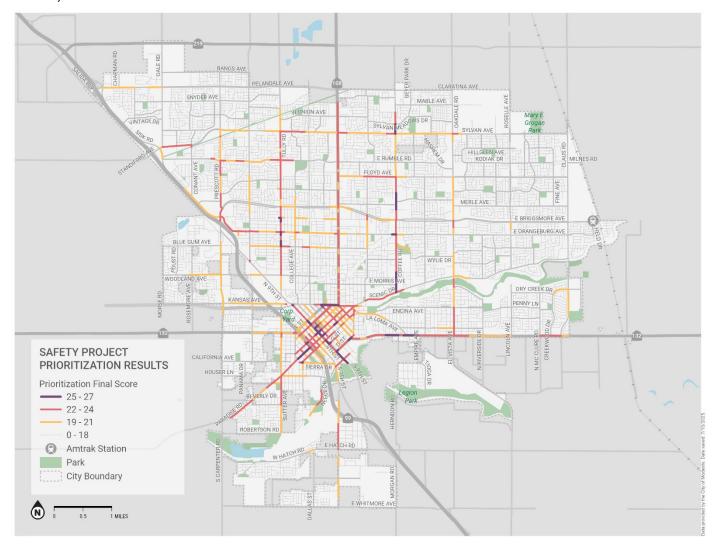
<sup>&</sup>lt;sup>6</sup> Projects within 0.25 miles of any public school were given a score of 3.

<sup>&</sup>lt;sup>7</sup> Projects were given a score of 1 if it is located within or directly adjacent to a commercial area, project were given a score of 2 if it located within or directly adjacent to a mixed-use area, and project were given a score of 3 if it is within or directly adjacent to downtown.

<sup>&</sup>lt;sup>8</sup> Projects were given a score of 3 if it overlaps with a Nonmotorized Transportation Plan recommendation.



Figure 1. Modesto Roadways Prioritization Results





# **Appendix**

**Table 3** lists the 25 highest scoring segments by prioritization score. Because many segments share the same score, segments were ranked first by final score and then by risk index score to determine the top 25. The complete list is available as an attachment.

Table 3: Ranked Segments by Prioritization Score

Rank	Street Name	Between	Final Score
1	NEEDHAM ST	SYCAMORE AVE & L ST	27
2	NEEDHAM ST	L ST & PARK AVE	27
3	9TH ST	O ST	27
4	W GRANGER AVE	TULLY RD	26
5	NEEDHAM ST	16TH ST & K ST	26
6	9TH ST	B ST	26
7	COFFEE RD	SCENIC DR & E MORRIS AVE	26
8	D ST	9TH ST & COMMERCIAL PL	26
9	NEEDHAM ST	K ST & MAGNOLIA AVE	26
10	NEEDHAM ST	MAGNOLIA AVE & 15TH ST	26
11	COFFEE RD	DAVID CT & NORWEGIAN AVE	26
12	9TH ST	F ST & G ST	26
13	H ST	1ST ST & 2ND ST	26
14	H ST	3RD ST & 4TH ST	26
15	F ST	9TH ST & COMMERCIAL PL	26
16	E ORANGEBURG AVE	ALLEN DR & COFFEE RD	25
17	YOSEMITE BLV	LA LOMA AVE & RUFFINO AVE	25
18	YOSEMITE BLV	ROSINA AVE & SEVERIN AVE	25
19	TULLY RD	GLENWOOD DR & W GRANGER AVE	25
20	YOSEMITE BLV	KERR AVE & COVENA AVE	25
21	TULLY RD	W ROSEBURG AVE & COLLEGE CT	25
22	9TH ST	K ST & L ST	25
23	TULLY RD	OAKWOOD DR & W ORANGEBURG AVE	25
24	YOSEMITE BLV	CAMELLIA WY & KERR AVE	25



Rank	Street Name	Between	Final Score
25	D ST	13TH ST & 14TH ST	25