MEMORANDUM

To: Torina Wilson, Transportation Planner; City of Santa Rosa

From: Mauricio Hernández, Alta Planning + Design

CC: Charlie Simpson, Alta Planning + Design

Date: November 5, 2024

Re: Santa Rosa Active Transportation Plan – Prioritization Methodology (FINAL)

Prioritization

The following memorandum summarizes the proposed metrics and methodology used to weigh projects to develop a planning-level assessment for the prioritization of projects and programs as part of the Santa Rosa Active Transportation Plan.

The approach to enhancing and expanding the City's active transportation network must consider what is realistic given historic and anticipated funding, while also providing the City with flexibility to respond to changing conditions and opportunities that may arise. The prioritization of proposed projects helps formulate a strategic list to guide project implementation. Prioritization results are flexible concepts that serve as guidelines. It is recommended that the City re-evaluate the proposed projects and rankings every five years. Over time as development occurs or other changes to land uses and Santa Rosa's transportation network take place, this framework can be used to re-evaluate remaining projects and continue pursuing implementation of the recommended improvements. For example, a low-priority spot improvement may be completed ahead of a high-priority corridor project due to immediate funding opportunities as part of a redevelopment or larger project. Similarly, a high-priority project may require additional study and funding making it take longer to implement.

Methodology

Focusing public investments into areas with the greatest needs helps to leverage the greatest public benefits from scarce public dollars for improving transportation access, connectivity, and project sustainability. This project used a weighted prioritization process for pedestrian and bicycle improvements. Each prioritization scheme included mode specific analysis such as bicycle/ pedestrian levels of traffic stress and larger community metrics including health and equity needs. As shown in Tables 1, 2, and 3 below, the safety metric was awarded the most prominent score weighting to focus on high-collision intersections and segments for both pedestrian and bicycle projects. The project prioritization process also placed a high priority on projects located in high equity and health need areas. These areas have historically had under-investment in public infrastructure. To address historical inequities, projects in these areas are prioritized for improvements as part of this plan.

Interpretation Prioritization Results

The overall prioritization rankings will provide an order of which projects may provide the greatest community benefit by improving safety and connectivity. The projects will be sorted into high, medium, and opportunity-priority categories based on the distribution of scores. Implementation for high-priority projects is recommended for a timeframe of 0-2 years. Medium-priority projects should be considered for implementation between 3-5 years. Opportunity projects should be considered for implementation after 5 years or when funding and other opportunities like repaving or development projects occur.

Overall project rankings can help select projects for Active Transportation Program (ATP) grant applications or for projects to add to the City's next Capital Improvement Plan (CIP). Breaking down the scores of the different inputs can provide guidance for more specific needs. The rankings are not intended to be a hardened list but rather a guide for staff to select projects based on a variety of factors that present opportunities to move projects forward.

Table 1. Linear Bicycle Project Prioritization Matrix

Goal	Criteria	Metric (Source)	Scoring	Max Score	Total score
Safety	*Collision History*	Roadway segment scores on the Bike Crash Severity Index (Alta Existing Conditions: Bike Crash Severity Index - FIGURE 69)	20 pts: >29 crash severity index score 15 pts: 12.1 - 29 crash severity index score 10 pts: 5.1-12 crash severity index score 5 pts: 1-5 crash severity index score 0 pts: none	20	35
	Facility Upgrade	Recommended Bicycle Facility upgrade from existing conditions (Alta Bikeway Network Recommendations)	15 pts: No facility to Class I 14 pts: Class III or IIIB to Class I 13 pts: No facility to Class IV 12 pts: Class III or IIIB to Class IV 8 pts: No facility to Class II 7 pts: Class II to Class I 5 pts: Class II to Class IV 2 pts: Class IV to Class I 1 pt: No facility to Class IIIB	15	
Health and Equity	*Health & Equity Analyses*	Segment borders or travels within region with high socio-economic needs (Alta Existing Conditions: Equity Priority Community analysis - FIGURE 10)	20 pts if project borders or travels through census tract within MTC Equity Priority Community or Santa Rosa Equity Priority Area; 0 pts if not	20	30
		Segment borders or travels within region with high Environmental and Health Burden (Alta Existing Conditions: Environmental & Public Health Index Analysis- FIGURE 18)	10 pts: project borders or travels through census tract with high environmental burden & high public health burden score; 8 pts: project borders or travels through census tract with either high environmental burden and medium public health burden or high public health burden and medium environmental burden score; 0 pts if not	10	
Access and Comfort; Sustainable City	*Transit*	Presence of major transit stops along the roadway (Alta Existing Conditions: Transportation Profile - FIGURE 40)	5 pts for 1-mile proximity to major transit stops (SMART stations, Downtown Transit Mall, Coddingtown Transit Hub) 0 pts if not.	5	25
	Demand	Roadway has high active trip potential (Alta Existing Conditions: Active Trip Potential Analysis - FIGURE 71)	10 pts: 65-77% share of short trips (Red on map) 5 pts: 54-64% share of short trips (Orange on map) 0 pts: <54% share of short trips	10	
	Low stress connectivity	Segment connects to an existing or already planned/approved low stress bike facility (Class IV, Class I).	5 pts if segment connects to a low stress bike facility (Class IV, Class I) 0 pts if no connection to a low stress bike facility	5	
	School Access	School located nearby (School polygon data)	5 pts if project is within ¼ mile of schools; 0 pts if not	5	
Feasibility	*Parking Removal*	Potential need for parking removal based upon aerial imagery	10 pts - if no parking removal is needed to implement project 0 pts - parking removal is needed to implement project	10	10
				TOTAL MAXIMUM POINTS	**100**

Table 2. Pedestrian Spot Improvement Project Prioritization Matrix

Goal	Criteria	Metric (Source)	Scoring	Max Score	Criteria Max Score
Safety	*Collision History*	Roadway segment scores on the Pedestrian Crash Severity Index (Alta Existing Conditions: Pedestrian Crash Severity Index - FIGURE 65)	20 pts >29 crash severity index score 15 pts: 12.1 - 29 crash severity index score 10 pts: 5.1-12 crash severity index score 5 pts: 1-5 crash severity index score 0 pts: none	20	35
	Stress Level	Max score from pedestrian LTS analysis (Alta Existing Conditions: PLTS Analysis - FIGURE 49)	15 pts: PLTS 4; 10 pts: PLTS 3; 0 pts: PLTS 2 or 1	15	
Health and Equity	*Health & Equity Analyses*	Segment borders or travels within region with high socio-economic needs (Alta Existing Conditions: Equity Priority Community analysis - FIGURE 10)	20 pts if project borders or travels through census tract within MTC Equity Priority Community or Santa Rosa Equity Priority Area; 0 pts if not	25	35
		Segment borders or travels within region with high Environmental and Health Burden (Alta Existing Conditions: Environmental & Public Health Index Analysis- FIGURE 18)	10 pts: project borders or travels through census tract with high environmental burden & high public health burden score; 8 pts: project borders or travels through census tract with either high environmental burden and medium public health burden or high public health burden and medium environmental burden score; 0 pts if not	10	
Access and Comfort; Sustainable City	*Transit*	Presence of transit stops along the roadway (Alta Existing Conditions: Transportation Profile - FIGURE 40)	10 pts for crossing improvements within 500 feet of all transit stops; 5 pts for crossing improvements that link two transit stops together; 0 pts if not.	10	30
	Park Access	Park located nearby (Alta Existing Conditions: Park polygon data)	10 pts if project is within ¼-mile of parks; 0 pts if not	10	
	School Access	School located nearby (School polygon data)	10 pts if project is within 500 feet of school boundary; 0 pts if not	10	
				TOTAL MAXIMUM POINTS	**100**

Table 3. Linear Pedestrian Improvement Project Prioritization Matrix

Goal	Criteria	Metric (Source)	Scoring	Max Score	Criteria Max Score
Safety	*Collision History*	Roadway segment scores on the Pedestrian Crash Severity Index (Alta Existing Conditions: Pedestrian Crash Severity Index - FIGURE 65)	20 pts >29 crash severity index score 15 pts: 12.1 - 29 crash severity index score 10 pts: 5.1-12 crash severity index score 5 pts: 1-5 crash severity index score 0: none	20	35
	Stress Level	Max score from pedestrian LTS analysis (Alta Existing Conditions: PLTS Analysis - FIGURE 49)	15 pts: BLTS 4; 10 pts: BLTS 3; 0 pts: BLTS 2 or 1	15	
Health and Equity	*Health & Equity Analyses*	Segment borders or travels within region with high socio-economic needs (Alta Existing Conditions: Equity Priority Community analysis - FIGURE 10)	20 pts if project borders or travels through census tract within MTC Equity Priority Community or Santa Rosa Equity Priority Area; 0 pts if not	20	30
		Segment borders or travels within region with high Environmental and Health Burden (Alta Existing Conditions: Environmental & Public Health Index Analysis- FIGURE 18)	10 pts: project borders or travels through census tract with high environmental burden & high public health burden score; 8 pts: project borders or travels through census tract with either high environmental burden and medium public health burden or high public health burden and medium environmental burden score; 0 pts if not	10	
Access and Comfort; Sustainable City	*Transit*	Presence of transit stops along the roadway (Alta Existing Conditions: Transportation Profile - FIGURE 40)	5 pts for 500 feet proximity to all transit stops; 0 pts if not.	5	25
	Park Access	Park located nearby (Alta Existing Conditions: Park polygon data)	5 pts if project is within ¼-mile of parks; 0 pts if not	5	
	School Access	School located nearby (School Polygon Data)	5 pts if project is within ¼-mile of schools; 0 pts if not	5	
	Existing city and regional networks	Fills facility gap within a segment (Alta Project Identification)	10 pts if gap filled on both sides of segment, 5 pts if gap filled on one side of segment, 0 pts if no gap filled	10	
Feasibility	*Right of Way Availability*	Potential need for ROW acquisition based on parcel level assessment	10 pts if no additional ROW is needed to implement project 0 pts if additional ROW is needed to implement project	10	10
				TOTAL MAXIMUM POINTS	**100**