



APPENDIX

E

EARLY ACTION PROJECT IDENTIFICATION METHODOLOGY

Early Action Project Identification Methodology

Fifteen (15) Early Action Projects were selected among the 44 Community Connector projects by using nine (9) scoring criteria developed to reflect regional active transportation goals and REAP 2.0 program objectives. Each criterion was assigned a maximum of either two or three points, resulting in a maximum possible score of 24 points. Quantitative criteria were set at a maximum of three points to allow for more variation in the scoring. Criteria framed as Yes / No conditions were worth two points, as was general cost and feasibility – which relied on qualitative judgment. The criteria translate key considerations from the Network Development Framework into measurable factors that can be applied consistently across the 44 Community Connector projects. Projects with the highest tier of overall scores were identified as Early Action Projects.

Addendum A to this Appendix shows each Community Connector project by each criterion, their raw scores generated from the calculations and the points awarded based on each criterion’s categories or quantitative value ranges. The table includes two Community Connectors (Grapefruit Boulevard and Monroe Street / Avenue 50) which are greyed out because they are near complete implementation and thus removed from the list of identified Early Action Projects. Two projects from the next highest point total were elevated to the 15 Early Action Projects in their place.

The nine Early Action Project identification scoring criteria are described below. Each has a definition, and describes how the measures were operationalized, any collection methodology, relevant data sources and how they were categorized.

Population and Employment Density (0 to 3 points):

Definition

This criterion measures the combined population and employment density within one-quarter mile of each Community Connector project.

Methodology

A quarter mile buffer was generated around each Community Connector project centerline. The buffer was intersected with census block group boundaries containing total population from the 2023 American Community Survey 5-year estimate and year total employment from the U.S. Census Bureau “OnTheMap” data source year 2022 (the identical data sources and years presented for those topics in the Existing Conditions Report). Census block groups partially overlapping with each buffer were apportioned as a part of the estimate. Meaning, for example, if 25% percent of a census block group overlapped with the project’s buffer, then estimation assigned 25% of that geography’s population and employment to the buffer. The sum of the estimated overlapping population and employment of each census block group overlapping within the buffer was divided by the area of the buffer to obtain the density for each project area. Density was chosen over absolute total for the measurement, given the Community Connector projects vary greatly in length.

Categorization

The population and employment densities for the 44 Community Connector projects were sorted in equal sized subsets (the “quantile method” of establishing category breaks). This method yielded the following ranges.

Population and Employment Density	Points
High (≥ 7.2 /acre)	3
Medium (> 4.4 to 7.1 /acre)	2
Low (≥ 3.5 to 4.4 /acre)	1
Very Low (< 3.5 /acre)	0

Improves Accessibility to Destinations (0 to 3 points):

Definition

This criterion measures the extent to which each Community Connector project improves bicycling accessibility to non-work destinations, including retail, grocery stores, food and beverage establishments, health services, schools, parks and other points of interest for bicycling trips within three miles using the Accessibility Improvement Measure (AIM).

Methodology

See **Addendum B** of this Appendix.

Categorization

AIM raw scores were converted to standard deviation Z-scores, which is that raw score's standard deviation distance from the mean of all the projects' raw AIM scores. The Z-score is calculated by subtracting the raw AIM score from the mean of all the projects' raw AIM scores (3.1) and dividing it by the standard deviation of all projects' raw AIM scores (15.685). The calculated Z-score was used to set the category instead of the raw score to provide a more compact range. Greater than 2 standard deviations received full points, between 1 and 2 standard deviations two points, between 0 and 1 standard deviation one point, and AIM scores below the mean received no points. Addendum A shows the raw AIM scores and the Z-scores for each Community Connector project.

Improves Accessibility to Destinations	Points
High (>2 Z-score)	3
Medium (>1 to 2 Z-score)	2
Low (0 to 1 Z-score)	1
Very Low (<0 Z-score)	0

Improves Accessibility to Destinations in Disadvantaged Communities (0 to 3 points):

Definition

This criterion measures the extent to which each Community Connector project improves bicycling accessibility to the same categories of non-work destinations but from origins within disadvantaged communities. This uses the same methodology introduced in Addendum B, though restricts the measures to only from census block origins that are within SB 535-defined disadvantaged census block groups. These geographies were used instead of the Existing Conditions Report's Equity Index measure because the SB 535 definition includes all Tribal lands.

Methodology

See Addendum B in this Appendix.

Categorization

Disadvantaged community AIM raw scores were converted to standard deviation Z-scores, as was done in the preceding criterion. The mean of all the projects' disadvantaged community AIM raw scores was 3.0 and the standard deviation of the projects' disadvantaged community AIM raw scores was 5.529. The same standard deviation ranges were used for this criterion as the previous.

Improves Accessibility to Destinations from Disadvantaged Communities	Points
High (>2 Z-score)	3
Medium (>1 to 2 Z-score)	2
Low (0 to 1 Z-score)	1
Very Low (<0 Z-score)	0

Improves Regional Bicycling Connectivity (0 to 3 points):

Definition

This criterion considers whether a Community Connector crosses multiple jurisdictions, including Tribal lands, and/or directly connects to CV Link.

Methodology

The criterion was applied by visually assessing the project extent's geography in comparison to jurisdictional boundaries and the CV Link. To receive credit for the multiple jurisdictions component of this criterion, the Community Connector project had to penetrate the boundary of the jurisdiction. Projects which only included segments that run along the boundary between two jurisdictions but did not penetrate both jurisdictions, did not receive credit for connecting multiple jurisdictions.

Categorization

Categorization for this criterion is as shown below. If both conditions were true, the project received full points. If the project connected multiple jurisdictions only, it received two points. If a project connected to the CV Link only, it received one point. When neither condition was true, the project received no points.

Improves Regional Bicycling Connectivity	Points
Both conditions are true	3
Connects multiple jurisdictions only	2
Connects to CV Link only	1
Neither condition is true	0

Collision History (0 to 3 points):

Definition

Measures bicyclist- and pedestrian-involved injury collisions occurring from 2019 through 2023 along each Community Connector project, normalized by project mileage.

Methodology

Bicyclist- and pedestrian-involved collisions occurring along the extents of each Community Connector were summarized. Collisions occurring at locations where multiple projects intersect were credited for each project in their summary total. Off-street alignments would not be rewarded for this criterion given there would be no vehicular traffic; however, no project is comprised *exclusively* of off-street alignments. Only Project 31, Murray Canyon Drive, included an off-street segment within its extents). The collision totals were divided by the mileage of the project to determine collisions per mile.

Categorization

Collisions per mile for the 44 Community Connector projects were sorted into roughly equal sized subsets (the “quantile method” of establishing category breaks). This method yielded the following ranges. Because of some projects being tied in collisions per mile, the number of projects in each of the categories was slightly unequal.

Bicyclist- and Pedestrian-Involved Collision History	Points
High (≥ 2.5 /mile)	3
Medium (≥ 1.5 to 2.4 /mile)	2
Low (≥ 0.7 to 1.4 /mile)	1
Very Low (< 0.7 /mile)	0

Improves Bicycling Comfort (0 to 3 points):

Definition

Measures the percentage of each Community Connector alignment that would become low-stress (LTS 1) based on the recommended ultimate bikeway classification. The LTS measure was introduced in Chapter 2 – Existing Conditions.

Methodology

LTS for all roadways in the study area was determined during existing conditions. The LTS for all planned classifications along a given Community Connector were determined during the calculation of this criterion. Projects with planned Class I or Class IV segments earn an LTS 1. Projects with planned Class II segments can only be LTS 1 if the roadway is two-lane and 30 mph (if without on-street parking) or 25 mph (if with on-street parking).

Categorization

Categorization for this criterion is as shown below.

Improves Bicycling Comfort	Points
High (>66% of extent)	3
Medium (>33% to 66% of extent)	2
Low (>0% to 33% of extent)	1
Very Low (0%)	0

Near Affordable Housing Infill Sites (0 or 2 points):

Definition

Indicates whether a Community Connector project passes within 500 feet of an affordable housing infill opportunity site identified by the local agencies.

Methodology

Affordable housing and infill opportunity sites were identified from General Plan Housing Elements of jurisdictions within the study area. Each of the participating stakeholder agencies confirmed and supplemented this data in meetings which took place early in the planning process. Spatial querying methods were used to identify the Community Connector projects that were within 500 feet of one of these locations.

Categorization

If the projects were within a 500-foot distance of one of the housing opportunity sites, they received the full two points. This criterion was structured without a point scale rewarding higher quantities, as this data was sourced piecemeal and some jurisdictions had more information available than others. If projects were not within 500 feet of a housing opportunity site, they received no points.

Near Affordable Housing Infill Sites	Points
Yes	2
No	0

General Cost and Feasibility (0 to 2 points):

Definition

Considers the general cost and feasibility of each Community Connector project based on the recommended bikeway classification and the ability to accommodate the proposed improvements within the available right-of-way.

Methodology

This criterion was applied prior to the rough order of magnitude cost estimation undertaken for all 44 projects, which was completed after more detailed feasibility assessments and project element inventories for each project area were conducted. Therefore, it relied on basic assumptions on the modifications to the right-of-way anticipated to make space for a Connector alternative's proposed classifications. Those assumptions are detailed below.

Categorization

This criterion awarded no points to projects with construction outside of the curbs such as widening the roadway or Class I construction, which would be the highest (\$\$\$) magnitude; projects with roadway reconfigurations within the curbs (adding physical separation for a bikeway, etc.) were assigned the moderate (\$\$) magnitude and received one point, and projects with minimal or no roadway modifications (e.g., re-striping) were assigned the lowest (\$) magnitude and received the full two points.

Cost and Feasibility	Points
Low ROM (\$)	2
Medium ROM (\$\$)	1
High ROM (\$\$\$)	0

Overlap with Local Projects (0 or 2 points):

Definition

Identifies whether a Community Connector incorporates a local bicycle project that is in an advanced stage of implementation along its alignment.

Methodology

As the project team met with participating stakeholder agencies, they identified active transportation/mobility projects in the advanced stages of planning which could influence or be incorporated into the Community Connectors network. Projects in the advanced stages may have had previous design work completed or underway and had varied levels of funding secured. Some example projects include the Ramon Road bridge over Whitewater River (Class IV – two-way) and Grapefruit Boulevard in Coachella (Class I). Community Connectors which incorporated projects with those characteristics were awarded the full two points.

Categorization

Categorization for this criterion is as shown below.

Overlap with Local Projects	Points
Yes	2
No	0

Addendum A – Early Action Project Identification Criteria Scoring

Project ID	Project Name	Mileage	Population & Employment Density	Population & Employment Density Points	AIM Raw Score	Z-Score from AIM Raw Score	AIM Points	Equity AIM Raw Score	Z-Score from Equity AIM Raw Score	Equity AIM Points	Bicyclist- and Pedestrian-Involved Collisions	Bicyclist- and Pedestrian-Involved Collisions per Mile	Collision Points	Improves Bicycling Comfort Points	Affordable Housing / Infill Opportunity Points	General Cost and Feasibility Points	Overlap with Local Projects Points	Total Score
4	Palm Dr / Pierson Bl	10.1	3.63	1	51.5	3.09	3	25.5	4.06	3	37	3.7	3	3	2	0	0	18
7	Tahquitz Canyon Way / El Cielo Rd	3.7	7.60	3	32.2	1.85	2	12.4	1.70	1	11	3.0	3	3	2	1	0	17
6	Date Palm Dr	4.4	8.55	3	51.6	3.09	3	24.1	3.81	1	12	2.7	3	3	0	0	0	16
8	Ramon Rd / Landau Bl	8.9	8.18	3	18.9	1.00	1	6.3	0.60	3	12	2.1	2	2	2	0	2	16
14	Ave 50 / Monroe St	5.5	6.70	2	5.3	0.65	1	4.6	1.40	3	21	3.9	3	2	2	0	2	16
9	Avenue 50 / Cesar Chavez St / Van Buren St	3.4	10.93	3	13.3	0.14	1	10.7	0.29	1	10	2.9	3	2	2	1	0	15
42	Grapefruit Bl	3.7	6.50	2	8.5	0.35	1	5.6	0.47	2	5	1.3	1	3	2	0	2	14
5	Gene Autry Trl	6.7	4.15	1	6.4	0.21	1	1.8	-0.22	3	27	4.0	3	3	2	0	0	13
18	Jefferson St	9.0	3.10	0	65.5	3.98	3	7.0	0.73	3	19	2.1	2	2	2	0	0	13
25	Miles Ave / Requa Ave	7.7	10.92	3	12.6	0.60	1	6.8	0.69	3	10	1.3	1	1	2	1	0	13
20	Jefferson St / Avenue 40	8.9	3.61	1	47.6	2.84	3	2.0	-0.18	3	3	0.3	0	3	2	0	0	12
26	Fred Waring Dr	6.0	8.18	3	0.0	-0.20	0	0.0	-0.54	3	13	2.2	2	0	2	2	0	12
41	Avenue 52	4.1	12.07	3	12.8	0.62	1	2.3	-0.14	1	7	1.7	2	2	2	1	0	12
13	Jackson St / Avenue 42	5.2	7.77	3	7.3	0.27	1	2.7	-0.06	1	11	2.1	2	2	2	0	0	12
2	Indian Canyon Dr	5.5	7.19	3	11.2	0.52	1	1.9	-0.20	1	11	2.0	2	2	2	0	0	11
15	Highway 111	4.0	4.05	1	8.0	0.31	1	2.9	-0.03	2	9	2.3	2	2	2	0	0	11
19	Cook St	4.7	3.81	1	2.6	-0.03	0	1.0	-0.36	3	7	1.5	2	1	2	0	2	11

Project ID	Project Name	Mileage	Population & Employment Density	Population & Employment Density Points	AIM Raw Score	Z-Score from AIM Raw Score	AIM Points	Equity AIM Raw Score	Z-Score from Equity AIM Raw Score	Equity AIM Points	Bicyclist- and Pedestrian-Involved Collisions	Bicyclist- and Pedestrian-Involved Collisions per Mile	Collision Points	Improves Bicycling Comfort Points	Affordable Housing / Infill Opportunity Points	General Cost and Feasibility Points	Overlap with Local Projects Points	Total Score
3	Avda Caballeros / Sunrise Way	7.3	6.20	2	2.3	-0.05	0	0.5	-0.46	1	21	2.9	3	2	2	0	0	10
12	Avenue 44	3.5	6.72	2	1.9	-0.08	0	1.6	-0.26	1	6	1.7	2	3	2	0	0	10
30	Portola Ave / Shadow Mountain Dr	5.4	6.56	2	0.0	-0.20	0	0.0	-0.54	1	12	2.2	2	0	2	1	2	10
33	Country Club Dr	7.0	3.75	1	0.0	-0.20	0	0.0	-0.54	2	6	0.9	1	0	2	2	2	10
35	Vista Chino	2.7	4.41	2	4.0	0.06	0	2.7	-0.06	3	3	1.1	1	3	0	0	0	10
37	Washington St / Country Club Dr / Warner Trl	6.4	3.59	0	1.1	-0.13	0	1.0	-0.36	2	11	1.7	2	0	2	2	2	10
39	Golf Center Pkwy	3.1	7.50	3	1.4	-0.11	0	0.0	-0.54	1	5	1.6	2	1	2	1	0	10
22	Portola Ave (north of Magnesia Falls Dr)	3.8	3.97	1	0.0	-0.20	0	0.0	-0.54	1	5	1.3	1	0	2	2	2	9
23	Cathedral Canyon Dr	3.7	6.00	2	0.9	-0.14	0	0.5	-0.46	1	2	0.5	0	1	2	1	2	9
27	Ramon Rd / Bob Hope Dr	8.7	3.60	1	0.4	-0.18	0	0.3	-0.48	3	11	1.3	1	0	2	2	0	9
1	North Palm Canyon Dr	3.0	4.27	1	0.0	-0.20	0	0.0	-0.54	1	5	1.7	2	0	2	2	0	8
17	Washington St / Avenue 52	10.0	4.21	1	15.1	0.77	1	3.2	0.04	1	13	1.3	1	1	2	0	0	8
28	Dinah Shore Dr	6.5	5.00	2	1.6	-0.10	0	0.1	-0.53	3	3	0.5	0	1	2	0	0	8
29	Dune Palms Rd	3.4	7.88	3	0.0	-0.20	0	0.0	-0.54	3	2	0.6	0	0	2	0	0	8
34	Gerald Ford Dr	5.0	3.90	1	5.3	0.14	0	0.8	-0.40	2	4	0.8	1	1	2	1	0	8
38	Little Morongo Rd / Indian Canyon Dr /	8.5	0.88	0	2.6	-0.03	0	2.6	-0.08	2	4	0.5	0	3	0	0	2	8
40	66th Ave / Harrison St / Pierce St	11.3	0.75	0	1.6	-0.10	0	1.6	-0.26	1	1	0.1	0	3	2	0	2	8
16	Hovley Ln	4.8	5.15	2	0.0	-0.20	0	0.0	-0.54	3	2	0.4	0	0	0	2	0	7

Project ID	Project Name	Mileage	Population & Employment Density	Population & Employment Density Points	AIM Raw Score	Z-Score from AIM Raw Score	AIM Points	Equity AIM Raw Score	Z-Score from Equity AIM Raw Score	Equity AIM Points	Bicyclist- and Pedestrian-Involved Collisions	Bicyclist- and Pedestrian-Involved Collisions per Mile	Collision Points	Improves Bicycling Comfort Points	Affordable Housing / Infill Opportunity Points	General Cost and Feasibility Points	Overlap with Local Projects Points	Total Score
24	Frank Sinatra Dr	5.2	2.86	0	2.0	-0.07	0	0.0	-0.54	2	4	0.8	1	2	2	0	0	7
44	South Palm Canyon Dr	3.0	2.03	0	2.7	-0.02	0	0.4	-0.48	3	1	0.3	0	1	2	0	0	6
10	Avenue 54	3.1	2.55	0	0.0	-0.20	0	0.0	-0.54	1	1	0.3	0	0	2	2	0	5
36	Monterey Ave	3.1	5.11	2	0.0	-0.20	0	0.0	-0.54	0	4	1.3	1	0	0	2	0	5
43	Golf Club Dr	1.1	2.92	0	1.5	-0.10	0	0.0	-0.54	1	0	0.0	0	2	0	2	0	5
11	Airport Bl / Polk St	3.1	0.43	0	0.8	-0.15	0	0.8	-0.41	1	0	0.0	0	3	0	0	0	4
31	Murray Canyon Dr	3.5	2.54	0	0.0	-0.20	0	0.0	-0.54	1	0	0.0	0	3	0	0	0	4
32	Pines to Palms Hwy	2.8	5.29	2	0.0	-0.20	0	0.0	-0.54	1	1	0.4	0	0	0	1	0	4
21	Da Vall Dr	4.8	3.40	0	0.0	-0.20	0	0.0	-0.54	2	4	0.8	1	0	0	0	0	3

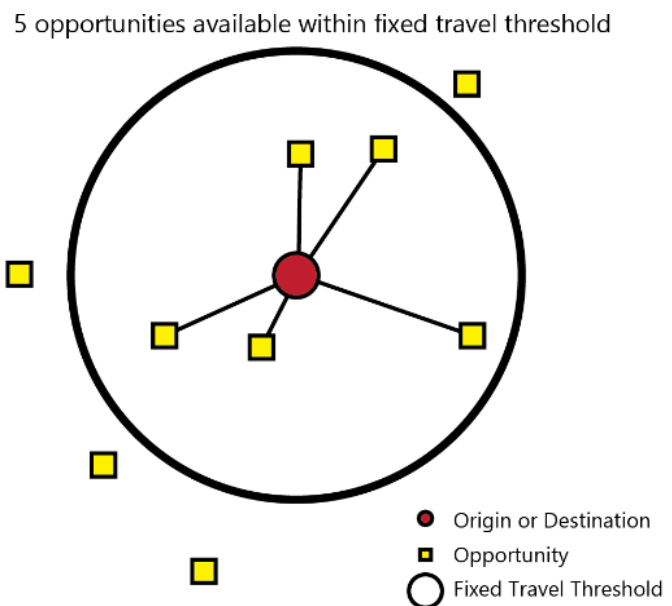
Note: The Avenue 50 / Monroe St and Grapefruit Bl projects are advancing toward full implementation and therefore were excluded from the Early Action Project identification. Those two projects are greyed out within this table.

Addendum B - Overview of Accessibility Improvement Measure

The Accessibility Improvement Measure (AIM) is a calculation that quantifies an active transportation project's individual contribution toward increasing a population's bicycling access between origins (spanning the entire geographic study area) and selected categories of non-work trip-attracting destinations. This measure was generated for all Community Connector projects in the Plan.

AIM is an example of an *accessibility measure*, which are derived from various methodological approaches for quantifying objects (destinations, opportunities, etc.) that are reachable from origins within a specified travel cost or distance. Accessibility measures facilitate consistent comparisons across a study area by normalizing for inputs (population, destinations, and networks) that are otherwise distorted by irregular spatial distribution and scale. They have become widespread in the study of travel behavior since the processing capabilities of Geographic Information Systems (GIS) software have improved and a wider variety of spatial datasets have become more accessible.

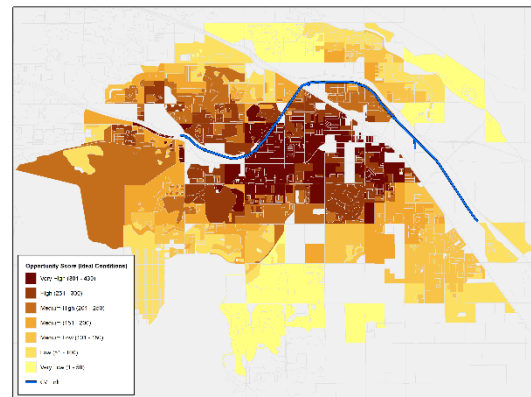
In AIM, destinations accessible within the travel thresholds are quantified for each origin in the study area. Origins are operationalized in this methodology as the centroid of every populated census block. AIM combines the counts of various destination categories into one composite index score called an "Opportunity Score," which assumes every participating destination category is of equal weight. Assigning equal weight to each destination category requires adjusting the individual count value of each destination type to control for their varying quantities. For instance, grocery stores, which are less numerous than other business categories such as restaurants or retail stores, are worth more individually in order to equalize their value in relation to the other categories which have more numerous locations. The business types that were included in the Community Connectors AIM analysis included retail, grocery stores, food and beverage establishments, health services, schools, parks and stakeholder identified points of interest. Unlike the business categories, the two land use categories used (schools and parks) were not quantified in the same way. Instead, they were treated as a yes/no variable. If one of the land use types were captured within the travel threshold, full points were awarded to the origin in the calculation of the Opportunity Score, regardless of their quantity. The travel threshold assumed for the analysis used in the Community Connectors project was three miles, a trip length that reflects a reasonable travel distance for non-work trip purposes and is within the range of a short bicycle trip.



An abstract representation of an accessibility measure from one origin, showing a count of opportunities within a given quantity of travel.

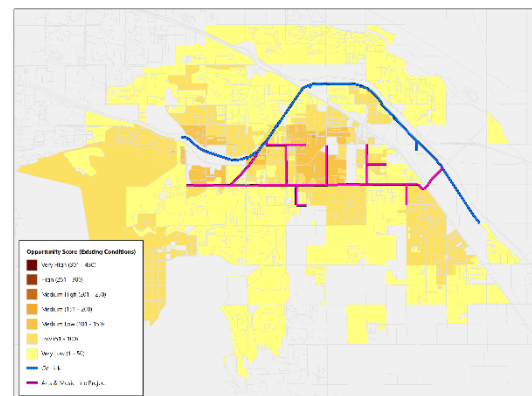
The Opportunity Score is calculated for three network scenarios: Ideal Conditions, Existing Conditions, and Existing Plus Project Conditions. These scenarios are explained below. The Arts & Music Line is used as a sample project to demonstrate the AIM scenario calculations.

Ideal Conditions – this scenario measures an origin’s proximity to the selected categories of destinations within the travel distance threshold, without adjusting for deterrence that may be caused by low comfort roadway conditions. High Opportunity Scores in this scenario are indicative of areas with the most potential for bicycling (based on where destinations are geographically distributed in the study area) if the study area’s entire roadway network were improved to be comfortable for all users. This scenario also is used to calculate the weights for each destination type in the Opportunity Score, so that each destination subcategory is equal. This is determined by which origin has the most of each destination type under this scenario.



Opportunity Score under Ideal Conditions – accessibility to destinations, if not adjusting for bicycling environment deterrence. Darker shades represent higher opportunity scores.

Existing Conditions – this scenario measures an origin’s proximity to the selected categories of destinations within the travel distance threshold assuming low comfort roadway environments can deter bicycling of longer length. It is operationalized by assigning travel time penalties to higher stress roadways within the network (and thereby reducing an origin’s accessibility to surrounding destinations). Conditions of stress were assumed based on the roadway’s Bicycle Level of Traffic Stress, which was measured for the study area in Existing Conditions. The rationale for assigning travel time penalties for LTS roadways is that more stressful travel results in an increased perceived travel time. Also, Caltrans’ Transportation Equity Index, which includes an access to destinations measure that adjusts for stressful travel conditions similarly assumes slower travel speeds for high stress environments (using a comparable travel time penalty ratio for LTS 4 roadways).



Opportunity Score under Existing Conditions – adjusts for deterrence created by stressful bicycling conditions, before project is implemented. Darker shades represent higher opportunity scores.

Bicycle Level of Traffic Stress (LTS) influenced travel time penalties

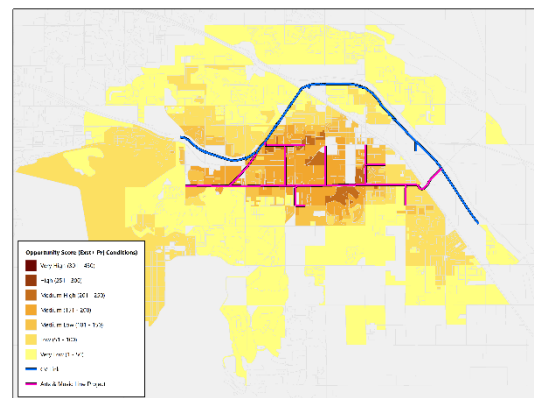
- LTS 1 (lowest stress) – perceived travel time is equal to length of segment
- LTS 2 (low stress) – perceived travel time is 125% length of the segment (100' = 125')
- LTS 3 (high stress) – perceived travel time is 200% length of the segment (100' = 200')
- LTS 4 (very high stress) – perceived travel time is 300% length of the segment (100' = 300')

Transportation literature acknowledges that travelers are influenced by perception of travel time. Some of the evident ways the influence of stress and perception of travel influences route choice in

favor of something which results in a slower trip are when travelers opt for “less boring” routes, prefer using some types of infrastructure over other types, or prefer routes with fewer turns. Another way of justifying a 300% perceived travel time penalty is that if a cyclist is deterred from riding in an LTS 4 environment and decided to dismount and walk, it would result in their travel speed being cut into one third of the speed of riding a bicycle.

High Opportunity Scores are less likely to be achieved in this scenario because of the prevalence of low comfort roadway environments. The Existing Conditions Opportunity Scores shows locations in the study area where there are relatively better conditions for making bicycling trips. Where differences between Ideal and Existing Conditions scores are the highest represent locations where improvements can have the most benefit. Projects targeted in these locations will have higher AIM scores, especially if they are well populated.

Existing Plus Project Conditions – this scenario measures an origin’s proximity to the selected categories of destinations within the travel distance threshold with the implementation of a project which changes LTS. This scenario is calculated for each project individually. It applies the same assumptions and network conditions as Existing Conditions, where travel time penalties are assigned to all high stress roadways within the network, except for the analyzed project extents – where the travel time penalty was eliminated or reduced because the improvement has hypothetically improved the roadway’s conditions. Differences in Opportunity Scores between Existing Conditions and Project Conditions are indicative of locations which received benefit from the project, in the form of increased access to surrounding destinations. This benefit is to be most pronounced closer to the project extents, though projects can also improve accessibility to destinations from origins not in the immediate vicinity.

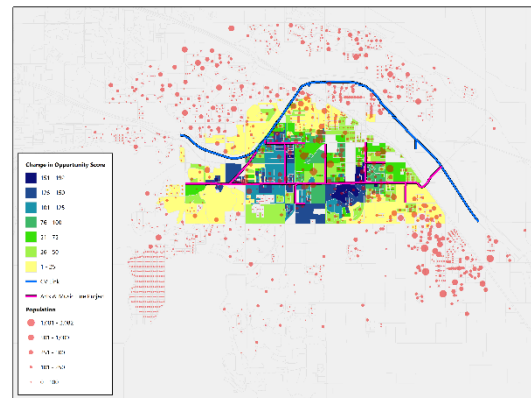


Opportunity Score under Existing Plus Project Conditions - adjusts for deterrence created by stressful bicycling conditions, though incorporates improved conditions provided along project area. Darker shades represent higher opportunity scores.

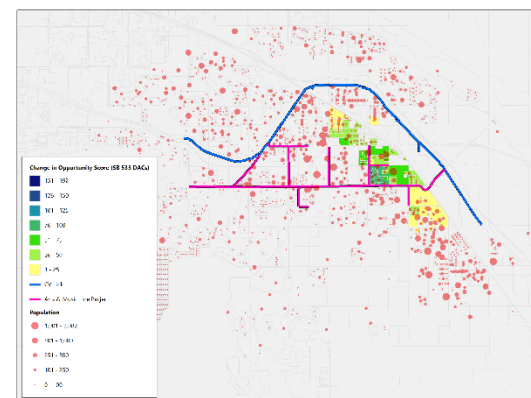
The AIM score is calculated by subtracting the Opportunity Score from existing conditions for all census blocks from its Opportunity Score from existing plus project conditions. The differences in Opportunity Score for each census block are multiplied by the population weighted percentage of that census block. The sum of differences represents the AIM score.

With the AIM measure there are not a finite number of points that can be earned. The main variables for a project's score are if the project is close to many destinations, if they serve high populated areas, and if they improve the roadway's condition from very low/low comfort to adequate comfort for a significant stretch. Projects which do not score high are missing one or more of those components. Either those projects did not change the level of comfort significantly (or at all) or were in remote locations of the study area that did not serve many trips.

A variant of the AIM measure was used to measure accessibility improvement for equity need areas. For that criterion, the same methodology was used but only census blocks within disadvantaged communities were counted in the score.



Change in Opportunity Score provided by project (shows difference in Opportunity Score between Existing + Project Conditions and Existing Conditions). Weighted population is also shown as



Change in Opportunity Score provided by project for Disadvantaged Community origins only (shows difference in Opportunity Score between Existing + Project Conditions and Existing Conditions). Weighted population is also shown.