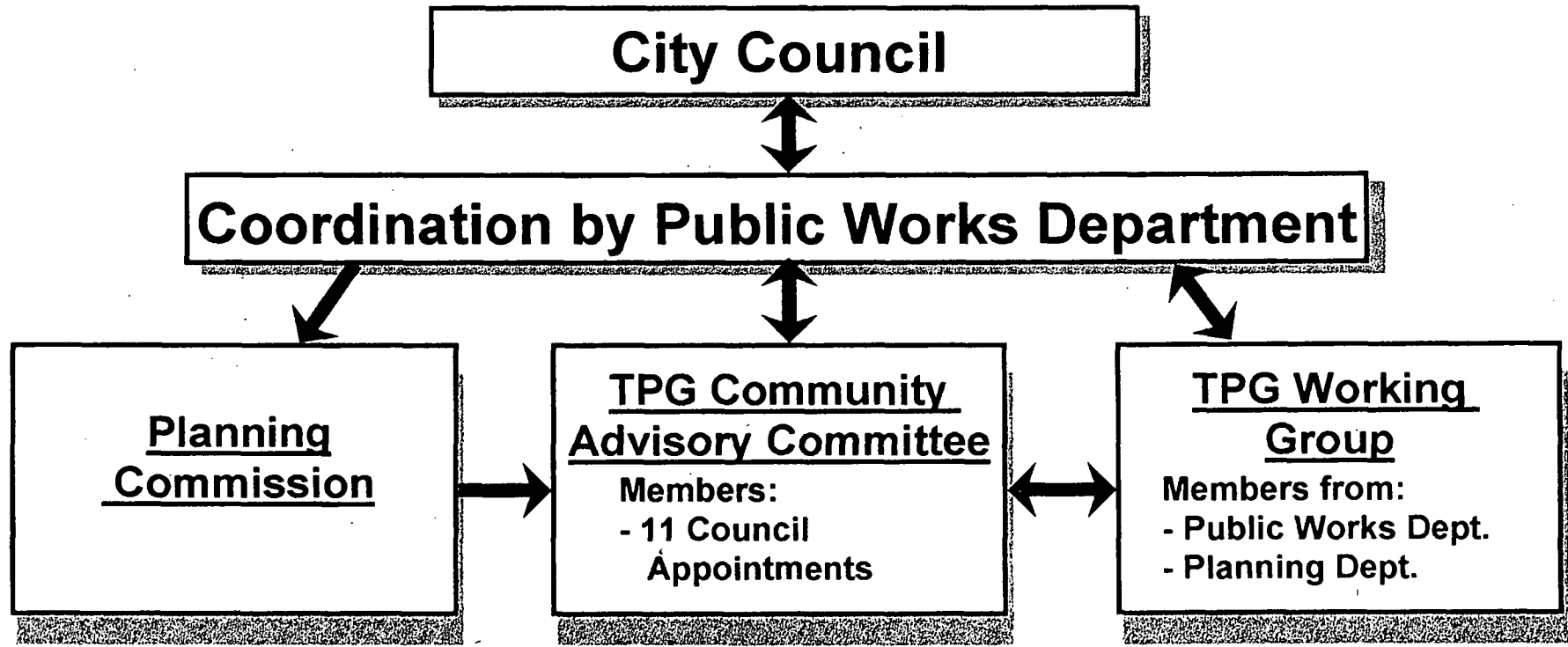


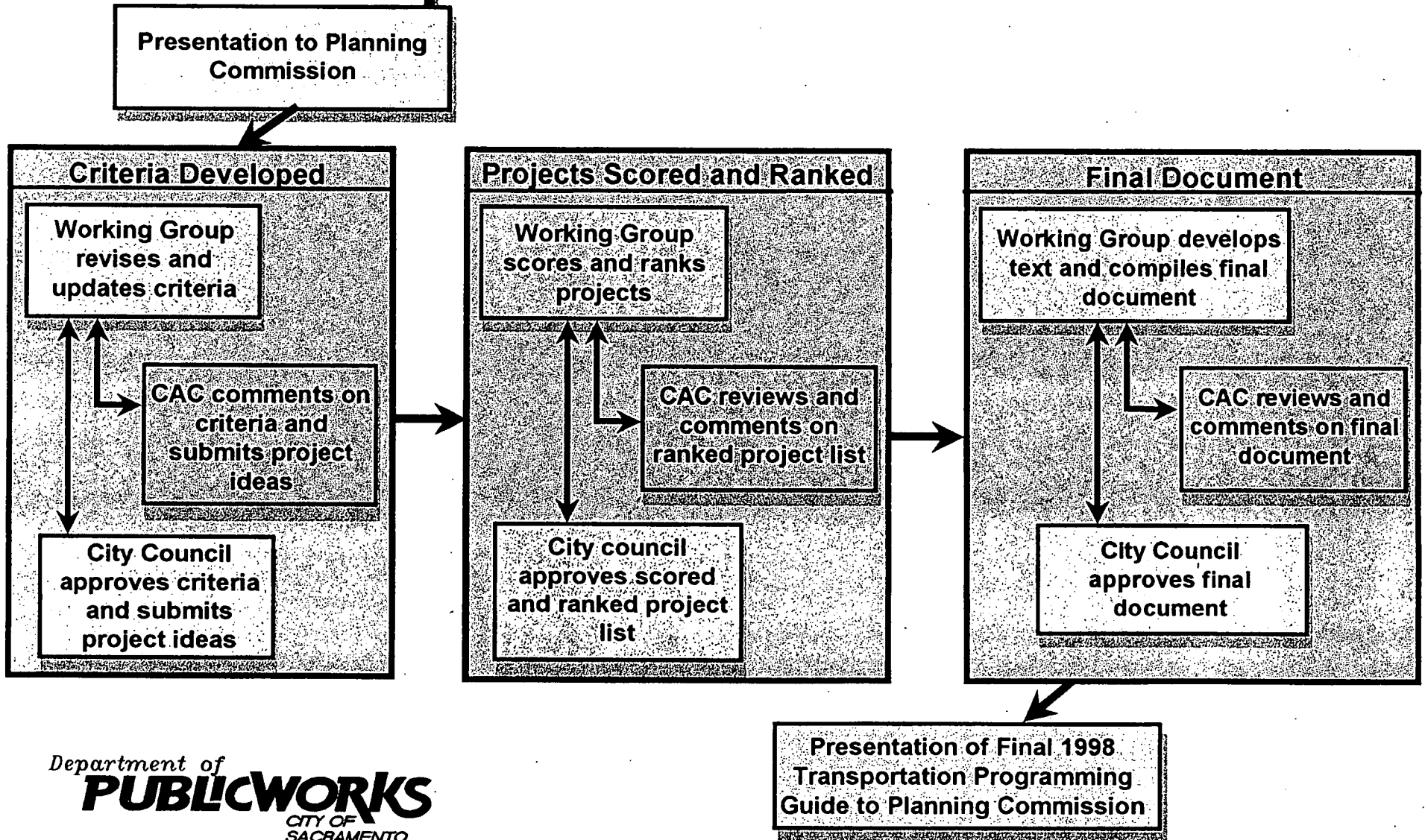
Transportation Programming Guide

- Summarizes the City's transportation programs and projects.
- Establishes program and project priorities.
- Provides the City with information to make project funding decisions.

Transportation Programming Guide Development Process



Transportation Programming Guide Development Process for 1998



Transportation Programming Guide

The 1998 Transportation Programming Guide differs from previous year's TPGs in 2 primary ways:

- **Street Reconstruction section added.**
- **Pedestrian Enhancements/Transit Accessibility and Speed Hump sections removed.**

Transportation Programming Guide

7 Program Areas

**Major Street
Improvements**

Bikeways

**Street
Maintenance**

Traffic Signals

**Street
Reconstruction**

**Bridge Replacement
and Rehabilitation**

**Non-Publicly Funded
Projects**



APPROVED
BY THE CITY COUNCIL

SEP 9 1997

OFFICE OF THE
CITY CLERK

A.2

DEPARTMENT OF
PUBLIC WORKS

ARCHITECTURE &
ENGINEERING DIVISION

CITY OF SACRAMENTO
CALIFORNIA

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SACRAMENTO, CA
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September 1, 1997

City Council
Sacramento, California

Honorable Members in Session:

SUBJECT: 1998 TRANSPORTATION PROGRAMMING GUIDE - APPROVAL OF
PROJECT SCORING CRITERIA

LOCATION AND COUNCIL DISTRICT: Citywide

RECOMMENDATION:

This report recommends that the City Council approve scoring criteria for the following program areas of the 1998 Transportation Programming Guide (TPG): Major Street Improvements, Street Maintenance, Street Reconstruction, Traffic Signals, Bikeways, and Bridge Replacement/Rehabilitation.

CONTACT PERSON: Kirsten Garrard, Transportation Analyst, 264-8242
Tim Mar, Senior Engineer, 264-5521

FOR COUNCIL MEETING OF: September 9, 1997

SUMMARY:

Criteria which will be used to score and rank projects in the following program areas: Major Street Improvements, Street Maintenance, Street Reconstruction, Traffic Signals, Bikeways, and Bridge Replacement/Rehabilitation are included in Attachment A. These criteria were developed by City staff in conjunction with a Community Advisory Committee. Concurrent with this effort, the Bicycle Advisory Committee (BAC) developed the Bikeways criteria, for which we are also asking Council approval.

COMMITTEE/COMMISSION ACTION:

On September 18th, an overview of the 1998 TPG will be presented to the Planning Commission.

BACKGROUND INFORMATION:

TPG Process

The TPG is developed by:

- Developing ranking criteria for each program area
- Scoring and ranking projects
- Writing the final document, which includes the prioritized project listings for each program area and a section entitled "Non-Publicly Funded Projects".

Each completed phase will be brought to the City Council for approval. This report asks for approval of the scoring criteria as presented in Attachment A. Additional project suggestions are currently being solicited from the City Council, City Manager's Office, Neighborhood Services, Community Advisory Committee, Bicycle Advisory Committee, Planning Commission and City staff. The scored and ranked project lists will be brought to Council in October for approval. The prioritized project lists will be incorporated into the complete document, which will be presented for City Council approval in November.

Changes to 1998 TPG

- Major Street Improvements: Criteria #1, Public Safety: The accident rate is changed from one year to a three-year average for consistency with other program areas in the TPG.

Criteria #4, Cost: The maximum points possible are reduced from 15 to 5 to reduce the impact of strictly project cost alone. Under the existing cost criteria, the least expensive project would get the maximum points. This reduces the total points possible for Major Street Improvement projects from 110 to 100 points.

- Street Reconstruction: See attached proposed criteria for new program area.
- Traffic Signals: Criteria #2, Pedestrians: An additional criteria (C) entitled Bicycles is added with 10 points for intersections identified as along a bikeway in the City/County Bikeway Master Plan.

Criteria #6 Special Conditions (A) Activity Centers: Employment, Commercial and High Density Residential Centers have been added. The number of signals included is proposed to be reduced to the top 10 (the 1997 TPG included 79 signal locations). Traffic Services will continue to maintain a database of all potential signal locations.

- Bikeways: Criteria #7, Geographic Distribution: The Bicycle Advisory Committee members are proposing to decrease the distance between bike routes in relation to the assigned point value. The maximum points assigned for distance between routes has been reduced from "greater than 4.5 miles" to "greater than 2 miles."
- Pedestrian Enhancements/Transit Accessibility: These amenities to the transportation system with limited funding opportunities are proposed to be removed from the TPG. Staff will maintain the existing lists, score and continue to seek funding opportunities.
- Speed Humps: Beginning with the 1997/98 CIP, the City has moved towards a council district equity-based Speed Humps program. Consequently, the Citywide ranked list is proposed to be removed from the TPG.

FINANCIAL CONSIDERATIONS:

The TPG is not a financing document, but is a tool used to assist in identifying and prioritizing the City's transportation needs and the subsequent programming of transportation funds.

POLICY CONSIDERATIONS:

Approval of the proposed criteria is consistent with the City Council priorities of Economic Development, Neighborhood Revitalization and Enhancement, and Public Safety.

ENVIRONMENTAL CONSIDERATIONS:

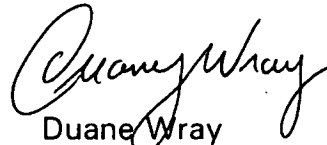
The TPG is not, in itself, a project. The subject of this report does not involve a project which requires compliance with the California Environmental Quality Act (CEQA), inasmuch as it does not involve an activity which may cause a direct or indirect change in the environment (Public Resources Code Section 21065). Each project in the TPG will be subject to environmental analysis.

City Council
1998 TPG – Approval of Project Scoring Criteria
August 27, 1997

MBE/WBE:

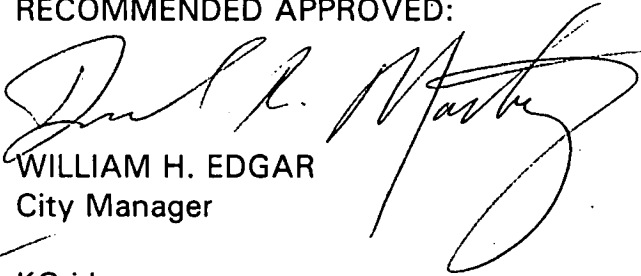
Not applicable as no goods or services are being purchased.

Respectfully submitted,



Duane Wray
Technical Services Manager

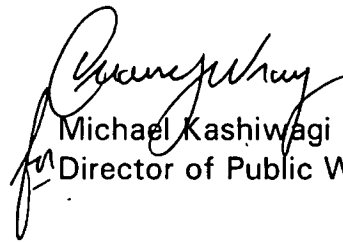
RECOMMENDED APPROVED:



WILLIAM H. EDGAR
City Manager

KG:jd
M\f&p\tpg\cc97-10

Approved:



Michael Kashiwagi
for Director of Public Works

ATTACHMENT A

MAJOR STREET IMPROVEMENTS SCORING CRITERIA

Eligible projects are scored and ranked, using seven criteria: Public Safety, Congestion, Economic Development, Cost (to the City), Deliverability/Readiness, Volume, and Gap Closure. If the roadway segment or intersection has not yet been built, then the criteria are applied to the facility which will receive the most benefit from the project. The maximum possible score is 100 points, which are assigned for the seven criteria as described below.

1. Public Safety (Max. Points: 20)

The accident rate of the project is compared to the highest accident rate of all the Major Street projects being evaluated. Points are assigned as follows:

$$\frac{\text{Accident Rate}^1 \text{ of Project}}{\text{Highest Accident Rate of Projects Considered}} \times 20 = \underline{\hspace{2cm}}$$

2. Congestion (Max. Points: 25)

Existing and future (Year 2015) congestions are determined for each project by calculating the volume to a capacity ratio (V/C), which is the ratio of the average daily traffic (ADT) to the theoretical maximum ADT the facility can carry. The ratios are then compared to the highest V/C of all the Major Street projects being evaluated, as follows:

$$\frac{\text{Existing V/C of Project}}{\text{Highest Existing V/C of Projects Considered}} \times 15 = \underline{\hspace{2cm}}$$
$$\frac{\text{Year 2015 V/C of Project}}{\text{Highest Year 2015 V/C of Projects Considered}} \times 10 = \underline{\hspace{2cm}}$$

3. Economic Development (Max. Points: 15)

Five points are given for each of the following conditions that apply to a particular project:

- Can development (residential or commercial) be directly tied to the project?
 Yes (5 points)
 No (0 points)

¹ The Accident Rate is the annual number of accidents per 1 million vehicle miles.
Accident Rate = Accidents x 10⁶ / (ADT x segment miles x 365) over a three year average

- Is the project in a Sacramento Housing and Redevelopment Agency redevelopment area?
 Yes (5 points)
 No (0 points)
- Is the project in a City-designated residential infill area?
 Yes (5 points)
 No (0 points)

4. Cost (Max. Points: 5)

Points are assigned inversely proportionally to the cost of the project that will be born by the City, as follows:

$$\frac{\text{Lowest Cost Project}}{\text{Project Cost}} \times 5 = \underline{\hspace{2cm}}$$

5. Deliverability/Readiness (Max. Points: 15)

Projects are scored based on estimated project delivery time, and whether other critical milestones have been completed as detailed below:

<u>Estimated Project Delivery Time</u>	<u>Points</u>
Within 3 years	9
Between 3 and 5 years	6
Between 5 and 10 years	3
Over 10 years	0

- Has the Environmental Determination been approved?
 Yes (2 points)
 No (0 points)
- Has a Project Study Report been approved?
 Yes (2 points)
 No (0 points)
- Is the Preliminary Design (30%) complete?
 Yes (1 point)
 No (0 points)

- Is Other Project Funding available?
 Yes (1 point)
 No (0 points)

6. Volume (Max. Points: 10)

Existing volumes on the candidate roadways are evaluated, with the higher volume streets receiving more points:

$$\frac{\text{Existing ADT of Project}}{\text{Highest Existing ADT of Projects Considered}} \times 10 = \underline{\hspace{2cm}}$$

7. Gap Closure (Max. Points: 10)

If a project will either close a gap or connect missing links in a route, ten points are assigned.

STREET MAINTENANCE SCORING CRITERIA

The ten (10) year Needs list is assessed by the Street Division through the SuperPMS computer program. Streets compete with each other continuously.

- The SuperPMS generates the potential rehabilitation strategies for the streets (mill and overlay, overlay or seals). An assessment of the effectiveness of the strategy and the benefit/cost of the strategy are performed. From these processes, the list is subdivided into the different maintenance treatments thus forming the REHABILITATION-NEEDS list. Street Division staff field-check the generated list for consistency.
- A Budget Analysis is run on the Rehabilitation-Needs list with the annual anticipated funding. The SuperPMS spends that funding from the streets in need of repair in year one. Any remaining projects compete for funding in year two and so on.

The analytical routines unique to the new maintenance program allow the Division to better assess the whole street network objectively. The rehabilitation programs are capable of accepting several user-defined scenarios which can be utilized to improve the pavement network management.

Annual Project List Development

The probability of a Street Maintenance Annual Project List to be undertaken in a particular year is dependent on utility coordination and neighborhood service area equitableness.

- The need - budget driven list for a specific year is circulated to the different private and public utility entities for comparison with their current or proposed projects. Since the City currently discourages excavations in streets for three (3) years after asphalt resurfacing, a street section that is on a utility's project list to be excavated within three (3) years of the need - budget driven list will be held back until completion of the utility project. The list is backfilled from the following year list. The different utility companies are presented with the annual list on three different occasions.
- To better service all residents, an attempt is made to balance the annual maintenance budget among the four (4) neighborhood service areas.

STREET RECONSTRUCTION SCORING CRITERIA

The Street Reconstruction Needs list is assessed through the SuperPMS computer program. The SuperPMS maintains information on the streets' characteristics and condition. This information is used to determine the overall condition of the street and is assigned a Pavement Quality Index (PQI) score which gives an overall rating of the condition of the street (1 - poor condition, 10 - excellent condition). Streets annually compete with each other.

Street segments with a PQI of 4 or below are deemed beyond rehabilitation (mill and overlay, overlay or seal) and are prioritized for reconstruction. The maximum possible score is 100 points which are assigned for the four criteria as described below. Criteria used to prioritize reconstruction projects are as follows:

1. Cost Effectiveness (Max. Points: 65)

The cost-effectiveness of the project is calculated by multiplying the average daily traffic count of the segment by the length of the segment and dividing by the project cost.

$$\frac{\text{ADT} \times \text{Length}}{\text{City Cost}^*} = \text{Cost Effectiveness}$$

*Total project cost minus any outside funding (SHRA, State, Federal, etc.)

Points are assigned as follows:

<u>Cost Effectiveness</u>	<u>Points</u>
20.1 +	65
15.1 - 20	50
10.1 - 15	35
5.1 - 10	25
0.1 - 5	15

2. Bikeway (Max. Points: 20)

Twenty points are given for streets that are identified as a designated bikeway in the City/County Bikeway Master Plan.

3. Economic Development (Max. Points: 15)

Five points are given for each of the following conditions that apply to a particular project:

- Can economic development be directly be tied to the project?
 - Yes (5 points)
 - No (0 points)

- Is the project in an Sacramento Housing and Redevelopment Agency redevelopment area?
 Yes (5 points)
 No (0 points)

- Is the project in a City-designated infill area?
 Yes (5 points)
 No (0 points)

TRAFFIC SIGNALS SCORING CRITERIA

Once a location is determined eligible for a traffic signal by meeting one or more of the Caltrans warrants, the following criteria are applied to rank the eligible locations (there is no maximum score):

1. Collisions (Max. Points: No limit)

Points are assigned for each reported collision that occurred at the intersection during the previous three years that was susceptible to correction by signalization, as follows:

<u>Type of Collision</u>	<u>Points per Occurrence</u>
Fatal	8
Injury	4
Property Damage Only	2

The total points for the previous three years are divided by three to determine a yearly average which is then assigned to the proposed signal location.

2. Pedestrians/Bicycles (Max. Points: 30)

A maximum of ten pedestrian points are assigned for each of the following:

(A) Pedestrians (General) (Max. Points: 10)

Points are assigned based on the number of pedestrians crossing the higher volume street during the four highest traffic hours, as presented below:

<u>Pedestrians</u>	<u>Points</u>	<u>Pedestrians</u>	<u>Points</u>
≥ 100	10	40-49	4
90-99	9	30-39	3
80-89	8	20-29	2
70-79	7	10-19	1
60-69	6	0-9	0
50-59	5		

(B) Pedestrians (Schools) (Max. Points: 10)

If the school warrant (Caltrans School Warrant #4) is met, 10 points are assigned.

(C) Bicycles (Max. Points: 10)

If the location is identified as on a bikeway in the City/County Bikeway Master Plan, 10 points are assigned.

3. Average Daily Traffic (ADT) Volumes (Max. Points: 10)

Points are assigned based on a comparison of the average daily traffic (ADT) volumes on the intersecting streets, as presented below:

MAIN STREET ADT

SIDE STREET ADT	≤2,000	2,001-5,000	5,001-10,000	10,001-15,000	15,001-20,000	≥20,001+
≤2,000	0	1	2	3	4	5
2,001-5,000	1	2	3	4	5	6
5,001-10,000	2	3	4	5	6	7
10,001-15,000	3	4	5	6	7	8
15,001-20,000	4	5	6	7	8	9
≥20,001	5	6	7	8	9	10

4. Peak Hour Traffic Volumes (Max. Points: 10)

Points are assigned based on a comparison of side street traffic volume to main street traffic volume during the peak hour, as presented below:

SIDE STREET PEAK HOUR VOLUME

MAIN STREET PEAK HOUR VOLUME	≤100	101-200	201-300	301-400	≥401+
≤400	0	0	1	2	3
401-600	0	1	2	3	4
601-800	1	2	3	4	5
801-1,000	2	3	4	5	6
1,001-1,200	3	4	5	6	7
1,201-1,400	4	5	6	7	8
1,401-1,600	5	6	7	8	9
≥1,601	6	7	8	9	10

5. Speed (Max. Points: 5)

Points are assigned in this category to account for the difficulty that motorists may have judging gaps in traffic on high-speed streets. More points are assigned for the higher-speed streets, as presented below:

<u>Posted Speed (mph)</u>	<u>Points</u>
≥50	5
40-49	4
35-39	3
30-34	2
25-29	1
<25	0

6. Special Conditions (Max. Points: 5)

Points are added based on special conditions related to the benefits or drawbacks of signaling an intersection as determined by the City Traffic Engineer. Although the sum of the three categories below may total more than five points for a candidate location, no more than five points are assigned.

(A) Activity Centers (Max. Points: 3)

One point is assigned for each of the following activity centers that generate pedestrian or emergency vehicle traffic and are within 1,000 feet of the candidate traffic signal location:

- School
- Stadium
- Fire Station
- Park
- Arena Complex
- Rail Line
- Library
- Senior Center
- Hospital
- Employment Center
- Commercial Center
- High Density Residential

(B) Rail Crossing (Max. Points: 2)

Up to two points may be assigned if a rail crossing that would benefit from adjacent traffic signal pre-empt operation is within 1,000 feet.

(C) Other Safety Concerns (Max. Points: 2)

Two points are assigned when restricted sight distance is a concern, or there is a favorable condition for signal coordination.

BIKEWAY SCORING CRITERIA

Eligible projects are scored and ranked using the eight criteria outlined below. The maximum score is 100 points.

1. Linkage to Activity Centers (Max. Points: 20)

Points are assigned for projects that are adjacent to, or provide access to, activity centers:

<u>Activity Center</u>	<u>Points per Activity Center</u>
Public Colleges/Universities	20 per use
Schools/Parks/Libraries/Community Centers	10 per use
Commercial Centers	5 per center
Employment Centers	5 per 100 employees
High Density Residential	5 per site

Note: **Commercial Centers** = Commercial sites containing a minimum of 40,000 square feet.
Employment Centers = Non-residential sites containing a minimum of 100 employees
High Density Residential = A common project site containing 20 dwelling units per acre and a minimum of 100 dwelling units

2. Barrier Elimination (Max. Points: 15)

Points are assigned based on the reduced distance the cyclists would travel with the project in place.

<u>Distance (miles)</u>	<u>Points</u>
less than .25	0
.25 - .5	2
.6 - 1.0	4
1.1 - 1.5	6
1.6 - 2.0	10
more than 2.0	15

3. Traffic Characteristics (Max. Points: 15)

Bike Trails (Off-Street Bikeways)

Trails are separated from motorized traffic; therefore, they receive full 15 points.

Bike Lanes/Routes (On-Street Bikeways)

Points are assigned based on existing curb lane width, average daily traffic (ADT) volume, and posted speed limit.

(A)	<u>Curb lane width (feet)</u>	<u>Points</u>
	< 12	5
	≥ 12	0

(B)	<u>ADT</u>	<u>Points</u>
	> 40,000	5
	30,001-40,000	4
	20,001-30,000	3
	10,001-20,000	2
	5,000-10,000	1
	< 5,000	0

(C)	<u>Speed</u>	<u>Points</u>
	> 55	5
	50	4
	45	3
	40	2
	35	1
	< 35	0

4. Right-of-Way/Cost (Max. Points: 15)

<u>Land Ownership Factors</u>		<u>Land Modification Factors</u>	
City Owned	7	Unused/Vacant Land	8
Public (non-City)	4	Relocatable Use	4
Private	0	Non-Relocatable	0

5. Linkage to Transportation System (Max. Points: 10)

(A) Links to other bikeways Max. Points: 5

One point is assigned for each existing or planned bikeway to which the candidate bikeway will connect.

(B) Links to other modes Max. Points: 5

Five points are assigned for a connection with another transportation mode that accommodates bicycles by carrying them or providing secure parking. Other modes include

light rail stations, busses with bike racks, AMTRAK station, Sacramento International Airport, and park and ride lots.

6. Riding Continuity (Max. Points: 10)

Points are assigned based on the number of stops per mile along the route.

<u>Stops Per Miles</u>	<u>Points</u>
0	10
1-4	7
5-9	5
> 10	0

7. Geographic Distribution (Max. Points: 5)

Points are assigned based on the candidate bikeway's distance from the nearest parallel existing route at the closest point:

<u>Distance (miles)</u>	<u>Points</u>
0 - .5	1
.6 - 1.0	2
1.1 - 1.5	3
1.6 - 2.0	4
>2.0	5

8. Recreational Potential (Max. Points: 10)

	<u>Points</u>	
	<u>Yes</u>	<u>No</u>
(A) Does the bikeway have scenic views?	2	0
(B) Does the bikeway have shaded portions?	2	0
(C) Does the bikeway have low slopes?	2	0
(D) Is the bikeway greater than two miles long?	2	0
(E) Existing street lighting?	2	0

BRIDGE REPLACEMENT AND REHABILITATION SCORING CRITERIA

Eligible projects are ranked in order of priority based on a deficiency rating system. The higher the total deficiency points assigned to a candidate project, the higher the project is ranked on the list. The ranking consists of assigning deficiency points to each of three major categories. The three categories and their weighting with respect to a maximum deficiency point total of 100 are listed below:

1. Structural Deficiency (Max. Points: 50)

- Points = 50 (If Structural Appraisal Rating \leq 3)
- Points = 0 (If Structural Appraisal Rating \geq 4)

The structural deficiency of a bridge is determined through the results of the structural inspections and appraisals performed by Caltrans. The *structural appraisal rating* (Caltrans Item 67) is used by Caltrans to evaluate the overall structural condition of a bridge in relation to the level of service which it provides on the roadway system of which it is a part (level of service in this context is with respect to needed bridge improvements).

The structural appraisal rating compares the existing structure to a new one which meets current design standards. The rating is based on the *structural condition ratings* (Caltrans Items 58, 59, and 60) assigned for the superstructure and substructure, and on the structure's *inventory rating* (Caltrans Item 66). Structural condition ratings describe the existing in-place bridge as compared to the as-built condition, and are designed to assess the severity of any deterioration and disrepair which the structure may be in. The inventory rating is a capacity rating which represents the load level for various vehicle types which the structure can sustain for an indefinite period of time.

Structural appraisal ratings are assigned by Caltrans on a scale of 0 to 9, with 0 reflecting a closed bridge, and 9 reflecting a structure that is superior to present desirable criteria. The City's evaluation criteria assigns points to only those structures with a Caltrans appraisal rating code of 3 (reflecting intolerable conditions requiring high priority of corrective action) or less.

2. Service Deficiency (Max. Points: 20)

The service deficiency of a bridge is determined by comparing the type of facilities it provides to those which are desired. The three types of facilities considered are vehicular, bicycle, and pedestrian. The cumulative score in the service deficiency category has a range from 0 to 20, with 20 reflecting a high degree of deficiency.

Vehicular Facilities (Max. Points: 10)

- Points = 10 (If $V/C > 0.8$ (below Level of Service C))
- Points = 0 (If $V/C \leq 0.8$ (Level of Service C or better))

Service deficiencies in the vehicular facilities of a structure are determined by evaluating the volume to capacity ratio (V/C) of the roadway segment between the two intersections nearest to the structure.

Bicycle Facilities (Max. Points: 5)

Points = 5 (If Class II Bike Routes¹ have a gap across or are detoured around the bridge)

A gap across the structure exists when bike lanes on both the structure and its approaches are absent for an existing Class II Bike Route. The 2010 Bikeway Master Plan is used to determine whether or not a Class II Bike Route is detoured around the structure.

Pedestrian Facilities (Max. Points: 5)

Points = 5 (If there are sidewalk gaps across the bridge)

A gap across the structure exists if there are sidewalks along the structure approaches, but not across the bridge.

3. Functional Deficiency (Max. Points: 30)

The functional deficiency of a bridge is determined by evaluating the adequacy of its facilities. The factors used to determine and rate functional deficiency are summarized below.

Accident Rate (Max. Points: 10)

Points = 10 (If bridge segment accident rate > expected accident rate for the most recent three years)

Points = 5 (If bridge segment accident rate > expected accident rate for two of three most recent years)

Points = 0 (If bridge segment accident rate > expected accident rate² for one or none of three most recent years)

The accident rate deficiency is determined by comparing the number of reported accidents along the bridge and roadway segments between the nearest two intersections with the expected accident rate. The expected accident rate... is reported by the Traffic Engineering Division on an annual basis in the Speed Survey Segment Accident Rate Report. For the 1997 Transportation Programming Guide, the most recent three reports are for 1992, 1993 and 1994.

Deck Geometry (Max. Points: 10)

¹A Class II Bike Route is an on-street route with striped bike lanes.

²The Accident Rate is the annual number of accidents per 1 million vehicle miles.
Accident Rate = $\text{Accidents} \times 10^6 / (\text{ADT} \times \text{segment miles} \times 365)$

The deck geometry adequacy is evaluated based on the geometric features of a structure with respect to minimum vehicle lane width, bike lane width, sidewalk width, and horizontal and vertical clearances. Deficiency points are assigned to a structure which does not meet certain minimum criteria, as follows:

- 1 point per foot short for each vehicle lane width less than 11 feet
- 2 points per foot short for each bike lane less than 5 feet
- 2 points per foot short for each sidewalk width less than 4 feet
- 1 point per foot short of horizontal clearance³ less than 3 feet
- 1 point per inch short of overhead clearance less than 14 feet

Deficiency points are totaled for each structure and normalized, as follows:

Points = (point total of project/highest point total of all candidate projects) x 10

Waterway Adequacy (Max. Points: 10)

Points = 10 (If bridge has a score \leq 3 for Caltrans Item 71 Code)

Points = 0 (If bridge has a score $>$ 3 for Caltrans Item 71 Code)

The Waterway Adequacy (Caltrans Item Code 71) is based on the frequency of floodwater overtopping the structure and approaches, and the significance of the resulting traffic delays. The Waterway Adequacy appraisal rating is reported on a scale of 0 (bridge closed) to 9 (superior to present desirable criteria). The City's rating system assigns waterway adequacy points to only those structures with a code of 3 (requiring high priority of corrective action) or less.

³Horizontal clearance is measured from the edge of the travel lane to the nearest obstruction, such as an abutment, column, or bridge rail.