

**CITY OF SACRAMENTO
TRANSPORTATION PROGRAMMING GUIDE
APRIL 2002**

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INTRODUCTION

BACKGROUND

The Transportation Programming Guide is a comprehensive document that prioritizes the City of Sacramento's transportation programs and projects. Nine transportation program areas are identified:

- Major Street Improvements
- Street Maintenance
- Street Reconstruction
- Traffic Signals
- Alternate Modes
- Bridge Replacement and Rehabilitation
- Streetscape Enhancement
- Sidewalks to Schools
- Speed Humps

The Transportation Programming Guide also summarizes development driven projects in the following areas:

- Jacinto Creek Planning Area
- North Natomas
- Richards Boulevard/Railyard Area
- Granite Regional Park
- South Natomas

Although projects are prioritized within the nine program areas, this document is a guide identifying the relative transportation merit of the individual projects evaluated. It may occasionally be appropriate to take projects out of order because of funding source availability, project feasibility or deliverability, physical constraints, and/or partnerships with other agencies or groups.

CITY AND COMMUNITY PARTNERSHIP

During development of the Year 2002 Transportation Programming Guide, City staff worked with a Council-appointed Community Advisory Committee. This committee was comprised of members who represent:

- The Mayor
- Each of the Councilmembers; and
- The Sacramento Area Bicycle Advocates
- The American Lung Association

DEVELOPMENT OF THE TRANSPORTATION PROGRAMMING GUIDE

City staff and the Community Advisory Committee developed the Year 2002 Transportation Programming Guide using the scoring and ranking criteria developed last year.

Project ideas were solicited from Mayor and City Council, the Planning Commission, City staff, Community Advisory Committee, City Manager's Office and Neighborhood Services. Staff screened project suggestions for eligibility and applied the Council-approved criteria to score and rank eligible projects. The scored and ranked project lists were reviewed by City staff and the Community Advisory Committee to ensure that the criteria were applied correctly and that the proposed projects were of sufficient merit for inclusion in the TPG.

A. MAJOR STREET IMPROVEMENTS PROGRAM
(TAB PLACE HOLDER)

MAJOR STREET IMPROVEMENTS PROGRAM

INTRODUCTION

The City of Sacramento's Major Streets carry the majority of City traffic. These streets include:

Expressways: Expressways are designed for relatively long distance through movement. They have limited access with few cross streets. All cross street intersections are signalized. Residential driveways are prohibited, but limited non-residential driveways are allowed based upon driveway spacing. Expressways have moderate to high speeds with moderate to high volumes on eight or less travel lanes.

Arterials: The arterial street system is used to provide a high level of mobility for travel through the region and within and between adjacent sub-areas of the city. The arterial streets have moderate speeds with moderate to high volumes on six or less travel lanes. Six lane arterials, (major arterials), provide intra-city transportation and inter-region transportation for large volumes of vehicles while providing access to abutting properties. Four lane arterials, (minor arterials), connect major facilities, but provide more access than a six lane arterial. Principal land-uses served by arterials are central business districts, community shopping centers, community colleges, large industrial plants, high schools, large office complexes, community hospitals, clinics, golf courses, and fire stations.

Collectors: The collector system is deployed through out the entire city to provide mobility between neighborhoods or from neighborhoods to the arterial system. An adequate collector system is needed to ensure these localized movements do not occur on principal routes or major arterials. Land is directly accessible with emphasis on collection and distribution trips within an arterial grid. Collector streets have low speeds, low to moderate volumes on two or three lanes. Principal land-uses served are elementary schools, smaller industries and warehouse facilities, neighborhood shopping centers, small office buildings including clinics, neighborhood parks residential uses, and community service uses.

Major Street projects generally have a minimum construction cost of \$1 million and represent projects of regional transportation significance. Typical Major Street Improvement projects include:

- Roadway Widening
- Extensions/Connections
- Grade Separations
- Interchange Construction or Modification

These improvements are planned to close gaps in the City's circulation network, relieve congestion, improve safety, and/or provide for the efficient movement of people, services, and goods.

GOALS AND POLICIES

The Major Street Improvements Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goals and policies:

Goals:

1. Create a street system which will ensure the safe and efficient movement of people and goods within and through communities, and to other areas in the City and region.

Policy:

- Explore actions which allow for the prioritization, planning, and construction of new facilities.
2. Create and maintain a street system that protects residential neighborhoods from unnecessary levels of traffic.

Policy:

- Continue, wherever possible, to design streets and to approve development application in such a manner as to eliminate high traffic flows and parking problems within residential neighborhoods.
3. Work toward achieving an overall Level of Service C¹ on the City's local and major street system.

Policies:

- Work toward the most efficient use of the City's existing street system.
 - Explore alternative transportation modes that will lead to a decrease in demand of the City's surface street system.
4. Increase the capacity of the transportation system.

Policy:

- Support programs that improve traffic flow.

¹

Level of Service (LOS) is a term used to describe the quality of traffic operations on roadways and at intersections. Letters ranging from A to F denote levels of service, with A describing free-flowing conditions and F describing congested conditions. The City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) has adopted a service level standard of C for both roadways and intersections.

PROJECT LIST DEVELOPMENT

Eligibility Criteria

Projects on Major Streets are considered if they support the previously identified goals, and one or more of the following conditions exist:

<u>Roadway Widening:</u>	If the existing volume on a street exceeds 80% of the street's capacity (i.e., the Level of Service is below C), lanes are of substandard width, or widening is needed to serve anticipated development.
<u>Extensions/Connections:</u>	If extending a major street or connecting two major streets will close a gap, improve traffic circulation, or relieve congestion on other streets that have a service level below C (i.e., LOS D, E, or F).
<u>Grade Separations:</u>	If the existing service level is below C, or there are problems with conflicts between vehicular traffic and/or rail traffic.
<u>Interchange Construction:</u>	If an interchange is needed to serve development or to relieve congestion at a nearby interchange with an existing service level below C.
<u>Interchange Modification:</u>	If the existing service level at the over-crossing, at the ramp intersections, or on the ramps is below C, or if a partial interchange exists and the modification will upgrade it to a full interchange.

Project Identification

A total of forty projects were evaluated in the Major Street section. The majority of the projects were previously identified in the 2001 TPG:

<u>Type of Major Street Improvement</u>	<u>Number of Projects</u>
Roadway Widening	20
Extension/Connection	7
Grade Separation	0
Interchange Construction/Modification	8
Extension and Interchange Construction/Modification	2
Other	3

PROJECT RANKING PROCESS

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

1. Congestion(Max. Points: 25)

Existing and future (Year 2022) congestion are determined for each project by calculating the volume to 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:

$$\frac{\text{Existing V/C of Project}}{\text{Highest Existing V/C of Projects Considered}} \quad X \quad 15 = \underline{\hspace{2cm}}$$

$$\frac{\text{Year 2022 V/C of Project}}{\text{Highest Year 2022 V/C of Projects Considered}} \quad X \quad 10 = \underline{\hspace{2cm}}$$

2. 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. The accident rate used is the average rate for the three latest years for which accident data is available. Points are assigned as follows:

$$\frac{\text{3 Year Average Accident Rate}^1 \text{ of Project}}{\text{Highest Accident Rate of Projects Considered}} \quad X \quad 20 = \underline{\hspace{2cm}}$$

3. Economic Development (Max. Points: 10)

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

- Is the project within the Economic Development Strategy?
 1. Does the project fall within one of the nineteen (19) Neighborhood Commercial Revitalization Area?
 2. Is the project located within one of the twenty-seven (27) Key Development Opportunity Areas or Sites?

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)

3. Is the project located in either the Merged Downtown or SP/Richards
Redevelopment Area?

_____ Yes (5 points) _____ No (0 points)

- Is the project located in a Business Improvement District (BID) or Property-Based
Improvement District (PBID)?

_____ Yes (5 points) _____ No (0 points)

4. Infill Development..... (Max) Points: 10)

- Is the project located in a City-designated residential infill area (as identified in the
City General Plan?

_____ Yes (5 points) _____ No (0 points)

- Is the project located in a City Redevelopment Area or Community Development
Block Grant Area?

_____ Yes (7 points) _____ No (0 points)

5. Cost.....(Max Points: 5)

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

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

6. Deliverability/Readiness (Max. Points 10)

Projects are scored based on whether critical milestones have been completed, as detailed
below:

- Has the Environmental Determination been approved?

_____ Yes (5 points) _____ No (0 points)

- Has a Project Study Report or Feasibility Study been approved or completed?

_____ Yes (5 points) _____ No (0 points)

7. Volume.....(Max. Points: 10)

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

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

8. Gap Closure (Max Points: 5)

Freeway Interchanges

1 point given for each freeway interchange ramp added by project

Roadway Extension

5 points given to projects that either close a gap or connect missing links in a route

2 points given to projects that will close a bicycle facility gap

2 points given to projects that will reduce vehicle travel through a residential neighborhood

9. Alternative Modes (Max Points: 5)

2 points given for streets identified as a designated Class 2 or 3 bikeway (existing or proposed) in the City/County Bikeway Master Plan

2 points given if the project is on a bus route

2 points given if the project improves access to a LRT station for pedestrians, bicyclists, vehicles or buses

SUMMARY

The Major Street Improvement priority listing is presented in Table A-1 and Table A-2. Figure A-1 shows the approximate location of these projects. One new project, State Route 99/Sheldon Road Interchange, was added this year. The project is consistent with the goals, policies, and eligibility criteria of the Major Street section.

The Florin Road/LRT, UPRR Grade Separation Project was deleted from the 2001 TPG. This project is fully funded and was ranked number 2 in the 2001 TPG.

Previous projects identified as SR100 at Grade Improvement, ranked number 20 in the 2001 TPG, was redefined and renamed Northgate Boulevard Interchange at SR160. Improvements at the SR160 / Richards intersection were deleted since these improvements are fully funded. The project also no longer includes improvements at SR160/Del Paso Boulevard.

YEAR 2002 - MAJOR STREET PROJECTS

Table A-1

2002 Rank	2001 Rank	Council District	Major Street Project	Project Cost	Congestion Score	Pub Safe Score	Econ Dev Score	Infill Score	Cost Score	Deliv/ Ready Score	Volume Score	Gap Close Score	Alt. Modes Score	TOTAL SCORE
Maximum Points Possible in Scoring Category:					25	20	10	10	5	10	10	5	5	100
1	1	3,6	Folsom Blvd Widening from 65th Street to Power Inn Rd	\$ 11,000,000	22.26	16.61	0	0	0.35	10	2.97	0	4	56.19
2	3	1	Gateway Boulevard - North 7th Street to North 12th Street and North 12th St/North B St Intersection Reconfiguration	\$ 16,513,000	13.45	10.72	10	7	0.23	0	4.75	5	4	55.16
3	4	3,6	Jed Smith Realignment and Ramona Ave Ext, to Folsom Blvd and 14th Avenue	\$ 3,000,000	17.15	10.48	0	0	1.29	10	6.24	5	0	50.16
4	5	6	4th Ave. Ext. from 65th St. to Ramona Ave	\$ 10,000,000	17.15	10.48	0	0	0.39	10	6.24	5	0	49.26
5	6	6	SR 16 Realignment: Watt to Power Inn Rd at 14th Ave	\$ 11,000,000	17.15	10.48	5	0	0.35	10	6.24	0	0	49.22
6	7	1	Richards Boulevard/SR 160 Interchange	\$ 26,094,000	16.60	9.85	5	7	0.15	0	4.75	2	2	47.35
7	8	1,3	Sutter's Landing Parkway - Richards Blvd to SR51 and Interchange at SR51 (Requires Richards Blvd/SR 160 IC)	\$ 23,265,000	12.58	6.71	5	7	0.17	0	8.39	5	0	44.84
8	9	3	Arden Way/Arden Fair Mall Access Imp. - SR51 to Ethan Way	\$ 1,945,000	13.97	9.68	0	7	1.98	0	10.00	0	2	44.64
9	10	1	Railyards Access Road Extend and Improve Jibboom Street into Railyard area (Requires Richard Blvd/I-5 IC imp.)	\$ 6,407,000	13.45	10.72	10	7	0.60	0	2.38	0	0	44.15
10	11	6	Power Inn Rd Widening - 14th Ave to Fruitridge Rd	\$ 13,931,000	14.51	7.58	5	7	0.31	0	4.62	0	4	43.02
11	12	6	So Watt Ave Widening - Elder Creek Rd to Fruitridge Rd	\$ 18,637,000	21.71	2.92	5	7	0.21	0	2.66	0	2	41.50
12	13	1	Northgate Blvd/I-80 Interchange Ramp Improvements	\$ 3,732,000	13.14	5.59	5	7	1.03	0	4.64	0	4	40.41
13	14	3	Arden Way/SR 51 Interchange Imp.	\$ 19,529,000	13.92	8.06	0	7	0.20	0	8.37	0	2	39.54
14	15	1	Richards Blvd/I-5 Interchange Imp.	\$ 2,918,000	13.42	6.79	5	7	1.32	0	3.82	0	2	39.35
15	16	1	American River Crossing at Truxel Road	\$ 47,323,000	10.95	2.13	5	7	0.08	0	7.26	5	0	37.42
16	17	7	Cosumnes River Blvd Extension and Interchange at I-5 - Franklin Blvd to I-5	\$ 50,661,000	13.38	7.21	5	0	0.08	0	4.62	5	2	37.29
17	18	2	Exposition Blvd/SR 160 Interchange	\$ 34,050,000	11.28	12.11	0	7	0.11	0	1.14	0	4	35.64
18	19	1	Northgate Blvd All Weatherization - Elevate 2 Lane Road	\$ 3,489,000	13.17	9.77	0	7	1.11	0	1.90	0	2	34.94
19	21	2	Silver Eagle Rd Widening - Norwood Ave to Mabel Ave	\$ 772,000	9.47	4.72	0	10	5.00	0	1.37	0	4	34.56
20	20	1,2	Northgate Boulevard Interchange at SR160	\$ 18,000,000	10.95	2.13	5	7	0.21	0	7.26	0	2	34.55

YEAR 2002 - MAJOR STREET PROJECTS

Table A-1

2002 Rank	2001 Rank	Council District	Major Street Project	Project Cost	Congestion Score	Pub Safe Score	Econ Dev Score	Infill Score	Cost Score	Deliv/ Ready Score	Volume Score	Gap Close Score	Alt. Modes Score	TOTAL SCORE
Maximum Points Possible in Scoring Category:					25	20	10	10	5	10	10	5	5	100
21	22	5	Sutcliffe Rd/23rd Street Intersection	\$ 1,672,000	12.11	2.89	0	7	2.31	0	3.98	0	5	33.30
22	23	2	Bell Avenue Widening - Norwood Ave to Raley Blvd	\$ 4,524,000	6.60	15.52	0	7	0.85	0	1.08	0	2	33.04
23	24	8	Sheldon Road Widening to 4-lanes from Bruceville Rd to 99	\$ 1,148,000	20.13	3.80	0	0	3.36	0	3.41	0	2	32.70
24	25	1	7th St. Extension Phase II, widen to 4 lanes	\$ 9,727,000	9.94	0.00	10	7	0.40	0	1.09	0	4	32.42
25	N/A	8	State Route 99/Sheldon Road Interchange*	\$ 29,800,000	13.84	10.46	0	0	0.13	5	0.84	0	2	32.28
26	26	6	Fruitridge Rd Widening - Florin Perkins Rd to So Watt Ave	\$ 6,663,000	11.31	2.35	5	7	0.58	0	1.76	0	4	31.99
27	27	1	Garden Hwy Widening-Arden/Garden to I-5	\$ 34,756,000	17.06	5.27	0	0	0.11	5	2.39	0	2	31.83
28	28	2	Main Ave Widening - Norwood Ave to Rio Linda Blvd	\$ 4,524,000	8.00	20.00	0	0	0.85	0	0.84	0	2	31.69
29	29	2, 3	Roseville Rd Widening - Connie Dr to City Limits	\$ 3,353,000	10.01	6.41	0	7	1.15	0	2.02	0	5	31.60
30	30	1	West El Camino Ave/I-5 Interchange Ramp Improvements	\$ 18,263,000	19.21	7.61	0	0	0.21	0	2.39	2	0	31.42
31	31	2	Commerce Circle Exten. to Northgate Blvd	\$ 5,385,000	5.40	11.75	0	7	0.72	0	1.55	5	0	31.41
32	32	8	Bruceville Rd Widening - Cosumnes River Blvd to Sheldon	\$ 2,422,000	10.88	7.32	5	0	1.59	0	1.50	0	4	30.28
33	33	6	Elder Creek Rd Widening - Power Inn Rd to So Watt Ave	\$ 12,233,000	6.27	6.77	5	7	0.32	0	2.23	0	2	29.60
34	34	6	Florin-Perkins Rd Widening - Folsom Blvd to Fruitridge Rd	\$ 12,148,000	12.05	3.15	5	0	0.32	0	4.28	0	4	28.79
35	35	8	Cosumnes River Blvd Widening - Bruceville to Center Pkwy	\$ 970,000	13.90	3.25	0	0	3.98	0	2.33	0	2	25.46
36	36	1	West El Camino Ave Widening - NMDC to I-80	\$ 6,395,000	14.38	2.57	0	0	0.60	0	2.27	0	2	21.82
37	37	2	Raley Blvd Widening - Santa Ana to Ascot	\$ 3,961,000	10.70	5.62	0	0	0.97	0	1.87	0	2	21.17
38	38	2	Bell Ave Widening - Raley Blvd to Winters	\$ 1,647,000	6.71	6.09	0	0	2.34	0	1.06	0	2	18.21
39	39	7	Cosumnes River Blvd Widening - Franklin to Center Pkwy	\$ 1,696,000	9.51	2.73	0	0	2.28	0	1.19	0	2	17.71
40	40	6	Kiefer Blvd Widening - Florin Perkins to So Watt	\$ 3,393,000	6.15	5.16	0	0	1.14	0	1.03	0	2	15.47

TOTAL MAJOR STREET PROJECT COST \$ 486,946,000

 Development Driven Projects

* New project added in year 2002.

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

2002 Rank	Project Name	Description/Limits	Notes	Cost
1	Folsom Boulevard Widening – 65 th Street to Power Inn Road	Widen Folsom Boulevard to four lanes and a two-way left turn between Power Inn Road and 65 th Street.	SEATS Phase I ¹	\$11,000,000
2	Gateway Boulevard - North 7th Street to North 12th Street and North 12 th Street/North B Street Intersection Reconfiguration	Construct a 2-lane collector from the intersection of North B/12 th Street, southwest to an intersection with the proposed 7 th Street extension. Provide sidewalks and bike lanes in both directions. Construct traffic control islands on North B Street between North 10 th and North 12 th Street and on Dos Rios Street at the North B/North 12 th intersection. Modify traffic signal at North B St/North 12 th Street to accommodate the proposed Gateway Blvd (westbound). Construct new traffic signal at the proposed Gateway Blvd (eastbound)/North 12 th intersection. Construct a ramp connection from North B Street at the North 10 th intersection to proposed Gateway Boulevard.	NEATS Project ID #5 & ID #6. Facility of Benefit - SR 160 between C Street and Richards Blvd ²	\$16,513,000
3	Jed Smith Realignment and Ramona Avenue Extension, to Folsom Boulevard and 14 th Avenue	Realign Jed Smith from CSUS to Folsom Boulevard and extend Ramona Avenue as a two-lane roadway from Folsom Boulevard to 14 th Avenue.	SEATS Phase I	\$3,000,000
4	4 th Avenue Extension from 65 th Street to Ramona Avenue	Extend 4 th Avenue from 65 th Street to Ramona Avenue.	SEATS Phase I	\$10,000,000
5	SR 16 Realignment: Watt Avenue to Power Inn Road at 14 th Avenue	Realign Jackson Road as a four-lane roadway from Watt Avenue to Power Inn Road.	SEATS Phase I	\$11,000,000
6	Richards Boulevard/ SR160 Interchange	Construct an interchange on SR 160 at Richards Boulevard. Provide Richards Boulevard with a 4-lane over crossing of SR 160 including a loop ramp on the west side of SR 160 and a diagonal ramp on the east side of SR 160. Provides sidewalks and bike lanes in both directions on Richards Boulevard. This project can be constructed without Sutter's Landing Parkway.	NEATS project ID #9 Facility of Benefit - SR 160 between C Street and Richards Blvd.	\$26,094,000

1 South East Area Transportation Study (SEATS)

2 North East Area Transportation Study (NEATS)

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

2002 Rank	Project Name	Description/Limits	Notes	Cost
7	Sutter's Landing Parkway – Richards Blvd to SR51 and Interchange at SR51	Construct a four-lane arterial on new alignment between SR 160 and SR 51 (Capital City Freeway), a distance of 1.6 miles. Provide sidewalks and bike lanes in both directions and provide a grade separation with the railroad. Construct a full interchange at the connection with SR 51. Requires the Richards Boulevard/SR 160 Interchange.	NEATS Projects ID #2 Facility of Benefit - SR 160 between C Street and SR 51	\$23,265,000
8	Arden Way/Arden Fair Mall Access Improvements from SR51 to Ethan Way	The project is intended to improve access to and from Arden Fair Mall, improve traffic operations on Arden Way, and relieve congestion at the Business 80 interchange. Improvements include: Extending left turn pockets at Heritage Lane/Arden Way, converting thru lane to thru right turn lane at Arden Mall Driveway at Heritage Lane, extending left turn pocket at Challenge Way/Arden Way, realignment of Red Lion Inn Access Road, Sears Driveway right turn pocket extension, modifying Ethan Way/Arden Mall Driveway intersection, Alta Arden/Ethan Way Intersection Improvements, and Arden Way/Business 80 Interchange Improvements.		\$1,945,000
9	Railyards Access Road	Improve Jibboom Street between Richards Boulevard and the railyards site (D Street extended) to provide access to the site from the north. Provide pedestrian and bike facilities on Jibboom Street and Bercut Drive. Use an improved Jibboom Street and extended Bercut Drive to provide access to the site. Requires Richards Blvd/I-5 Interchange Improvements.	NEATS Project ID #3 Facility of Benefit - SR 160 between D Street to Richards Blvd.	\$6,407,000
10	Power Inn Rd Widening - 14th Ave to Fruitridge Rd	Power Inn Road between 14 th Avenue and Fruitridge Road is currently a four-lane roadway with a two-way left-turn lane. This project, which is in an industrial area with considerable truck traffic, will widen the segment to six lanes. Includes bike lanes and sidewalks in both directions.	SEATS Phase II	\$13,931,000
11	So Watt Ave Widening - Elder Creek Rd to Fruitridge Rd	Widen South Watt between Elder Creek Road and Fruitridge Road to 6-lanes.	SEATS Phase. II	\$18,637,000
12	Northgate Blvd/I-80 Interchange Ramp Improvements	Add a lane to the eastbound Northgate off-ramp; and an auxiliary lane to the westbound on-ramp; and extend the westbound off-ramp to improve operation and safety.		\$3,732,000

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

2002 Rank	Project Name	Description/Limits	Notes	Cost
13	Arden Way/SR 51 Interchange Improvements	Replace the two under crossing structures on SR51 to reduce the number of spans and piers located in Arden Way. Widen Arden Way beneath SR51 to include six through lanes and turn lanes(s). Provide sidewalks and bike lanes in both directions. Relocate the ramp terminals of the SR51 ramps 200' north to a new signalized intersection. Realign the ramp terminal of the loop on-ramp to SR160.	NEATS Project ID #12	\$19,529,000
14	Richards Boulevard/I-5 Interchange Improvements	Widen Richards Boulevard from five to eight lanes and improve the I-5 ramp terminals through the interchange. Reconstruct the intersections at Jibboom Street and Bercut Drive to improve capacity. Provide sidewalks and bike lanes in both directions on Richards Boulevard. Improve the existing diamond interchange form.	NEATS Project ID #8	\$2,918,000
15	American River Crossing at Truxel Road	Construct a 4-lane arterial from North 5 th Street at Richards Boulevard, across the American River to Truxel Road at Garden Highway. Provide sidewalks and bike lanes in both directions.	NEATS Project ID #16 Facility of Benefit - SR 160 between Richards Blvd and SR 51	\$47,323,000
16	Cosumnes River Blvd Extension and Interchange at I-5	Extend Cosumnes River Boulevard as a two-lane roadway from Franklin Boulevard to I-5. Construct an interchange at I-5. Project includes a grade separation at the UPRR and bike lanes and sidewalks in both directions.	Facility of Benefit – Meadowview Rd between I-5 to Franklin Blvd and Franklin Blvd from Meadowview Rd to Cosumnes River Blvd	\$50,661,000
17	Exposition Boulevard/SR 160 Interchange	Construct a split diamond interchange on SR 160 at Exposition Boulevard. Provides sidewalks and bike lanes.	NEATS Project ID #7	\$34,050,000
18	Northgate Blvd All Weatherization - Elevate 2 Lane Road	Raise the grade of the two Northgate Boulevard lanes six feet between SR 160 and the bridge over the Natomas East Main Drainage Canal (NEMDC) to provide 10-year flood protection. Reconstruct the SR 160 ramp terminals and Del Paso Boulevard to conform to the proposed grade of Northgate Boulevard. Provide sidewalks and bike lanes.	NEATS Project ID #10	\$3,489,000

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

2002 Rank	Project Name	Description/Limits	Notes	Cost
19	Silver Eagle Rd Widening - Norwood Ave to Mabel Ave	Widen Silver Eagle Road to 3-lanes including a two-way left turn lane.		\$772,000
20	Northgate Boulevard Interchange at SR160	Construct eastbound entrance ramp and westbound exit ramps at Northgate Boulevard/SR 160.	NEATS Project ID#18. Facility of Benefit - SR 160 between Richards and SR 51	\$18,000,000
21	Sutterville Road/23 rd Street Intersection	Provide a 4-way intersection at 23 rd Street and Sutterville. The project would also eliminate the by-pass at 24 th Street on the south side of the Sacramento City College.		\$1,672,000
22	Bell Avenue Widening from Norwood Avenue to Raley Boulevard	Widening Bell Avenue to 4-lanes plus a two-way left turn lane from Norwood Avenue and Raley Boulevard. Provide sidewalks and bike lanes in both directions.		\$4,524,000
23	Sheldon Road Widening from Bruceville Road to Hwy 99	Widen Sheldon Road between Bruceville Road and Highway 99 from 2 lanes to 6 lanes. Lanes 5 & 6 will be provided by developer.	Included in Jacinto Creek Planning Area Finance Plan. Developers will construct lanes 5 & 6.	\$1,148,000
24	7th Street Extension Phase II, widen to 4 lanes	Widen Phase I of 7 th Street Extension (2-lane interim project scheduled for construction in 2001) to 4 lanes from E Street, through the railyards site, to Richards Boulevard at North 7 th Street. Remove the temporary railroad grade separation and a temporary connection between 7 th street and the proposed Gateway Boulevard project. Includes bike lanes and sidewalks in both directions. NEATS Project #1, Phase 1, the 7 th Street Extension as a 2 lane road, is completely funded.	Congestion score is based on data from the 7th Street Extension EIR. The Public Safety score will change as accident data from the 7 th Street Extension becomes available.	\$9,727,000
25	State Route 99/Sheldon Road Interchange	This project will make improvements to the existing Highway 99 and Sheldon Road Interchange. Only the northwest corner of the project is located within the City of Sacramento city limits.	Projects added in 2002 TPG	\$29,800,000

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

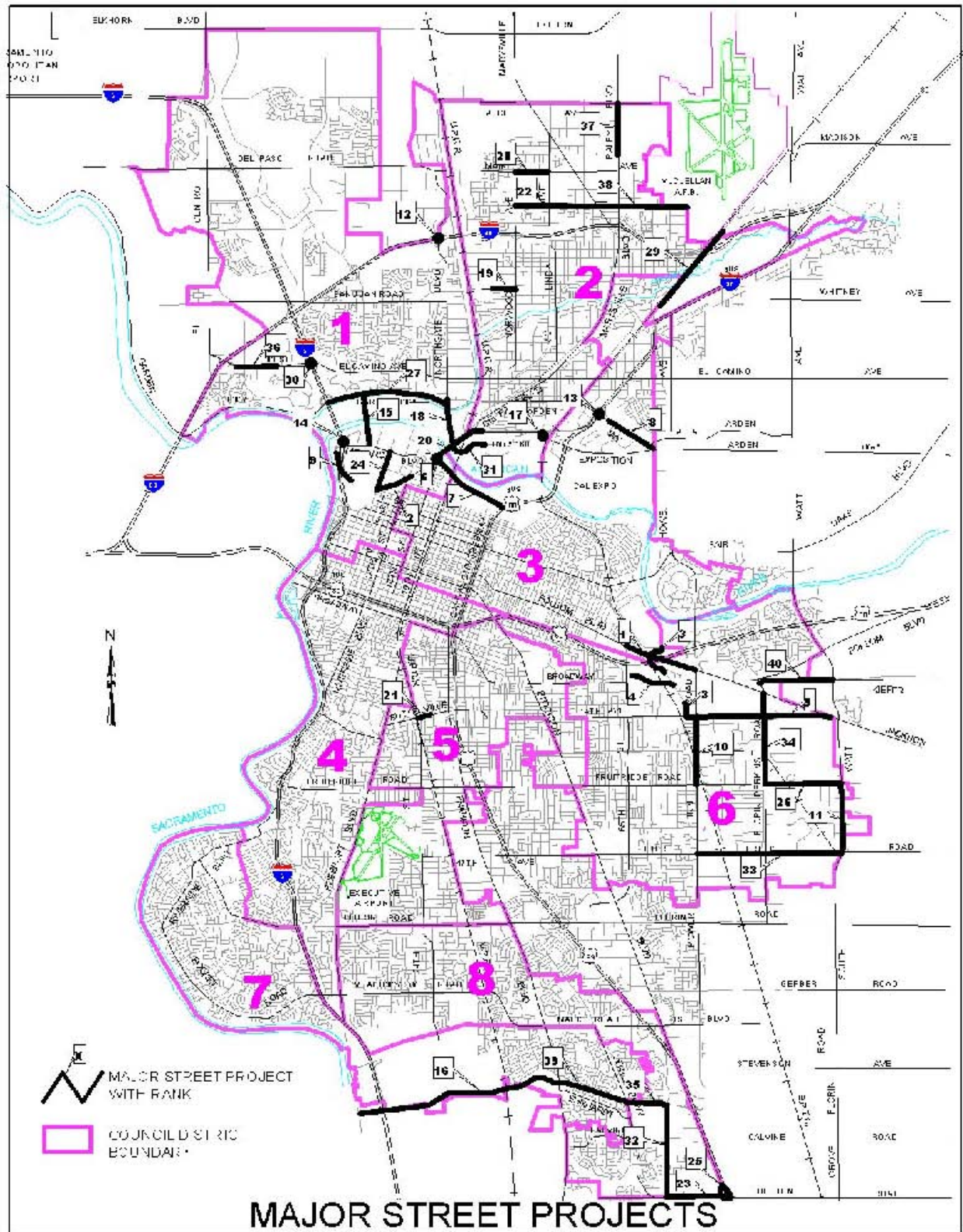
2002 Rank	Project Name	Description/Limits	Notes	Cost
26	Fruitridge Rd Widening - Florin Perkins Rd to So Watt Ave Widening	Widen Fruitridge between Florin-Perkins Road and South Watt Avenue to 4-lanes. Include bike lanes and sidewalks	SEATS Phase II	\$6,663,000
27	Garden Highway Widening – Arden- Garden Connector to Interstate 5	Widen Garden Highway from two lanes to four lanes between the western terminus of the Arden Garden Connector project to a point 300 feet east of the I-5 ramps, a total distance of 1.25 miles. Provide sidewalks and bike lanes in both directions	NEATS Project ID #13	\$34,756,000
28	Main Ave Widening - Norwood Ave to Rio Linda Blvd	Widen Main Avenue between Norwood Avenue and Rio Linda Boulevard to four lanes. The project includes bike lanes and sidewalks in both directions.		\$4,524,000
29	Roseville Rd Widening - Connie Dr to City Limits	This project will widen Roseville Road to four lanes between Connie Drive to the City Limits. This project includes bike lanes and sidewalks in both directions.		\$3,353,000
30	West El Camino Ave/I-5 Interchange Ramp Improvements	Construct a northbound entrance ramp and southbound exit ramp at the West El Camino Avenue/I-5 Interchange. Modify the NB I-5 to I-80 ramp to accommodate the proposed interchange ramps. Due to interchange spacing constraints, Northbound I-5 traffic entering at El Camino Avenue will not have access to the eastbound I-80 Ramp.	NEATS Project ID #11 Facility of Benefit - Garden Hwy between Truxel Rd and I-5	\$18,263,000
31	Commerce Circle Extension to Northgate Blvd	Construct a 2-lane roadway from the western terminus of Commerce Circle to Northgate Boulevard at SR 160. Includes a railroad over-crossing. Provides sidewalks and bike lanes in both directions of Commerce Circle	NEATS Project ID #14 Facility of Benefit - Del Paso Blvd between Northgate and Canterbury	\$5,385,000
32	Bruceville Rd Widening - Cosumnes River Blvd to Sheldon	Widen Bruceville Road with a raised center median from Cosumnes River Boulevard to Sheldon Road. Lanes 5 and 6 will be provided by developer.	Included in Jacinto Creek Planning Area Finance Plan. Developers will construct frontage improvements and lanes 5 and 6.	\$2,422,000

YEAR 2002 MAJOR STREET IMPROVEMENTS PROJECT DESCRIPTIONS

TABLE A-2

2002 Rank	Project Name	Description/Limits	Notes	Cost
33	Elder Creek Rd Widening - Power Inn Rd to So Watt Ave	This project will widen Elder Creek Road between Power Inn Road and Elk Grove-Florin Road/South Watt Avenue. This segment of roadway is approximately two miles long, and varies in width. The proposed project would improve the entire segment to four lanes.	SEATS Phase II	\$12,233,000
34	Florin-Perkins Rd Widening - Folsom Blvd to Fruitridge Rd	This project will widen Florin Perkins between Folsom Boulevard and Fruitridge Road to six lanes. Includes bike lanes and sidewalks in both directions.	SEATS Phase II	\$12,148,000
35	Cosumnes River Blvd Widening - Bruceville to Center Parkway	Widen Cosumnes River Boulevard to four lanes between Center Parkway to Bruceville Road. Include bike lanes and sidewalks in both directions.		\$970,000
36	West El Camino Ave Widening - NMDC to I-80	Improve West El Camino Avenue from a two lane to a four lane facility with median landscaping, an expanded roadside landscape corridor with a meandering 8-foot sidewalk and street lighting. Includes a new bridge over the Natomas Main Drainage Canal, improving Orchard Lane from Barandas Way to 300 feet north of West El Camino Avenue to the ultimate 80-foot cross section, and signaling the West El Camino Avenue/ Orchard Lane intersection.	Included in the South Natomas Public Facilities Financing Plan.	\$6,395,000
37	Raley Blvd Widening - Santa Ana to Ascot	Raley Boulevard between Santa Ana Avenue and Ascot Avenue is currently a two-lane roadway approximately 0.75-mile long. This project will widen the segment of Raley Boulevard to 4-lanes and construct raised median islands.	Project will be coordinated with the Magpie Creek Diversion project.	\$3,961,000
38	Bell Avenue Widening from Raley Boulevard to Winters	Widen Bell Avenue between Raley Boulevard and Winters to four lanes. Include bike lanes and sidewalks in both directions.		\$1,647,000
39	Cosumnes River Blvd Widening - Franklin to Center Pkwy	This project will widen the one-mile segment of Consumnes River Boulevard from two lanes to four lanes between Franklin Boulevard and Center Parkway.		\$1,696,000
40	Kiefer Blvd Widening - Florin Perkins to So Watt	Widen Kiefer Boulevard between Florin-Perkins road to South Watt Avenue from two lanes to four lanes. This segment of Kiefer Boulevard is approximately 1.1 miles long, a portion of which lies entirely within Sacramento County.		\$3,393,000

FIGURE A-1



B. STREET MAINTENANCE PROGRAM
(TAB PLACE HOLDER)

STREET MAINTENANCE PROGRAM

INTRODUCTION

Street Maintenance is routine work performed to keep the pavement in a condition as close as possible to its newly constructed condition. This results in cost-effective use of limited available funds, and provides maximum benefit to the traveling public by enhancing the safety of the roadway and improving ridability of the road surface.

Street maintenance can be divided into three strategies: maintenance, rehabilitation and transition. Maintenance activities are comprised of crack sealing and patching potholes and are used to repair damage to a street immediately so as to minimize any long-term structural damage that might occur.

Rehabilitation activities include several types of resurfacing, which are described below. All of these resurfacing treatment are used to extend the life of a street. The appropriate resurfacing treatment for a roadway depends on the existing pavement condition. If the existing pavement condition is extremely poor then the street may need to be reconstructed. It is more cost effective to resurface a street before pavement deterioration becomes severe than to reconstruct it. The cost to reconstruct a street is significantly higher and can be upwards of \$35.00 per square yard. There is currently a significant backlog of street segments identified as needing reconstruction. The Maintenance Services Division is developing transition strategies to improve the roadway condition of these streets to a level that makes it cost effective to apply one of our rehabilitation activities.

Overlay: An overlay is the highest form of street maintenance and involves the placement of a new layer of asphalt, approximately one and a half to two inches thick, on the street. The construction cost to overlay a street is \$11 per square yard. Properly maintained an overlay can extend the life of the street by twenty to twenty-five years although heavily used streets may require more frequent overlays.

Chip Seal: A chip seal involves the application of liquid asphalt followed by placement of small rock chips on the existing pavement. The construction cost to chip seal a street including any required prep work is approximately \$2.50 per square yard. This treatment adds strength to the existing pavement and can extend the life of the street by eight to ten years.

Slurry Seal: A slurry seal is a blend of oil and small rocks that is applied to the streets. Slurring is a preventive maintenance procedure. The construction cost to slurry seal a street is including any required prep work is approximately \$1.50 per square yard. Slurry sealing can extend the life of the street by five to seven years.

Cape Seal: A cape seal consists of a chip seal followed by a slurry seal. This process gives the strength of a chip seal with the added benefit of a smoother riding surface; therefore it is used more frequently than a chip seal. The construction cost to cape seal a street including any required prep work is approximately \$3.50 per square yard. Cape sealing can extend the life of a street by nine to twelve years.

GOALS AND POLICIES

The Street Maintenance Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goals and policies:

Goals:

1. Maintain the quality of the City street system.

Policy:

- Continue to identify streets that are in need of major upgrading, and develop a priority listing for their inclusion in the Capital Improvement Program.
2. Update the City's Pavement Management Application (PMA) which prioritizes street sealing and overlay maintenance work, and establishes a link between the Geographical Information System (GIS) for mapping capabilities.

Policies:

- Perform sealing of streets currently in good condition to delay the need for more costly street overlays.
- Perform street overlays to avoid street reconstruction costs.

PROJECT LIST DEVELOPMENT

Pavement Management System Update

The City performed an inventory of the entire road network, in segments of one hundred (100) foot increments, during the spring and summer of 1999.

Data was collected for thirteen different distress and roughness ratings. Each distress rating was based on three severity levels and five density levels. Each roughness rating was based on five levels.

Structural data was collected from record drawings, soil core samples, and road condition observations. Traffic data was obtained from the City's Traffic Engineering Division. Other information included in the inventory was the age, location, and maintenance history of the roadway, Council Districts, curb shoulder and pavement types, and street functional classifications.

Performance Indicators

All of this data was converted to three performance indicators that make up the street segment's overall condition number or Pavement Quality Index (PQI). These indicators are Ride Comfort Index (RCI), Surface Distress Index (SDI) and Structural Adequacy Index (SAI).

PROJECT RANKING PROCESS

The needs list is developed using the SuperPMA computer program. This program determines the ranking by combining the PQI with the average daily traffic and cost data. The analytical routines unique to the SuperPMA allow the City to better assess the whole street network objectively. They also allow the City to develop a rehabilitation program that maintains every street at the most cost-effective point.

The Maintenance Services Division is developing a ten-year rehabilitation cycle that will include every street in the City of Sacramento. This cycle will provide a gauge to determine if funding is keeping up with or falling behind the goal of providing maintenance at the cost-effective point.

SUMMARY

The projects listed on the following tables are designed to give information on streets in the City that are scheduled for rehabilitation work in the next few years but are subject to budget constraints. Additional information provided includes the Council district, and approximate size in square yards for each rehabilitation project.

There are 2,750 lane miles of paved roadway within the City of Sacramento, which equates to approximately 25 million square yards. Since 1996 the City has used the ITX / Stanley Super Pavement Management Application (PMA), one of the most powerful systems of its kind in the country, to assess, evaluate, and recommend our most cost effective street maintenance strategies. The system was original designed using a national pavement deterioration model or curves for forecasting needs, which reflected maintenance needs for every street about every 12 years. In 1996 the entire city street system was inventoried, assessed, and that data was plotted. In 1999 the inventory and assessment was conducted again and the data plotted. The new data helped establish pavement deterioration rate curves specific to Sacramento. Our PMA now reflects Sacramento specific pavement deterioration curves. These curves show that the most cost-effective maintenance would require some level of maintenance every seven years instead of every 12 years.

We currently have a ten-year street maintenance plan that addresses approximately 2.5 million square yards or paved roadway annually. However there are areas of the city not included in this plan where maintenance was deferred for several years because of conflicts with other projects. More costly maintenance strategies are now required to actually move these streets into the ten-year cycle. The annual cost today for delivering a ten-year street maintenance plan, without addressing these backlog streets, is approximately \$5.5 million.

Funding for this level of maintenance is problematic. Funding for a seven-year maintenance cycle is not currently realistic. We believe that the first step in enhancing our street infrastructure to begin to

meet our City Council's goals is to have a ten-year plan that addresses all city streets. Additional fund sources need to be identified. Assembly Bill 2928 (AB2928) is a new funding source that is being used to address these backlog streets. However this funding is limited and may end at any time.

Approximately 250,000 square yards of pavement overlays are planned annually. The overlays for the 2002 and 2003 are presented in Table B-1 based on the needs assessment of the PMA. Approximately two million square yards of pavement are sealed annually. Table B-2 presents the residential street seal locations for 2002 and 2003 based on the needs assessment of the PMA. Table B-3 presents the arterial streets in need of seals for 2002 and 2003 based on the needs assessment of the PMA. Conflicts with other agencies and funding availability often times cause significant schedule changes to occur in the order that streets will be addressed

YEARS 2002 AND 2003 - RECOMMENDED STREET OVERLAYS

TABLE B-1

Year Recommended	Council District	Street Name	Limits	Square Yards
2002	3	C St	12th Street to 17th Street	10,798
2002	2	Grove / Norwood	El Camino Ave to Lampasas Ave	8,007
2002	3 & 4	19th Street	I Street to S Street	18,636
2002	3	29th St / N St	Capitol Ave to O St / 29th St to 30th St	6,477
2002	3 & 4	20th Street	I Street to T Street	23,443
2002	4	21st St	R Street to Broadway	15,350
2002	5	MLK Jr Blvd	14th Ave to 11th Ave	5,575
2002	5	Broadway	Bret Harte Ct to 43rd St	18,345
2002	6	24th Avenue	Florin Perkins Rd to 83rd St	11,290
2002	6	83rd Street	Fruitridge Rd to North end	11,921
2002	6	84th Street	Fruitridge Rd to North end	8,689
2002	4	Gloria Dr	35th Ave to 43rd Ave	10,428
2002	8	Tangerine Ave	La Mancha to Brookfield (1)	11,831
2002	8	Mack Rd	Detroit Blvd east to Creek	23,075
2002	4, 7 & 8	Freeport Blvd	City limit to Meadowview Rd (2)	13,000
2002	4 & 8	Freeport Blvd	Meadowview Rd to Florin Rd (2)	40,794
2002	4 & 5	Freeport Blvd	Sutterville Rd to 21st St (2)	24,343
2003	5	Stockton Blvd	Broadway to Fruitridge Rd	52,890
2003	6	Stockton Blvd	Fruitridge Rd to El Paraiso	37,450
2003	3	Howe Ave	AR Bridge to Cadillac Dr	54,137
2003	1 & 3	12th St	North B Street to F Street (2)	
2003	1, 3 & 4	16th Street	C St to Broadway (2)	47,533
2003	4 & 5	Freeport Blvd	Sutterville Rd to Fruitridge Rd (2)	29,629
2003	4	Freeport Blvd	Broadway to 21st St (2)	10,984
2003	4 & 5	Freeport Blvd	Blair Ave to Fruitridge Rd (2)	33,292
2003	1, 3 & 4	15th St	L St to S St (2)	14,230
2003	3	15th St	F St to H St (2)	4,191
2003	3	F Street	12th St to 15th St (2)	6,721

(1) Shared with County.

(2) Funding from State required.

YEARS 2002 - RECOMMENDED RESIDENTIAL STREET SEALS

TABLE B-2

Year Recommended	Council District	Street Name	Area (SY)	Cumulative Total Yards
2002	3	<i>Residential area bounded by</i> : C St to the north, H St, D St, and 51st St to the south, 46th St to the East, and 41st St to the West.	40,000	\$40,000
2002	1	<i>Residential area bounded by</i> : Gateway Oaks Dr. to the North, W El Camino Ave to the South, Gateway Oaks Dr to the East and Orchard Lane to the West	32,909	\$72,909
2002	2	<i>Residential area bounded by</i> : Arcade Creek and Arcade Blvd to the North, Del Paso Blvd. to the East, El Camino Ave to the South, and Rio Linda Blvd and Traction Ave to the West.	211,880	\$284,789
2002	2	<i>Residential area bounded by</i> : Ascot Ave to the North, city limit to the East, North Ave and Bell Ave to the South, Pinell St, Marysvill Blvd and Rio Linda Blvd to the West.	138,031	\$422,820
2002	3	<i>Residential area bounded by</i> : Feature Dr to the North, American River to the south, Howe Ave to the East, and American River to the West	138,393	\$561,213
2002	7 & 4	<i>Residential area bounded by</i> : Greenhaven Lake and Gloria Dr to the North, Florin Rd to the South, I-5 to the East and Florin Rd to the West	234,264	\$795,477
2002	5	<i>Residential area bounded by</i> : Donner Way to the North, Sutterville Rd to the South, SR 99 to the East, and 24th St to the West	90,345	\$885,822
2002	5	<i>Residential area bounded by</i> : 21st Ave / City Limit to the North, Fruitridge Rd to the South, 58th Ave to the East, City Limit to the West	113,671	\$999,493
2002	5	<i>Residential area bounded by</i> : Broadway to the North, Broadway, Martin Luther King Blvd and 33rd St to the East, 9th Ave and 11th Ave to the South, SR 99 to the West.	121,781	\$1,121,274
2002	6	<i>Residential area bounded by</i> : Elder Creek Rd. to the North, 75th St to the East, City limit to the South, 65th St to the West / Elder Creek Rd. to the North, 63rd ST to the East, Riza Ave. and Fowler Ave. to the South, City Limit to the West.	108,853	\$1,230,127
2002	5	<i>Residential area bounded by</i> : 47th Ave and Hogan Dr to the North, Florin Rd to the South, 24th St to the East, and Executive Airport, Bing Maloney Golf Course and 20th St to the West.	183,727	\$1,413,854
2002	3	<i>Residential area bounded by:</i> H Street to the south, the American River to the east and north, and the railroad to the west.	200,936	\$1,614,790
2002	4	<i>Residential area bounded by</i> : Vallejo Way to the North, 10th Ave to the South, Riverside Blvd to the East, I-5 to the West	82,653	\$1,697,443
2002	4	<i>Residential area bounded by</i> : Riverside Bl to the East from Captains Table Rd to the North, Surf Way to the South, Sacramento River to the West	72,636	\$1,770,079
2003	2	<i>Residential area bounded by</i> : Morrison Ave, Harris Ave and I 80 to the North, Rio linda Blvd to the East, Altos Ave to the South, City Council District boundary to the West.	514,424	\$514,424
2003	4	<i>Residential area bounded by</i> : Broadway to the North, Muir Wy and Riverside Blvd to the East, Vallejo Wy to the South, I-5 and 3rd ST to the West.	97,987	\$612,411

YEARS 2002 - RECOMMENDED RESIDENTIAL STREET SEALS

TABLE B-2

Year Recommended	Council District	Street Name	Area (SY)	Cumulative Total Yards
2003	4	<i>Residential area bounded by</i> : Seamas Ave, Danjac Cr. And Fruitridge to the North, Freeport Blvd, Southland Park Dr. and Gloria Dr. to the East, 35th Ave and 43rd Ave to the South, I-5 to the West.	173,519	\$785,930
2003	5	<i>Residential area bounded by</i> : Broadway to the North, SR99 to the East, Donner Wy and Portola way to the South, City Limit to the West.	190,717	\$976,647
2003	5	<i>Residential area bounded by</i> : 12th Ave and 14th Ave to the North, 40th ST, Martin Luther King Blvd and Warwick Ave to the East, Fruitridge Rd and 22nd Ave to the South, SR99 to the West.	161,343	\$1,137,990
2003	6	<i>Residential area bounded by</i> : 14th Ave to the North, 65th St Expresswy to the East, Fruitridge to the South, 58th ST to the West.	189,950	\$1,327,939
2003	7	<i>Residential area bounded by</i> : Riverside Blvd to the North, Florin Rd. to the East, Rivergate Wy to the South, Riverside Blvd to the West.	190,899	\$1,518,838
2003	8	<i>Residential area bounded by</i> : Tangerine Ave to the North, Lamancha Wy to the East, Mack Rd. to the South, Tangerine Ave to the East.	127,649	\$1,646,487
2003	7 & 8	<i>Residential area bounded by</i> : Meadowview to the North, Connector St. to the East, Deerhaven Wy to the South, Billings Wy, Shrader Cir and Burlington way to the West.	62,951	\$1,709,438

This list represents the proposed streets for residential seals and are subject to change based upon conflicts and funding.

YEARS 2002 and 2003 RECOMMENDED ARTERIAL STREET SEALS

TABLE B-3

Year Recommended	Council District	Street Name	Limits	Square Yards	Cumulative Total Yards
2002	2	Dry Creek Rd	Bell Ave to I-80	9,776	9,776
2002	8	Franklin Blvd	Turnbridge Dr to Brookfield Dr	63,411	73,187
2002	7	Windbridge Dr	Rush River to Pocket Rd	18,638	91,825
2002	4	Riverside Blvd	Karbet to San Mateo	23,389	115,214
2002	1	W El Camino Av	I-5 to E Levee Rd	86,308	201,522
2002	6	Florin Perkins Rd	Fruitridge Rd to City Limits	60,000	261,522
2002	4 & 5	Fruitridge / Seamas	RR Tracks to Danjac / Delcliff	67,000	328,522
2003	1	Northgate Blvd	E Levee Rd to San Juan Rd	58,132	58,132
2003	2	Rio Linda Blvd	El Camino Ave to Arcade Blvd	33,674	91,806
2003	3	Exposition Blvd	Tribute Rd to Arden Way	70,818	162,624
2003	5	Broadway	Alhambra Blvd to Bret Harte Ct	19,466	182,090
2003	5	Franklin Blvd	Sutterville Rd to Broadway	21,915	204,005
2003	7 & 8	Cosumnes River	Center Parkway to US 99	40,956	244,961
2003	8	Meadowview Rd	Freeport Blvd to Detroit Blvd	69,920	314,881
2003	6 & 3	65th St Exp	Folsom Blvd to 21st Ave	50,972	365,853
2003	3 & 4	29th Street	E St to Capitol Ave & O St to T St	27,665	393,518
2003	6	Florin Perkins Rd	Fruitridge Rd to Jackson Hwy	50,000	443,518

This list represents the proposed Arterial seals only and is subject to change based upon conflicts and funding.

STREET MAINTENANCE PROGRAM 2002-2003

Legend:

- YEAR 2002 (Green)
- YEAR 2003 (Blue)
- COUNCIL DISTRICT BOUNDARY (Pink line)

C. STREET RECONSTRUCTION PROGRAM
(TAB PLACE HOLDER)

STREET RECONSTRUCTION PROGRAM

INTRODUCTION

Street Reconstruction involves removing and replacing all asphalt concrete and aggregate base on a roadway segment and placing new striping and pavement markings. A street reconstruction project may also include removing and replacing or constructing new curb, gutter, and sidewalk. It may also include traffic control improvements, adding streetlights, and drainage improvements. Water and sewer improvements may be completed in conjunction with a street reconstruction project, although they are not integral to the roadway.

Street reconstruction is required when a street has deteriorated to the degree that the maintenance and rehabilitation activities that are included in the Street Maintenance Program are no longer effective. An inventory of the entire City of Sacramento street system, performed in the summer of 1999 using the Super Pavement Management Application (SuperPMA), identified a backlog of streets in need of reconstruction.

GOAL AND POLICY

The Street Reconstruction Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goals and policies:

Goal:

1. Maintain the quality of the City's street system.

Policy:

- Continue to identify streets that are in need of major upgrading, and develop a priority listing for their inclusion in the Capital Improvement Program.

PROJECT LIST DEVELOPMENT

The Street Reconstruction list is assessed through the SuperPMA computer program. The SuperPMA maintains information on the street's characteristics and condition. The SuperPMA evaluates the information from the Pavement Condition Survey completed in 1999 and subsequent tests to determine the Pavement Quality Index (PQI) for all street segments in the City roadway network. An explanation of the Pavement Quality Index can be found in the Street Maintenance Section of this document.

Eligibility Criteria

Street segments with a PQI of 4 or below may be deemed beyond rehabilitation and are considered for reconstruction.

PROJECT RANKING PROCESS

Street reconstruction projects are scored and ranked using four criteria: Cost Effectiveness, Alternate Modes, Economic Development, and Infill Development. The maximum possible score is 100 points. Criteria used to prioritize reconstruction projects are as follows:

1. Cost Effectiveness (Max Points: 60)

The cost-effectiveness of the project is calculated by multiplying the average daily traffic (ADT) count of the segment by the length of the segment and dividing by the project cost. The cost-effectiveness scores are then compared to the highest cost-effectiveness of all the Street Reconstruction projects being evaluated, as follows:

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

$$\frac{\text{Cost Effectiveness of Project}}{\text{Highest Cost Effectiveness of Projects Considered}} \times 60 \text{ points} = \underline{\hspace{2cm}}$$

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

2. Alternate Modes (Max Points: 20)

10 points given for streets that have an existing or planned Class 2 or Class 3 bicycle facility
10 points given for streets on a bus route

3. Economic Development..... (Max Points: 10)

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

- Is the project within the Economic Development Strategy?
 - A) Does the project fall within one of the nineteen (19) Neighborhood Commercial Revitalization Areas?
 - B) Is the project located within one of the twenty-seven (27) Key Development Opportunity Areas or Sites?
 - C) Is the project located in either the Merged Downtown or SP/Richards Redevelopment Area?

_____ Yes (5 points) _____ No (0 points)
- Is the project located in a Business Improvement District (BID) or Property-Based Improvement District (PBID)?

_____ Yes (5 points) _____ No (0 points)

4. Infill Development (Max Points: 10)

- Is the project located in a City-designated residential infill area (as identified in the City General Plan)?
_____ Yes (5 points) _____ No (0 points)
- Is the project located in a City Redevelopment Area or Community Development Block Grant Area?
_____ Yes (7 points) _____ No (0 points)

SUMMARY

The Street Reconstruction Priority listing is presented in Table C-1. The approximate location of the top ranked 25 projects are depicted in Figure C-1

One new project, South Land Park Drive (Sutterville Road to Moss Drive), was added this year. One project, W. El Camino Avenue (I-80 to Drainage Canal), was deleted from the 2001 TPG because the project is fully funded for a widening.

YEAR 2002 - STREET RECONSTRUCTION PROJECTS

TABLE C-1

2002 Rank	2001 Rank	Council District	Project	Limits	2001 ADT	Cost of Work	Cost Effect Points	Alt. Modes Points	Econ. Develop. Points	Infill Points	Total Score ⁽⁵⁾
Maximum Points in Scoring Category:							60	20	10	10	100.00
1	1	2	Raley Blvd ⁽¹⁾	Santa Ana to Ascot	11,038	\$1,569,603	60.00	10	0	0	70.00
2	N/A	4	South Land Park Dr ⁽⁶⁾	Sutterville Rd to Moss Dr	5,457	\$582,301	20.30	20	0	0	40.30
3	3	1	N 7th St	North B St to N/End	3,156	\$1,494,028	12.28	10	10	7	39.28
4	4	1	N B St ⁽²⁾	City Water TP to North 10th	3,121	\$1,372,563	14.39	10	5	7	36.39
5	5	1	N 10th St & Turn Lane to Richards Bl	North B to N/End	1,121	\$1,942,665	5.01	10	10	7	32.01
6	6	1	Bannon St	Bercut Dr to North B St	1,148	\$1,069,214	5.56	10	5	7	27.56
7	7	1	Ahern St	N 12th St to N C St	1,246	\$313,142	6.16	0	10	7	23.16
8	8	2	Carroll Ave ⁽³⁾	Paseo Nuevo Rd to Altos Ave	569	\$855,220	2.92	10	0	10	22.92
9	9	3	Academy Wy	N/C of Kathleen to 3109 Academy (near Eldridge)	2,677	\$295,882	10.69	0	5	7	22.69
10	10	3	Academy Wy	N/C Juliesse Ave to N/ Driveway of R.T. Maint. Yard	2,325	\$333,607	9.28	0	5	7	21.28
11	11	1	McCormack St E/B	North 16th St to Ahern St	589	\$261,467	2.76	10	0	7	19.76
12	12	3 & 4	R St	10th to 19th	853	\$1,374,190	3.97	0	5	10	18.97
13	13	1	N 14th St	North A St to North B St	268	\$228,550	0.94	0	10	7	17.94
14	14	4	Broadway	Marina View to Front Street	1,128	\$492,401	5.78	0	5	7	17.78
15	15	6	El Paraiso Ave	City Limit to Stockton Blvd	1,297	\$551,133	5.71	0	5	7	17.71
16	16	2	Sully St	Pinedale Ave to Claire Ave	262	\$232,936	1.62	10	0	5	16.62
17	17	2	Claire Ave	W/End to Rio Linda Blvd	187	\$534,918	1.08	10	0	5	16.08
18	18	3	Silica Ave	Princeton St to Harvard St	1,536	\$491,890	8.52	0	0	7	15.52
19	19	2	Ascot Ave EB ⁽⁴⁾	Dry Creek to Raley	739	\$807,002	5.15	10	0	0	15.15
20	20	3	Kathleen Ave	Del Paso Blvd to Academy	254	\$734,676	1.28	0	5	7	13.28
21	21	2	Taft St	Helena Ave to Del Paso Blvd	654	\$445,994	3.09	0	0	10	13.09
22	22	2	MacArthur Street	Raley Blvd to Wainwright St	1,101	\$879,998	5.65	0	0	7	12.65
23	23	2	Lampasas Ave	Fairfield St to Altos Ave	518	\$91,795	2.61	0	0	10	12.61
24	24	4	U St	20th St to 21st St	479	\$198,332	2.21	0	0	10	12.21
25	25	3	Crosby Wy	2540 Crosby to Helena Ave	253	\$613,792	1.34	0	0	10	11.34
26	26	3	Craigmont St	Kenwood to Del Paso Blvd	203	\$212,671	1.20	0	0	10	11.20

YEAR 2002 - STREET RECONSTRUCTION PROJECTS

TABLE C-1

2002 Rank	2001 Rank	Council District	Project	Limits	2001 ADT	Cost of Work	Cost Effect Points	Alt. Modes Points	Econ. Develop. Points	Infill Points	Total Score ⁽⁵⁾
Maximum Points in Scoring Category:							60	20	10	10	100.00
27	27	2	Doolittle Street	Marysville Blvd to East End	228	\$280,761	1.17	0	0	10	11.17
28	28	2	Jean Ave	Dry Creek to west end (1048 Jean)	199	\$354,757	1.13	0	0	10	11.13
29	29	2	Ascot Ave EB ⁽⁴⁾	1152 Ascot Ave to Dry Creek Rd	130	\$89,532	0.98	10	0	0	10.98
30	30	3	B St	28th St to 29th St	154	\$136,585	0.87	0	0	10	10.87
31	31	2	Goss Court	Doolittle St to East End	125	\$107,711	0.72	0	0	10	10.72
32	32	4	Yale St	21st St to 20th St	677	\$167,454	3.17	0	0	7	10.17
33	33	3	Mahogany St	Albany Wy to South Ave	530	\$234,027	3.07	0	0	7	10.07
34	34	3	Manning St	Harvard St to Silica Ave	612	\$418,104	2.96	0	0	7	9.96
35	35	2	Emmons Street	Magpie Drain Canal to N End	565	\$182,975	2.95	0	0	7	9.95
36	36	2	Astoria St	North Ave to Bell Ave	446	\$1,216,687	2.86	0	0	7	9.86
37	37	3	Albany Wy	Los Robles to Del Paso Blvd	464	\$423,190	2.80	0	0	7	9.80
38	38	2	Ripley St	S End/ I-80 to Harris Ave	439	\$34,784	2.71	0	0	7	9.71
39	39	2	Doolittle Street	Magpie Drain Canal to N End	512	\$240,509	2.68	0	0	7	9.68
40	40	3	Eldridge Ave ⁽⁵⁾	Del Paso to Academy Wy	363	\$582,632	2.03	0	0	7	9.03
40	40	2	Buckley Way ⁽⁵⁾	Wainwright St to North Ave	389	\$189,142	2.03	0	0	7	9.03
42	42	3	Douglas St	Los Robles to Albany Wy	343	\$508,900	1.98	0	0	7	8.98
43	43	2	Balsam St	Bell Ave to Jessie Ave	278	\$427,667	1.72	0	0	7	8.72
44	44	2	Wainwright Street	North Ave to Buckley Way	298	\$160,097	1.50	0	0	7	8.50
45	45	3	Naomi Wy	Marconi Cr to Connie Dr	219	\$139,063	1.35	0	0	7	8.35
46	46	1	Barros Dr	Sorrento Rd to E End	241	\$758,884	1.31	0	0	7	8.31
47	47	1	Kenmar Rd	Sotnip Rd to Barros Dr	239	\$920,998	1.30	0	0	7	8.30
48	48	2	Kelley Court	Doolittle Street to West End	199	\$107,711	1.15	0	0	7	8.15
49	49	2	Clinger Court	MacArthur St to South End	177	\$66,865	1.02	0	0	7	8.02
50	50	3	Verano St	Del Paso Blvd to Douglas St	179	\$904,751	0.91	0	0	7	7.91
51	51	3	Frienza Ave ⁽⁵⁾	Albatross Wy to Connie Dr	143	\$222,287	0.86	0	0	7	7.86
51	51	2	Chennault Court ⁽⁵⁾	MacArthur St to North End	148	\$111,418	0.86	0	0	7	7.86

YEAR 2002 - STREET RECONSTRUCTION PROJECTS

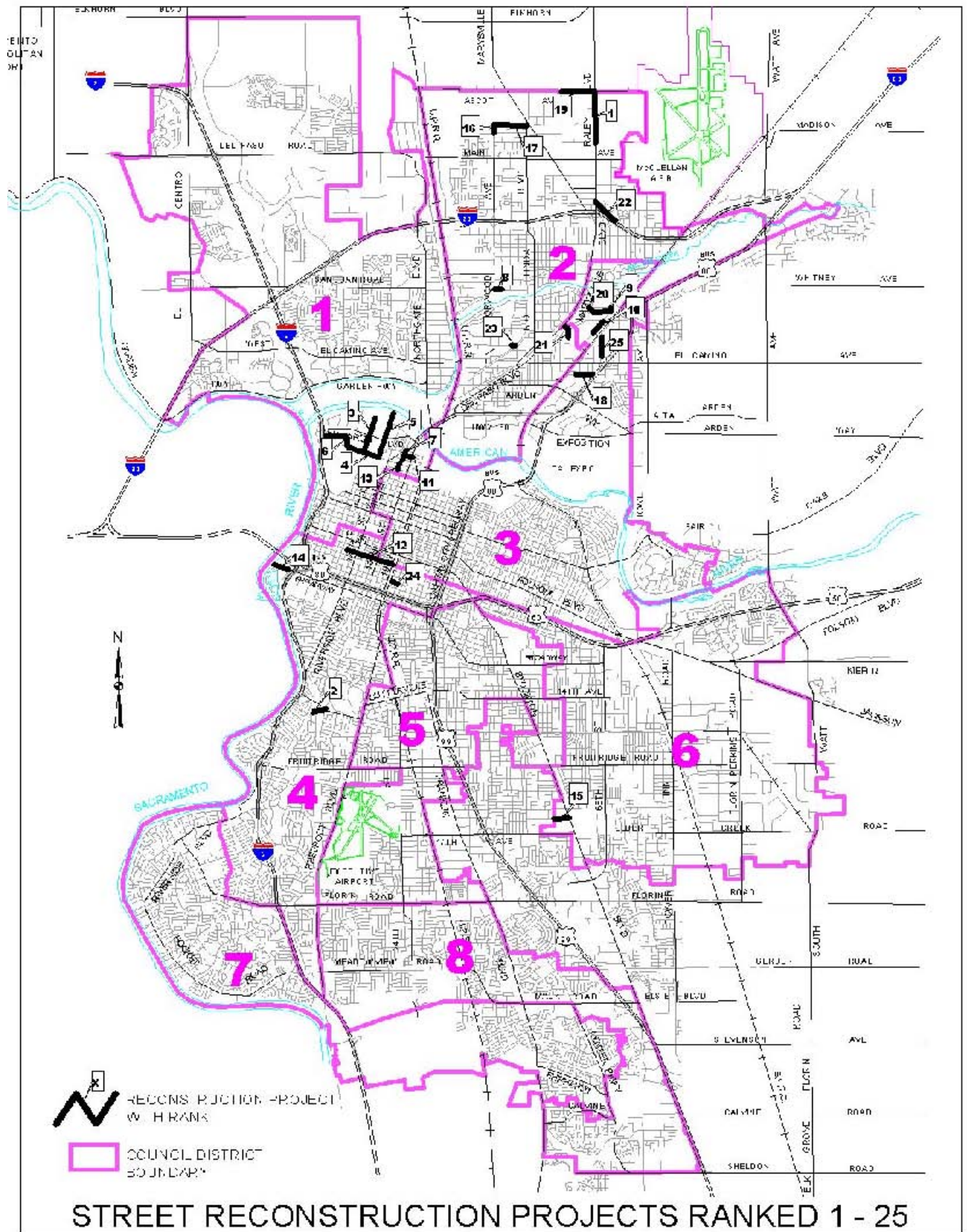
TABLE C-1

2002 Rank	2001 Rank	Council District	Project	Limits	2001 ADT	Cost of Work	Cost Effect Points	Alt. Modes Points	Econ. Develop. Points	Infill Points	Total Score ⁽⁵⁾
Maximum Points in Scoring Category:							60	20	10	10	100.00
53	53	2	Lombard Court	MacArthur St to South End	147	\$66,865	0.85	0	0	7	7.85
54	54	2	Bright Court	MacArthur St to South End	137	\$74,278	0.79	0	0	7	7.79
55	55	2	DeWitt Court ⁽⁵⁾	Wainwright St to West End	134	\$122,609	0.77	0	0	7	7.77
55	55	2	Harris Ave ⁽⁵⁾	Astoria St to E End	133	\$458,751	0.77	0	0	7	7.77
57	57	2	Nimitz Street	Magpie Drain Canal to W End	137	\$503,986	0.74	0	0	7	7.74
58	58	1	Carey Rd ⁽⁵⁾	Barros Dr to Del Paso Rd	122	\$920,998	0.66	0	0	7	7.66
58	59	2	Barbara St ⁽⁵⁾	Rene Ave to N End	117	\$272,443	0.66	0	0	7	7.66
60	60	2	Clark Court	North Avenue to West End	110	\$102,620	0.61	0	0	7	7.61
61	61	2	Anderson Ct (west)	Wainwright St to West End	104	\$113,307	0.60	0	0	7	7.60
62	62	3	Glenrose Ave	Albatross Wy to Connie Dr	106	\$149,100	0.59	0	0	7	7.59
63	63	2	Hills Court	Doolittle St to East End	100	\$48,260	0.58	0	0	7	7.58
64	64	2	Wainwright Court	MacArthur St to North End	92	\$90,995	0.53	0	0	7	7.53
65	65	2	Mogan Ave	North Ave to Winters St	79	\$331,912	0.47	0	0	7	7.47
66	66	2	Calhoun Court	MacArthur St to South End	70	\$87,288	0.40	0	0	7	7.40
67	67	2	Anderson Ct (east)	Wainwright St to East End	52	\$57,562	0.30	0	0	7	7.30
68	68	2	Stillwell Court	MacArthur St to North End	38	\$85,470	0.22	0	0	7	7.22
69	69	2	Neal Rd	Dry Creek Rd to west end (1025 Neal Rd)	276	\$352,053	1.67	0	0	5	6.67
70	70	2	Vinci Ave	W End to Dry Creek Rd	137	\$512,809	0.85	0	0	5	5.85
71	71	1	W. Silver Eagle Rd	Northgate Blvd to E End	1,007	\$520,377	5.82	0	0	0	5.82
72	72	2	Ascot Ave EB ⁽⁴⁾	Raley to McClellan AFB	681	\$1,208,971	4.75	0	0	0	4.75
73	73	4	Casilada Way	Karbet Wy to Elmer Wy	985	\$142,011	4.25	0	0	0	4.25
74	74	2	Pinedale Ave	Dry Creek Rd to Marysville	275	\$742,926	1.59	0	0	0	1.59

TOTAL RECONSTRUCTION PROJECT COST \$33,933,049

- ⁽¹⁾ On hold, pending Magpie Creek Project.
- ⁽²⁾ Drainage improvements will be required and are **NOT** included in the current estimate.
- ⁽³⁾ This street is part of the Del Paso Nuevo project. Funding for this segment has not been secured.
- ⁽⁴⁾ This street segment is half in the County, and will require co-ordination with the County for payment of the reconstruction work.
- ⁽⁵⁾ Projects with identical total scores receive the same rank.
- ⁽⁶⁾ New project added in year 2002.

FIGURE C-1



D. TRAFFIC SIGNALS PROGRAM
(TAB PLACE HOLDER)

TRAFFIC SIGNALS PROGRAM

INTRODUCTION

Traffic signals determine who has the right-of-way at an intersection or crossing. They facilitate orderly traffic flow, allow pedestrians to cross, and provide cross-street traffic a chance to cross or enter an intersection. When installed at appropriate locations, traffic signals can increase the capacity of an intersection, reduce the frequency of collisions, and provide better minor street access. Because traffic signals are expensive to install (approximately \$200,000 per signal) and may induce safety problems if not appropriately placed, the City only installs signals where they will clearly improve safety and make the intersection operate more efficiently. The City typically constructs one or two traffic signals per year through the Capital Improvement Program.

GOALS AND POLICIES

The Traffic Signals Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goals and policies.

Goals:

1. Create a safe, efficient surface transportation network for the movement of people and goods.

Policy:

- Install traffic signals, when appropriate, to improve safety and increase the efficiency of intersections within the City.

2. Maintain a desirable quality of life, including good air quality, while supporting planned land use and population growth.

Policy:

- Install traffic signals, when appropriate, to improve air quality by reducing delay at intersections.

3. Work toward achieving an overall Level of Service C on the City's local and major street systems.

Policy:

- Install traffic signals to make more efficient use of the City's existing street system.

4. Increase the capacity of the transportation system.

Policy:

- Support programs that improve traffic flow.

PROJECT LIST DEVELOPMENT

Eligibility Criteria

The Traffic Signal Priority List procedure involves three phases. Project eligibility is determined during Phases I and II, as presented below:

Phase I

In Phase I, the following data are collected for any location which has been suggested as a candidate for a traffic signal:

<u>Collisions:</u>	A recent three-year compilation of reported collision history on a diagrammatical format differentiating collision types and correctability is developed.
<u>Traffic Volumes:</u>	Twenty-four hour micro counts with an hourly listing of each approach direction are obtained for the combined minor street volumes, the combined major street approach volumes, and a total for the entire intersection. Peak hour (am and pm) traffic volumes by manual count for the turning and through movements are typically obtained. The pattern of traffic arrival on the main street approaches (i.e., random, tight platoon, etc.), and the frequency and adequacy of gaps are also noted.
<u>Pedestrian/Bicycle:</u>	As part of the peak hour vehicular movement counts, pedestrian and bicycle data are collected. If the pedestrian and bicycle peak hour differs from the vehicular peak hour, a separate manual count is conducted.
<u>Existing Controls:</u>	The current type of control (i.e., two-way stop, an all-way stop, etc.) is recorded.

The above data is collected to screen eligible projects. In addition, information on topographic/geometric features, land use, and visibility is also collected and considered when making recommendations on eligible traffic signal locations.

Phase II

In Phase II, the information from Phase I is used to determine which locations meet one or more of the following eleven Caltrans traffic signal warrants:

Warrant-1
Minimum
Vehicle Volume

This warrant is satisfied when the volume of intersecting traffic (from the minor street as compared to the total traffic) is the principal reason for consideration of a traffic signal. For most urban locations, a minimum of 600 vehicles per hour for the heaviest eight hours must approach the intersection from the major street, and for the same 8-hour period a minimum of 200 vehicles per hour must approach the intersection from the minor street.

Warrant-2
Interruption of
Continuous Traffic

This warrant is satisfied when the traffic volume on the major street impacts the minor street by creating a hazard for traffic entering the major street. For most urban locations, a minimum of 900 vehicles per hour for the heaviest eight hours must approach the intersection from the major street, and for the same eight-hour period a minimum of 100 vehicles per hour must approach the intersection from the minor street.

Warrant-3
Minimum
Pedestrian
Volume

This warrant is satisfied when there is a minimum of 100 pedestrians per hour for four hours or a minimum of 190 pedestrians in one hour crossing the major street at regular or mid-block locations. Acceptable gaps in traffic and the distance to nearby signals are factors that are also considered in determining whether or not a signal is appropriate.

Warrant-4
School Areas

This warrant is satisfied when there is a minimum of 100 pedestrians per hour for two hours and a minimum of 500 vehicles per hour for the same two hours in the vicinity of a school. It may also be appropriate where it is necessary to extend or create adequate crossing gaps in the flow of traffic on roadways in suggested school route areas.

Warrant-5
Progressive
Movement

This warrant is satisfied when the distance to the nearest signalized intersection is greater than 1,000 feet, and progressive movement control requires the installation of a traffic signal where one would not otherwise be warranted. The signal will provide proper vehicle platooning and speed control. Factors considered include whether or not the streets are one-way or two-way, the operation of adjacent signals, and travel speeds.

Warrant-6
Collision Experience

This warrant is satisfied when five or more collisions in a year, correctable by traffic signal control, are reported, and other less restrictive remedies have failed to reduce the number of collisions; where the traffic volumes of warrants one and two are 80% fulfilled; and where such a signal would not seriously disrupt progressive traffic flow.

Warrant-7
Systems
Warrant

A traffic signal installation may be warranted to encourage concentration and organization of traffic flow networks where there are two major routes meeting specific volume and functional characteristics. This warrant is satisfied when there is a minimum of 1000 vehicles during any one hour of the day and both streets meet a requirement of being a major route through the City.

<u>Warrant-8</u> Combination of Warrants	This warrant is satisfied when warrants one and two are satisfied to the extent of 80% or more of the stated numerical values.
<u>Warrant-9</u> Four Hour Warrant	This warrant is satisfied for most urban areas when for four or more hours, the minor street approach volumes exceed 200 vehicles per hour and the major street approach volume exceeds 800 vehicles per hour during the same four hours.
<u>Warrant-10</u> Peak Hour Delay	This warrant is satisfied when the minor street approach volume is at least 150 vehicles and the total volume of intersection approaches are 800 vehicles per hour. The number of lanes and the type of geometric configuration (4-legged or “T” intersection) is also considered in determining whether or not minor street traffic suffers delay during the peak hour.
<u>Warrant-11</u> Peak Hour Volume	This warrant is satisfied for most urban areas when the minor street approach volume exceeds 200 vehicles in an hour and the major street approach volume exceeds 1,250 vehicles for the same hour. It is somewhat similar to warrant nine (four hour volumes), and recognizes minor streets that suffer delay in entering or crossing major streets.

Project Identification

Each year, the City evaluates approximately 20 locations for traffic signals. New locations are added to the list through traffic investigations, collision analysis, resident requests, development projects, Councilmember requests, etc. New data is collected for intersections that have been on the Traffic Signal Priority List for more than three years and new locations as they are identified.

The installation of a traffic signal needs to be carefully evaluated because unwarranted installation may cause an increase in the number of certain types of collisions, such as rear end collisions. When a signal warrant is met, it indicates that the potential for increased congestion or an increase in collisions attributed to a traffic signal is less than for existing conditions (without a signal).

PROJECT RANKING PROCESS

Phase III

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 that 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 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
- Park
- Library
- Employment
- Stadium
- Arena
- Senior Center
- Commercial Center
- Fire Station
- Rail Line
- Hospital
- 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.

SUMMARY

Of the 20 new intersections investigated for traffic signals last year, 15 met Caltrans traffic signal warrants and were scored and reranked with the previous list by the highest total score. In the case of a tie, locations will be ranked by the highest category totals in the following order: collisions, ped/bike/schools, special conditions, peak hour, speed and ADT. The geographic locations of the top twenty-five highest scoring intersections are depicted in Figure D-1.

YEAR 2002 - TRAFFIC SIGNAL PROJECTS

TABLE D-1

2002 Rank	2001 Rank	Council District	Major Street	Minor Street	Point Total By Category						Total Score
					Collisions (3 YR AVG)	Ped/Bike/ Schools	ADT	Peak Hour	Speed	Special Conditions	
			Maximum Points Possible in Scoring Category:				N/A*	30	10	10	
1	14	5	24th Street ¹	Irvin Way/26th Avenue	7	17	4	4	4	1	37
2	1	6	Power Inn Road ²	Belvedere Avenue	7	11	6	7	4	0	35
3	11	3	Capitol Avenue	24th Street	5	20	4	4	2	0	35
4	13	8	Center Parkway	Tangerine Avenue	4	17	3	5	3	3	35
5	12	3	Ethan Way ³	Hurley Way	3	10	7	10	4	1	35
6	8	4	South Land Park Drive	35th Avenue	1	20	4	6	3	1	35
7	10	1	Northgate Boulevard	Sotano Drive/Wisconsin Avenue	7	10	6	7	4	0	34
8	17	6	Fruitridge Road	South Watt Avenue	3	10	7	10	4	0	34
9	4	1	Azevedo Drive	Pebblewood Drive	0	25	2	2	4	1	34
10	5	1	Azevedo Drive	Bannon Creek Drive	0	22	3	2	4	3	34
11	7	8	Florin Road ⁴	Luther Drive (south)	9	6	6	7	4	1	33
12	19	6	Power Inn Road	Alpine Avenue	8	7	6	8	4	0	33
13	33	7	Center Parkway	Bamford Drive	7	15	3	3	4	1	33
14	15	7	Valley Hi Drive	Wyndham Drive	3	15	5	7	3	0	33
15	23	5	24th Street	Hogan Drive/48th Avenue	3	15	5	6	4	0	33
16	NA	1	San Juan Road ⁵	Azevedo Drive	11	10	3	4	4	0	32
17	25	6	65th St Expressway	4th Avenue	9	7	5	7	4	0	32
18	21	8	Bruceville Road	Wyndham Way	8	11	4	4	4	1	32
19	2	6	Fruitridge Road	Bradford Dr/Wilkinson St	8	10	4	6	4	0	32
20	27	7	Riverside Boulevard	Park Riviera Drive	7	11	4	5	4	0	31
21	38	2	El Camino Avenue	Boxwood Street	7	7	6	7	3	0	30
22	34	3	Campus Commons Drive	University Avenue	0	20	3	4	3	0	30
23	29	6	Stockton Boulevard	Dias Avenue	7	7	5	6	4	0	29
24	31	2	Norwood Avenue	Fairbanks Avenue	5	12	4	5	3	0	29
25	20	2	Rio Linda Boulevard ⁶	Main Avenue	10	6	3	4	4	1	28
26	16	4	W Street ⁷	6th Street	7	7	3	7	3	1	28
27	35	3	P Street	24th Street	6	10	4	4	2	1	27
28	45	5	Fruitridge Road	58th Street	4	7	5	7	4	0	27
29	24	1	West El Camino Avenue	Northview Drive	3	7	5	7	4	1	27
30	43	4	Freeport Boulevard	10th Avenue	0	12	4	7	3	1	27
31	41	3	Munroe Street	Latham Drive	0	10	5	8	3	1	27
32	32	1	West El Camino Avenue	Millcreek Drive	2	5	5	7	4	3	26
33	37	4	Greenhaven Drive	Gloria Drive	0	15	3	3	4	1	26
34	40	2	Rio Linda Boulevard	Lampasas Avenue	7	5	5	5	3	0	25
35	NA	8	Bruceville Road	Alpine Frost/Timberlake Way	7	5	4	5	4	0	25

YEAR 2002 - TRAFFIC SIGNAL PROJECTS

TABLE D-1

2002 Rank	2001 Rank	Council District	Major Street	Minor Street	Point Total By Category						Total Score
					Collisions (3 YR AVG)	Ped/Bike/Schools	ADT	Peak Hour	Speed	Special Conditions	
					Maximum Points Possible in Scoring Category:	N/A*	30	10	10	5	5
36	36	2	Rio Linda Boulevard	South Avenue	4	10	3	4	3	1	25
37	44	1	Q Street	4th Street	3	10	3	6	2	1	25
38	NA	7	Center Parkway	Arroyo Vista Drive	8	5	3	3	4	1	24
39	NA	6	14th Avenue	73rd Street	3	10	3	3	4	1	24
40	NA	5	Broadway	42nd Street	2	10	4	5	3	0	24
41	42	2	Rio Linda Boulevard	Acacia Avenue	1	12	4	4	3	0	24
42	NA	2	Connie Drive	Roseville Road	1	5	5	7	5	1	24
43	48	2	Norwood Avenue	Ford Road	5	7	4	4	3	0	23
44	53	6	Broadway	53rd Street	3	8	4	5	3	0	23
45	NA	7	Rush River Drive	Windbridge Drive	1	10	4	5	3	0	23
46	NA	1	Gateway Oaks Drive	River Plaza Drive	0	10	3	6	4	0	23
47	NA	8	Bruceville Road	CRC Driveway	0	7	5	7	4	0	23
48	NA	1	Truxel Road	Millcreek Dr/Waterwheel Drive	1	7	5	5	4	0	22
49	52	3	Q Street	24th Street	0	12	3	3	3	1	22
50	49	2	Norwood Avenue	Lampasas Avenue	1	15	2	0	2	1	21
51	NA	7	Center Parkway	CRC Driveway	1	5	4	4	4	3	21
52	46	7	Ehrhardt Avenue	Carlin Avenue	0	15	1	1	2	1	20
53	NA	8	Franklin Boulevard	Boyce Drive	0	5	5	6	4	0	20
54	51	1	Northgate Boulevard	Del Paso Boulevard/160 ramp	3	6	3	3	4	0	19
55	54	2	Silver Eagle Road	Mabel Street	1	7	4	4	3	0	19
56	50	4	Riverside Boulevard	2nd Avenue	0	12	2	1	3	1	19
57	NA	6	Business Drive	14th Avenue	1	5	3	4	3	1	17
58	47	2	Marysville Boulevard	Bell Avenue	0	7	3	2	4	1	17
59	NA	7	Riverside Boulevard	Shoreside Drive	0	5	2	6	4	0	17
60	56	1	West El Camino Avenue	I-80 E/B Ramp	0	5	3	5	3	0	16
61	NA	3	H Street	48th Street	0	5	3	4	2	0	14
62	57	2	Marysville Boulevard	Dry Creek Road	0	5	2	2	4	0	13

Traffic Signal Program D-9

¹ Continue to monitor

² 14th and Belvedere has signal and close to this intersection. Spillback may occur.

³ Joint project with County and Cal expo- to be constructed in 2002.

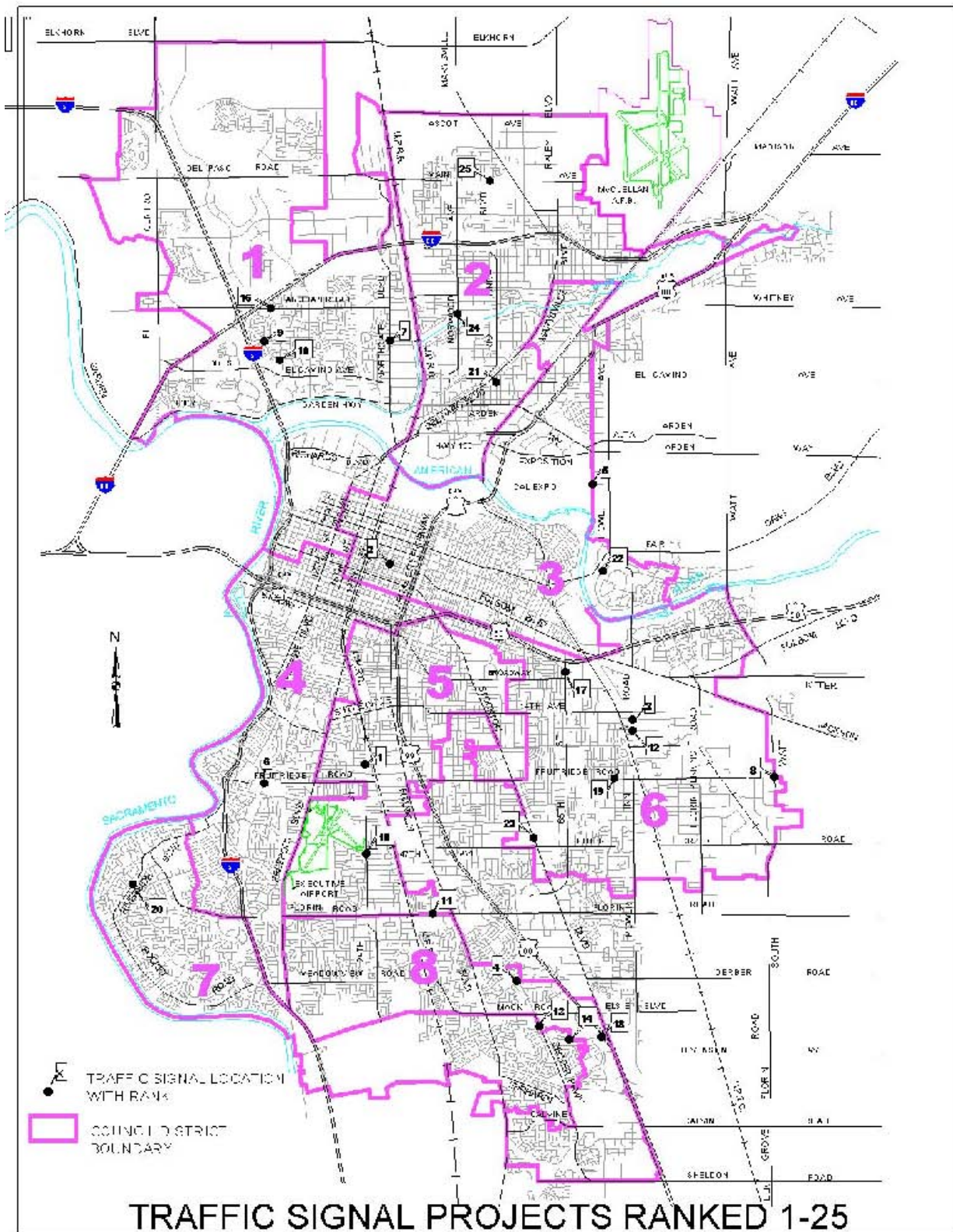
⁴ Timing changes done nearby, continue to monitor.

⁵ Recommend for FY02/03 CIP

⁶ Visibility mitigations being evaluated.

⁷ Ramp metering is affecting operations- signal timing changes made.

FIGURE D-1



E. ALTERNATE MODES PROGRAM
(TAB PLACE HOLDER)

ALTERNATE MODES PROGRAM

INTRODUCTION

Facilities for bicycles and pedestrians are an integral part of the transportation system. Given the City's mild climate and flat terrain, bicycling and walking are viable and important transportation mode. According to a 1992 survey conducted by the Sacramento Area Council of Governments (SACOG), 2% of all trips in Sacramento County are made by bicycle, which is higher than public transit (at 1.3 %).

The Caltrans Design Manual, Chapter 1000 (a City Standard adopted by reference in the Bicycle Master Plan) specifies three classifications of bikeways:

<u>Class I Bikeways:</u>	Bike trails or bike paths are separated from vehicular traffic and are for the exclusive use of bicyclists and pedestrians. Cross traffic by motorists is minimized. Bike trails adjacent to roads are separated by physical space (minimum five feet) or barriers such as fences or dense shrubs.
<u>Class II Bikeways</u>	Bike lanes are one-way lanes established within the street for preferential use by bicycles. Bicyclists are required to travel in the same direction as the automobile traffic. Class II bikeways are on-street facilities designated with signs, striped lanes, and pavement legends.
<u>Bike/Pedestrian Bridges</u>	Special consideration is given to criteria for bicycle/pedestrian bridges. Within this section of the TPG, the term “bridges” refers to a stand-alone bike and pedestrian overcrossing or undercrossing including associated approaches.

GOALS AND POLICIES

The Bikeways Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) and City/County 2010 Bikeway Master Plan goals and policies:

Goals:

1. Develop bicycling as a major transportation and recreational mode. (City of Sacramento General Plan adopted January 19, 1988, reflects City Council Amendments through September 2000).

Policies:

- Develop bikeways in a coordinated manner with the County and other agencies to facilitate commuting to and from major trip generators.

- Maintain public bikeways in a manner that promotes their use, by developing a continuous repair and maintenance program.
2. Work toward achieving an overall Level of Service C on the City's local and major street systems. (City of Sacramento General Plan adopted January 19, 1988, reflects City Council Amendments through September 2000).

Policy:

- Explore alternative transportation modes that will lead to a decrease in vehicular demand of the City's surface street system.
3. Develop and maintain a coordinated approach by City/County and other agencies to implement the plan (2010 Bikeway Master Plan) as funding becomes available or as development occurs. (2010 Bikeway Master Plan)

Policy:

- Integrate efforts of Planning, Recreation, Public Works, and other departments of City and County government and other agencies that are involved in planning, construction or operational elements of the bikeway system.
4. Achieve the highest possible level of safety and security for cyclists. (2010 Bikeway Master Plan)

Policy:

- Provide a network of safe and convenient bikeways.
5. Develop a bikeway system that incorporates aesthetics and the historical characteristics of the Sacramento area. (2010 Bicycle Master Plan)

Policy:

- Bikeways should take full advantage of the beauty and natural features of the Sacramento area by blending with the terrain and topography.

PROJECT LIST DEVELOPMENT

The 2010 Bikeway Master Plan was used to develop an initial list of projects, which was then reviewed by the TPG Community Advisory Committee and City staff. Projects from the 1999-2000 TPG that have been funded have been removed from the list. The new list introduces four new on-street bikeway projects, none of which are in the bikeway master plan. Sixteen new off-street bikeways were included, which are not part of the bikeway master plan. The list of bike/pedestrian bridges includes seventeen new bike/pedestrian bridges. The final scored and ranked lists include a total of 38 on-street bikeways, 31 off-street bikeways, and 24 bike/pedestrian bridges.

PROJECT RANKING PROCESS: FOR ON-STREET AND OFF-STREET

The Bicycle Advisory Committee, with input by the Community Advisory Committee, developed the scoring and ranking criteria. There are eight scoring criteria categories for evaluating bikeway projects:

- Links to Activity Centers (employment/residential/recreation)
- Barrier Elimination (reduction in cycling distance)
- Traffic Characteristics (volume/speed/lane width)
- Right-of-Way/Cost (ownership and land use)
- Linkage to Transportation System (i.e., bus, LRT, train etc.)
- Travel Continuity (stops per mile)
- Geographic Distribution (spacing between bikeways)
- Recreation Potential (proximity to parks/open space)

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</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 0.25	0
0.25 - 0.5	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 for Traffic Characteristics were given on the basis of whether the proposed project is a Class 2 or Class 3 facility using the point system below. Projects on major streets were classified as Class 2 facilities for scoring purposes only. The feasibility of each Class 2 facility has not been evaluated and will be determined in the scoping/funding process.

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

(A) Class 2

- | | | | |
|----|---------|-----------------|-------------------------|
| 1) | Volume: | <u>ADT</u> | <u>Points</u> |
| | | >40,000 | 5 |
| | | 30,001 – 40,000 | 4 |
| | | 20,001 – 30,000 | 3 |
| | | 10,001 – 20,000 | 2 |
| | | 3,000 – 10,000 | 1 |
| | | <3,000 | 0 (Class 3 Recommended) |
-
- | | | | |
|----|--------|--------------|---------------|
| 2) | Speed: | <u>Speed</u> | <u>Points</u> |
| | | ≥50 | 5 |
| | | 45 | 4 |
| | | 40 | 3 |
| | | 35 | 2 |
| | | 30 | 1 |
| | | <30 | 0 |
-
- 3) High existing usage: Five points are assigned if bicycle counts on the candidate bikeway segment indicate 25 or more bikes per hour.

(B) Class 3

- | | | | |
|----|---------|---------------|---------------|
| 1) | Volume: | <u>ADT</u> | <u>Points</u> |
| | | >20,000 | 0 |
| | | 10,001-20,000 | 1 |
| | | 5,001-10,000 | 2 |
| | | 3,001-5,000 | 3 |
| | | 1,001-3,000 | 4 |
| | | <1,000 | 5 |

2)	Speed:	<u>Speed</u>	<u>Points</u>
		>35	0
		35	1
		30	2
		25	3
		20	4
		≤15	5

3) High existing usage: Five points are assigned if bicycle counts on the candidate bikeway segment indicate 25 or more bikes per hour.

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 bikewaysMax. Points: 5*

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

(B) *Links to other modesMax. 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, buses with bike racks, AMTRAK station, Sacramento International Airport, and park and ride lots.

6. Travel 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) Is there existing street lighting?	2	0

PROJECT RANKING PROCESS FOR BICYCLE AND PEDESTRIAN BRIDGES

B1. Population(Max. Points: 20)

Points are assigned based on population density within 2 miles:

One point for every multiple of 750 persons per square mile.
(population density of 750 = 1 point, density of 1500 = 2 points...density equal to or greater than 15,000 = 20 points)

One point for every multiple of 1000 jobs per square mile.
(job density of 1000 = 1 point, density of 2000 = 2 points...density of 5,000 or greater =5 points)

B2. Link to Activity Centers(Max. Points: 20)

<u>Activity Center</u>	<u>Points</u>
Public Colleges/Universities	20 per use
Schools/Parks/Libraries/Community Centers	5 per use
Commercial Center	5 per use

Note: Commercial Centers = Commercial sites containing a minimum of 40,000 square feet

B3. Barrier Elimination.....(Max. Points: 40)

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

FIGURE E-1

<u>Distance (miles)</u>	<u>Points</u>
Less than 0.25	0
0.25 - 0.5	5
.5 - 1.0	10
1 - 2	20
2 - 3	30
Greater than 3	40

B4. Type of Crossing.....(Max. Points: 5)

Bridges that cross waterways, freeways and mainline railways receive 5 points.
 Bridges that cross expressways with ADT's >20,000 receive 3 points.
 Bridges over streets with ADT's less than 20,000 and greater than 10,000 receive 2 points.

B5. Right-of-Way/Cost (Max. Points: 5)

<u>Land Ownership Factors</u>		<u>Land Modification Factors</u>	
City Owned	3	Unused/Vacant Land	2
Public (non-City)	2	Relocatable Use	1
Private	0	Non-Relocatable	0

B6. Linkage to Transportation System(Max. Points: 5)

Does it have existing bikeways
 or walkways on both ends leading to it 5 points

or

Will it require bikeway or walkway
 construction greater than 1000 feet at one end 3 points

or

Will require bikeway or walkway
 construction greater than 2000 feet at both ends 1 point

B7. Travel Continuity(Max. Points: 5)

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

<u>Design speed on bridges</u>	<u>Points</u>
>10 mph	5
5-10 mph	3
<5mph	0

YEAR 2002 - ON-STREET BIKEWAY PROJECTS

TABLE E-1

2002 Rank	2001 Rank	Council District	On Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char.	Right-of-Way	Transp. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score	
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100	
			Project Description	Miles									
1	1	2	Bell Ave: Bell Ave. between Bollenbacher Ave. & Winters.	3.1	20	15	5	11	10	5	2	4	72
2	2	1	West El Camino Ave: West El Camino Blvd. between Orchard Ln. & Azevedo Dr.	1.4	20	15	6	11	8	7	2	2	71
3	N/A	6	65th St: 65th St. Expressway between Q St. & 14th Ave.	0.9	20	6	7	15	10	7	1	4	70
4	3	5	47th Ave: 47th Ave. between 24th St. & City Limits.	0.8	10	15	5	15	7	7	5	4	68
5	4	3	McKinley Blvd: McKinley Blvd. between 33rd St. & Elvas Ave.	0.8	20	4	5	15	7	7	1	8	67
5	4	1,2	Main Ave: Main Ave. between Northgate Blvd. & Rio Linda Blvd.	1.6	15	10	5	11	10	7	5	4	67
5	4	6,3	Redding Ave: Redding Ave. between 14th Ave. & Folsom Blvd.	1.0	20	15	2	8	8	7	5	2	67
8	7	4,7,8	Freeport Blvd. South: Freeport Blvd. between Meadowview Rd. & City Limits.	1.1	5	15	8	8	9	10	5	6	66
8	7	1	Bannon Creek Dr: Bannon Creek Dr. between Azevedo Dr. & Truxel Rd.	0.4	20	4	8	15	7	7	1	4	66
8	7	2, 3	Roseville Rd: Roseville Rd. between Auburn Blvd. & City Limits.	1.6	10	15	7	11	8	10	1	4	66
11	10	1	Pebblewood Dr: Pebblewood Dr. between Azevedo Dr. & Montview Way.	1.4	15	4	8	15	10	5	2	6	65
11	10	7,8	Bamford Dr/Bruceville Rd: Bamford Dr. between Center Parkway & Valley Hi Dr.; Bruceville Rd. between Valley Hi Dr. & Sheldon Rd.	3.2	20	4	6	11	10	7	1	6	65

YEAR 2002 - ON-STREET BIKEWAY PROJECTS

TABLE E-1

2002 Rank	2001 Rank	Council District	On Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char.	Right-of-Way	Transp. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score	
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100	
			Project Description	Miles									
13	12	4	South Land Park Bikeways: 13th St. between 35th Ave. & South Land Park Dr.; 35th Ave. between South Land Park Dr. & Freeport Blvd.	1.7	20	2	7	15	10	5	1	4	64
13	12	4	43rd Ave: 43rd Ave. between Greenhaven Dr. & 13th St; Blair Ave. between 13th St. & Freeport Blvd.	1.4	15	6	5	15	10	7	2	4	64
13	N/A	1	Oak Harbor Dr: Oak Harbor Dr. between River Plaza Dr. & Gateway Oaks Dr.	0.2	15	2	8	15	7	10	1	6	64
16	N/A	1	Venture Oaks Way: Venture Oaks Way between Gateway Oaks Dr. & Gateway Oaks Dr.	0.5	20	0	6	15	6	10	1	4	62
16	14	4	Seamas Ave: Seamas Ave. between Peidmont & South Land Park Dr.	0.9	20	6	5	11	8	7	1	4	62
18	15	4,5	Freeport Blvd: Freeport Blvd. between Vallejo Way & 13th Ave.	0.6	20	6	3	11	9	7	1	4	61
19	16	2	Grand Ave: Grand Ave. between Marysville Blvd. & Winters St.	1.0	15	2	7	15	8	7	2	4	60
19	16	8	Brookfield Dr: Brookfield between Mack Rd. & Tangerine Ave.	1.0	15	6	4	15	8	7	1	4	60
21	18	8	Amherst St: Amherst St. between Florin Rd. & Meadowview.	1.1	10	2	3	15	10	10	1	6	57
21	18	4	Golden Oak/Alma Vista: Golden Oak/AV between South Land Park Dr. & Pocket Rd.	0.7	10	0	10	15	7	10	1	4	57
21	18	5	Franklin Blvd: Franklin Blvd. between 2nd Ave. & Fruitridge Rd.	2.1	10	10	4	11	10	7	1	4	57
24	21	4	V St: V St. between 8th St. & 18th St.	0.8	10	0	8	15	9	7	1	6	56
25	22	4	South Land Park Dr: South Land Park Dr. between Sutterville Rd. & Seamas Ave.	1.4	20	4	2	7	9	7	2	4	55

YEAR 2002 - ON-STREET BIKEWAY PROJECTS

TABLE E-1

2002 Rank	2001 Rank	Council District	On Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char.	Right-of-Way	Transp. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100
			Project Description	Miles								
26	23	4,7	Meadowview Rd: Meadowview Rd. between Greenhaven Dr. & Freeport Blvd.	0.6	5	6	6	15	10	7	3	54
27	24	3	H St. West: H St. between 29th St. & 33rd St.	0.7	15	0	3	11	10	7	1	53
27	24	4	Havenhurst Dr. & 56th Ave: Havenhurst between Greenhaven Dr. & Greenhaven Dr; 56th Ave. between Havenhurst & South Land Park Dr.	1.1	10	2	8	15	8	7	1	53
29	N/A	1	Shady Arbor Dr: Shady Arbor Dr. between West River Dr. & dead end.	0.2	10	0	10	15	2	10	1	52
29	26	4	South Land Park Dr: South Land Park Dr. between 35th Ave. & Seamas Ave.	0.2	15	4	2	11	7	10	1	52
31	27	4	Gloria Dr: Gloria Dr. between 43rd Ave. & Greenhaven Dr.	0.7	10	4	3	15	7	7	1	51
32	28	2	Grove Ave: Grove Ave. between Lampasas Ave. & Arden Way.	0.6	15	0	3	11	8	7	1	49
32	28	3	Del Paso Blvd.: Del Paso Blvd. between Arcade Blvd. & Dayton St.	0.7	10	2	2	15	8	7	1	49
34	31	8	Center Parkway: Center Parkway between Newport Cove Way & Sheldon Rd.	0.4	0	4	4	11	7	10	5	47
35	32	1	Capitol Mall: Capitol Mall between Front St. & 10th St.	1	20	0	3	8	7	0	1	45
35	32	2, 3	Del Paso Blvd. East: Del Paso Blvd. between El Camino Ave. & Arcade Blvd.	1	10	0	4	11	8	7	1	45
37	34	7	Pocket Rd: Pocket Rd. between Park Riviera Way & Riverside Blvd.	0.8	0	2	6	15	7	7	1	42
38	35	4, 7	Havenside Dr: Havenside Dr. between Riverside Blvd. & Florin Rd.	1.2	0	2	3	15	8	7	1	40

YEAR 2002 - OFF-STREET BIKEWAY PROJECTS

TABLE E-2

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char	Right-of-Way	Trans. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100
1	N/A	1	Ninos Parkway Bike Trail - Bike trail in Ninos Parkway from West El Camino to Rosin Blvd. Distance of 2.09 miles.	20	4	15	12	10	7	1	4	73
1	11	1,3	Two Rivers Bike Trail - Bike trail along the south levee of the American River from Jibboom St. to Sutter's Landing Park site. Distance of 2.99 miles.	20	6	15	4	10	10	2	6	73
3	N/A	7,8	South City Limits E/W Bike Trail - Bike trail along the South City Limits from the Freeport Shores Park to Franklin Blvd. Distance of 4.33 miles.	10	15	15	8	10	7	3	4	72
4	3	3	Sutter's Landing East - Bike trail from Sutter's landing bridge along the American River to H St. Distance of 2.05 miles	20	6	15	4	10	10	1	4	70
5	4	4,7,8	Del Rio Bike Trail - Bike trail along the SPRR right-of-way from Sutterville Rd. to the South City limits. Distance of 5.33 miles	20	2	15	4	10	10	1	6	68
5	4	5,7,8	UPRR Phase II - Bike trail along the UPRR right-of-way from Sacramento City College to Morrison Creek. Distance of 5.01 miles.	20	2	15	4	10	10	1	6	68
7	6	5	UPRR Phase I - Bike trail through the UPRR yards from Sacramento City College to Vallejo Way and SCC to 10th Ave. Distance of 0.82 miles.	20	2	15	4	10	10	1	4	66
8	8	1	C-1 Canal - Bike trail along the C-1 canal from the Natomas East Main Drain Canal to the East Drainage Canal. Distance of 0.97 miles.	20	2	15	4	5	10	5	4	65
9	N/A	8	Center Parkway Extension - Bike trail on the west side of Center Parkway from Jacinto Park to Sheldon Rd. Distance of 0.28 miles.	15	0	15	15	2	10	1	6	64
9	9	1	SP Railyards - Bike trail through the SP railyards from E St. to the Sacramento River Bike Trail. Distance of 0.55 miles.	20	2	15	4	10	10	1	2	64
11	N/A	1	Arena Access Trail - East-west bike trail between East Commerce Way to Del Paso Road overpass. Distance of 0.68 miles.	15	2	15	15	4	7	3	2	63

YEAR 2002 - OFF-STREET BIKEWAY PROJECTS

TABLE E-2

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char	Right-of-Way	Trans. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100
11	N/A	8	Laguna Creek South Trail - Bike trail along the south side of Laguna Creek from the existing bridge eastward to the city limits. Distance of 0.26 miles.	10	4	15	15	2	10	1	6	63
13	15	2, 3	Arcade Creek Phase II - Bike trail along Arcade Creek from Haginwood Park Through Del Paso Park to Auburn Blvd. Distance of 4.08 miles.	20	2	15	7	5	7	1	6	63
14	13	8	Laguna Tower - Bike trail along the Laguna Creek tower easement from Laguna Creek to the south City limits. Distance of 0.31 miles.	10	10	15	4	0	10	5	6	60
15	N/A	1	North Natomas Regional Park Bike Trails - Network of bike trails within the North Natomas Regional Park. Distance of 2 miles.	0	4	15	15	9	7	1	8	59
15	N/A	1	West Canal West - Bike trail on the west side of the West Canal within the city limits. Distance of 0.34 miles.	10	0	15	15	2	10	1	6	59
17	N/A	1	Ninos Bike Trail Extension - Bike trail connecting the Ninos Bike Trail at the northern limits to the Ninos Parkway Bridge. Distance of 0.38 miles.	5	10	15	8	7	10	1	2	58
17	N/A	1	Airport Rd. Trail - Bike trail along the current alignment of Aiport Rd. between San Juan Rd. and Arena Blvd. Distance of 1.24 miles.	10	6	15	8	5	7	5	2	58
17	N/A	3,6	Folsom LRT Trail East - Bike trail along the Folsom Light Rail Line between 65th St. and Watt Ave. Distance of 2.73 miles.	15	0	15	4	10	7	1	6	58
20	N/A	1	East Drainage Canal - Bike trail on the east sides of the East Drain Canal from the C1 Canal to Truxel Road. Distance of 0.69 miles.	10	2	15	4	8	10	5	2	56
20	N/A	1	Shady Arbor Trail - Bike trail though Shady Arbor Neighborhood Park between Shady Arbor Court and Barandas Dr. Distance of 0.08 miles.	10	0	15	15	2	10	1	2	55
22	16	4,5	Mangan Park - Bike trail south of Mangan Park in Executive Airport right-of-way from 24th St to Freeport Blvd. Distance of 0.58 miles.	10	4	15	4	5	10	1	4	53

YEAR 2002 - OFF-STREET BIKEWAY PROJECTS

TABLE E-2

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Activity Centers	Barrier Elimination	Traffic Char	Right-of-Way	Trans. System	Travel Continuity	Geographic Distribution	Recreational Potential	Total Score
			Max. Points Possible in Scoring Category:	20	15	15	15	10	10	5	10	100
22	N/A	3	Folsom LRT Trail West - Bike trail along the Folsom Light Rail Line between Alhambra Blvd. and 65th St. Distance of 2.37 miles.	10	2	15	4	10	7	1	4	53
24	N/A	1	San Juan Access Trail - Bike trail on the north and south sides of San Juan Rd. at the I-5 underpass. Distance of 0.57 miles.	0	0	15	15	4	10	4	4	52
24	N/A	6	Cal Central Traction RR Trail - Bike trail along the Cal Central Traction RR Right of Way from Power Inn Rd. to the city limits. Distance of 2.85 miles.	10	2	15	4	9	7	1	4	52
26	18	3	Haggin Oaks Golf Course West - Bike trail from Connie Dr. to Arcade Creek. Distance of 0.81 miles.	10	0	15	7	0	10	1	6	49
26	18	8	Morrison Creek - Bike trail along Morrison Creek from Mack Rd. to 53rd Ave. Distance of 2.17 miles.	5	2	15	4	5	10	2	6	49
28	20	3	Elvas Bike Trail - Bike trail on the northeast side of the Elvas Ave. from 36th Way to F St. Distance of 1.17 mile.	5	0	15	4	7	10	1	6	48
29	21	7	Sacramento River Parkway Phase III - Bike trail on the Sacramento River levee from the Pocket Canal to Arabella Way. Distance of 1.44 miles.	10	2	15	0	5	10	1	4	47
30	22	7	Pocket Canal Phase V - Bike trail on the west and south sides of the Pocket Canal from Gloria Dr. to Havenside Dr. Distance of 0.79 miles.	10	0	15	0	5	10	1	4	45
31	N/A	1	Airport Rd. Access Trail - East-west bike trail connecting Airport Rd. trial to Truxel Rd. Distance of 0.58 miles.	0	2	15	8	9	7	1	2	44

YEAR 2002 - BIKE/PED. BRIDGE PROJECTS

TABLE E-3

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Population	Activity Centers	Barrier Elim.	Crossing Type	Row/ Cost	Transp. System	Travel Continuity	Total Score
			Maximum Points in Scoring Category:	20	20	40	5	5	5	5	100
1	1	3	Sutter Landing Bridge - Provides Bike/Ped. Connection over the American River between the American River Parkway and Sutter Landing Park	10	15	40	5	2	1	5	78
2	2	1	Discovery Park - Provides Bike/Ped. Connection over The American River for an all weather connection between Natomas and downtown (LRT Bridge alignment).	15	10	30	5	4	5	5	74
3	3	1	I-80 Bridge(N to S. Natomas) - Provides Bike/Ped. Connection over I-80 at the WAPA Corridor between North & South Natomas.	12	10	20	5	2	5	3	57
4	N/A	6	Bridge at Redding to Folsom - Provides Bike/Ped. Connection under Railroad mainline connecting Redding Avenue to Folsom Boulevard.	11	20	10	5	1	1	5	53
5	5	3	Glenn Hall Park Bridge - Provides Bike/Ped. Connection over the American River between the American River Parkway and the Riverpark neighborhood.	7	10	20	5	4	1	5	52
6	6	3	H Street Bridge - Provides Bike/Ped. Path on the north side of the H Street bridge.	11	20	5	5	3	1	5	50
7	7	1	I-80 Bridge(N to S. Natomas) - Provides Bike/Ped. Connection over I-80 at the West Canal between North & South Natomas.	10	10	10	5	5	3	5	48
8	8	2	Haggin Oaks Crossing - Provides Bike/Ped. Connection over railroad tracks and Arcade Creek connecting north Sacramento to Haggin Oaks Bike Trail.	6	5	20	5	3	3	5	47

YEAR 2002 - BIKE/PED. BRIDGE PROJECTS

TABLE E-3

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Population	Activity Centers	Barrier Elim.	Crossing Type	Row/ Cost	Transp. System	Travel Continuity	Total Score
			Maximum Points in Scoring Category:	20	20	40	5	5	5	5	100
9	N/A	1	Gateway Park Boulevard at C1 Canal - Provides Bike/Ped. Crossing of C1 Canal at Gateway Park Boulevard in North Natomas.	4	5	20	5	4	1	5	44
9	N/A	Co.	National Drive at C1 Canal - Provides Bike/Ped. Crossing of C1 Canal at National Drive in North Natomas.	4	5	20	5	4	1	5	44
9	9	1	I-80 Bridge(N to S. Natomas) - Provides Bike/Ped. connection over I-80 near Bannon Creek between North & South Natomas.	8	5	20	5	0	1	5	44
12	N/A	1	I-5 Bridge in S. Natomas - Provides Bike/Ped. connection over I-5 between West El Camino and Garden Highway.	9	10	10	5	3	1	5	43
13	N/A	1	Northgate Boulevard at C1 Canal - Provides Bike/Ped. Crossing of Northgate Boulevard at the C1 Canal in North Natomas.	4	5	20	3	2	1	5	40
14	N/A	1,4	R Street at I-5 - Provides Bike/Ped. Connection over I-5 at R Street to the Sacramento River Waterfront.	12	10	0	5	3	3	5	38
15	N/A	1	Del Paso at West Canal - Provides Bike/Ped. Crossing of Del Paso Boulevard at the West Canal in North Natomas.	0	0	20	3	4	1	5	33
16	N/A	1	East Drain at Sump 20 - Provides Bike/Ped. Connection over East Drain Canal near Sump 20 in North Natomas.	4	5	10	5	2	1	5	32
17	N/A	1	West Canal Crossing at El Centro - Provides Bike/Ped. connection over West Canal at El Centro Road in North Natomas.	1	0	10	5	3	1	5	25

YEAR 2002 - BIKE/PED. BRIDGE PROJECTS

TABLE E-3

2002 Rank	2001 Rank	Council District	Off-Street Bikeway Projects	Population	Activity Centers	Barrier Elim.	Crossing Type	Row/ Cost	Transp. System	Travel Continuity	Total Score
			Maximum Points in Scoring Category:	20	20	40	5	5	5	5	100
17	N/A	1	Del Paso Road at East Drain - Provides Bike/Ped. Connection over Del Paso Road at the East Drain Canal in North Natomas.	1	5	5	3	5	1	5	25
19	N/A	1	H Drive and East Drain - Provides Bike/Ped. Connection over East Drain Canal in Northpoint Subdivision in North Natomas.	0	0	10	5	3	1	5	24
20	N/A	1	San Juan Crossing at West Canal - Provides Bike/Ped. crossing of San Juan at the West Canal in North Natomas.	4	0	5	2	3	3	5	22
21	N/A	1	Arena Blvd. At East Drain - Provides Bike/Ped. Connection over Arena Boulevard at the East Drain Canal in North Natomas.	2	0	5	2	5	1	5	20
22	N/A	1	Saint Hilarion Crossing at West Canal - Provides Bike/Ped. crossing of Saint Hilarion Boulevard in North Natomas.	3	0	5	2	3	1	5	19
22	N/A	1	North Bend Dr. at East Drain Canal - Provides Bike/Ped. Connection over East Drain Canal at North Bend Drive in North Natomas.	0	0	5	5	3	1	5	19
24	N/A	1	El Centro at West Canal - Provides Bike/Ped. crossing of El Centro Road at the West Canal in North Natomas.	1	0	5	2	4	1	5	18
24	N/A	1	Town Center Pedestrian Bridge - Provides Ped. Connection over Del Paso Boulevard at the Town Center in NorthNatomas.	1	0	5	3	5	1	3	18

FIGURE E-1

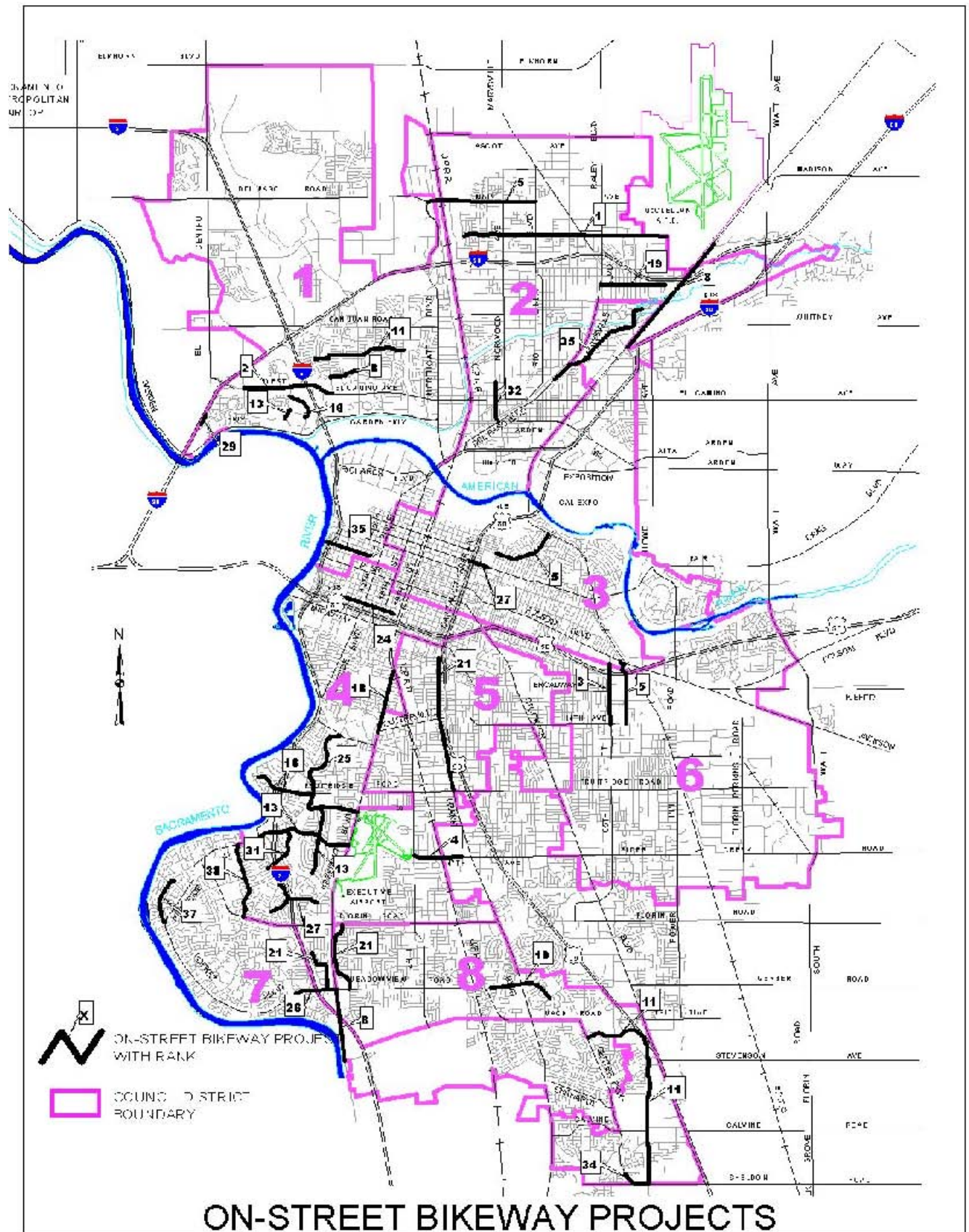


FIGURE E-2

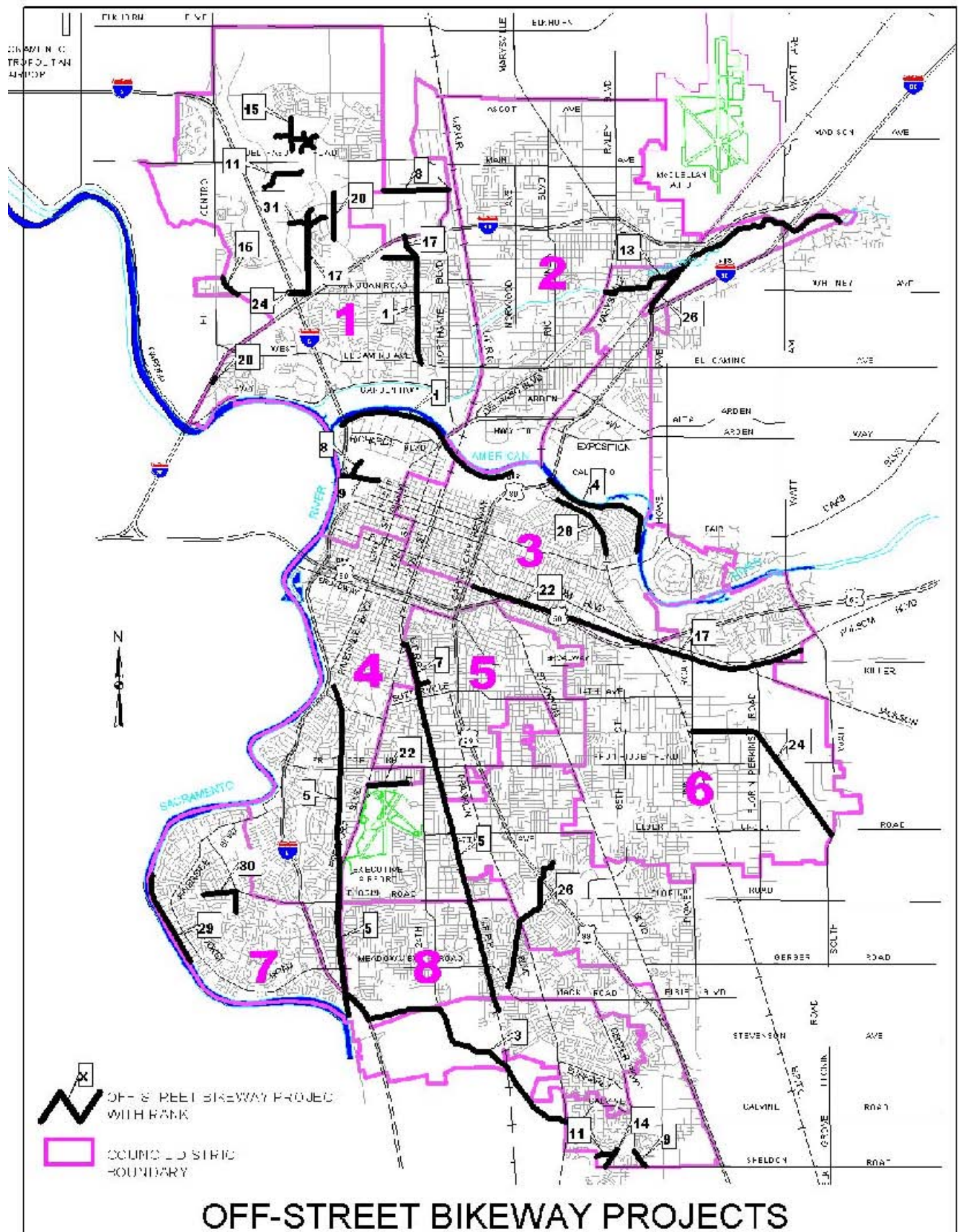
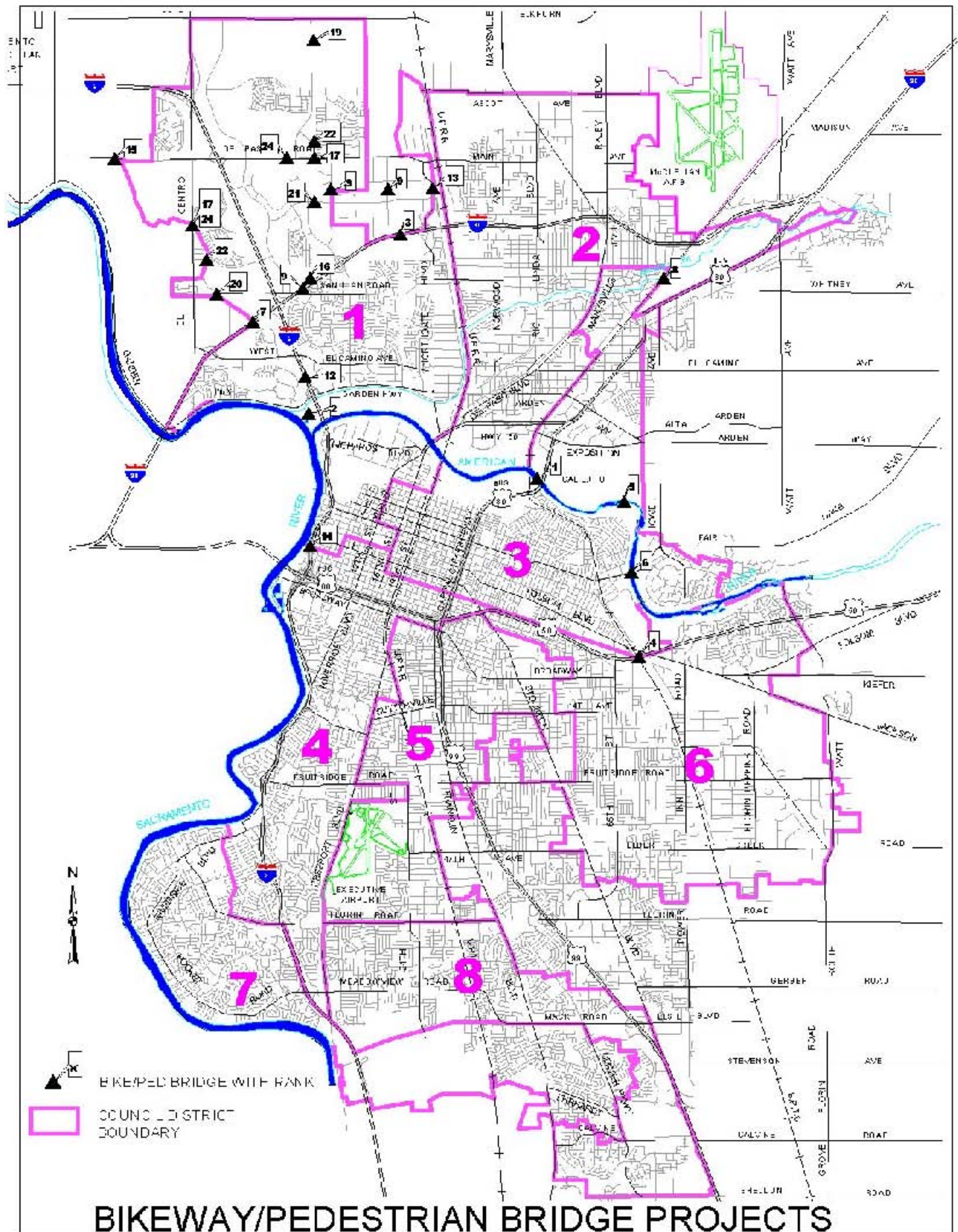


FIGURE E-3



F. BRIDGE REPLACEMENT AND REHABILITATION PROGRAM
(TAB PLACE HOLDER)

BRIDGE REPLACEMENT AND REHABILITATION PROGRAM

INTRODUCTION

An integral element of the City's transportation infrastructure is a network of bridges designed to carry vehicular, railroad, light rail, pedestrian, and bicycle traffic across approximately 30 canals and waterways in Sacramento. These bridges enable essential activities, such as commerce, transportation and emergency services to take place in an efficient and economical manner.

There are 117 bridges owned or maintained by the City. Of these, 97 are primarily vehicular bridges, 5 are railroad bridges, and the remaining 15 are bikeway and pedestrian bridges. It is estimated that more than 1,000,000 vehicle trips are made across City maintained bridges each day.

Routine maintenance of the City's bridges is performed by City operations and maintenance staff. Maintenance tasks are identified through a combination of visual inspections performed by City staff and more in-depth, formal, inspections performed under the direction of Caltrans staff. The results of the Caltrans inspections are forwarded to the City for information and, when appropriate, corrective action is taken.

Since the majority of the City's bridges are constructed of reinforced concrete, which requires little or no maintenance, structure upkeep costs are minimal. However, the cost for capital improvement projects needed to upgrade or replace existing structures represents a continuing major investment in the City's bridge infrastructure.

The City's bridge replacement and rehabilitation program was designed to identify and prioritize needed improvements to the City's existing bridge inventory. (New bridge construction projects are prioritized along with major street projects since they are integral to new roadways.) Rehabilitation projects can consist of large-scale maintenance projects (such as the painting of steel structures) or repairing and upgrading the structural, service, and functional elements of an existing structure. Typically, if the cost of the needed improvements is greater than fifty percent (50%) of the cost of a new structure, and the remaining life expectancy of the existing structure is short, the structure is considered eligible for replacement.

GOAL AND POLICIES

The Bridge Replacement and Rehabilitation Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goal and policies:

Goal:

1. Provide the necessary infrastructure to link the City's existing transportation network across natural and other physical barriers in a safe, efficient, and economical manner.

Policies:

- Identify and prioritize candidate bridge replacement and rehabilitation projects, taking into account safety, service, and life-cycle costs.
- Plan and develop improvements to the City's existing bridge infrastructure in a coordinated manner with other public agencies in order to meet the program goal on a regional basis.
- Plan and develop improvements to the City's existing bridge infrastructure in a way that recognizes and addresses the need for a multi-modal transportation system.
- Continue to develop a comprehensive bridge infrastructure inventory and maintenance program.

PROJECT LIST DEVELOPMENT**Eligibility Criteria**

The Sufficiency Rating assigned by Caltrans is a numeric value that indicates the sufficiency of a bridge to remain in service. Sufficiency Ratings range from zero to 100, with zero representing an entirely insufficient or deficient bridge, and 100 representing an entirely sufficient bridge. Structures that are assigned a Sufficiency Rating of 70 or less, and structures which have been identified as potentially having service or functional deficiencies, are considered eligible for replacement or rehabilitation.

Project Identification

Caltrans inspects and assigns Sufficiency Ratings to all structures in the City's inventory which carry vehicular traffic or cross a route carrying vehicular traffic and are a minimum of 20 feet in length. Sufficiency Ratings are established by using federal bridge inspection and appraisal guidelines, and represent a weighted analysis of a bridges structural adequacy and safety, serviceability and functional obsolescence, and essentialness for public use.

Candidate bridge replacement and rehabilitation projects are identified by reviewing the Sufficiency Ratings assigned to the structures by Caltrans. City bridges that are not inspected by Caltrans are reviewed periodically and, if known deficiencies exist, are added to the candidate list. All of the bridges in the Year 2002 Transportation Programming Guide are inspected by Caltrans.

PROJECT RANKING PROCESS

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 ≤ 3)

Points = 0 (If Structural Appraisal Rating ≥ 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 that 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 that the structure may be in. The inventory rating is a capacity rating which represents the load level for various vehicle types that 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: 10)

Points = 10 (If Class II Bike routes¹ have a gap across or are detoured around the bridge)

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

A gap across the structure exists when bike lanes on either the structure and its approaches are absent for an existing Class II Bike route. A gap also exists if the travel lane closest to the curb is less than 15 feet for bridges that are not included in the 2010 Bikeway Master Plan (BMP).

Pedestrian Facilities(Max. Points: 10)

Points = 10 (If there are sidewalk gaps across the bridge)

A gap across the structure exists if sidewalks are absent from the structure or its approaches in either direction of travel.

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 for last three years > latest available expected accident rate² for the most recent three years)

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

Points = 0 (If bridge segment accident rate for one or none of the last three years > expected accident rate)

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 was from the Traffic Engineering Division latest available Speed Survey Segment Accident Rate Report of 1994.

Deck Geometry.....(Max. Points: 10)

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 clearances³. Deficiency points are assigned to a structure that does not meet certain minimum criteria, as follows:

- 1 point per foot short for each vehicle lane width less than 11 feet

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

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

- 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 clearance 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 ≤ 3 for Caltrans Item 71)

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

The Waterway Adequacy (Caltrans Item 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.

SUMMARY

Table F-1 presents the final point total and relative deficiency ranking for all twenty-two bridge rehabilitation and replacement projects, along with the ratings given for each of the three major evaluation categories. The table also lists the identified deficiencies for each structure. Figure F-1 depicts the approximate location of each of the twenty-two bridge projects.

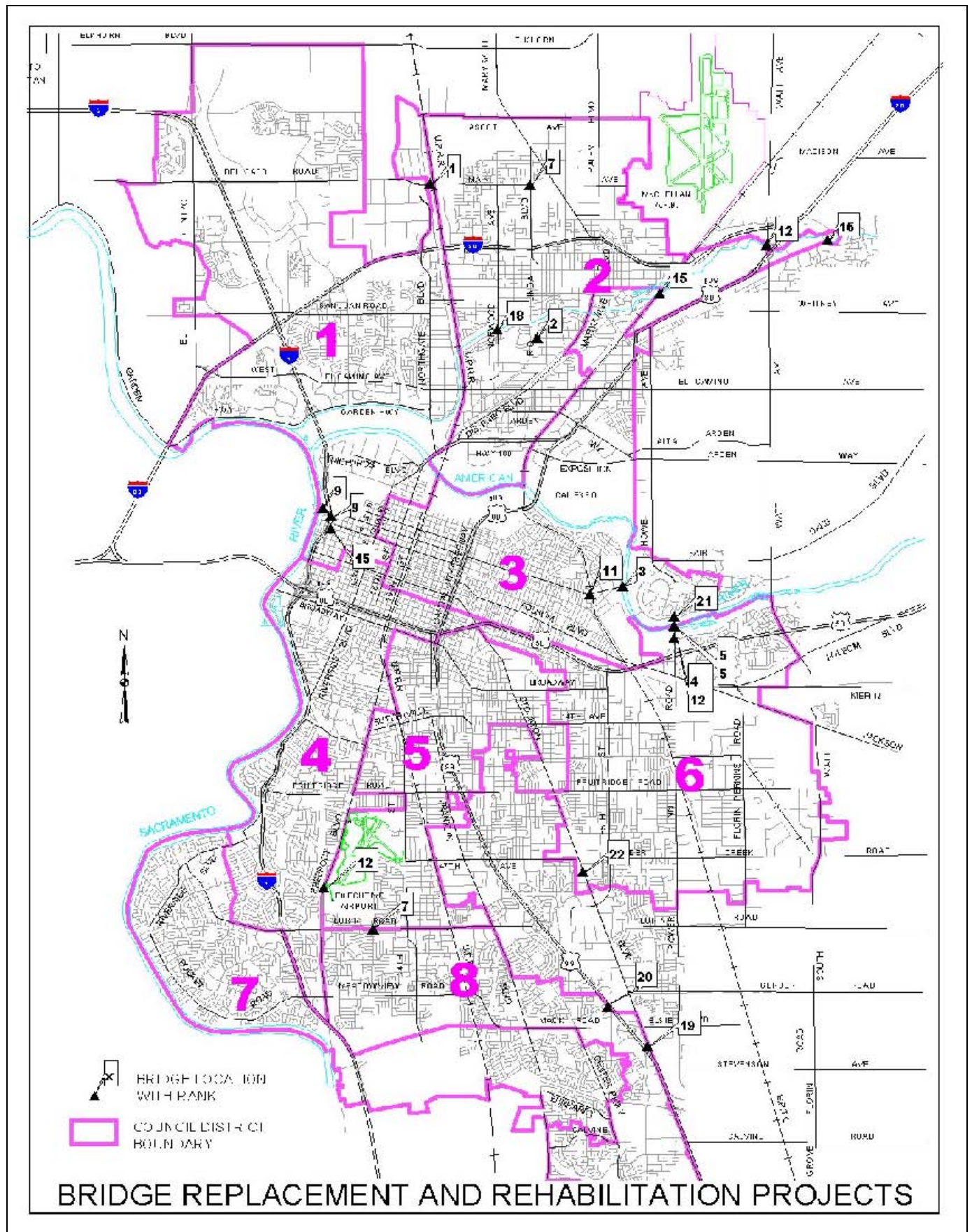
The Main Avenue at Natomas Main Drain Canal Bridge ranks number one with a score at 60 points. The next ranked project is Rio Linda Boulevard at Acacia Bridge, with a score of 50 points. The remaining twenty bridges received scores ranging from 3 to 30.

YEAR 2002 - BRIDGE REPLACEMENT REHABILITATION PROJECTS

TABLE F-1

2002 Rank	2001 Rank	Council District	Bridge No.	Location	Structural	Service	Functional	Deficiency Total	Improvements Needed
				Maximum Points in Scoring Category:	50	20	30	100	
1	1	1,2	24C0008	Main Ave. at Natomas Main Drain Canal	50	10	0	60	Design for replacement is funded.
2	2	2	24C0127	Rio Linda Blvd. At Acacia	50	0	0	50	Low superstructure condition rating - investigation started.
3	3	3	24C0076	H Street at American River	0	20	10	30	Narrow lanes, limited horizontal clearance, traffic volume near capacity
4	4	6	24C0142R	Howe Avenue at La Riviera Drive	0	20	5	25	ADT> capacity, horizontal clearance and underclearance limited
5	5	6	24C0107L	Howe Avenue at American River	0	20	1	21	ADT>capacity, limited horizontal clearance
5	5	6	24C0107R	Howe Avenue at American River	0	20	1	21	ADT>capacity, limited horizontal clearance
7	7	2	24C0129	Rio Linda Blvd at Magpie Creek	0	20	0	20	ADT = capacity
7	7	5,8	24C0209	Florin Road at Anderson Drain	0	10	10	20	Narrow lanes, bike route detoured
9	9	1	24C0006	Jibboom Street Viaduct N of I Street	0	10	8	18	Narrow lanes, limited horizontal clearance & underclearance, bike route detoured
9	9	1	24C0364L	I Street Viaduct at I Street	0	10	8	18	Bike route detoured, narrow shoulder for bike lane
11	11	3	24C0069	Elvas Avenue Overcrossing at H Street	0	10	7	17	Horizontal underclearance limited, bridge widened to add sidewalk - 1997
12	12	6	24C0142L	Howe Avenue at La Riviera Drive	0	10	5	15	ADT>capacity, horizontal clearance and underclearance limited
12	12	3	24C0177	Watt Avenue at Arcade Creek	0	10	5	15	ADT = capacity
12	12	4,5	24C0295	Freeport Blvd at Executive Drain	0	10	5	15	Narrow lanes
15	15	3	24C0003	Roseville Road at Arcade Creek	0	10	3	13	Limited horizontal clearance
15	15	3	24C0081	Auburn Blvd at Arcade Creek	0	10	3	13	High flows at or above soffit, narrow bike lanes
15	15	1	24C0378	K Street at Holiday Inn Garage	0	10	3	13	Limited horizontal clearance, narrow sidewalk
18	18	2	24C0080	Norwood Avenue at Arcade Creek	0	10	2	12	Bike lane gap, horizontal clearance limited
19	19	8	24C0091	Stockton Blvd at Beacon (Union House) Creek	0	10	1	11	Sidewalk gap, narrow lane
20	20	8	24C0093	La Mancha Way at Elder Creek	0	10	0	10	Bike lane gap
21	21	3	24C0143L	Howe Avenue at University Avenue	0	0	4	4	
22	22	6	24C0096	Stockton Blvd at Morrison Creek Tributary	0	0	3	3	Narrow lane and bike lane

FIGURE F-1



G. STREETSCAPE ENHANCEMENT PROGRAM
(TAB PLACE HOLDER)

STREETSCAPE ENHANCEMENT PROGRAM

INTRODUCTION

Corridor Landscaping

In 1987, the City Council adopted a policy of landscaping public right-of-way areas including street medians, curbside planter strips, embankments, surplus right-of-way, and setback areas, as new streets are constructed. Prior to that time, landscaping was not routinely planted at the time streets were constructed or widened. Consequently, there are existing areas within the right-of-way that are not landscaped, most of which are medians. There are also many streets in the city where medians were not constructed as part of the original roadway.

To improve both the aesthetics and the travel experience on the City's streets, the City of Sacramento formally established the Streetscape Enhancement Program in FY 99/00. The program will fund the planning, engineering, and construction of landscaped medians, curbside planter strips, and gateway features on the City's commercial and neighborhood corridors. The Streetscape Enhancements Program includes two sections:

1. Commercial Corridors
2. Other Corridors

The Streetscape Enhancement section of the Transportation Programming Guide will define the two program elements listed above, identify current streetscape projects and future needs, define eligible enhancements, present criteria for prioritizing projects, present the scoring and ranking process, and establish a priority list of projects for the enhancement programs. This section will also define the project delivery process for streetscape enhancement projects.

In May 2000, City Council adopted streetscape standards for new right-of-way landscaping. The City also has design guideline practices for new street lighting.

GOALS AND POLICIES

The Streetscape Enhancement Program is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goals and policies:

Goal:

1. Create a street system, which will ensure the safe and efficient movement of people and goods within and through communities and to other areas in the City and region.

Policy 1

- Update the City's street design standards.

(New street standards were approved by City Council on October 6, 1998. The street standards include medians and curbside planter strips for implementation on specific street classifications that have adequate right-of-way. The street standards provide design policy for implementation of the Streetscape Enhancement Program.)

Policy 2

- Explore actions, which allow for the prioritization, planning and construction of new facilities.

Policy 3

- Through the community, specific and redevelopment planning process, identify major street improvements for inclusion in the Capital Improvement Program.

Goal:

1. Maintain the quality of the City's street system.

Policy 1

- Continue to identify streets that are in need of major upgrading and develop a priority listing for their inclusion in the Capital Improvements Program.

Policy 2

- Target street improvements to areas that are in identified revitalization areas.

The Streetscape Enhancement Program is also consistent with the following City of Sacramento Economic Development Strategy policies:

- Strengthen the linkages between healthy neighborhoods and viable neighborhood commercial corridors.
- Improve the coordination of human and financial resources to maximize economic growth.

(In April 2000, the City Council approved the Economic Development Strategy, which established a framework for determining economic development priorities.)

The Council has established the following program goals:

- To improve the safety and convenience of pedestrians and bicyclists; and
- To construct and maintain equitably distributed street landscaping throughout the City.

COMMERCIAL CORRIDOR PROGRAM

The eligible commercial corridors are those identified in the Economic Development Strategy Framework, approved by the City Council in April 2000. The following corridors, within the identified boundaries, are eligible for the Streetscape Enhancement Commercial Corridor program:

- 12th Street, between C & H Streets
- 16th Street, between C Street and Broadway

- 65th Street, between Elvas Avenue and Broadway
- Broadway, between Miller Park and Alhambra Boulevard and between Alhambra Boulevard and Stockton Boulevard
- Del Paso Boulevard, between Acoma and Marysville Boulevard
- Franklin Boulevard, between Sutterville Road and Fruitridge Road
- Florin Road, between Franklin Boulevard and Riverside Boulevard
- Folsom Boulevard, between Alhambra Boulevard and 65th Street and between 65th Street and Watt Avenue
- Freeport Boulevard, between 2nd Avenue and City limits
- Fruitridge Road, between 65th Street and Power Inn Road
- Mack Road, between Center Parkway and State Highway 99 and Bruceville Road, between Mack Road and Methodist Hospital
- Marysville Boulevard, between Arcade Creek and I-80
- Midtown area J, K, and L Streets, between 16th and 29th Streets
- Northgate Boulevard, between Garden Highway and I-80
- R Street, between 3rd and 17th Streets
- Richards Boulevard, between 16th Street and Jibboom Street
- Stockton Boulevard, between X Street and Riza Avenue

Eligible Enhancements

The following improvements may be considered under the Commercial Corridors Program:

- In-fill street lighting to satisfy design guideline practices (lighting above the design guideline practices is to be paid for by property owners)
- New landscaped medians
- Landscaping existing medians
- New curbside planter strips
- Landscaping existing planter strips
- Irrigation for landscaping
- Sidewalks where missing or lacking adequate width
- Bicycle lane striping and signage where consistent with Bicycle Master Plan (on-street bicycle funding will be primary funding source)
- Stamped crosswalks or other types of crosswalk delineation
- Pedestrian bulbs
- Signage/banners
- Trash receptacles/enclosures

Project Ranking Process

The targeted commercial corridors are largely older corridors that were constructed without landscaped medians or curbside planter strips. Many of the corridors are wide enough to accommodate both medians and planter strips. Other corridors will accommodate either medians or planter strips, but not both. Consideration will have to be given to providing parking, bicycle lanes, wider sidewalks, etc.

Priority is given to corridors within revitalization areas, in accordance with General Plan policy. The criteria recognizes targeted corridors that have already been deemed “blighted” and in the most serious need of attention. Priority is also given to corridors where streetscape planning and/or engineering investments have already been made.

The maximum possible score is 100 points, assigned as follows:

1. Project Readiness (scoring is not cumulative) – maximum of 50 points

Scoring based on current project phase at time all projects are scored and ranked. Points given for highest project phase, phases are not cumulative. Master Plans and Urban Design Plans are complete when they have been accepted by City Council.

<u>Project phase</u>	<u>Assigned points</u>
Construction documents complete	50
Construction documents in progress	42
Master Plan complete	34
Master Plan in progress	26
Urban Design Plan complete	18
Urban Design Plan in progress	10

2. Traffic volume – maximum of 20 points

Many of the older commercial corridors were designed to move traffic volumes, without consideration for aesthetics or pedestrian comfort. Streetscape enhancements will provide traffic calming benefits, improve the pedestrian experience, and bring more foot traffic to local businesses. Scoring is based on average daily traffic (ADT) measured for the length of the corridor. Streets with the highest traffic volumes receive the highest points.

<u>Average Daily Traffic (vehicles/day)</u>	<u>Assigned points</u>
40,000+	20
35,000+	17

<u>Average Daily Traffic (vehicles/day)</u>	<u>Assigned points</u>
30,000+	14
25,000+	11
20,000+	8
15,000+	5
10,000+	2

3. Redevelopment, CDBG-eligible area, BID, or PBID – maximum of 30 points

The City’s General Plan policy and Economic Development Strategy policy both include targeting street improvements to identified revitalization areas. The criteria focuses on corridors that have the greatest need of assistance.

Redevelopment areas have been adopted based on findings of blight and are generally suffering inadequate or deteriorated public infrastructure. Community Development Block Grant (CDBG) eligible areas may also suffer from inadequate infrastructure, however these areas have not been declared blighted. Business Improvement Districts (BID) or Property-Based Improvement Districts (PBID) are often committed to providing matching funds for public projects within their areas.

<u>Type of area</u>	<u>Assigned points</u>
Redevelopment area	15
BID or PBID	15
CDBG-eligible area	15

SUMMARY

Table G-1 presents the final point total and ranking of the twenty-one commercial corridors, streetscape enhancement projects. Figure G-1 shows the approximate location of these projects.

One new project, 65th Street (Folsom Boulevard to Highway 50), was added this year. One project, Florin Road (sound wall at Riverside Drive) was deleted for the 2001 TPG because it is fully funded.

YEAR 2002 - STREETSCAPE ENHANCEMENT - COMMERCIAL CORRIDOR PROJECTS

TABLE G-1

2002 Rank	2001 Rank	Council District	Project Name With Limits	Description	Status	Project Readiness Score	Traffic Volume Score	Redevelopment, CDBG, BID OR PBID Score	Total Score
Maximum Points in Scoring Category:						50	20	30	100
1	1	2	Marysville Blvd (Arcade Creek to I-80) - Phase II	Landscape medians and landscape planters in areas not covered by Phase I	Master plan Complete	34	8	30	72
2	2	5,6	Stockton Blvd (UC Davis Medical Center to Riza Ave)	Streetscape	Master Plan in Progress	26	11	30	67
3	3	5	Broadway (Alhambra Blvd to Stockton Blvd)	Streetscape	Master Plan in Progress	26	5	30	61
4	4	2	Del Paso Blvd (Hwy 160 to Lampasas Ave)	Streetscape Improvements	Master Plan In Progress	26	2	30	58
4	4	5	Franklin Blvd (Sutterville Rd to Florin Rd)	Streetscape	Master Plan In Progress	26	2	30	58
6	6	6	Fruitridge Road (65th St to Power Inn Rd) - Phase II	Streetscape improvements include St. Mary's Entrance and Promenade and gateway at 65th Street.	Master Plan Complete	34	5	15	54
7	7	4,5	Freeport Blvd (Meer Way to Wentworth Avenue)	Capital Nursery Demo Project	Construction Docs in Progress	42	11	0	53
8	8	1,3,4	16 Street (C St to Broadway)	Improvements include canopy of trees, consolidation of curb cuts, signage, screening of parking, and streetlight improvements.	Urban Design Complete	18	8	15	41
8	8	5,8	Florin Rd (Tamoshanter Wy to Freeport Blvd)	Median improvements		0	11	30	41
10	10	1	Richards Blvd (16th St to Jibboom St)			0	8	30	38
11	11	6	Folsom Blvd (Howe Ave - Watt Ave)	Streetscape	Master Plan in Progress	26	11	0	37
12	12	1	12th Street/Alkali Flat			0	5	30	35
12	12	4	Broadway (Miller Prk to Alhambra Blvd)	Large canopy trees along Broadway. Palm trees in center medians. Provide center medians to help with pedestrians crossing. Install corner bulbs at intersections.	Urban Design Complete	18	2	15	35

TABLE G-1

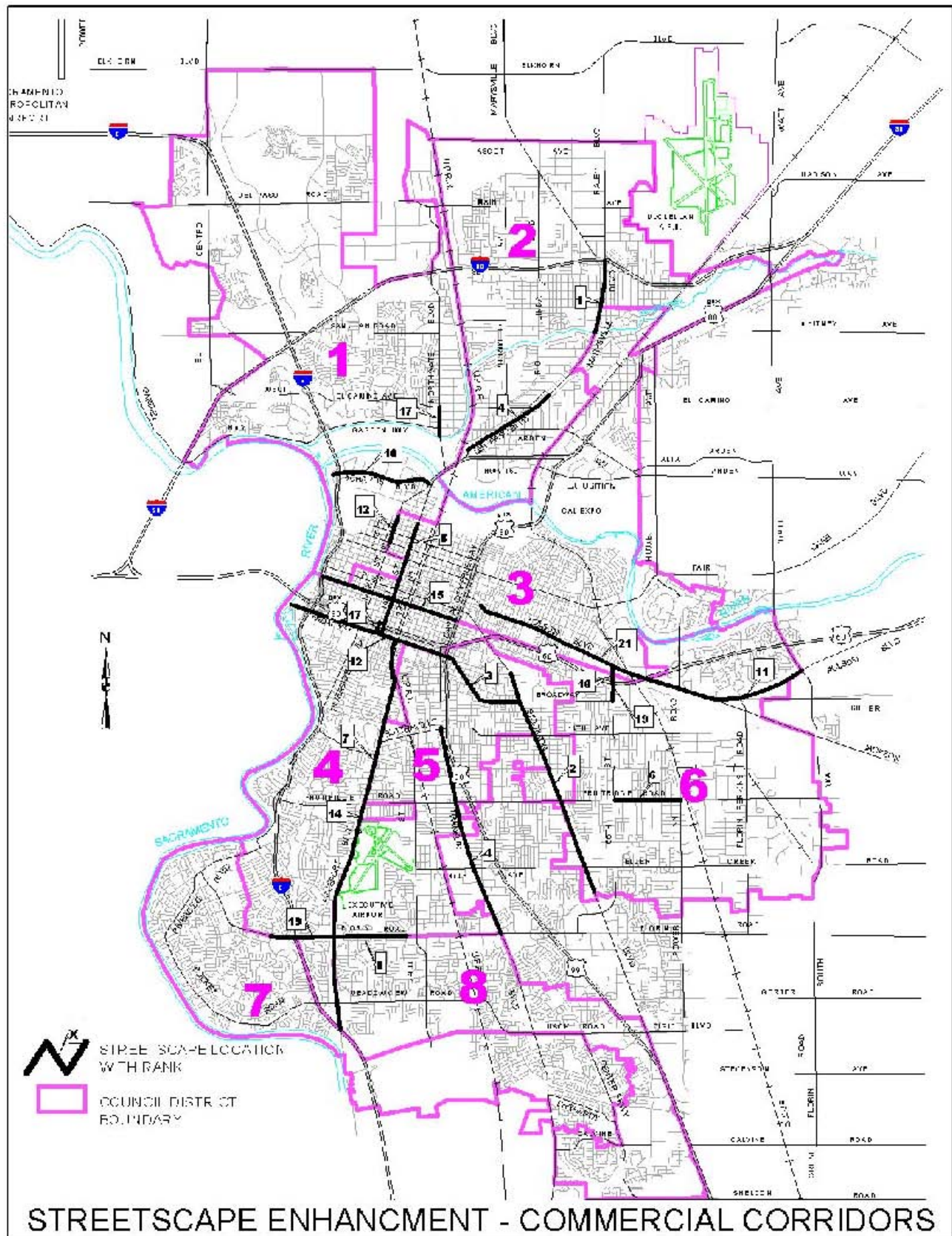
YEAR 2002 - STREETScape ENHANCEMENT - COMMERCIAL CORRIDOR PROJECTS

2002 Rank	2001 Rank	Council District	Project Name With Limits	Description	Status	Project Readiness Score	Traffic Volume Score	Redevelopment, CDBG, BID OR PBID Score	Total Score
Maximum Points in Scoring Category:						50	20	30	100
14	14	4,5,8	Freeport Blvd (Broadway to I-5)	Streetscape improvements including landscaped medians, textured pavement at intersections, textured crosswalks, shade trees, and sidewalk.	Master Plan In Progress	26	8	0	34
15	15	1,3,4	R Street Corridor	R Street Corridor Community Plan	Urban Design Complete	18	0	15	33
16	N/A	3,6	65th St (Folsom Blvd to Hwy 50) *	Part of 65th Street Transit Village Project	Urban Design Complete	18	2	0	20
17	16	4	15th & 16th St (between W/X Freeway to Broadway)	Match streetscape improvements on 15th/16th under the W/X Freeway south to Broadway including trees, plants, sidewalks, pedestrian crossings, lighting, signage, art.		0	2	15	17
17	16	1	Northgate Blvd (Garden Highway to El Camino Ave)	Landscaped medians		0	2	15	17
19	18	6	65th St (Hwy 50 to Broadway) *			0	14	0	14
19	18	4,7	Florin Rd (Freeport Blvd to Greenhaven Dr)	Streetscape.		0	14	0	14
21	20	3,6	Folsom Blvd (33rd to Howe Ave)	Streetscape.		0	5	0	5

Notes: * New Project added in year 2002.

Projects with the same total score received the same rank.

FIGURE G-1



OTHER CORRIDOR PROGRAM

The corridors eligible for streetscape enhancement under the Other Corridors program include all the streets that are not identified in the Economic Development Strategy Framework. Landscaped medians and curbside planter strips are included on streets that have cross sections consistent with the City of Sacramento's adopted Street Standards.

Eligible Enhancements

The following improvements may be considered under the Other Corridors Program:

- In-fill street lighting to satisfy design guideline practices (lighting above the design guideline practices is to be paid for by property owners)
- New landscaped medians
- Landscaping existing medians
- New curbside planter strips
- Landscaping existing curbside planter strips
- Irrigation for landscaping
- Sidewalks where missing or lacking adequate width
- Bicycle lane striping and signage where consistent with Bicycle Master Plan (on-street bicycle funding will be primary funding source)
- Stamped crosswalks or other types of crosswalk delineation
- Pedestrian bulbs
- Signage/banners
- Trash receptacles/enclosures

Project Ranking Process

The existing right-of-way for streets that fall into the Other Corridor category will generally accommodate either a planted median or curbside planter strips. This type of street typically provides for parking and bicycle lanes within the right-of-way. Priority is given to corridors for which planning or engineering investments have already been made.

The maximum possible score is 100 points, which are assigned as follows:

1. **Project Readiness (scoring is not cumulative) – maximum of 30 points**

Scoring based on current project phase at time all projects are scored and ranked. Master Plan and Urban Design Plans are complete when they have been accepted by City Council.

<u>Project phase</u>	<u>Assigned points</u>
Construction documents complete	30
Construction documents in progress	25
Master Plan complete	20
Master Plan in progress	15
Urban Design Plan complete	10
Urban Design Plan in progress	5

2. Traffic volume - maximum of 30 points

<u>Average Daily Traffic (vehicles/day)</u>	<u>Assigned points</u>
35,000+	26
25,000+	22
20,000+	18
15,000+	14
10,000+	10
5,000+	6

3. Current appearance - maximum of 40 points

Priority is given to streets that have existing medians or planter areas that need to be landscaped and irrigated over those that do not have existing medians or planter areas. More enhancement can be achieved with a lower investment on those streets that need only landscaping and irrigation. Scoring is based on the predominant condition observed for the length of the corridor.

<u>Current condition</u>	<u>Assigned points</u>
Existing median or curbside planter – not landscaped	40
Existing median or curbside planter – landscaping in poor condition	25
No existing median or curbside planter or concrete median	10

SUMMARY

Table G-2 presents the final point total and ranking of the thirty-six other corridor streetscape enhancement projects. Figure G-2 shows the approximate locations of the projects.

No projects were added this year while the following projects were deleted because they are fully funded:

- Center Parkway (Calvine Road to Jacinto Avenue)
- Main Avenue (Pell Drive to Norwood Avenue)
- Greenhaven Drive near South Land Park Drive
- Riverside Boulevard and Clipper Way Area

YEAR 2002 - STREETSCAPE ENHANCEMENT - OTHER CORRIDOR PROJECTS

TABLE G-2

2002 Rank	2001 Rank	Council District	Project Name With Limits	Description	Status	Project Readiness Score	Traffic Volume Score	Current Condition Score	Total Score
				Maximum Points in Scoring Category:		30	30	40	100
1	2	8	Center Parkway Ph III (Hollybrook Dr to Bruceville Rd)	Landscaped medians	Construction Does in progress	25	6	40	71
2	3	5	24th Street (47th to 48th)	Landscape empty lots. Not in the public ROW.		0	14	40	54
3	4	5	Martin Luther King Jr. Blvd (southeast and west corners of 12th and 14th Ave.)	Landscape vacant lots		0	10	40	50
4	6	5	Fruitridge Road (SR 99 to 24th St)	Streetscape	Master Plan In Progress	15	18	10	43
4	6	4	Riverside Blvd	Landscape adjacent to cemetery		0	18	25	43
6	10	2	Bell Ave at Norwood Ave	Landscape vacant lot - Plant trees		0	0	40	40
6	10	1,3	North 12th St and North 16th St, C St to American River				30	10	40
8	12	5	47th Ave (UPRR to 27th St)	Streetscape. Part of the Franklin Master Plan; project limits are between St 99 and 27th St. Included is City portion only.	Master Plan In Progress	15	14	10	39
8	12	3,4,5	Alhambra Blvd (C St to Broadway)	Widen sidewalk and landscape		0	14	25	39
8	12	2	Arden Wy (Del Paso Blvd to Royal Oaks Dr)	Add median		0	14	25	39
11	15	6	59th St/Broadway	Brick crosswalks and landscape entire intersection		0	10	25	35
11	15	1	Capitol Mall Streetscape Improvements			0	10	25	35
11	15	7	Center Parkway (2nd median south of Mack to 2nd median north of Cosumnes River Blvd)	Match medians between Cosumnes River and Calvine		0	10	25	35
11	15	3	Dogleg at Alhambra Blvd (G St and H St)	Add low shrubbery and DG with sign		0	10	25	35
15	19	2,3	El Camino Avenue (Del Paso Blvd to I-80)			0	18	10	28
15	19	6	Elder Creek Rd (Stockton Blvd - Power Inn Rd)			0	18	10	28
15	19	5,6	Fruitridge Road, Stockton Blvd to 65th Street			0	18	10	28

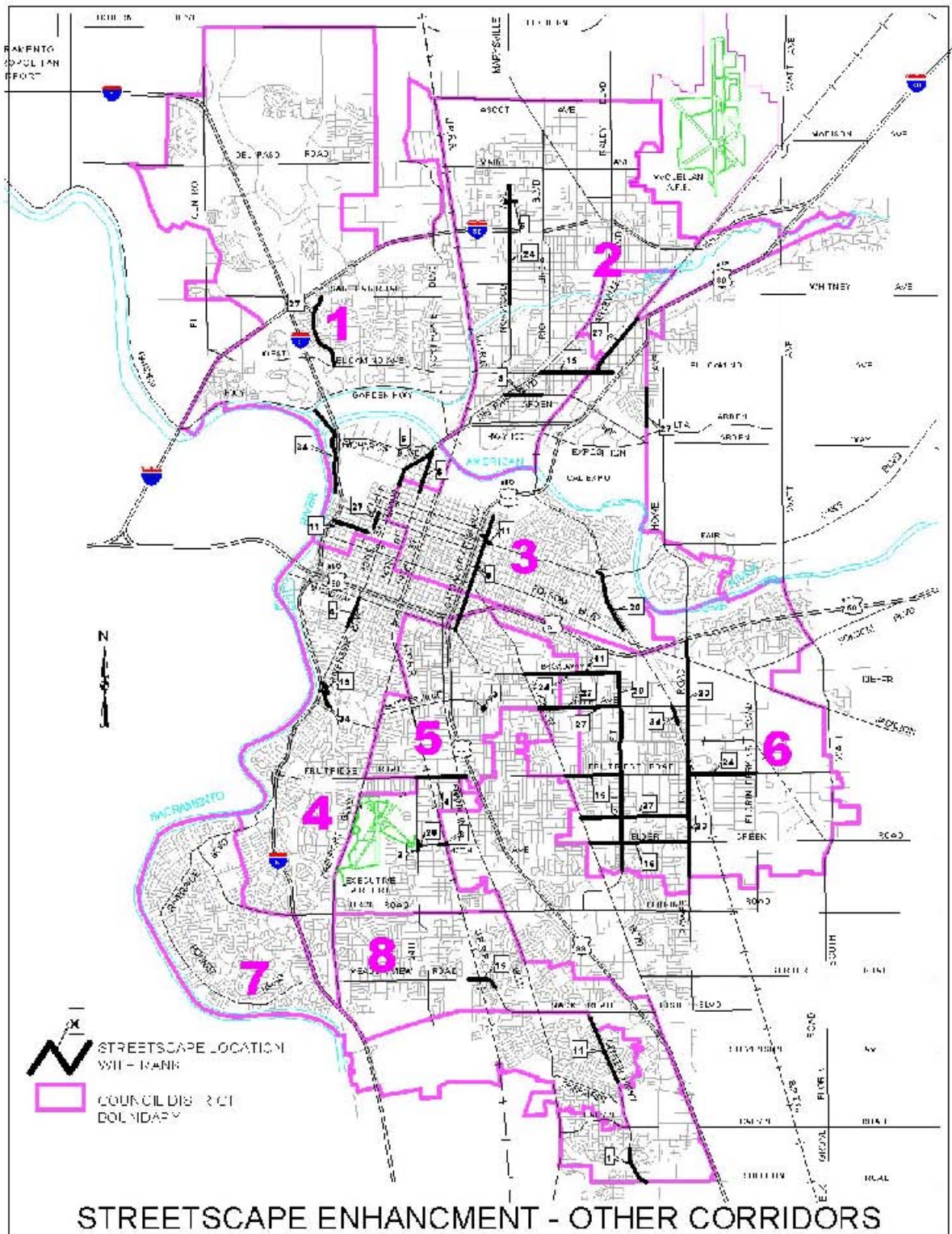
YEAR 2002 - STREETSCAPE ENHANCEMENT - OTHER CORRIDOR PROJECTS

TABLE G-2

2002 Rank	2001 Rank	Council District	Project Name With Limits	Description	Status	Project Readiness Score	Traffic Volume Score	Current Condition Score	Total Score
				Maximum Points in Scoring Category:		30	30	40	100
15	19	8	Mack Rd/Brookfield Dr/Meadowview Rd at Future LRT			0	18	10	28
19	23	4	San Mateo Way	Streetscape		0	0	25	25
20	24	3	Elvas Ave (56th St to 65th St)	Add sidewalks, shade trees, medians, and textured pavement		0	14	10	24
20	24	5	47th/24th Street Medians	Remove concrete and plant trees, shrubs, Art in Public Places. Area is triangular piece created between 24th/47th.		0	14	10	24
20	24	6	65th Street (Broadway to City limits)			0	14	10	24
23	27	6	Power Inn Road (Hwy 50 - City Limits)			0	22	0	22
24	28	5,6	Broadway (Stockton Blvd to 65th St)			0	10	10	20
24	28	6	Fruitridge Road, Power Inn Rd to Florin Perkins	South side frontage of Army Depot		0	10	10	20
24	28	2	Norwood Ave (Fairbanks Ave to Grace Ave)	Modify		0	10	10	20
27	31	5,6	14th Avenue (Stockton Blvd to 60th St/14th Ave - NE and NW corners and around Tallac Shopping Center			0	6	10	16
27	31	6	60th St/14th Ave - NE and NW corners and around Tallac Shopping Center			0	6	10	16
27	31	1	10th Street Corridor (L St to I St)			0	6	10	16
27	31	3	Auburn Blvd/Roseville Road (El Camino Ave to Connie Dr)	Study median/operations		0	6	10	16
27	31	1	Azevedo Dr Medians			0	6	10	16
27	31	3	Ethan Way (west side of street from	Plant shade trees		0	6	10	16
27	31	6	Lemon Hill Ave (Stockton Blvd to Power Inn Rd)			0	6	10	16
34	38	1	Jibboom Street, entire length			0	0	10	10
34	38	4	Darnel Way	Streetscape		0	0	10	10
34	38	6	West Railroad Ave			0	0	10	10

Notes *Projects with the same total scored received the same rank.

FIGURE G-2



H. SIDEWALKS TO SCHOOLS PROGRAM
(TAB PLACE HOLDER)

SIDEWALKS TO SCHOOLS PROGRAM

INTRODUCTION

Sidewalks provide pedestrians some degree of safety from vehicles on the road. This is especially true for locations around schools. Safety considerations are a primary concern when parents and children make the decision whether children should walk (or be driven) to school. During arrival and departure times, schools are very congested places with many different and potentially conflicting transportation modes: cars, buses, pedestrians, and bicyclists. The bicyclist and pedestrians are almost exclusively school-age children who lack the experience and sophistication to deal with this complex, congested situation. Sidewalks provide school-age children with a safe refuge, and consequent protection from a myriad of vehicular conflicts.

The construction of sidewalks to schools provide a safer route for school children, resulting in both children and parents feeling more comfortable about children walking to school. This will result in an increase in walking as a mode of transportation, and corresponding decrease in vehicular trips.

Shifting from vehicular to walking school trips will result in reducing the number of vehicular pedestrian conflicts and decreasing the number of vehicle miles driven. Proving sidewalks on walking routes to schools will increase the safety of children walking to school as well as furthering the federal mandate to improve air quality and the City Council's desire to conserve energy and reduce overall capitol improvement costs.

This section of the TPG prioritizes the need for sidewalks surrounding schools to facilitate students safely walking to school and thus reducing the number of vehicular trips.

GOAL AND POLICY

Construction of new sidewalk is consistent with the following City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000) goal and policies:

Goals:

1. Increase the use of the pedestrian mode as a mode of choice for all areas of the City.

Policy:

- Require new subdivisions and planning unit developments to have safe pedestrian walkways that provide direct links between streets and major destinations such as bus stops, schools, parks, and shopping centers.
2. Work towards achieving an overall Level of Service C on the City's local and major street systems.

Policy:

- Explore alternative transportation modes that will lead to a decrease in vehicular demand of the City's surface street system.

PROJECT LIST DEVELOPMENT

Staff has solicited requests for new sidewalks and sidewalk improvements on walking routes that school children take to school to enhance their safety. Requests were solicited from schools within the City of Sacramento, Councilmembers, and Neighborhood Planning & Development Services. To date, Public Works has received requests for 34 schools.

PROJECT RANKING PROCESS

A criterion has been developed by Public Works staff, and reviewed by the TPG Community Advisory Committee (CAC), to rank projects on a need basis. Based upon the TPG CAC's comments, staff's draft guidelines were updated to include the following criteria to rank the requests:

- Number of students attending the school
- Vehicular traffic on the street adjacent to the proposed sidewalk improvements
- Posted speed limit on the street adjacent to the proposed sidewalk improvements
- Existing condition of the sidewalk

One of the TPG CAC members requested that staff evaluate both the cost estimate and alternative funding sources for each of the requests. After a discussion of this topic it was agreed upon that once the requests were ranked, based upon need, staff would evaluate the top priority projects on cost and availability of supplemental funding sources to potentially alter the project's final ranking.

The below criteria will be used to prioritize sidewalk improvements on walking routes to school. The request will be prioritized on a need basis, with the goal of providing a safer area for school-age children to walk to school. The maximum score possible is 100, with points assigned as described below:

1. Average Daily Traffic (ADT) (Max. Points: 15)

ADT on adjacent street:

Highest ADT on adjacent streets of all sidewalk projects considered X 15

2. Number of Students (Max. Points: 25)

Number of Students at School

Highest Number of Students at School of all sidewalk projects considered..... X 25

3. Posted Speed Limit.....(Max. Points: 15)

<u>Posted Speed Limit</u>	<u>Weight</u>
25	0
30	5
35	10
>35	15

4. Existing Condition(Max. Points: 45)

<u>Condition</u>	<u>Weight</u>
No Sidewalk	45
<u>Sidewalk with the following conditions:</u>	
<3 feet in width	10
Without planter strip	10
Without vertical curb	10
Impassible	5

SUMMARY

Figure H-1 depicts the approximate location of the top 25 ranked sidewalk projects. The top forty projects require the construction of new or in-fill sidewalks of which nine of the adjacent streets have speeds over 25 mph and were ranked as the highest priority projects.

YEAR 2002 - SIDEWALKS TO SCHOOLS PROJECTS

TABLE H-1

2002 Rank	2001 Rank	Council District	School Name	Street Name	Segment	Volume	Student	Speed	Condition	Total Score
1	1	6	Hirman Johnson High School	65th Street	14th Ave to Fruitridge Rd	8.97	25	15	45	93.97
2	2	8	Barbara Comstock Morse	Bruceville Road	South of Jacinto Avenue	3.61	9.25	15	45	72.86
3	3	2	Taylor Street Elementary School	Bell Avenue- gaps, mostly no sw both sides	Rio Linda Blvd. to Norwood Ave.	2.21	4.66	15	45	66.87
4	4	2	Robla Elementary School	Marysville Blvd	Main Ave to Rio Linda Blvd	2.51	3.49	15	45	66.00
5	5	2	Bell Avenue Elementary School	Bell Avenue	Raley Blvd. to Pinell St.	2.58	3.37	15	45	65.95
6	6	8	Barbara Comstock Morse	Jacinto Avenue	East of Bruceville	0.69	9.25	10	45	64.94
7	7	2	Bell Avenue Elementary School	Bell Avenue	Trailer Park on Bell to Winters Street	1.55	3.37	15	45	64.92
8	20	4	Jedediah Smith Elementary School	5th Street	Broadway to McClatchy Way	1.48	3.62	5	45	55.10
9	9	2	Bell Avenue Elementary School	Pinell Street	Wainwright Street to Bell Avenue	0.75	3.37	5	45	54.12
10	10	3	Michael J. Castori Elementary School	Dayton Street	Del Paso Blvd to South Avenue	0.91	6.03	0	45	51.94
11	11	2	Taylor Street Elementary School	Jessie Avenue	Norwood Avenue to Taylor Street	1.78	4.66	0	45	51.44
12	12	3	Michael J. Castori Elementary School	Mahogany Street	Verano Street to South Avenue	0.22	6.03	0	45	51.25
13	12	3	Michael J. Castori Elementary School	Presidio Street	South Avenue to Verano Street	0.22	6.03	0	45	51.25
14	14	3	Michael J. Castori Elementary School	Verano Street	Presidio Street to Mahogany Street	0.11	6.03	0	45	51.14
15	15	2	Del Paso Heights Elementary School	Morey Avenue, gaps both sides	Norwood Ave. to Western Ave.	0.44	5.45	0	45	50.89
16	16	3	Ben Ali School	Frienza Avenue	Crosby Way to Plover Street	0.22	5.41	0	45	50.63
17	16	3	Ben Ali School	Plover Street	Glenrose Ave. to Frienza Ave.	0.22	5.41	0	45	50.63
18	18	3	DW Babcock Elementary School	Woolley Way	Cormorant Way to Albatross Way	0.9	4.5	0	45	50.40
19	19	3	DW Babcock Elementary School	Cormorant Way	Royale Road to Woolley Way	0.84	4.5	0	45	50.34
20	21	2	Taylor Street Elementary School	Taylor Street	Jessie Avenue to Bell Avenue	0.39	4.66	0	45	50.05
21	22	3	DW Babcock Elementary School	Albatross Way	Silica Avenue to Woolley Way	0.43	4.5	0	45	49.93
22	23	2	Northwood Elementary School	Taft Street	Frienza Ave. to Helena Ave.	0.73	4.19	0	45	49.92

YEAR 2002 - SIDEWALKS TO SCHOOLS PROJECTS

TABLE H-1

2002 Rank	2001 Rank	Council District	School Name	Street Name	Segment	Volume	Student	Speed	Condition	Total Score
23	24	3	DW Babcock Elementary School	Ray Street	Silica Avenue to Bowling Green Drive	0.41	4.5	0	45	49.91
24	25	2	Harmon Johnson Elementary School	Edgewater Road	Lampasas Avenue to Bay Drive	0.47	4.43	0	45	49.90
25	26	3	DW Babcock Elementary School	Yorkshire Road	Bowling Green Drive to Royale Road	0.29	4.5	0	45	49.79
26	27	2	Harmon Johnson Elementary School	Lampasas Avenue	1/2 block from Grove Avenue to Edgewater Road	0.24	4.43	0	45	49.67
27	28	2	Woodlake Elementary School	Southgate Road	End of school grounds to in front of the school office	0.59	4.02	0	45	49.61
28	29	3	DW Babcock Elementary School	Waterford Road	Bowling Green Dr. to Yorkshire Rd.	0.08	4.5	0	45	49.58
29	NA	4	John Cabrillo Elementary School	Lonsdale Drive	Seamas Ave. south about 1/2 a block	0.85	3.39	0	45	49.24
30	30	2	Robla Elementary School	Claire Avenue	Marysville Boulevard to ADA Lane	0.47	3.49	0	45	48.96
31	31	4	Jedediah Smith Elementary School	McClatchy Way	5th Street to Jedediah Smith School	0.29	3.62	0	45	48.91
32	32	2	Woodlake Elementary School	Southgate Road, gaps both sides		0.59	3.04	0	45	48.63
33	33	2	Bell Avenue Elementary School	Wainwright Street	Pinell Street to MacArthur Street	0.04	3.37	0	45	48.41
34	34	2	Woodlake Elementary School	Woodlake Drive, gaps both sides		0.22	3.04	0	45	48.26
35	35	2	Woodlake Elementary School	Blackwood Street, gaps both sides		0.17	3.04	0	45	48.21
36	36	2	Main Avenue Elementary School	Main Avenue	Dry Creek to Raley Boulevard	0.52	2.57	0	45	48.09
37	38	5	All Hallows Elementary School	53rd Street	14th Avenue to 15th Avenue	0.76	2.13	0	45	47.89
38	37	2	Main Avenue Elementary School	Main Avenue	Dry Creek to Marysville Boulevard	0.2	2.57	0	45	47.77
39	39	5	All Hallows Elementary School	52nd Street	14th Avenue to 15th Avenue	0.21	2.13	0	45	47.34
40	40	5	All Hallows Elementary School	50th Street	14th Avenue to 15th Avenue	0.11	2.13	0	45	47.24

YEAR 2002 - SIDEWALKS TO SCHOOLS PROJECTS

TABLE H-1

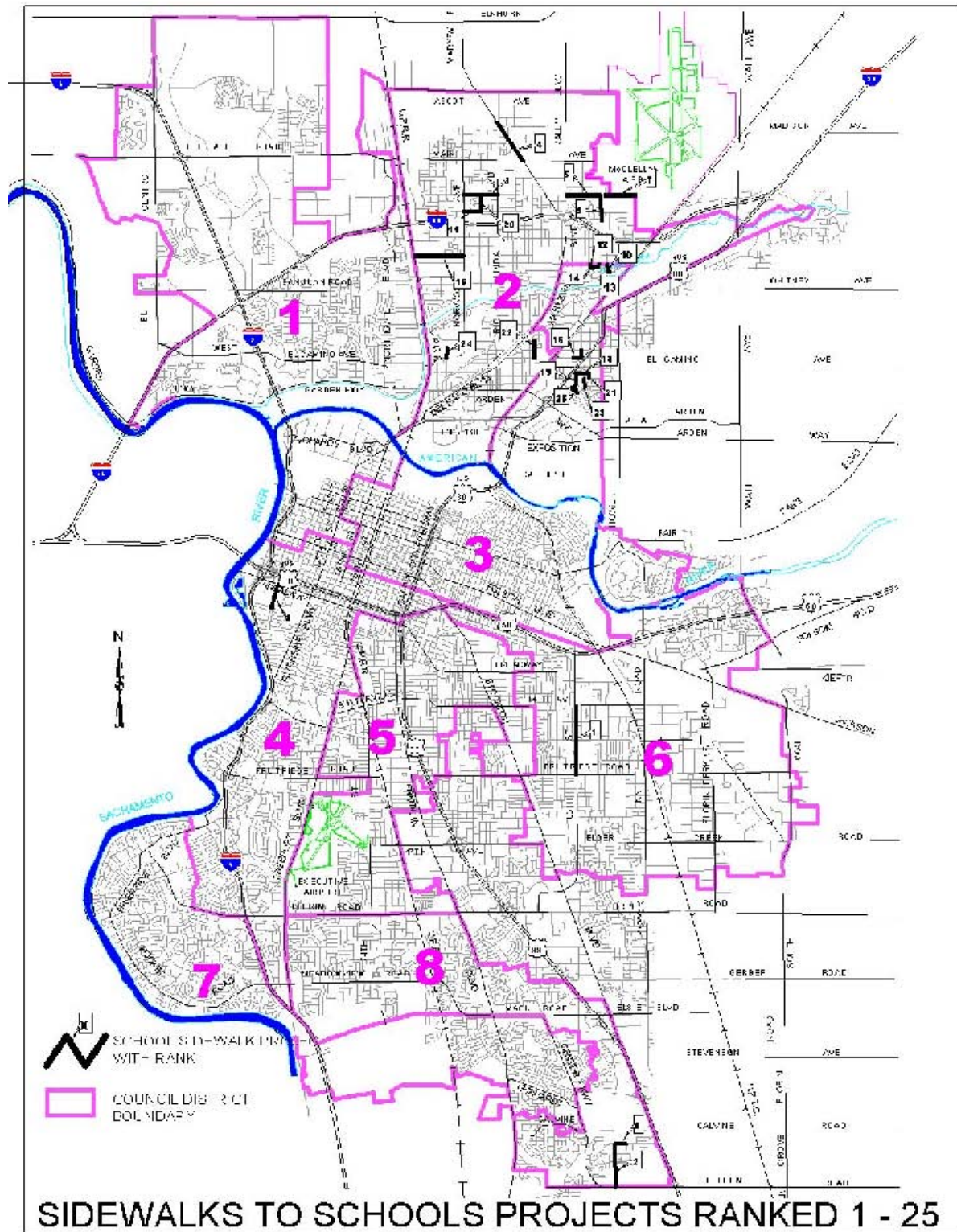
2002 Rank	2001 Rank	Council District	School Name	Street Name	Segment	Volume	Student	Speed	Condition	Total Score
41	41	5	Luther Burbank High School	Florin Rd. (no sw north side)-sw exists s/side	Indian Lane to Woodbine Avenue	15	15.83	15	0	45.83
42	42	7/8	Union House Elementary School	Mack Road - gap in sw on west side	Franklin Blvd to Brookfield Drive	10.15	12.85	15	0	38.00
43	43	6	Earl Warren Elementary School	Fruitridge Road - n/side <4'	Lowell Street to 79th Street	6.97	4.02	15	10	35.99
44	44	4	C.K. McClatchy High School	Freeport Boulevard	Bidwell Way to 7th Avenue	8.35	19.76	5	0	33.11
45	45	2	Grant Union High School	Grand Avenue, no sw n/side	Huron Street to Fell Street	4.5	14.63	10	0	29.13
46	46	3	Saint Francis Girls High School	Elvas Ave. sw on east side	62nd Street to driveway of St	6.92	6.12	15	0	28.04
47	47	8	Charles M. Goethe Middle School	24th Street	Meadowview Road to Florin Road	4.9	6.83	15	0	26.73
48	48	2	Michael J. Castori Elementary School	Kern Street	South Avenue to Roanoke Avenue	0.29	6.03	0	20	26.32
49	50	4	John Cabrillo Elementary School	Semas Avenue	Karbet Way to Parkfield Court	6.18	3.39	15	0	24.57
50	51	1	Jefferson Park Elementary School	San Juan Road, s/side, n/side no sw	Balcaro Way to Summer Park Drive	3.11	6.27	15	0	24.38
51	52	4	Sutterville Elementary School	Monterey Way	Oregon Drive to 27th Avenue	0.44	3.63	0	20	24.07
52	53	5	Sacramento High School	34th Street	Y Street to W Street	2.74	15.26	5	0	23.00
53	54	8	John Sloat Elementary School	Matson Dr., impassable on	Sylvia Way to Henrietta Drive	0.4	2.89	0	15	18.29
54	55	4	Sam Brannan Middle School	Elmer Way	Casilada Way to bend @ Elmer Way	0.48	7.72	0	10	18.20
55	56	4	Crocker Riverside Elementary School	Riverside Boulevard	Robertson Way to Street light	3.92	3.62	10	0	17.54
56	57	6	Tahoe Elementary School	14th Avenue	60th Street (intersection)	3.8	3.7	10	0	17.50
57	58	4	Caroline Wenzel Elementary School	Greenhaven Drive	Greenway Circle to Park Vista Circle	2.38	3.6	10	0	15.98
58	59	5	Sacramento High School	35th Street	Y Street to 1st Avenue	0.31	15.26	0	0	15.57
59	60	5	Sacramento High School	36th Street	V Street to Y Street	0.25	15.26	0	0	15.51
60	61	2	Grant Union High School	Fig Street, no sw w/side	South Avenue to Roanoke Avenue	0.1	14.63	0	0	14.73
61	62	6	Earl Warren Elementary School	Lowell Street - w/tside <4'	Earl Warren School to Fruitridge Road	0.14	4.02	0	10	14.16
62	63	6	Tahoe Elementary School	59th Street	Broadway (intersecton)	4.41	3.7	5	0	13.11

YEAR 2002 - SIDEWALKS TO SCHOOLS PROJECTS

TABLE H-1

2002 Rank	2001 Rank	Council District	School Name	Street Name	Segment	Volume	Student	Speed	Condition	Total Score
63	64	3	Michael J. Castori Elementary School	Ivy Street	Nogales Street to South Avenue	0.16	6.03	0	5	11.19
64	65	6	Will C Wood Middle School	School Path	64th Street to Will C. Wood Middle School	0	8.84	0	0	8.84
65	66	2	Pacific West High School	North Avenue n/side, s/side no sw	Pinell Street to Dayton Street	0.47	2.81	5	0	8.28
66	67	6	Earl Warren Elementarty School	Lowell Street - e/side ok	Fruitridge Road to Vandenberg Drive	0.14	4.02	0	0	4.16
67	68	6	Tahoe Elementary School	60th Street	Broadway (intersection)	0.37	3.7	0	0	4.07
68	69	4	William Land Elementary School	11th Street	U Street to V Street	0.79	2.9	0	0	3.69
69	70	5	Hollywood Park Elementary School	Harte Way/Shielah Way	Gates of Leonard Da Vinci School to Hollywood Park Elementary School	0.4	3.05	0	0	3.45
70	71	4	William Land Elementary School	12th Street	U Street to V Street	0.47	2.9	0	0	3.37
71	72	4	William Land Elementary School	V Street	11th Street to 12th Street	0.43	2.9	0	0	3.33
72	73	4	William Land Elementary School	U Street	11th Street to 12th Street	0.36	2.9	0	0	3.26
73	74	5	Collis P. Hunginton Elementary School	Ventura Street	47th Street to School Entrance	0.21	2.96	0	0	3.17
74	75	8	John Sloat Elementary School	Candlewood Way	Belinda Way to 69th Avenue	0.25	2.89	0	0	3.14
75	76	5	Hollywood Park Elementary School	24th Avenue	22nd Street to Hollywood Park Elementary School	0.07	3.05	0	0	3.12

FIGURE H-1



I. Speed Hump Program
(TAB PLACE HOLDER)

SPEED HUMP PROGRAM

INTRODUCTION:

The City of Sacramento began constructing undulations (speed humps) in 1980 in response to neighborhood speeding problems. In 1995, the program was modified and became known as the speed hump program. (Most people are more familiar with speed humps than undulations.)

Speed humps are designed to enhance public safety by reducing vehicular speeds and cut-through traffic on local resident streets. Speed humps are used on residential streets where traditional methods of slowing traffic have not been effective, and where other forms of traffic controls (e.g., stop signs) are not appropriate.

Speed humps are 12 feet wide, slightly raised “bumps” in the pavement, which extend across the roadway. Drivers sense a gentle rocking motion as they pass over them at posted speeds. Speed humps have evolved from extensive research and testing. They have been found to be effective at reducing speeds and thereby discourage cut-through (i.e., non-local) traffic.

A list of streets that have qualified for speed humps is produced each year for the Transportation Programming Guide (TPG). This list contains project types of residential, parks/schools, and bypass traffic streets and their ranking citywide. The definition of each type is as follows:

- Residential – focused on reducing vehicular speed on residential streets,
- Parks and Schools – focused on reducing vehicular speed on streets which include park and/or school frontage, and
- Bypass – focused on reducing cut-through traffic volumes on residential streets.

Note: Speed humps are not always the best solution for residential street traffic problems. Under a separate program called the Neighborhood Traffic Management Program (NTMP), the Department of Public Works Staff meets with neighborhood residents to develop and implement a community-based traffic calming plan for the entire neighborhood. Implemented in 1996, the NTMP considers traffic calming measures including speed humps, traffic circles, pedestrian islands, diverters, textured crosswalks, and chokers.

GOAL AND POLICY:

The Speed Humps Program is consistent with the following goal and policy of the City of Sacramento General Plan (adopted January 19, 1988, reflects City Council Amendments through September 2000):

Goal:

1. Create and maintain a street system, which protects residential neighborhoods from

unnecessary levels of traffic and/or excessive speeds.

Policy:

- Continue wherever possible to design streets and approve development applications in such a manner as to eliminate high traffic flows, excessive speeds, and/or parking problems within residential neighborhoods.

PROJECT LIST DEVELOPMENT

Eligibility Criteria

A street qualifies for the installation of Residential, Parks and Schools, or Bypass speed humps when the following minimum criteria are met.

Residential

- The segment is a minimum of 750 feet in length between traffic controls, four-way intersections, and/or curves with less than a 250-foot radius.
- The speed limit is 30 mph or less.
- Street frontage is at least 75% residential.
- The street is not part of the Regional Transit bus network.
- The street is not identified as an emergency response route by the Fire Department.
- The 85th percentile speed must be a minimum of 5 mph over the speed limit.
- Two-thirds majority of residents that vote are in favor of the installation of speed humps.¹

Parks and Schools

- The segment is a minimum of 500 feet in length between traffic controls, four-way intersections, and/or curves with less than a 250-foot radius.
- The speed limit is 30 mph or less.
- Street frontage is adjacent to a school² or park.
- The street is not part of the Regional Transit bus network.
- The street is not identified as an emergency response route by the Fire Department.
- The 85th percentile speed must be a minimum of 5 mph over the speed limit.
- Two-thirds majority of residents that vote are in favor of the installation of speed humps.³

1 One vote per household is allowed; voter(s) must reside at the household (whether they are owners or tenants), as they are the primary users of the street being considered for speed humps.

2 Preschool, day care school, elementary, middle or high school.

3 One vote per household is allowed; voter(s) must reside at the household (whether they be owner or tenants), as they are the primary users of the street being considered for speed humps. If the balloting of residents on the Parks and Schools streets does not demonstrate a two-thirds majority favoring the installation of speed humps, the City Council member representing the district in which the street is located may override the ballot results.

Bypass

- The segment is a minimum of 500 feet in length between traffic controls, four-way intersections, and/or curves with less than a 250-foot radius.
- The speed limit is 30 mph or less.
- Street frontage is at least 75% residential.
- The street is not part of the Regional Transit bus network.
- The street is not identified as an emergency response route by the Fire Department.
- Average daily traffic (ADT) is at least 500 vehicles.
- The street(s) serve to bypass⁴ major streets with a four-way stop, a signalized intersection, or another street with speed humps.
- Two-thirds majority of residents that vote are in favor of the installation of speed humps.

Project Identification

In order for a street to be studied for speed humps, a petition signed by residents from ten households on the affected street must first be submitted.

PROJECT RANKING PROCESS

Streets which meet the minimum criteria, as specified above, are scored and ranked using the following criteria:

Residential

1. Volume ----- (Max. Points: No Limit)

Points = Average Daily Traffic Volume / 50

2. Frontage ----- (Max. Points: No Limit)

Points = (# of residential units fronting the street) + (apartment frontage / 25 feet)

3. Speed ----- (Max. Points: No Limit)

Points = 85th percentile speed⁵ (in miles per hour)

4 To be considered a “bypass” location, the ADT must be at least 50% higher than the volume that would be expected using the following trip generation rates: 10/trips/day/single family residential (SFR) unit, 6 trips/day/multi family residential (MFR) unit, 50 trips/day/acre of school, and 5 trips/day/acre of park. Land uses that do not front the bypass location, itself, but which could reasonably be expected to use the bypass street(s) should be considered when determining the expected volume.

5 A radar speed survey shall be conducted to determine the 85th percentile speed. The speed survey shall be minimum of 1 hour in length. If less than 30 vehicles are observed in one hour, the survey shall be 1-1/2 hours in length.

Parks and Schools

1. **Volume** ----- (Max. Points: No Limit)
Points = Average Daily Traffic Volume / 50
2. **Frontage** ----- (Max. Points: No Limit)
Points = (# of residential units fronting the street) + (lineal feet of apartment frontage / 25 feet) + (lineal feet of school frontage / 25 feet) + (lineal feet of park frontage / 25 feet) + (lineal feet of playground frontage / 25 feet)
3. **Speed** ----- (Max. Points: No Limit)
Points = 85th percentile speed (in miles per hour)

Bypass

1. **Volume** ----- (Max. Points: No Limit)
Points = Average Daily Traffic Volume / 25
2. **Frontage** ----- (Max. Points: No Limit)
Points = (# of residential units fronting the street) + (apartment frontage / 25 feet) + (school frontage / 25 feet) + (park frontage / 25 feet) + (playground frontage / 25 feet)
3. **Bypass Volume** ----- (Max. Points: No Limit)
Points = Daily Bypass Volume / 10

PROJECT RANKING SUMMARY

Residents may request speed humps for their street by submitting a completed petition at any time during the year. The streets are then evaluated and ranked according to the guidelines criteria. New ranked streets are then added to the speed hump list. The addition of new streets will result in a new ranking for streets already on the speed hump list.

Each spring, based on program funding, residents on the top ranked streets in each Council District are balloted to determine if the street will receive speed humps. Generally, all streets on the Parks/Schools list are also balloted.

Streets that achieve the minimum balloted return rate and two-thirds favorable vote, receive their speed humps generally in the Fall of the same year they are balloted.

Many of the streets on the Speed Hump list (21%) are also in a neighborhood that has applied for the City's Neighborhood Traffic Management Program (NTMP). This program takes into consideration the traffic concerns of an entire neighborhood rather than one street as the Speed Hump Program does. Depending on the ranking of a street, speed humps may be installed sooner as part of the NTMP traffic calming plan if approved by the neighborhood.

At the time of the printing of this TPG, there were 160 streets on the Speed Hump List (see Table I-1). A map showing the locations of the 25 highest ranked streets is shown as Figure I-1.

YEAR 2002 - SPEED HUMPS PROJECTS

TABLE I-1

2002 Rank	Council District	Major Street	Boundary Street	Boundary Street	Type	Total Score
1	5	San Diego Wy	Broadway	8th Av	Bypass	137.68
2	4	Wentworth Av	Del Rio Rd	Monterey Wy	Bypass	121.94
3	7	Richion Dr	Bamford Dr	Paramount Cr	Bypass	110.18
4	2	Grove Av	Lindley Dr	Eleanor Av	Resid	106.74
5	4	Rio Ln	Riverside Bl	End	Resid	95.92
6	2	Austin St	Bell Av	Jessie Av	Resid	92.21
7	5	35th St	12th Av	16th Av	Resid	91.98
8	2	Harris Av	Taylor St	Altos Ave	Resid	90.68
9	7	Surfside Wy	Harmon Dr	Park Riviera Wy	Resid	86.52
10	5	3rd Av	21st St	24th St	Resid	85.12
11	8	Manorside Dr	Meadowview Rd	71st Av	Resid	83.14
12	8	Loma Verde Wy	29th St	69th Ave	Resid	82.58
13	8	Craig Av	24th St	W 90 Deg Bend Craig	Resid	85.58
14	6	Tierra Wood Wy	Bridle Trail Wy	Tierra Green Wy	Resid	80.76
15	5	7th Av	33rd St	37th St	Resid	80.74
16	7	Surfside Wy	Benham Way	Driftwood St	Resid	79.9
17	5	26th Av	36th St	Mlk Bl	Resid	79.82
18	8	65th Av	21st St	Tamoshanter Way	Resid	79.72
19	5	55th St	San Francisco Bl	19th Ave	Resid	78.68
20	7	Arabella Wy	Harmon Dr	Pocket Rd	Resid	78.38
21	3	51st St	H St	J St	Resid	78.14
22	2	Windcloud Ave.	(West) Curve Of Windcloud	End Of Wincloud Ave.	Resid	77.39
23	1	Sagemill Wy	Crossmill Wy	Pebblewood Dr	Resid	77.3
24	8	Anoka Av	18th St	Amherst St	Resid	76.72
25	6	53rd Av	Sun River Dr	75th St	Resid	76.54
26	8	Stratford St	65th Av	68th Av	Resid	76.31
27	4	Sherwood Av	Mead Ave	Del Rio Rd	Resid	76.16
28	5	25th Av	36th St	Mlk Bl	Resid	76.06
29	2	Estes Wy	Englewood	Bollenbauc	Resid	75.56
30	6	U St	45th St	48th St	Resid	75.45
31	2	Balsam/Katherine/Youngs	Bell Ave	Raley Blvd	Bypass	75.16
32	6	60th St	21st Ave	19th Ave	Resid	74.78

YEAR 2002 - SPEED HUMPS PROJECTS

TABLE I-1

2002 Rank	Council District	Major Street	Boundary Street	Boundary Street	Type	Total Score
33	2	Graves Av	Mabel St	Bozeman St	Resid	74.53
34	1	Potomac Av	Northgate Bl	Natoma St	Resid	74.3
35	8	65th Av	Amherst St	15th St	Resid	73.98
36	5	28th St	Broadway	2nd Av	Resid	73.94
37	5	23rd St	24th Av	Irvin Wy	Resid	73.84
38	8	67th Av	Tamoshanter Wy	East 90 Degree	Resid	73.78
39	4	14th St	Markham Wy	2nd Av	Resid	73.76
40	7	Benham Wy	Arabella Way	Surfside Way	Resid	73.7
41	5	Jeffery Av	Sutterville Rd	Wilmington Av	Resid	73.36
42	5	Santa Cruz Wy	8th Av	Broadway	Resid	73.15
43	2	Grace Av	Bethesda Ct	Bollenbacher Av	Resid	72.9
44	3	55th St	F St	H St	Resid	72.54
45	6	Sun River Dr	43rd Av	Elder Creek Rd	Resid	72.52
46	2	Rivera Dr	Rio Linda Bl	May St	Resid	72.44
47	6	62nd St	Fruitridge Rd	Jansen Dr	Resid	72.26
48	8	Oneil Wy	Tamoshanter Wy	21st St	Resid	72.24
49	2	Belasco Av	Fairfield St	Altos Ave	Resid	72.22
50	6	Rancho Pico Wy	Cunningham Wy	Rancho Adobe Dr	Resid	72.16
51	8	Winnett Wy	Alcedo Cir	Alcedo Cir	Resid	72.14
52	8	Tilden Wy	21st St	68th Av	Resid	71.9
53	7	Sea Forest Wy	Deerlake Dr	Elbow	Resid	71.84
54	4	Fordham Wy	13th St	14th St	Resid	71.78
55	8	Culpepper Dr	Jacinto Ave	East Elbow	Resid	71.72
56	6	69th St	Bender Ct	18th Ave	Resid	71.66
57	2	Pinedale Av	Marysville	Drycreek Rd	Resid	71.58
58	6	Cliffwood Wy	Terilyn St	Chiplay St	Resid	71.48
59	2	Carroll Av	Norwood Av	Altos Av	Resid	71.2
60	5	36th St	12th Av	10th Av	Resid	71.18
61	2	Dry Creek Rd	Grand Ave	South Ave	Resid	71.02
62	4	Jacks Ln	32nd Ave	34th Ave	Resid	71.02
63	5	28th St	26th Av	29th Av	Resid	71
64	1	Wisconsin Av	Northgate Blvd	Natoma St	Resid	70.84

YEAR 2002 - SPEED HUMPS PROJECTS

TABLE I-1

2002 Rank	Council District	Major Street	Boundary Street	Boundary Street	Type	Total Score
65	4	Flint Wy	Mc Clatchy Wy	San Luis Ct	Resid	70.78
66	3	48th St	H St	J St	Resid	70.52
67	5	Knight Wy	Murieta Wy	24th St	Resid	70.5
68	6	58th St	T St	2nd Ave	Resid	70.34
69	4	Babich Av/Meer Wy	Freeport Bl	Sutterville Rd	Bypass	70.28
70	4	34th Av	Gilgunn Wy	Rickey Dr	Resid	70.2
71	4	El Granero Wy	Fruitridge Rd	34th Av	Resid	69.38
72	3	63rd St	Elvas Ave	Folsom Blvd	Resid	69.22
73	8	Newport Av	19th Street	21st Street	Resid	69.02
74	5	Edna St	24th St	26th St	Resid	68.36
75	8	Cottontail Wy	Mandy Dr	Elbow	Resid	68.66
76	1	Greenlea Av	Reiner Way	Thelma Ave	Resid	68.56
77	6	55th St	Jansen Dr	Mcmahon Dr	Resid	68.52
78	2	Rene Av	Astoria St	Winters St	Resid	68.32
79	6	Ortega St	Jansen	Mcmahon Dr	Resid	68.22
80	5	Florin Frntg Rd (N)	21st St	Tamoshanter Way	Resid	68.19
81	1	Weise Wy	Erin Dr	Fairweather Dr	Resid	68.16
82	8	Skelton Wy	Kirk Way	North Elbow	Resid	68.08
83	2	Rood Av	Dry Creek Rd	Acme Ave	Resid	67.98
84	4	La Campana Wy	Fruitridge Rd	34th Ave	Resid	67.86
85	8	Florin Frntg Rd (S)	Tamoshanter Way	21st St	Resid	67.78
86	2	Christine Dr	Grove Ave	Arcade Bl	Resid	67.72
87	5	Hooke Wy	24th Street	Murieta Way	Resid	67.66
88	6	Briggs Dr	Tortola Wy	City / County Line	Resid	67.6
89	5	43rd St	2nd Ave	4th Ave	Resid	67.54
90	3	Verano St	Del Paso Bl	Mahogany St	Resid	67.42
91	3	Lagomarsino Wy	C Street	F Street	Resid	66.98
92	5	36th St	16th Av	19th Av	Resid	66.86
93	6	64th St	T St	Broadway	Resid	66.68
94	5	28th St	35th Av	38th Av	Resid	66.54
95	5	39th Av	24th St	26th St	Resid	66.52
96	8	Rotherton Wy	Seyforth Way	Wardell Way	Resid	66.36

YEAR 2002 - SPEED HUMPS PROJECTS

TABLE I-1

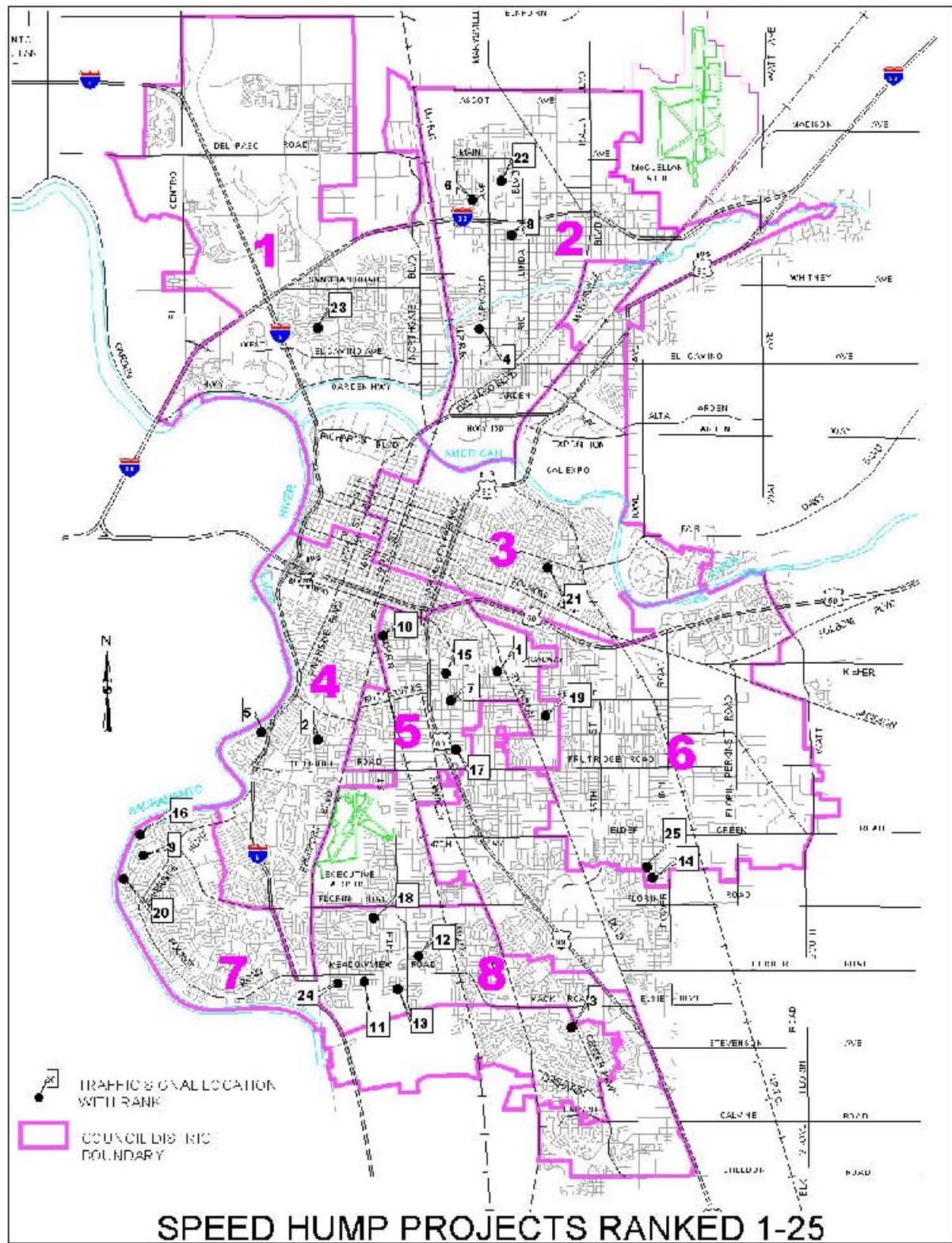
2002 Rank	Council District	Major Street	Boundary Street	Boundary Street	Type	Total Score
97	1	Rancho Silva Dr	San Juan Dr	Iberian Dr	Resid	66.12
98	5	Dana Wy	Murieta Wy	Irvin Wy	Resid	65.96
99	3	42nd St	F St	H St	Resid	65.88
100	2	Sonoma Av	Fairfield St	Altos Ave	Resid	65.88
101	8	66th Av	19th St	21st St	Resid	65.7
102	2	Bollenbacher Av	Kelton Way	Loveland Ave	Resid	65.66
103	4	Harian Wy	Freeport Blvd	Hillard Way	Resid	65.61
104	1	Mill Oak Wy	Truxel Rd	Pebblewood Dr	Resid	65.44
105	5	10th Av	Franklin Bl	East Curtis Dr	Resid	65.28
106	1	Rockhampton Dr	San Juan Rd	Ashley Wy	Resid	65.04
107	1	Pebblestone Wy	Truxel Rd	Stonecreek Dr	Resid	64.9
108	2	Tailwind Dr	Baywind Dr	Crosswind Dr	Resid	64.64
109	5	52nd St	14th Ave	11th Ave	Resid	64.64
110	8	Benbow St	65th Ave	68th Ave	Resid	64.32
111	7	Village Star Dr	Franklin Bl	Edenview Dr	Resid	64.1
112	5	42nd St	2nd Av	4th Av	Resid	64.08
113	6	Kroy Wy	8th Ave	11th Ave	Resid	63.98
114	3	54th St	F St	H St	Resid	63.74
115	7	Harmon Dr	Trudy Way	Riverbrook Wy	Resid	63.66
116	1	Jefferson Av	Northgate Bl	American Ave	Resid	63.6
117	2	Ponderosa Ln	Lindley Dr	Arcade Blvd	Resid	63.55
118	4	Mc Clatchy Wy	Muir Wy	Freemont Wy	Resid	63.26
119	6	Marsalla Ct	South Of 14th Ave	End Of St	Resid	63.14
120	8	Casa Linda Dr	Flores Way	Twilight Drive	Resid	63.06
121	1	Wilson Av	Northgate Bl	Northglen St	Resid	62.83
122	7	Lindbrook Wy	Grandstaff Dr	East Elbow	Resid	62.5
123	7	Monaghan Cr	East Elbow	Richon Dr	Resid	62.2
124	8	Balfour Wy	68th Ave	Poirier Way	Resid	62.18
125	1	Wiese Wy	Erin Dr	Mendel Wy	Resid	62.08
126	2	May St	Jessie Ave	Bell Ave	Resid	62.08
127	8	Winkley Wy	West Elbow	Permar Street	Resid	61.86
128	7	Blue Water Cr (N Leg)	Rush River Dr	W. Elbow	Resid	61.78

YEAR 2002 - SPEED HUMPS PROJECTS

TABLE I-1

2002 Rank	Council District	Major Street	Boundary Street	Boundary Street	Type	Total Score
129	7	Blue Water Cr (S)	Rushriver Dr	Elbow	Resid	61.44
130	8	Hollybrook Dr	Falmouth Wy	Port Haywood Wy	Resid	61.34
131	6	Cliffwood Wy	Wisemann Dr	90 Degree Curve	Resid	60.84
132	6	Kroy Wy	Broadway	8th Ave	Bypass	60.76
133	2	Grace Av	Norwood Ave	Seawind Dr.	Resid	60.24
134	6	63rd St	11th Ave	8th Ave	Resid	60
135	7	Shaw River Wy	Gloria Dr	Rush River Dr	Resid	59.04
136	8	Wardell Wy	Tefler Wy	End	Resid	58.92
137	4	Theo Wy	Euclid Ave	W. Curve	Resid	58.86
138	8	Wakefield Wy	Cromwell Way	17th St	Resid	58.38
139	2	Pinedale Av	Sully St	90 Deg Bend (W)	Resid	58.16
140	8	69th Av	Amherst St	Schreiner St	Resid	58.14
141	6	64th St	Jansen Dr	Mcmahon Dr	Resid	57.7
142	6	50th Av	Sun River Dr	East To 90 Degree Bend	Resid	57.14
143	4	Harian Wy	Hillard St	Freeport Bl	Resid	56.98
144	2	Breckenridge Wy	Bollenbacher Ave	Gunnison Ave	Resid	56.62
145	8	22nd St	65th Av	67th Av	Resid	56.58
146	2	Callecita St	Arcade Bl	Sonoma Av	Resid	56.5
147	2	Del Paso Bl/ Ripley St	Roanoke Av	Astoria St	Resid	55.88
148	2	Crosswind Dr.	Tidewind Dr.	Tailwind Dr.	Resid	55.25
149	8	Hermes Cr	Marathon Ct	East Elbow	Resid	54.76
150	1	Haggin Av	Norcross Dr	Normington Dr	Resid	53.94
151	7	La Solana Wy	Valley Hi Dr	Torrenta Way	Resid	53.8
152	6	63rd St	Jansen Dr	33rd Ave	Resid	53.46
153	6	Great Falls Wy	Occidental Dr	Lake Forest Dr	Resid	53.12
154	4	Santa Buena Wy	Swanston St	11th Ave	Resid	52.24
155	6	63rd St	Mcmahon Dr	Jansen Dr	Resid	51.6
156	4	Regina Wy	Markham Wy	Vallejo Wy	Resid	51.42
157	4	23rd St	12th Av	8th Av	Resid	50.56
158	7	Riverbrook Wy	Harmon Dr	Pocket Rd	Resid	50.36
159	5	32nd St	6th Av	10th Av	Resid	46
160	5	Deeble St	24th Ave	21st Ave	Resid	35.86

FIGURE I-1



J. DEVELOPMENT DRIVEN
(TAB PLACE HOLDER)

DEVELOPMENT DRIVEN

INTRODUCTION:

The projects presented in the nine program areas of the 2002 Transportation Programming Guide are not fully funded; therefore, they are prioritized so available public funds can be programmed consistently with City transportation priorities. However, there are also many projects in the City that are fully funded or have funding mechanisms in place; many of these are funded primarily from non-public sources. These projects are an integral part of the City's overall transportation system, and their inclusion in this document helps provide a more comprehensive picture of the City's transportation needs. Planned projects are presented below for the following areas:

- Jacinto Creek Planning Area (JCPA)
- North Natomas
- Richards Boulevard/Railyards Area
- Granite Regional Park
- South Natomas

In addition to these projects, public improvements such as traffic signals or intersection modifications may be required as a condition of approval for other privately funded development projects.

- Timing will vary depending on the amount and location of development

JACINTO CREEK PLANNING AREA (JCPA)

Summary Of Capital And Developer Improvements

This section of the Transportation Programming Guide will summarize a variety of improvements being constructed in the JCPA. The JCPA is bounded by Highway 99 on the east, Sheldon Road on the south, Bruceville Road on the west, and approximately 600 feet north of Shasta Road on the north. Most of the improvements are drainage facilities and are funded by private landowners. A portion of the improvements are roadway facilities that will be funded as part of the CIP as well as developer funded. Much of the public improvements in the JCPA will be funded by three (3) impact fees. They are the JCPA Public Facility Fee (PFF), the Drainage Fee and Channel Fee. These fund improvements for roads, drainage and water distribution facilities.

The Public Facility Fee (PFF), Drainage and Channel fees were established with the adoption of the JCPA Financing Plan. The plan was first approved in 1997, and is scheduled for updating in 2002. The JCPA area includes nearly the entire Jacinto Creek Community Plan. The finance plan was originally planned to fund \$11.3 million dollars in public improvement facilities. Of that the JCPA fees would fund \$7.8 million dollars. In November 1999, the Park component of the PFF fees was removed decreasing JCPA funded improvements to \$6.754 million. Projects include water distribution lines, drainage facilities, and transportation improvements along Bruceville and Sheldon Road widenings.

The PFF portion of the fees provides for a portion of the total cost of the roadway widening, including intersection improvements and signalization with funding sources identified from a combination of Mello-Roos CFD revenues, Sacramento County Laguna Roadway fees, City major street construction taxes and developer frontage improvements. As well, the PFF allows for reimbursement for developer funded water distribution systems. Payment of the PFF fee is required of all private development projects in the JCPA. Funding of transportation projects will require the utilization of both existing and new funding sources. The impact fee is structured to utilize existing fee and bond funding sources to the extent possible; to insure that basic infrastructure is in place when needed for the development; the cost of major infrastructure is distributed equally among the property owners; and each developer pays a fair-share for necessary infrastructure.

Overview of the Public Facility Fee

The JCPA Financing Plan was established with the adoption of the JCPA Financing Plan. The plan was approved in 1997 and is scheduled for updating in 2002.

The PFF will ultimately fund \$1.001 million dollars in public roadway improvements. These improvements include:

- Major Roadway Widening
- Signals

- Timing will vary depending on the amount and location of development

Payment of the PFF is required of all private development projects in the JCPA. The impact fee is structured to ensure:

- Basic infrastructure is in place when needed for development;
- The costs of major infrastructure is distributed fairly among the property owners;
- Each developer pays a fair-share for necessary infrastructure.

Provision of Infrastructure through the Public Facility Fee

Improvements funded by the PFF may be constructed in several ways. Improvements may be built by the City, using PFF revenues and other available sources, or by private developers as part of their development project(s). Private landowners may construct roadway improvements included in the PFF program for which they will be reimbursed. The major road segments will be built by the City, however, due to the widening requirement of the Bruceville Channel crossing, a drainage improvement built by developer, a portion of that cost will be attributable to road widening and the PFF fees may be modified to finance that portion of developer's cost.

Improvements Funded by the Public Facility Fee

Transportation improvements in the JCPA will be constructed as needed to accommodate build-out of the community plan area. Criteria used to prioritize improvements to be constructed with the PFF are shown in Table J-1. These criteria are listed in no particular order.

PUBLIC FACILITY FEE PROJECT SELECTION CRITERIA	
TABLE J-1	
• Accommodate traffic growth	• Feedback from Council and City offices
• Community feedback	
• Available funding	• Close a gap in transportation network

The PFF will be used to fund transportation improvements and other public facilities. The CIP includes several improvements to be funded (in whole or in part) by the PFF, including roadway widening and water distribution. A summary of costs of the transportation projects is shown in Table J-2. It should be noted that not all of the PFF funds programmed for the next five years will be available when needed. In these cases, funds will be sought from other sources, typically in the form of a loan to the PFF

- Timing will vary depending on the amount and location of development

TABLE J-2

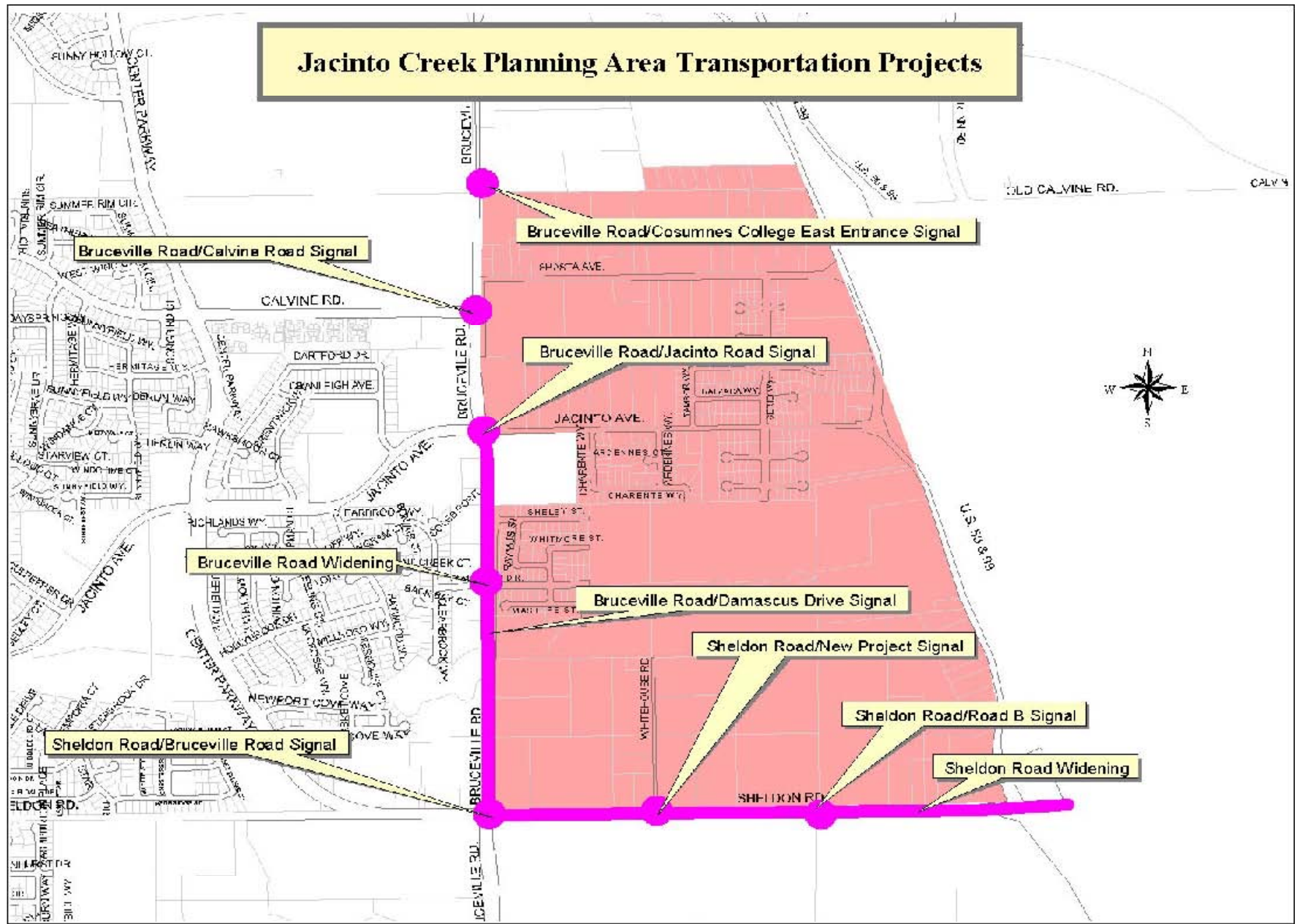
JACINTO CREEK PLANNING AREA

REF#	PROJECT	DESCRIPTION	DELIVERY YEAR	WORK PERFORMED BY	ESTIMATED COST \$1,000 ⁽¹⁾	CITY FUNDS REQUIRED
1	Sheldon Road Widening	Widen Sheldon Road between Bruceville Road and Highway 99 from 2 to 6 lanes (lanes 5 & 6 provided by developer)	2004	County	\$1,061	Yes
2	Bruceville Road Widening	Widen Bruceville Road between Jacinto Road and Sheldon Road to 6 lanes (lanes 5 & 6 provided by developer)	2006	City	\$1,690	Yes
3	Sheldon Road / Road B Signal	Signalize the intersection of Sheldon Road and Road B	2004	City or Developer	\$189	No
4	Sheldon Road / New Project Roadway Signal	Signalize the intersection of Sheldon Road and New Project Roadway (between Bruceville Road and Road B)	2004	City or Developer	\$169	No
5	Sheldon Road/Bruceville Road Signal	This signalization project has been completed	2003	County	Completed	No
6	Bruceville Road / Damascus Drive Signal	Signalize the intersection of Bruceville Road and Damascus Drive	2006	City or Developer	\$169	No
7	Bruceville Road / Jacinto Road Signal	Signalize the intersection of Bruceville Road and Jacinto Road	2006	City or Developer	\$169	No
8	Bruceville Road / Calvine Road Signal	Signalize the intersection of Bruceville Road and Calvine Road	2006	City or Developer	\$169	No
9	Bruceville Road / Cosumnes College East Entrance Signal	Signalize the intersection of Bruceville Road and Cosumnes College East Entrance	2006	City or Developer	\$169	No

Note: (1) Estimated costs are taken from the 11/20/96 JCPA Financing Plan. Estimates are being updated to reflect current conditions and prices and are not reflected above. Total cost of Sheldon Road widening is estimated at \$1,918,918 which consists of projects 1, 3 and 4. Total cost of Bruceville Road widening is estimated at \$2,365,470 which consists of projects 2, 6, 7, 8 and 9.

Timing will vary depending on the amount of location of development

FIGURE J-1



Timing will vary depending on the amount of location of development

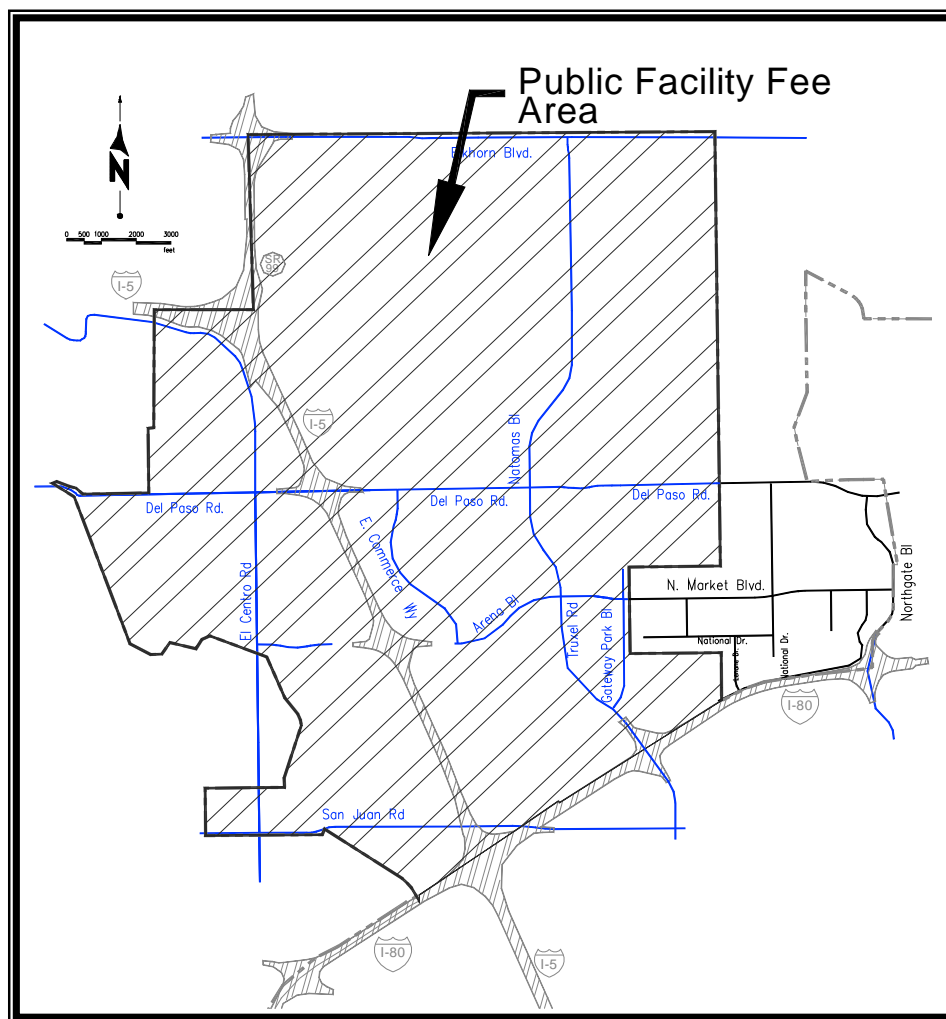
Jacinto Creek Planning Area J-5

NORTH NATOMAS

This section will summarize transportation projects needed to support development activity in North Natomas. Some of the improvements are funded as part of City's Capitol Improvement Program while others are being built by private landowners. A number of transportation improvements in North Natomas will be funded by the North Natomas Public Facility Fee.

The Public Facility Fee (PFF) was established with the adoption of the North Natomas Financing Plan. The plan was first approved in 1994, and was last updated in 1999. The PFF area includes nearly the entire North Natomas Community Plan, as shown in Figure K-1. The PFF will ultimately fund approximately \$121 million in transportation system improvements. Payment of the PFF is required of all private development projects in North Natomas. The fee is structured to insure that basic infrastructure is in place when needed for the development, the cost of major infrastructure is distributed equally among the property owners, and each developer pays a fair-share for necessary infrastructure.

**Figure K-1: Public Facility Fee Area
Improvements funded by the Public Facility Fee**



- Timing will vary depending on the amount and location of development

The PFF will fund a variety of transportation improvements. These improvements are needed to accommodate build-out of the community plan area, promote the use of alternate travel modes, and provide recreational opportunities. The planned improvements include:

- Off-street Bikeways
- Freeway improvements
- Traffic signals
- Road & Freeway Landscaping
- Shuttle Busses
- Major Roads
- Bridges

Provision of Infrastructure Through the Public Facility Fee

Improvements funded by the PFF may be constructed in several ways. Improvements may be built by the City, using PFF revenues, by private developers as part of their development project(s) or through establishment of Community Facility Districts and/or Assessment Districts. Private landowners that construct improvements included in the PFF program will be reimbursed for the costs of those improvements.

Transportation Improvements in North Natomas

Improvements in North Natomas will be constructed as needed to accommodate build-out of the community plan area. These improvements will be built over the next 30 years and in response to development activity. A number of factors are considered in estimating the relative timing of improvement projects. These considerations for North Natomas are shown in Table K-1 (listed in no particular order except for safety).

PUBLIC FACILITY FEE PROJECT SELECTION CONSIDERATIONS	
TABLE K-1	
• Public safety	• Feedback from Council and City offices
• Support economic development	
• Close a gap in transportation network	• Aesthetics and livability
• Environmental mitigation	• Promote alternate travel modes
• Accommodate traffic growth	• Community feedback
• Available funding	• Discussions with landowners

Table K-2 indicates the improvements expected to be constructed within the next five years. This list constitutes a significant revision to the North Natomas chapter of the 2000-2005 Capital Improvement Program, and is based on updated revenue projections. Figure K-2 shows projects to be built by both the City and private developers.

NORTH NATOMAS TRANSPORTATION PROJECTS 2001 – 2005					
TABLE K-2					
Project	Location & Description	Est Const Date	Who Will Const.	Est'd Cost (dollars)	City Funds Req'd
Arena Bl	Duckhorn to I-5, 6-lanes (with interchange)	2002	City	\$783,357	No
Arena Bl	I-5 to E. Commerce Way, 8-lanes (with Interchange)	2002	City	\$785,042	No
Arena Bl	Duckhorn to E. Commerce Way, landscaping	2004	City	\$290,790	No
Arena Bl Interchange	Construct Interchange and related improvements	2002	City	\$10,970,000	No
Del Paso Road Landscaping	I-5 to Truxel Rd, widen road, construct median and landscape	2003	City	\$2,472,985	No
Del Paso Road Widening	West city limits to El Centro Rd, widen to 4-lanes	2002	Developer	\$1,677,832	No
Del Paso Road Widening	El Centro Rd to I-5, widen to 4-lanes	2002	Developer	\$391,678	No
East Commerce Wy Construction	Del Paso Rd. to North Parks Dr	2002	Developer	\$704,000	No
Freeway Landscaping	Landscaping along freeways (with interchange)	2003	City	\$500,000	No
Gateway Park Bl	Del Paso Rd to Arena Bl, 4-lanes	2001	Developer	\$1,957,471	No
Gateway Park Bl	Intersection improvements at Arena Bl	2002	City	\$1,767,341	No
Off-Street	2 miles ± of bikeways, various locations	2002	City	\$310,000	No
Traffic Signal	Del Paso Rd @ El Centro Rd	2001	Developer	\$175,000	No
Traffic Signal	Gateway Park Bl @ Arenal Bl	2001	City	\$175,000	No
Traffic Signal	E. Commerce Wy @ Del Paso Rd	2002	City	\$219,000	No
Truxel Rd Bike Lanes	South of Del Paso Rd	2002	City	\$10,000	No
Truxel Rd Landscaping	Del Paso Rd to Natomas Crossing Dr, complete median Landscaping	2002	City	\$524,000	No

FIGURE K-2: NORTH NATOMAS TRANSPORTATION IMPROVEMENTS THROUGH 2005

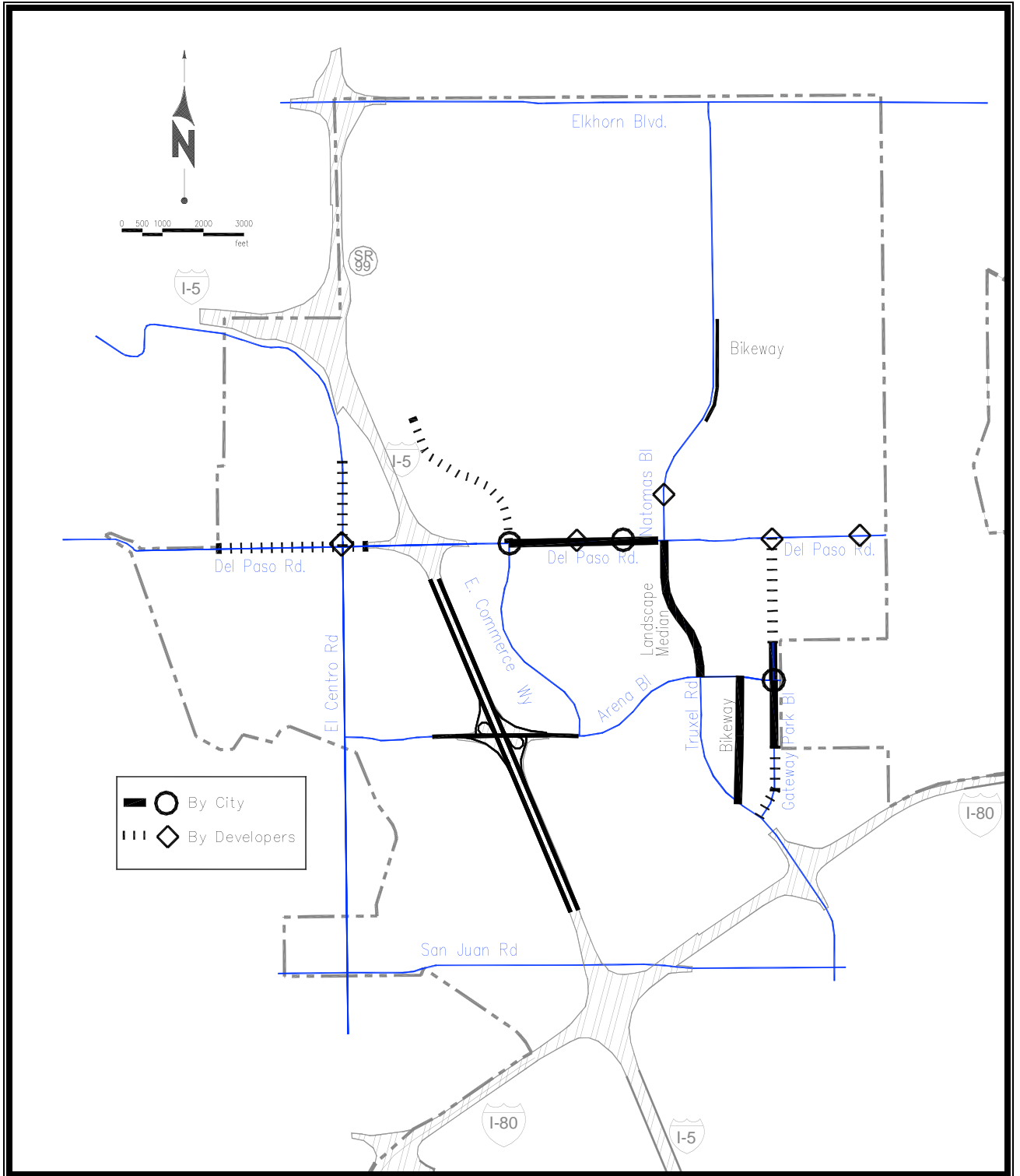


Table K-3 lists all of the major transportation improvements currently planned for North Natomas.

North Natomas - Major Transportation Projects			
Table K-3			
Project Description	Location & Description	Cost	City Funds Req'd?
Freeway Improvements			
A Street OC	New Freeway over crossing south of Del Paso Rd	\$2,580,000	No
Arena Bl Interchange	Construct Interchange and related improvements	\$10,970,000	No
El Centro OC	New freeway overdressing north of Del Paso Road	\$1,597,000	No
Elkhorn/SR99 Interchange	Widen Existing Interchange	\$2,762,000	No
Freeway Landscaping	Landscaping along freeways	\$5,541,000	No
Meister Way OC	New freeway overdressing south of Elkhorn Boulevard	\$1,006,000	No
S Loop Road OC	New Freeway over crossing south of Arena Boulevard	\$1,597,000	No
W El Camino /I-80 Int	Widen Existing Interchange	\$2,708,000	No
Subtotal - Freeways		\$28,761,000	
Major Roads			
Snowy Egret Way	New 4-lane south of Del Paso Rd, El Centro Rd to E. Commerce Way	\$2,237,110	No
Arena Bl	6-lanes, Duckhorn to I-5 (with interchange)	\$783,357	No
Arena Bl	8-lanes, I-5 to E. Commerce Way (with Interchange)	\$785,042	No
Del Paso Road	4-lanes, west city limits to El Centro Rd	\$1,677,832	No
Del Paso Road	6-lanes, El Centro Rd to I-5	\$391,678	No
Del Paso Road	6-lanes, I-5 to Truxel Rd	\$2,472,985	No
Del Paso Road	6-lanes, Truxel Rd to East Drain	\$825,188	No
Del Paso Road	6-lanes, East Drain to east city limits	\$1,781,225	No
East Commerce Way	4-lanes, Elkhorn Bl to Club Center Dr	\$3,076,026	No
East Commerce Way	6-lanes, Club Center Dr to Del Paso Rd	\$3,831,232	No
East Commerce Way	6-lanes, Arena Bl to South Loop	\$1,795,977	No
East Commerce Way	4-lanes, South Loop to San Juan Rd	\$1,894,960	No
El Centro Road	4-lanes, Del Paso Rd to Arena Bl	\$3,389,783	No
El Centro Road	4-lanes, Arena Bl to San Juan Rd	\$4,200,384	No
Elkhorn Bl	6-lanes, SR-99 to east city limits	\$10,571,737	No
Gateway Park Bl w/LS	4-lanes, Arena Bl to Truxel Rd	\$1,767,341	No
Gateway Park Blvd	4-lanes, Del Paso Rd to Arena Bl	\$1,957,471	No
Natomas Bl	Widen to 4-lanes, Elkhorn Bl to Club Center Dr	\$2,804,604	No
Natomas Bl	Widen to 4-lanes, Club Center Dr to North Park Dr	\$1,099,063	No
Natomas Bl	Widen to 6 lanes, North Park Dr to Del Paso Road	\$2,062,971	No
Natomas Crossing Dr	4-lanes, El Centro Rd to I-5	\$3,076,026	No
Natomas Crossing Dr	4-lanes, I-5 to E. Commerce Way	\$503,350	No
Subtotal - Major Roads		\$52,985,342	

North Natomas - Major Transportation Projects			
Table K-3			
Project Description	Location & Description	Cost	City Funds Req'd?
Freeway Landscaping			
Freeway Landscaping	Various	\$5,541,000	No
Signals			
31 Signals	Various	\$8,797,000	Yes
Bridges			
Canal Crossing	Roadway Crossing @ East Drain	\$384,000	No
Del Paso Road @ East Drain	Widen Crossing on westbound side	\$755,000	No
El Centro Road @ West Drain	Roadway Crossing @ West Drain	\$570,000	No
Elkhorn Blvd @ East Drain	Roadway Crossing @ East Drain	\$755,000	No
Gateway Park Blvd @ C-1 Canal	Roadway Crossing @ C-1 Canal	\$570,000	No
Natomas Crossing Dr @ West Drain	Roadway Crossing @ West Drain	\$570,000	No
Northpointe PUD Canal Crossing	Roadway Crossing @ East Drain	\$384,000	No
Parkway Plaza PUD Canal Crossing	Roadway Crossing @ East Drain	\$384,000	No
San Juan Road @ West Drain	Roadway Crossing @ West Drain	\$384,000	No
Subtotal - Bridges		\$4,756,000	
Alternate Mode Facilities			
Off-street Bikeway Crossings	Crossings of freeway, canals and streets, various locations	\$6,800,000	Yes
Off-Street Bikeways	Various	\$3,377,750	No
Shuttle Buses (10)	Local Shuttles	\$1,000,000	No
Subtotal - Alternate Modes		\$11,177,750	
Total North Natomas Major Transportation Projects		\$112,018,092	

RICHARDS BOULEVARD/RAILYARDS AREA

INTRODUCTION

This section of the Transportation Programming Guide will summarize a variety of improvements being constructed in the Richards Boulevard and Railyards planning districts. Some of the improvements are funded as part of the City's Capital Improvement Program, while others will be built by private landowners. A number of the public improvements in the Richards Boulevard and Railyards areas will be funded by the Railyards/Richards Boulevard/Downtown Area transportation fee program.

The Railyards/Richards Boulevard Area Infrastructure Finance Plan was adopted on September 30, 1997 (Resolution 97-557). The Plan establishes a method for funding the public facilities identified in the Railyards/Richards Boulevard Area Facility Element, and the fee program is composed of both a transportation impact and a public facility fee. The public facilities fee, which covers facilities such as new fire and police stations, parks, schools, etc. is not discussed in this section. The total cost of the Railyards/Richards Boulevard Area infrastructure plan is estimated at \$519 million, and the Facility Plan calls for build out of the areas over a 35-year period (although build out will likely occur over a long period of time). The Finance Plan is based on the following assumptions:

- Federal, State, and Regional sources of funding will be allocated to the project in an estimated total amount of \$197.0 million.
- City of Sacramento and Redevelopment Agency funding will be allocated to the project in an estimated total amount of \$111.2 million.
- Transportation, school, and public facilities fees imposed on new development within the Railyards Specific Plan, Richards Boulevard Area Plan and Downtown Areas will generate an estimated total amount of \$135.6 million to be allocated to the project.
- Railyards and Richards Boulevard Area developers will allocate private capital to the project in an estimated total amount of \$69.3 million.

As of January 2001, the City is anticipating major amendments to the adopted Facility Elements that will amend the list of transportation projects to be funded through the fee program. The proposed amendments are the result of 1) recommendations contained in the North-East Area Transportation Study, 2) Union Pacific's decision to revise the adopted Railyards Specific Plan, and 3) the desire of Richards Boulevard Area property owners to amend the street circulation system to minimize the impact on private property and existing businesses. Amendment to the Facility Element will commence in 2002, but likely not be completed until 2003. The Finance Plan will be updated concurrent with the amendment process.

Overview of the Transportation Facility Fee

The \$135.6 million in Transportation Impact Fees anticipated to be collected over build out of the plan will fund the following categories of transportation improvements

- Construction of new arterial roadways
- Major arterial roadway widening
- Timing will vary depending on the amount and location of development

- Freeway improvements
- Rail/Transit improvements (intermodal station, light rail)

Payment of the Transportation Impact Fee is required of all private new construction projects in the Railyards, Richards Boulevard, and Downtown benefit districts. The structure of the fee is intended to ensure that:

1. Existing development **does not** pay the fee.
2. Tenant improvements or changes in ownership **do not** trigger payment of fees.
3. All new development that will impact the transportation system and benefit from the improvements will be required to pay the fee.
4. Some exemptions from the fee program have been incorporated to promote adaptive reuse of federal, state, or locally listed historic structures.

The fee program assigns the following transportation impact fees to new development:

TABLE L-1

Area Transportation Fee	Office Per sq. ft.	Hotel Per Room	Industrial Per sq. ft	Residential Per unit	Retail Per sq. ft.
Railyards Area	\$5.29	\$3,248	N/A	\$2,784	\$5.83
Richards Boulevard Area	\$5.51	\$1,523	\$2.00	\$2,900	\$6.07
Downtown Area	\$1.13	\$295	\$0.41	\$594	\$1.24

Provision of Infrastructure Through the Transportation Facility Fee

Improvements funded by the fee program may be constructed in several ways. Improvements may be built by the City, using fee revenues and other available resources, or by private developers as part of their development projects. Private landowners may construct roadway improvements included in the fee program for which they will be reimbursed.

Improvements Funded by the Public Facility Fee

Improvements in the Railyards/Richards Boulevard Area will be constructed as needed to accommodate build-out of the community plan area. Generally, the construction of infrastructure has been identified to occur in three phases tied to various levels of development. The selection of projects has been accomplished through input from a number of sources, as outlined in the following table.

TABLE L-2

Transportation Facility Fee Project Selection Criteria	
Accommodate traffic growth	North-East Area Transportation Study Working Group
Available funding	Capitol Station District Board of Directors
Close gap in transportation network	Feedback from Council and City offices
Railyards/Richards Blvd Finance Plan Working Group	7 th Street Task Force
Leverage public funding	Promote catalyst development

- Timing will vary depending on the amount and location of development

Five Year List of Projects

The following is a list of projects anticipated to be funded partially or wholly from private development, and utilize the transportation impact fees. The improvements are seen as necessary “catalyst” to allow the first phase of private development to occur. Since there are insufficient redevelopment tax increment, or private capital resources, the fee program will play a minor role in achieving the initial transportation improvements in the next five years.

TABLE L-3

Five Year List of Projects			
Project	Description	Responsible Entity	Projected Delivery Year
Arterial Roadways			
7 th Street Extension Phase I	Extend 7 th Street as two lane roadway (D Street to N. B Street)	City	2002
6 th Street Extension	Extend 6 th St. between H Street and F Street	Developer	2004
H Street Extension	Construct 4 lane street between 3 rd and 5 th St	Developer	2004
5 th Street Extension	4-lane roadway from H to F Street	Developer	2004
Freeways			
I-5/Richards Boulevard	Add on/off ramps and widen underpass	City	2004
Richards Blvd./SR160	Create at-grade signalized intersection	City	2003
Collector Roads			
G Street (5 th – 7 th St) Extension	Extend G Street once rail mainline track relocated	Developer	2004
N. 7 th Street Widening (N. of Richards Blvd).	Widen 7 th Street to four lanes north of Richards Blvd (Cannery Development Project)	Developer	2004
N. 10 th St. Widening	Widen N. 10 th north of N. B St. to four lanes	Developer	2005
New Street	From N. 5 th to N. 10 th Street (Cannery and Continental Plaza developments)	Developer	2005
Riverfront Drive	From N. 5 th to N. 7 th Street (Cannery Development Project)	Developer	2004
F Street (6 th – 7 th Street) Extension	Extend F St. as 2-lane roadway	Developer	2004
Transit Facilities			
Sacramento Intermodal Station	Construct to passenger rail and intercity rail facility	City / Developer	2004

Five to Ten Year Project List

The five to ten year project list represents improvements that are largely driven by the level of private development.

- Timing will vary depending on the amount and location of development

TABLE L-4

Five to Ten Year Project List			
Project	Description	Responsible Entity	Projected Delivery Year
Arterial Roadways			
7 th Street Extension Phase II	Widen 7 th St. to four lanes w/LRT Median	Developer	2008
6 th Street Extension	Extend 6 th St. between Richards Blvd. and Downtown	Developer	2008
Gateway Blvd.	Construct 4 lane street between N. 7 th and N. 12 th St.	City	2008
Freeways			
I-5/Richards Blvd (Phase II)	Add on/off ramps & widen underpass	City	2008
Richards Blvd./SR160 (Phase II)	Create grade separated interchange	City	2008
Railyards Access Road	Create roadway connection from I-5 / Richards to Railroad Technology Museum	City / Developer	2006
Collector Roads			
5th Street (N. of Richards)	Widen 5 th Street	Developer	2006
Riverfront Drive.	Extension from 5 th to Dreher St.	Developer	2008
N. 10 th St.	Widen N. 10 th north of Richards Blvd.	City	2007
Vine Street	From N. 10 th Street to North 5 th	Developer	2008
Transit Facilities			
Downtown / Natomas / Airport LRT Extension	Extend LRT north from 7 th and K to Richards Blvd.	Regional Transit	2007
Mainline rail relocation – improvements associate with rail track relocation	Grade separated street crossings under rail tracks	City / Developer	2007

Major Improvements to be Provided by Landowners

Private land owners must provide basic infrastructure needed to support each development. The extent, cost, timing, and location of those improvements cannot be specifically determined at this time. However, it is possible to reasonably forecast improvements based on the locations and nature of approved planned development, the trend in housing construction, and the new projects currently being reviewed by staff.

Anticipated development includes the following:

Railyards Planning Area

- New mixed-use development on the lower 40-acres
- Construction of new north-south access when mainline rail tracks are relocated
- State Railroad Technology Museum
- Sacramento Intermodal Transportation Center
- Folsom LRT Extension

- Timing will vary depending on the amount and location of development

Richards Boulevard Area

- Construction of new streets as part of various private development projects related to approved and pending entitlement applications, including:
- Discovery Center Office Park
- Continental Plaza Office Park
- Richards “Cannery” site mixed use project
- Jibboom Street PG&E Building Redevelopment
- State Printing Plan site redevelopment

It is possible, and in some cases likely, that private landowners will opt to provide some of the improvements noted in the 5 year TPG before they are programmed for construction by the City.

- Timing will vary depending on the amount and location of development



Richards Boulevard/Railyard Area L-6

GRANITE REGIONAL PARK

Planned Unit Development (PUD)

This section will summarize transportation projects needed to support development activity in the Granite Regional Park PUD. Development fees paid by the PUD and the City's Capitol Improvement Program fund the improvements.

Transportation Improvements in Granite Park

Improvements in the Granite PUD will be constructed as needed to accommodate development activity over the next 30 years. The timing of specific improvement projects required in response to development activity is defined in the mitigation-monitoring plan for the PUD.

Table L-1 indicates the projects to be built by the City and private developers anticipated to be constructed within the next five years.

- Timing will vary depending on the amount and location of development

TABLE M-1

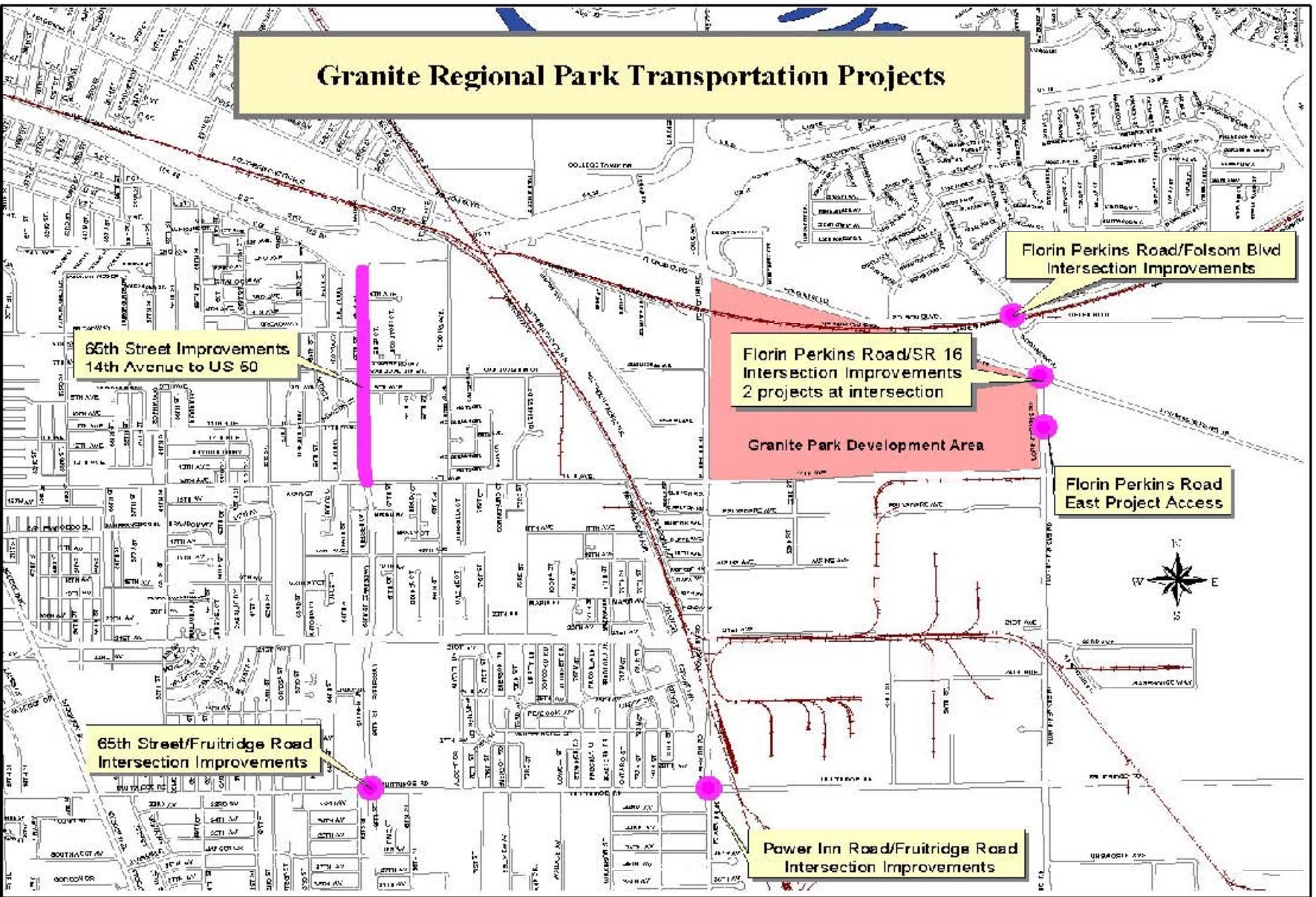
GRANITE REGIONAL PARK

Ref #	Type of Project	Project	Description	Who Will Accomplish?	Estimated Cost	Granite Park Contribution	City Contribution	Some City Funds Required
1	Improvements	65th Street Improvements from 14th Ave to US 50 East Bound Ramps	65th Street from 14th Avenue to US 50 east bound ramps- construct third north bound through lane on 65th Street; US50 east bound ramps/ 65th Street- construct second east bound right turn lane; and 65th Street/Broadway- Construct exclusive east bound left turn lane. On 65th Street and 14th Avenue intersection- Add exclusive north bound right-turn lane, construct exclusive right turn lane and construct exclusive south bound left turn lane. On 65th Street and Folsom Boulevard intersection-Add exclusive north bound right turn lane and add exclusive west bound left turn lane.	City	\$2,674,000	\$1,128,000	\$1,546,000	yes
2	Intersection	Florin Perkins Road/ Folsom Road	Construct second west bound exclusive left turn lane and construct north and south bound exclusive right turn lanes	Developer	\$167,000	\$167,000	\$0	no
3	Intersection	65th Street/Fruitridge Road	Construct exclusive south bound left turn lane; construct exclusive east bound left turn lane; and construct exclusive west bound left turn lane	City	\$331,500	\$50,000	\$282,000	yes
4	Intersection	Power Inn Road/Fruitridge Road	Construct additional east and west bound through lanes; construct west bound free right turn lane; and construct exclusive east bound left turn lane	City	\$384,000	\$150,000	\$235,000	yes
5	Intersection	Florin Perkins Road/SR 16	Construct second exclusive east and west left turn lanes and add second exclusive north bound left turn lane	City	\$312,000	\$202,000	\$110,000	yes
6	Intersection	SR 16/ Florin Perkins Road	Construct east bound exclusive right turn lane and construct north bound exclusive left turn lane	City	\$208,000	\$208,000	\$0	no
7	Intersection	Florin Perkins Road/ E. Project Access	Construct new intersection with north bound exclusive left turn lane; east bound exclusive left turn lane; east bound exclusive right turn lane; and south bound free right turn lane.	Developer	\$200,000	\$200,000	\$0	no

Improvements expected within the next 5 years

Timing will vary depending on the amount and location of development

FIGURE M-1



Timing will vary depending on the amount and location of development

SOUTH NATOMAS

This section will summarize transportation projects planned for South Natomas.

South Natomas is bounded by Garden Highway to the south, Interstate 80 on the west and north, and the Natomas East Main Drainage Canal on the east. The City Council has approved two funding programs for South Natomas: the South Natomas Community Infrastructure Fund (SNCIF) and the South Natomas Facilities Benefit Assessment District (FBA).

South Natomas Community Infrastructure Fund (SNCIF)

The South Natomas Capital Improvement Fund (SNCIF) was established in 1983 through development agreements for three properties adjacent to Interstate 5: Metropolitan Center, Gateway Center and Corporate Center. This program established special fees paid by developers for construction of various capital improvements to partially mitigate the impact of new commercial construction within the South Natomas area. The SNCIF development agreements expired in 1993. New development in these areas now requires payment of SNCIF fees at the FBA rate.

South Natomas Facilities Benefit Assessment (FBA) District

The South Natomas Facilities Benefit Assessment (FBA) District was formed in 1990. All undeveloped or underdeveloped property within the South Natomas Community Plan area was included in the district, with the exception of property subject to the South Natomas development agreements. Fees are paid by developers and collected when building permits are issued.

The purpose of the FBA District was to provide funding for infrastructure needs and community enhancements within the South Natomas Community Plan area. At the time of district formation, the City Council adopted a list of twenty-one specific projects to be paid with FBA funds. This program will ultimately fund \$12.9 million dollars in transportation improvements. The remaining eleven project locations and descriptions are referenced in Table N-1.

Overview of the South Natomas Community Financing Plan

The transportation projects, which are being proposed for FBA and SNCIF funding, are basic assumptions of the 1988 South Natomas Community Plan. The environmental analysis for buildout of the area was done, assuming that all these transportation projects were constructed.

Future development in South Natomas will generate the need for new transportation systems as well as improvement of existing facilities to serve the additional growth of the community. FBA and SCNIF funding will partially or completely provide a freeway interchange, major roadway modifications, traffic signals, bridges, and portions of the bicycle system. In addition, other traffic signals and the over-width center portion of several major roads will be constructed using funding sources other than the FBA.

Portions of the needed public facilities will be constructed as part of the subdivision process by private development. The remaining portion of needed public facilities could be financed by the following alternative methods: Facilities Benefit Assessment (FBA), Acquisition Assessment Districts, Lighting and Landscaping Act District, Mello Roos, Fee Exactions, Developer Construction, and Major Street Construction Tax.

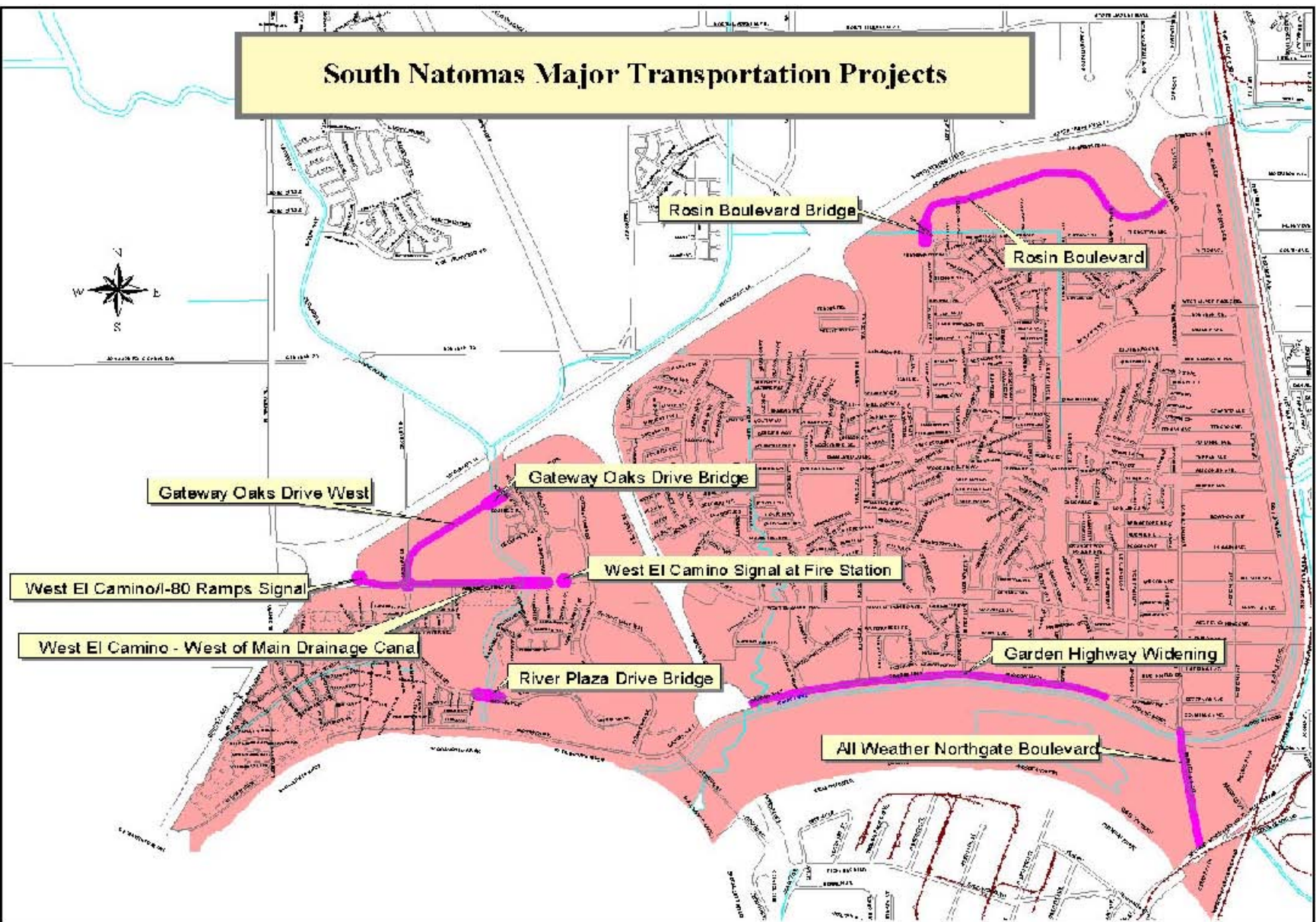
YEAR 2002 REMAINING SOUTH NATOMAS TRANSPORTATION PROJECTS

TABLE N-1

Ref #	Category	Project	Description	Who Will Accomplish?	Estimated Cost	SNCIF Contribution	FBA Contribution	Some City Funds Required
1	Alternate Modes	Bikeway System*	Bicycle system for the South Natomas Community Plan area. Total estimated cost \$2M. In FY-FY-00/01, \$250,000 of SNCIF was allocated to LS71 – Garden Highway Bike trail	City	\$1,750,000	\$0	\$1,750,000	no
2	Delay Reduction	All Weather Northgate Blvd	Elevate Northgate Blvd between Garden Highway and State Route 160. Project has a current budget of \$1,169,389 (TG91)	City	\$7,443,600	\$303,100	\$1,930,000	yes
3	Safety	West El Camino Signal at Fire Station	Construction of traffic signals at the intersection of West El Camino at Fire Station adjacent to Main Drain Canal	City	\$128,400	\$8,700	\$55,500	no
4	Connectivity	River Plaza Drive	Construction of a four (4) lane conventional concrete bridge on River Plaza Drive over the Main Drainage Canal.	City	\$825,600	\$84,100	\$535,100	no
5	Access	Gateway Oaks Drive West	Construct 2900 feet of the center portion of Gateway Oaks Dr on the west side of Main Drainage Canal	Developer	\$305,600	\$0	\$0	no
6	Access	Gateway Oaks Drive Bridge	Construction of a four (4) lane conventional concrete bridge on Gateway Oaks Dr over the Main Drainage Canal.	City	\$825,600	\$56,000	\$356,000	no
7	Delay Reduction	West El Camino- West of Main Drainage Canal	Construct 3300 ft of the center portion of West El Camino west of the Main Drainage Canal. Center portion to include landscape median.	Developer	\$840,000	\$0	\$0	no
8	Delay Reduction	West El Camino/I-80 Ramp Signal	Construct traffic signals at West El Camino and I-80 ramps	City	\$332,400	\$0	\$0	no
9	Access	Rosin Blvd.	Construct 7500 ft of the center portion of Rosin Blvd between Truxel Rd and Northgate Blvd.	Developer	\$729,200	\$0	\$0	no
10	Access	Rosin Blvd Bridge	Construct a four (4) lane conventional concrete bridge over an RD-1000 canal, south of I-80	City	\$360,000	\$24,400	\$155,600	no
11	Delay Reduction	Garden Highway Widening	Widen Garden Highway to four lanes between I-5 and Northgate Blvd.	City	\$7,443,600	\$282,800	\$1,800,300	no

Timing will vary depending on the amount and location of development

FIGURE N-1



Timing will vary depending on the amount and location of development