

**Appendix B: Transportation and Circulation
Technical Materials**

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B1: Integrated Transportation System

TSM Advisory Handbook



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A Guide To Transportation Systems Management

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Introduction

Numerous benefits have been identified in TSM programs implemented across the nation.

THE PERILS OF GROWTH:

Traffic Jams & Air Pollution

Significant increases in residential construction, development and employment opportunities are anticipated in the City of West Sacramento over the next two decades. However, along with economic opportunity, we face the prospect of increasing traffic congestion and declining air quality.

To ensure the continued prosperity of our City, we must not only deal with existing problems, we must plan now for the future.

THE SOLUTION:

Transportation Systems Management

Transportation Systems Management (TSM) is a recognized strategy to promote more efficient use of our streets, highways, parking facilities, public transit and bikeways. TSM is a combination of services, subsidies, facilities and actions that reduce commute trips to help relieve traffic and pollution problems.

The TSM Ordinance requires employers and developers employing 25 or more employees to promote TSM programs at the work site. The intent of the Ordinance is to reduce traffic and auto emissions by changing commute habits. The goal of the TSM Ordinance is to achieve an Average Vehicle Ridership (AVR) of 1.5 persons per car by 1999. This handbook will detail the requirements of the Ordinance and the implementation process.

THE BENEFITS OF TSM

Employer Benefits

- Reduces employee tardiness and absenteeism
- Increases energy for work due to lower driving stress
- Makes more parking available for clients and visitors
- Makes it easier to recruit and retain employees
- Enhances corporate image

Employee Benefits

- Decreases driving stress
- Saves on fuel, vehicle maintenance and insurance costs
- Eliminates parking problems
- Reduces automobile dependence
- Increases commuting options
- Increases time for pursuing leisure activities or completing unfinished work
- Saves time when carpool lanes are used

Community Benefits

- Less traffic congestion
- Less energy consumption
- Cleaner air

Definitions

The following terms are important to understanding and implementing the TSM Ordinance.

ALTERNATIVE COMMUTE MODE: A trip for which a transportation mode is other than a single-occupant vehicle.

ALTERNATIVE WORK SCHEDULE: A work schedule that alters the traditional forty-hour work week including, but not limited to, compressed work weeks, staggered work hours and flextime.

ANNUAL STATUS REPORT: The report submitted by the employer or the developer and submitted in conjunction with the Transportation Management Plan (TMP) that describes the actions taken to implement the TMP; the results during the reporting year; and any changes to the TMP proposed for the upcoming year. The Annual Status Report is required for renewal of the Transportation Management Certificate.

AVERAGE VEHICLE RIDERSHIP (AVR): The number of employees commuting to a work site during the morning commute period, totaled over five consecutive weekdays, divided by the number of vehicles those employees drive, totaled over the same five consecutive weekdays. Bicycles, transit vehicles, buses serving several work sites and cars stopping on route to other work sites shall be excluded from the vehicles counted. For the purpose of calculating AVR, Reduced Emission Vehicles shall be counted per their Base Vehicle Equivalency Factor.

BASE VEHICLE: Any vehicle that is not a California Air Resources Board certified Reduced Emission Vehicle.

BASE VEHICLE EQUIVALENCE FACTOR: The multiplier provided by the California Air Resources Board that proportionally equates a Reduced Emission Vehicle to a base vehicle in terms of non-methane organic gas emissions.

CARPOOL: A motor vehicle occupied by two or more employees traveling to or from a work site.

CITY: The City of West Sacramento.

CITY COUNCIL: City Council of the City of West Sacramento.

COMMUTE: A home-to-work or work-to-home trip.

COMPLEX: Shall mean either:

(1) Any non-residential use or development that is operated as a unit, whether in common or separate ownership. To be a complex, two or more of the following conditions must be met:

- (a) It is known by a common name.
- (b) It is governed by a common set of covenants, conditions, and restrictions.
- (c) It was approved or is to be approved as an entity by the City.
- (d) It is covered either by a single subdivision or by a single parcel map.
- (e) It is operated by a single management.
- (f) It shares common private parking.

(2) Any multi-tenant, non-residential building or contiguous group of buildings under common ownership that is not covered by any of the aforementioned conditions.

EMPLOYEE: Any worker hired by any employer, including any part-time worker working 20 hours or more weekly and seasonal workers working more than 90 days per year, but excluding any independent contractors hired by the employer.

EMPLOYEE TRANSPORTATION COORDINATOR: An individual trained and designated to promote and implement TSM strategies at the work site.

EMPLOYER: Any public or private entity, including the City, with a permanent place of business or work site in the City. The maximum number of employees on the largest shift shall determine the size of the employer. Employer shall not include contractors with no permanent place of business in the City and other businesses with no permanent work site in the City.

EXISTING COMPLEX: A complex that has been issued a building permit for the building structure prior to the effective date of the TSM Ordinance.

FLEXTIME: A work schedule that allows the employee to adjust work hours outside of the employer's established start and stop time.

MORNING COMMUTE PERIOD: The morning commute hours from 7:00 A.M. to 8:30 A.M. during weekdays.

NEW COMPLEX: A complex that has been issued a building permit for the building structure after the effective date of the TSM Ordinance.

PLANNING COMMISSION: The Planning Commission of the City of West Sacramento.

REDUCED EMISSION VEHICLE (REV): A motor vehicle that is certified by the California Air Resources Board as any of the following:

Transitional Low Emission Vehicle (TLEV)

Low Emission Vehicle (LEV)

Ultra-Low Emission Vehicle (ULEV)

Zero Emission Vehicle (ZEV)

RIDESHARING: The cooperative effort of two or more employees traveling together.

SHUTTLE BUS: Private or public transportation service providing short distance, fixed route passenger service, limited to specific destinations and connections, with parking lots and/or existing transit services.

SINGLE-OCCUPANT VEHICLE (SOV): A motor vehicle occupied by one employee for commute vehicle purposes.

TELECOMMUTING: Working at home for the entire day and using electronic or other means to communicate with the usual work site.

TRANSIT: Public transportation including bus or fixed rail services.

TRANSPORTATION MANAGEMENT ASSOCIATION (TMA): A group of employers who have formed a formal association and incorporated as a non-profit organization to work toward solving mutual transportation-related problems.

TRANSPORTATION MANAGEMENT CERTIFICATE (TMC): A document issued by the TSM Administrator that verifies that the TMP complies with the requirements set forth in the TSM Ordinance.

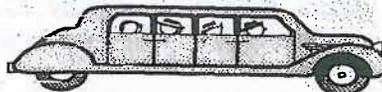
TRANSPORTATION MANAGEMENT PLAN (TMP): A document detailing TSM measures to reduce vehicle trips to and from a work site.

TSM ADMINISTRATOR: The person designated by the City with the responsibility for implementing the TSM Ordinance.

TSM COMPLIANCE RECORD: A document completed and signed by the Minor Employer or Developer acknowledging compliance with the requirements of the TSM Ordinance.

VANPOOL: Seven or more employees commuting to and from work in the same motor vehicle.

WORK SITE: The primary place of employment, base of operation, or predominant location of a group of employees.



Who Must Comply

Since traffic congestion and air pollution affect all of us, it is hoped that everyone will respond positively to the TSM Ordinance. The TSM Ordinance, however, specifically addresses public and private entities (employers and developers) that employ or that will employ 25 or more employees. The Ordinance also applies to any existing work site that, after structural expansion, will support 25 or more employees.

Employers

According to the TSM Ordinance, employers are categorized as either Minor Employers or Major Employers. Minor Employers employ 25 to 99 employees. Major Employers employ 100 or more employees.

Developers, as well as employers, are required to comply with the Ordinance. Developers include individuals or entities involved in the development of property for new commercial and/or industrial projects that will generate employment for 25 or more employees. New projects include building permits, conditional use permits, planned development permits, parcel maps and tentative subdivision maps.

Developers are categorized as either Minor Developers or Major Developers. Developers proposing projects that will generate employment for 25 to 99 employees are considered Minor Developers. Developers proposing projects that will generate employment for 100 or more employees are considered Major Employers.

The requirements for each group are summarized on pages 7 through 9.

Complexes

Complexes existing prior to December 4, 1992, are considered Minor Employers. A Major Employer located in an existing complex is treated as a Major Employer. The employee count shall determine whether a complex constructed after December 4, 1992, will be categorized as either a Minor Employer or a Major Employer.

Employee Count

The employee count should include the following employees:

- (1) full-time employees;
- (2) part-time employees working 20 hours or more weekly; and
- (3) seasonal workers that work more than 90 days per year.

EXEMPTIONS: The following are exempt from the TSM Ordinance:

- (1) Temporary construction activities related to development or other improvement to real property. This includes temporary work done by engineers, architects, contractors, subcontractors and construction workers.
- (2) Emergency activities in which persons are temporarily employed to render aid or other services following an emergency situation or a natural disaster.
- (3) Other temporary activities that employ persons for a period of less than 90 days.
- (4) Developments covered by existing development agreements and transportation management plans as of December 4, 1992.
- (5) Schools, colleges and universities.

Minor Employer and Minor Developer Requirements

**AT A MINIMUM, MINOR EMPLOYERS
AND DEVELOPERS MUST DO THE
FOLLOWING:**

- Implement a TSM Information Program
- File a TSM Compliance Record with the City's TSM Administrator

TSM COMPLIANCE RECORD

Minor Employers and Developers are required to submit a TSM Compliance Record (see Appendix A) each year prior to or on the anniversary date of the first submission.

The first TSM Compliance Record documents that the Minor Employer or Developer is aware of the TSM Ordinance requirements for Minor Employers and Developers. TSM Compliance Records submitted, thereafter, must verify actual compliance.

SCHEDULE OF COMPLIANCE

All Minor Employers and Developers doing business in the City as of December 4, 1992, must submit a TSM Compliance Record to the City TSM Administrator by December 4, 1993.

New Minor Employers locating within the City after December 4, 1992, must submit a TSM Compliance Record to the City TSM Administrator at the same time an application is made for a business license.

New Minor Developers locating within the City after December 4, 1992, must submit a TSM Compliance Record to the City TSM Administrator prior to obtaining a building permit.

TSM INFORMATION PROGRAM

At a minimum, the TSM Information Program should include the following activities:

1. Post and distribute information on commute alternatives.
2. Coordinate with local and regional ridesharing agencies for distributing ridesharing applications and information about commute alternatives.
3. Orient new employees to available commute alternatives.

Each activity is described below.

POSTING AND DISTRIBUTING INFORMATION

Posters, ridesharing information and applications, transit maps and schedules, bicycling information, and brochures describing the benefits of using commute alternatives should be readily accessible to all employees.

This material may be posted on a bulletin board in each office; in a common lobby; at an employee entrance; or in the break room. Often it may be necessary and desirable to post the information in more than one location (for example, in both shop and office areas). The information should be updated annually and its existence must be publicized at least once a year. If posting facilities are not available in existing work sites, this material should be distributed to employees on a regular basis.

Minor Developers locating within the City after December 4, 1992, will be required to provide, at a minimum, the facilities for posting alternative commute mode information. These facilities can include: a bulletin board in each office; a common lobby; an employee entrance; a break room; or a combination of the above. These facilities must be clearly delineated on your building plans. Upon completion of the project or at the time that tenant improvement permits are issued, the developer should contact Sacramento Rideshare and local transit agencies for brochures, posters, ridesharing information, bus schedules, etc., for distribution to the tenants.

COORDINATION WITH RIDESHARING AGENCIES

Brochures, posters, ridesharing information and commuter applications may be obtained from Sacramento Rideshare. Transit maps and schedules are available from Yolobus and Regional Transit. (See Appendix F for a complete list of services and contact information.)

NEW EMPLOYEE ORIENTATION

Pertinent transit information and ridesharing applications should be provided to all new employees.

MAJOR EMPLOYER AND MAJOR DEVELOPER REQUIREMENTS

MAJOR EMPLOYERS AND DEVELOPERS ARE REQUIRED TO DO THE FOLLOWING:

- Implement the TSM Information Program
- Designate an Employee Transportation Coordinator (ETC)
- Conduct an annual employee commuter survey
- File a TMP with the City's TSM Administrator
- Prepare an Annual Status Report
- Obtain a Transportation Management Certificate (TMC)

Major Employers and Developers are required to file a TMP with the City TSM Administrator. Upon approval of the TMP, a TMC will be issued that will be valid for one year. The TMC must be renewed prior to or on the first anniversary date of the original TMP's approval date. In order to renew the TMC, an Annual Status Report must be submitted and approved by the City TSM Administrator. These requirements are discussed in detail in Part III (employer TMP requirements) and Part IV (developer TMP requirements).

SCHEDULE OF COMPLIANCE

All Major Employers and Developers doing business in the City as of December 4, 1992, must have an approved TMP by June 4, 1994. Between June 4, 1993, and June 4, 1994, a TMP must be submitted to the City TSM Administrator at the same time application is made for a business license or the renewal of a business license.

New Major Employers locating within the City after December 4, 1992, must submit a TMP to the City TSM Administrator at the same time an application is made for a business license.

New Major Developers locating within the City after December 4, 1992, must have an approved TMP prior to the issuance of a building permit.

FEES

Minor Employers and Developers: A \$50.00 fee is required for filing the TSM Compliance Record.

Major Employers and Developers: A \$400.00 fee is required for filing the initial TMP and renewing the TMC. Fees are subject to change. Please contact the City TSM Staff for information regarding current fee schedules.

EMPLOYEE TRANSPORTATION COORDINATOR

WHAT IS AN EMPLOYEE TRANSPORTATION COORDINATOR (ETC)?

Each Major Employer and Developer subject to the Ordinance must appoint an Employee Transportation Coordinator (ETC). The ETC is the individual responsible for implementing the Transportation Management Plan (TMP).

The Coordinator's primary goal is to reduce the number of commute trips made by employees driving alone.

The duties and responsibilities of the ETC are outlined in the following section.

WHAT DOES AN ETC DO?

The ETC:

1. Develops, coordinates, documents and implements the TMP.
2. Obtains information on commute alternatives from ridesharing agencies.
3. Posts information promoting commute alternatives. This includes brochures, posters, and flyers describing the benefits of transportation options and listing facilities, services, subsidies, etc., available at the work site.
4. Coordinates with local transportation agencies and service providers regarding services and subsidies. Distributes appropriate transit information and transit passes and performs any other duties related to the utilization of transit services.
5. Orients new employees to commute alternatives by providing pertinent transit information and ridesharing applications.

6. Assists in the development of carpools, vanpools and any other services delineated in the TMP.

7. Coordinates any necessary, authorized on-site visits by City staff.

8. Coordinates, documents and prepares the Annual Status Report, and performs any other tasks required for the renewal of the Transportation Management Certificate (TMC).

9. Initiates, coordinates and files the appeal of any decision by the City's TSM Administrator as authorized by the employer or the developer.

10. Monitors and implements any changes as required in the TSM Ordinance or as indicated in the *TSM Advisory Handbook*.

In addition to the above, the ETC designated by a major developer is required to do the following:

1. Distribute pertinent information to all tenants regarding the facilities, services and subsidies available at the work site or the project site.
2. Distribute alternative commute mode information and ridesharing applications to all new tenants upon occupancy, as well as on an annual basis.

ETC services must be available to tenants upon issuance of the Temporary or Final Certificate of Occupancy. If the ETC is not located on-site, the developer is responsible for ensuring that the ETC is readily available and accessible to the tenants.

WHAT DOES IT TAKE TO BE AN ETC?

The ETC must demonstrate the knowledge and ability to perform the duties described in the preceding section. Sacramento Rideshare provides comprehensive training workshops for ETCs on an as-needed basis throughout the year. For further information, contact Sacramento Rideshare.

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Basic Commute Alternatives

The basic commute alternatives are carpools, vanpools, buspools, transit, bicycling, walking, and telecommuting. You must provide employees employed at the work site or project site with information about these alternative commute modes. Appropriate literature including brochures, flyers, and posters are available at little or no cost from a variety of sources. See Appendix F for a complete list of services and contact information.

Ridesharing

Carpools, vanpools and subscription buspools are all examples of ridesharing. Sacramento Rideshare, the regional ridesharing agency, provides applications for free computerized matching services that can help form carpools, vanpools and buspools. This agency also offers brochures, flyers and posters to aid in marketing your TSM program.

Transit

Transit includes regularly scheduled public services on fixed routes (like bus and light rail) as well as specialized paratransit services for senior and physically disabled persons. For those lucky enough to live and work in areas served by public transit, this is often the option of choice because it requires no commitment and offers additional "private" time for leisure activities or completing unfinished work. Subsidized transit passes can make this alternative even more appealing.

Route, fare and schedule information for transit services should be routinely distributed to new hires and readily available to all employees. This information can be easily obtained from transit service providers.

Bicycling and Walking

Bicycling and walking are often referred to as "healthy commutes" because they offer an opportunity to enjoy an aerobic workout during commute time. Providing showers and lockers for employees will encourage use of these alternatives. Bicycling is appropriate for employees living within five miles of work with good, available bike routes. Secure bicycle parking is also important in making this option viable. Walking can be appropriate for employees living within two miles of work if the site has good pedestrian access.

And more. . .

Other alternatives are discussed on pages 14 through 17.

What Is a TSM Measure?

TSM measures are any actions taken to promote the use of commute alternatives by employees at the work site or project site. These measures are the core of the TMP.

TSM measures fall into four general categories: facilities, services, subsidies and incentives. Specific examples of successful TSM measures are described in the following sections, but do not hesitate to include other original ideas in your TMP.

Facilities

Some commute alternatives can be encouraged by the use of company facilities. This includes modifying the usage of existing facilities as well as establishing new ones.

Parking Facilities

Three out of four cars driven to work are parked free in spaces provided by the employer. Consequently, free parking appears to be a significant incentive to drive to work. If you have some ability to control or influence employee parking at your work site, the following measures can help reduce Single Occupant Vehicles (SOVs) at the work site or project site.

■ Preferential Parking for Carpools and Vanpools

Reserved Parking: Mark or otherwise designate a certain number of spaces as reserved for carpools/vanpools.

Priority Location: Reserve spaces closest to building entrances, lot exits, or other preferred locations for ridesharers.

Priority Assignments: For full parking lots, carpools and vanpools should go to the head of the waiting list.

■ Perimeter or Park & Ride Lots with Shuttle Service

These lots are an economical alternative to high cost, close-in facilities. They also reduce high traffic volumes and decrease midday SOV trips.

■ Restricted Parking for SOVs

Limit SOVs to perimeter lots, charge them a parking premium, or use other disincentives to discourage solo driving.

NOTE: If you offer reserved parking, make every effort to maintain its reserved status. Monitoring preferential parking presents some challenges, especially

when parking is preferential by location only. Penalties for unauthorized use of reserved spaces may be assessed at your discretion.

Bicycle Facilities

Bicycling is an attractive commute option for employees living within five miles of the work site. A few simple steps can make bicycling a viable commute alternative.

■ Secured Bicycle Parking Facilities

Provide secured, safe bicycle parking. Contact Sacramento Rideshare for a complete catalog of the available options.

Class I bicycle lockers: Individually enclosed and covered lockers

Class II bicycle racks: Lockable racks in some type of compound

Other options: When specialized bicycle storage facilities are not feasible, consider designating available office, warehouse, or storage space as a bicycle parking area. Bike parking should be located out of public access.

■ Showers and Lockers

This facility benefits pedestrians as well as cyclists. It also promotes employee exercise and health in general, and will be seen as a valuable benefit by most employees. Showers are ideal, but if your building doesn't have showers, check around with other employers in your area who may allow other employees to use their facilities.

Services

Company-sponsored services that support or promote the use of commute alternatives range from simple TSM measures requiring little or no expense, to comprehensive programs requiring a financial commitment from the employer or the developer. Costs, of course, should always be measured against the benefits of increased employee productivity and enhanced quality of life for everyone.

On-site Sale of Transit Passes

This convenience can significantly increase transit usage. Retail customers may appreciate this service as well. Contact your transit service providers for specific requirements (see Appendix F). Subsidies for transit passes are discussed on page 15.

Shuttle Services

Shuttles are a versatile transportation option that can facilitate a variety of commute alternatives. Shuttles usually operate between the work place and nearby mass transit stops. They can also be used to transport employees for daytime trips near the work site. Many shuttles are completely company-sponsored and free to employees. You can provide shuttle service using a company vehicle, a leased vehicle, or by contracting with a private company to provide the service.

Pooling Programs

The easiest and most efficient way to form carpools and/or vanpools is through a computerized matching service. An interested employee fills out a questionnaire that includes name, work address, home address, and work hours, and submits it to Sacramento Rideshare. The information is added to Rideshare's database whereby a matchlist of persons with similar work hours and home/work location is produced. Matchlists include potential commuters' names, phone numbers, the cross streets near their homes and work places, and their work hours. Commuters' addresses are always kept confidential.

■ Preferential Parking Program

Giving preference to carpools and vanpools supports pooling programs. If your company does not directly control parking at the work site, this benefit could be negotiated as part of tenant improvements or through a Transportation Management Association.

■ Buspool Programs

Buspools are also called charter, club, park & ride or subscription buses. This commute option offers express bus service for a limited number of pickup and destination stops. A bus typically carries between 30 and 50 passengers. Due to high costs, buspooling is most effective for commuting distances of over 60 miles round-trip. Buspools are usually third-party operated or company-sponsored. Buspools can also be privately owned and employee-operated.

Informational and Promotional Programs

Provide literature and sponsor promotional activities tailored to your work site or project site. Employees need to know what subsidies, facilities, and programs are available at the site, who the ETC is, and how to contact him or her.

Guaranteed Ride Home Program

The Guaranteed Ride Home Program is the answer to a very real fear for potential ridesharers who have concerns about being stranded without a car. In the case of an emergency, a free taxi ride, a rental car or a company car is provided. In some instances, a co-worker may be allowed to drive the employee without losing pay. Examples of qualifying emergencies are: the commuter becomes ill at work; a close family member has been in a serious accident; a child has a problem at school that requires immediate attention; or the car or van used for pooling breaks down.

Subsidies

Subsidies offset employees' expenses related to using commute alternatives. They can be offered as temporary incentives to encourage changes in commute habits or as a permanent benefit to reward alternative commuters.

Transit Subsidies

Transit pass subsidies are an excellent way to promote and encourage the use of transit. This benefit is tax-free to employees up to \$60 per month.

Parking Subsidies

Offer free or discounted rates for carpools/vanpools and consider imposing parking fees on SOVs. Free parking for ridesharers then becomes a benefit.

Vanpool Subsidies

Employers or developers can subsidize passenger fares, operating costs, lease or purchase costs of vans. Subsidies can be offered to private vanpools as well as employer-sponsored vans.

Special Incentives

Creative Incentives

Provide commute alternative accessories (such as safety equipment for cyclists, walking shoes for pedestrians and umbrellas for transit users) through subsidies and co-promotions with vendors. For example, you might allow a bike shop to distribute sales literature to employees at your work site or project site in exchange for discounted rates.

Disincentives

Company policies that make solo driving less attractive also promote alternative commute modes. Consider introducing or raising parking fees for SOVs. You might also limit perks like flexible hours to alternative commuters.

Schedules

Flextime: Make it easier for employees to take advantage of commute alternatives like carpools and public transit by allowing them to adjust their schedules to their chosen commute modes. If this option is limited to alternative commuters, it becomes a real incentive for giving up SOVs.

Flextime extends your company workday. This system allows employees to decide which hours they will work as long as they meet their job responsibilities and work a full day. In designing a flextime program, it is not necessary to have employees work eight hours each day. The number of daily hours may vary as long as your employees work 40 hours each week or a set number of hours every pay period.

Staggered Work Hours: The staggered work hours program focuses on the work unit as opposed to a flextime program that focuses on the individual employee. Work periods are determined by building, floor or department. For example, the Administration Department might work from 7:00 a.m. to 4:00

p.m., while the Sales Department might work from 7:30 a.m. to 4:30 p.m. These working hours are usually staggered at 15- to 30-minute intervals. This alternative spreads out the traffic load in the area immediately surrounding the work site.

Compressed Workweek: A compressed workweek allows employees to work longer hours but shorter weeks. For example, employees working 40 hours in 4 days (a 4/40 shift) can commute during off-peak hours of the morning commute period (7:00 a.m. to 8:30 a.m.), and gain an extra day off! Employees have an additional day for leisure activities, personal business and family time.

Telecommuting

Telecommuting is working at a location other than the conventional office. This place may be at home or at a satellite office close to home. Telecommuting does not require computers and does not have to be a full-time arrangement, but it reduces commute time, mileage, gasoline expense and the number of vehicle trips to the work site. The prospect of shortening or eliminating commute time is a strong incentive for responsible employees.

Others

Transportation Management Association (TMA) Membership

The purpose of a TMA is to provide a cooperative atmosphere whereby employers and developers can provide a greater level of assistance and more substantial services to tenants and employees. TMA members can share in the cost of developing and providing facilities, subsidies, and services.

Membership in a TMA can be helpful to employers, employees and developers by allowing the TMA to provide more varied services at a lesser cost than could be provided by a single employer or developer.

Five percent (5%) of the annual Average Vehicle Ridership (AVR) is credited for joining a TMA. Ten percent (10%) of the annual AVR is credited for membership in a TMA that has demonstrated a 30% trip reduction in SOV trips among its members.

Employee Travel Allowance

Cash payments for non-use of parking facilities promote the use of commute alternatives. Eligible employees include those who walk, bicycle, use transit (if transit subsidies are not offered) or are dropped off by someone else.

Reduced Emission Vehicles

Reduced Emission Vehicles (REVs) are an important component in the overall effort to improve air quality. Employers and developers can receive AVR credit for employees that drive REVs. REVs are classified into four categories in order of decreasing emissions as follows:

Transitional Low Emission Vehicle	(TLEV)
Low Emission Vehicle	(LEV)
Ultra-Low Emission Vehicle	(ULEV)
Zero Emission Vehicle	(ZEV)

These categories are established by the California Health and Safety Code and State regulations. The methodology for calculating a REV credit is included in Appendix E.

On-site Child Care Facilities

A child care facility located at the work site has the potential to provide both tangible and intangible benefits to both the employer and the employees. In addition, an on-site facility impacts employees' commute patterns and reduces the number of miles traveled on a daily basis. The City recognizes that this is an innovative concept that deserves to be tried at the workplace.

The employer or the developer choosing this alternative must provide sufficient information and data (a survey and survey results or a study, for instance) documenting that (1) there is a need for the facility; (2) the facility will change employees' commute patterns and reduce the number of miles traveled on a daily basis; and (3) the facility, in conjunction with other TSM measures, will contribute towards increasing the AVR for the work site or the project site. A credit will be granted for on-site child facilities. The amount of the credit will be determined on a project-by-project basis by the City's TSM Administrator.

STEP 1: COLLECT DATA

Pages 20 - 21

- Company Profile
- Employee Commuter Survey
- Survey Week
- Annual Transportation Survey
- Survey Technique

STEP 2: ANALYZE THE DATA

Page 21

STEP 3: SELECT APPROPRIATE TSM MEASURES

Page 21 - 24

- Required TSM Measures
- Discretionary TSM Measures
- Existing TSM Programs & Policies
- TMP Coordination

STEP 4: PREPARE THE WORKPLAN

Pages 24 - 25

- Average Vehicle Ridership (AVR)
- Multiple Work Sites In The City
- AVR Credits

STEP 5: FILING YOUR TMP

Page 25

- Employer TMP Checklist

**TRANSPORTATION MANAGEMENT
CERTIFICATE (TMC)**

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ANNUAL STATUS REPORT

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OTHER

Page 26

- Change In Status
- Changing Employee Transportation Coordinators
- Change of Address

Employer TMP

EMPLOYER TMP GUIDELINES

Your TMP is the blueprint for implementing your transportation program. It should be based on both short- and long-term planning. Preparing this document should be the responsibility of the ETC.

This section outlines the steps to follow to develop an employer TMP. This section also provides guidelines for choosing appropriate TSM measures to reach your goals.

STEP 1: COLLECT DATA

The key to a successful TSM program is selecting measures that are consistent with the needs of the employees and that are compatible with your company. Two easy-to-use questionnaires can help you accurately determine those needs: the **Company Profile** and the **Employee Commuter Survey**.

Company Profile - Assessing Company Needs

The Company Profile highlights existing facilities, services, and compatible benefits already offered to employees. The type of business, business hours, employee work hours and the type of work performed by the employees all affect the range and type of TSM measures appropriate for your company.

The Company Profile data is combined with information compiled from the Employee Commuter Survey, which is described in the following section. This data helps determine which additional TSM measures can be useful for your company.

Once you have completed the Company Profile, save it for future reference. Much of the information is reported to the City in the TMP.

Employee Commuter Survey

Determining the current commute characteristics of your workforce is probably the most critical task in developing your TMP. The Employee Commuter Survey is the appropriate tool for this job.

You may use the sample survey included in Appendix B, or you may design your own form. Each company is encouraged to use language which is appropriate to its corporate organization. You may want to add questions specific to your work site to determine employee interest in particular services or facilities. Your survey must, however, provide the data that is requested on the sample survey. Sacramento Rideshare can assist you in designing your survey form and tabulating the results of the survey. Survey results will also provide the Average Vehicle Ridership (AVR) for the work site. The names, addresses and company-specific responses are strictly confidential and need not be reported to the City.

Survey Week

Select any five consecutive work days (Monday through Friday) to conduct your survey. The results of the survey will be important in determining the commute habits and patterns of your employees and should provide you with a baseline profile of employee commute modes. This information, along with your Company Profile, will give you the knowledge necessary to begin creating your TMP.

Annual Transportation Survey

All major employers are required to conduct an annual Employee Commuter Survey among the employees. A summary of this survey must be provided in the Annual Transportation Survey. Keep a record of the results of the survey. The records can be helpful in charting the progress of your transportation program.

Survey Technique

The statistical reliability of a survey depends upon the response rate (completed surveys compared to distributed surveys). Your survey will have a higher response rate if you let employees know that:

- Upper management expects a response from each employee, and the survey can be completed on company time as part of the employee's regular duties.
- The survey information is strictly confidential (no names or addresses will be reported to the City or to company management), and is compiled for statistical purposes only.
- The information furnished by employees is used to plan services and formulate the transportation program for the company.
- A designated company supervisor will personally collect completed surveys.

Use attention-getting techniques to be sure employees notice the survey. Include a brief introduction of the survey and a definition of ridesharing. Many people will not answer the survey questions correctly because they do not understand what is being asked. A definition of ridesharing will clear up misconceptions about ridesharing and an introduction explaining the purpose and goals of the program will yield a better response. City TSM staff recommends an 80% response rate.

STEP 2: ANALYZE THE DATA

In your Company Profile, you listed the number and type of employees who commute during the morning commute period (between 7:00 AM and 8:30 AM). You also identified the available TSM-related facilities and services at or near your work site. The Employee Commuter Surveys filled out by your employees contain their commute characteristics. Now that you know what is needed and what is

available to accomplish your objectives, the time has come to put it all together in a TMP. A TMP is composed of any reasonable combination of TSM measures that you select to reduce the number of single-occupant vehicle trips. Develop a plan that is realistic and can be implemented in a reasonable time frame. Remember that the success of your program depends on choosing appropriate TSM measures which are compatible with your company.

STEP 3: SELECT APPROPRIATE TSM MEASURES

Required TSM Measures

The TSM Ordinance requires all major employers to implement a TSM Information Program as described on page 7 in Part I. Other than this requirement, the employer can select among a range of TSM measures.

Discretionary TSM Measures

When selecting TSM measures, keep in mind that each TSM measure has specific requirements. Some depend upon employer control of parking facilities and input into tenant improvements. Some depend on the employee's distance from work and the transit and other available commute options available. Many measures require transit routes near the work site. Alternative modes like flexible work hours and telecommuting require special administration. Incentives and subsidies require financial commitment.

City TSM staff will develop a "model" list of TSM measures that can be selected for inclusion in the TMP. If the "model" list of TSM measures is selected for implementation, the City TSM Administrator will grant TMP approval. The "model" list can be modified to suit the needs and conditions of the work site. However, TMP approval will be based on the balance of additional measures included in the TMP. A "model" list will be developed for program years 1994 through 1999. Contact City TSM staff for further information.

The following TSM measures provide examples of the conditions and supporting measures that should be considered in selecting appropriate TSM measures for your work site. Which measures best suit your company?

TRANSIT PROGRAMS

Facility Conditions

Transit service is available at or near the work site.

Employer Conditions

Workshifts fall within the hours of transit operation.

Potential Commuters

Employees live in areas served by transit.

Supporting Measures

Transit subsidies

On-site sale of transit passes and tickets

Flexible work hours

Company policies

■ Transit Policy

Allow employees to leave work at a designated time in order to catch the bus.

■ Emergency Policy

Assist employees with emergencies by providing a Guaranteed Ride Home Program that includes: cab fare, a company car, or allowing a co-worker to drive the employee without losing pay.

CARPOOL PROGRAMS

Facility Conditions

Control of parking facilities is helpful (but not required) for preferential parking.

Employer Conditions

Employees must have fairly standard stop and start times, but flexibility is desirable.

Potential Commuters

Employees live on the same commute corridor and have nearly the same work site. Office and production workers (as defined in the Company Profile) are ideal carpoolers because they generally do not travel during the course of duties.

Supporting Measures

Assign or reserve preferential parking for carpools.

Subsidize:

a. **Carpool parking at commercial or company-controlled facilities.**

b. **Carpool costs when parking is free (otherwise you may not be able to control parking facilities)**

Allow employees to pay operating costs and use company vehicles for carpooling.

Company policies

■ Carpool Policy

Have flexible work hours for carpoolers.

■ Emergency Policy

Assist employees with emergencies by providing a Guaranteed Ride Home Program.

VANPOOL PROGRAMS

Facility Conditions

Work sites are not served by transit or are accessible only by motor vehicle.

Employer Conditions

Employees must have strict stop and start times.

Potential Commuters

Employees need not live near each other, but they should live at least twenty (20) miles from work on the same commute corridor, and have nearly the same work site. Employees without access to transit services may benefit from vanpools.

Supporting Measures

Preferential parking for vanpools.

Subsidies

- a. **Parking**
- b. **Van operating costs**

Company policies

■ **Vanpool Policy**

Allow vanpoolers to adhere to strict stop and start times.

■ **Emergency Policy**

Assist employees with emergencies by providing a Guaranteed Ride Home Program.

BUSPOOL PROGRAMS

Buspools have many of the same requirements as vanpools. If you are considering a buspool program, contact Sacramento Rideshare.

BICYCLING AND WALKING

Facility Conditions

Facilities such as sidewalks and bicycle lanes are available at the work site.

Potential Commuters

Employees generally live a short distance from work and have a safe walking or bicycling route. (A good rule of thumb is two miles or less for walkers, and five miles or less for bicyclists, although some bicycle commuters will ride much further.)

Supporting Measures

Showers

Lockers for shoes & commute clothes

Secure bicycle parking

Flexible workhours to take advantage of daylight travel

Subsidies

■ **Non-user**

Pay employees for not using parking facilities or accepting other types of subsidies.

■ **Equipment**

Supply or subsidize bicycles or walking shoes for employees.

Existing TSM Programs & Policies

Many employers have existing programs that support and encourage TSM. Review your Company Profile to identify existing qualifying programs and/or policies. These measures should be included in the TSM workplan.

Existing Programs That Qualify Include:

Flexible work hour management (4 days/40 hours, 9 days/80 hours, staggered shifts, etc.)

Policies that encourage employees to use alternative commute modes by allowing them to alter work shifts

Existing ridesharing program

TMP Coordination

Cooperative Efforts

Employers sharing the same work site (such as a building or business park) are encouraged to cooperate with each other to insure program success. Measures implemented in conjunction with other companies must be included with each company's TMP.

Employer and Developer TMPs

Contact the City of West Sacramento Community Development Department to see if your building has a Developer TMP. If it does, there may already be some services, subsidies and facilities that promote TSM in place at the site.

The Developer TMP may require the developer/property owner to offer preferential parking, parking discounts, showers and lockers, shuttle service or transit subsidies. By sharing the cost of services and subsidies with other tenants and the property owner or the developer, you can offer employees a greater variety of TSM measures at a lower cost.

Complexes

A complex and the employers within a complex may coordinate and submit one TMP. The TMP must be applicable to each employer within the complex and the complex itself.

STEP 4: PREPARE THE WORKPLAN

The TSM workplan is an essential component of your TMP. Once you have selected the TSM measures that will best serve your company, the following information must be reported on the TSM workplan:

- ◆ Required TSM measures - TSM Information Program
- ◆ Discretionary TSM measures
- ◆ Detailed description of how each TSM measure will be implemented
- ◆ Implementation dates
- ◆ Current AVR
- ◆ Annual projected AVR

Average Vehicle Ridership (AVR)

The goal of the TSM Ordinance is to achieve an Average Vehicle Ridership of 1.5 persons per motor vehicle by 1999. The TSM Ordinance contains the following interim AVR goals:

Year	AVR
1994	1.1
1995	1.2
1996	1.3
1997	1.4
1998	1.5
1999 and thereafter	1.5

Your TSM workplan must include the current year's AVR and the AVR projected for the upcoming year. As the employer, your goal is to achieve the annual interim goals. Sacramento Rideshare provides services that can assist you in determining the AVR for the work site. The formula for calculating the AVR is included in Appendix D.

Multiple Work Sites In The City

If you have more than one work site in the City, each work site and the number of employees at each work site must be included in the TMP. Achievement of the AVR goals will apply to the total number of employees commuting to all work sites during the morning commute period.

AVR Credits

■ TMA Membership

Five percent (5%) of the annual AVR is credited for joining a Transportation Management Association (TMA). Ten percent (10%) of the annual AVR is credited for joining a TMA if the TMA has been successful in reducing trips among its members by 30%.

■ On-site Child Care Facilities

On-site child care facilities may receive AVR credit. The credit will only be granted if the employer provides data (e.g. employee survey, child care study, etc.) that sufficiently documents and demonstrates that the facility, in conjunction with other TSM measures, will increase the AVR at the work site. The amount of the credit will be determined by the City TSM Administrator on a project-by-project basis.

STEP 5: FILING YOUR TMP

After you've fully developed your workplan, you are ready to assemble and complete your TMP application package. Fill out copies of the TMP forms provided in Appendix B and use the checklist below to help complete your application package. Once you have assembled your TMP, filing it with the City is a straightforward process.

Your TMP will be reviewed by City staff. If it is accepted, you will receive a Transportation Management Certificate (TMC) that acknowledges your compliance with the TSM Ordinance. An approved TMP may be amended at the discretion of the City TSM Administrator.

Employer TMP Checklist

Your TMP must include all of the following:

- Letter of Agreement
- Company and ETC Information
- Annual Transportation Survey
- TSM Workplan
- Site Plan/Parking Diagram
- Annual Status Report (For Renewals Only)
- Fees: Check or Money Order payable to the City of West Sacramento

Important: Be sure all elements are included in your package. City Staff can only accept complete plans with fees included.

TRANSPORTATION MANAGEMENT CERTIFICATE (TMC)

Your TMC is valid for one year. The certificate will include the expiration date of your TMP. It is very important that you remember this date — **the City sends no notice of pending renewal dates.** Your TMC need not be posted, but it should be available to your ETC.

ANNUAL STATUS REPORT

To renew your company's TMC, you must submit an Annual Status Report prior to the expiration date of the previous year's TMC. The Annual Status Report includes the following:

Copy of the previous year's TSM workplan

A copy of the previous year's TSM workplan with the COMPLETION DATE column filled in for each TSM measure must be included. This verifies the dates and results of the TSM measures specified in the workplan for the previous year. If a measure was not implemented within the stated time frame, you must explain why it was not done.

Summary of previous year's TSM workplan

A summary of the previous year's workplan must be provided. At a minimum, the summary should highlight the accomplishments of your transportation program and a summary of facilities, services and subsidies provided to the employees to encourage alternate commute modes of travel.

Updated TMP

All of the elements listed under the TMP Checklist must be submitted when renewing the TMC. A new workplan is completed using the same format. If you believe that certain TSM measures stipulated in the previous TMP are no longer feasible, you must explain why these measures will not be used. The TMP can be amended and modified to reflect current conditions of the work site.

OTHER

Change In Status

Employers who shift from the major to the minor employer designation will not receive a refund of any fees paid to the City of West Sacramento.

Changing Employee Transportation Coordinators

City TSM Staff should be notified within thirty (30) days of any changes regarding the ETC.

Change of Address

If your company relocates within the City of West Sacramento, City staff should be notified within 30 days of the new address, mailing address and phone number. If you relocate outside the City limits, there will be no refund of fees.

Part IV
Developer TMP

STEP 1: PREPARE PROJECT PROFILE

Page 28:

STEP 2: ANALYZE THE DATA

Page 28

STEP 3: SELECT APPROPRIATE TSM MEASURES

Page 30

- Discretionary TSM Measures
- Required TSM Measures

STEP 4: Prepare The Workplan

Pages 30- 31

- The Workplan
- Average Vehicle Ridership (AVR)
- AVR Credits

STEP 5: Filing Your TMP

Page 32

- Developer TMP Checklist

Transportation Management Certificate (TMC)

Page 32

Annual Status Report

Pages 32- 33

Other

Page 34

- Change In Status
- Changing Employee Transportation Coordinators



DEVELOPER TMP

DEVELOPER TMP GUIDELINES

The Developer TMP must detail the basic facilities, services and subsidies (if a subsidy measure is selected) that will assist the future tenants and employees of the development meet the goals of the TSM Ordinance.

All of the facilities must be designated and included in the building plans prior to receiving the building permit. Those measures that are service and/or subsidy related must be identified in the TMP, but implementation will not be required until the occupancy stage of the project. The following sections outline the steps you should follow in preparing and submitting your TMP.

STEP 1: PREPARE PROJECT PROFILE

The Project Profile is designed to aid in the identification of existing and future facilities and services that are or will be available in the vicinity of the development. Once you have identified these services and facilities, you will be able to select measures that, not only compliment each other, but enhance the project. Your TSM measures can become an attractive plus to prospective tenants.

The **Project Profile** requires specific information about the zoning designation, building size, number of potential employees (upon completion of the project), parking availability, transit-related information, bicycle facilities and miscellaneous information. How to match this information with complimentary TSM measures is discussed in the following sections.

The Project Profile will also be of assistance to the Employee Transportation Coordinator (ETC) in designing and implementing the marketing program that will promote the transportation program.

STEP 2: ANALYZE THE DATA

A completed Project Profile is provided on the following page to demonstrate how this form will help identify useful TSM measures based on existing and future facilities and services in the vicinity of your project. Based on the information contained in the Project Profile, we know the following facts about this project:

1. 450 employees will work here.
2. 400 parking spaces will be available; 350 spaces will be available for employees leaving 50 for customers.
3. Transit will be available in the near future.
4. Bicycle access is good; bike lockers will be available.
5. Pedestrian access is poor.

With this information, we can now assess the types of TSM measures that will be complimentary and useful to this project.

Parking is limited since there are potentially 100 more employees than available parking spaces. **Parking management strategies** can be effective in encouraging the use of alternative commute modes and discouraging the use of single-occupant vehicles. **Preferential parking** for carpools or vanpools, for instance, can encourage pooling.

Yolobus will be serving the area in approximately one year. Future transit service provides an opportunity to sell transit passes and offer transit subsidies at the project site. Since your building is still in the planning stage, transit will be available within a reasonable period of time after your project is completed.

Bicycle access is good, and secured bicycle facilities have been planned so **showers and clothes lockers** are a viable measure to enhance bicycle commuting.



Project Profile (optional)

Project Information

Project Name: RKD, Inc.
Project Address: 7777 Taylor Court
Assessor's Parcel No.: 10-123-20
Zoning: BP (Business Park)
Building Size (gross square feet): 150,000
Total # of Potential Employees: 450

Parking Availability

Total number of spaces required: 400
Number of spaces designated for employee parking: 350
Number of spaces to be designated for preferential parking: 20
Other:

Transit Service Availability

Is there transit service to the project site? YES NO
Is transit service planned for the area by the expected completion date of this project? YES NO
Which transit agencies provide service to the proposed site?
Yolo Bus YES NO Route #s unknown
Dial-A-Lift YES NO by arrangement
Other agencies
List type of facilities now available at site:
Currently, there are no bus shelters or bus stops located near the site.

Bicycle Facilities

List type and number of planned storage facilities:
Class I lockers 10
Will there be a charge for bike lockers? YES NO
How much? \$ per
Is the project site accessible by bicycle? YES NO
Explain access roads have bike lanes.
Is the project near an existing or proposed bikeway route? YES NO

Miscellaneous Services, Facilities and Information

Is the project site readily accessible to pedestrians? YES NO Explain: sidewalks are located at the site.
Is the project site near other worksites? YES NO Explain: the site is located in a business park.
Does the project site have easy freeway access? YES NO Explain: adjacent to I-80 on-ramp and off-ramp.
Will project have passenger loading zones to accommodate carpool or vanpool pickup points? YES NO Explain: Employee entrance will be covered with a sheltered waiting area.



STEP 3: SELECT APPROPRIATE TSM MEASURES

Discretionary TSM Measures

With these basic facilities and services, you can develop a program that can be expanded as the actual occupancy rate increases to the full capacity. The following lists the different TSM measures that can be implemented to compliment the services and the facilities which will be available at the project site.

■ Facility-Related Measures

1. Preferential parking spaces for carpools and/or vanpools
2. Restricted parking for SOVs
3. Showers and clothes lockers
4. Passenger loading zones
5. Alternative commute mode information boards
6. Others

■ Service-Related Measures

1. On-site sale of transit passes
2. Informational and promotional programs to promote ridesharing
3. Others

■ Subsidy-Related Programs

1. Free or discounted parking for carpools/vanpools
2. Subsidies for transit passes/tickets
3. Employee travel allowances (direct subsidies to employees not using parking facilities)
4. Direct subsidies to employees who carpool when free parking exists
5. Others

Required TSM Measures

The developer can select among a range of TSM measures. There are, however, TSM measures that major developer TMPs must include. They are as follows:

- Designate facilities to post alternative commute mode information (must also be included in the building plans)
- Delineate provisions for coordinating with appropriate transit agencies to provide current transit information at the time of initial occupancy and on an annual basis
- Delineate provisions for coordinating with the regional ridesharing agency for ridesharing information and applications at the time of initial occupancy and on an annual basis

STEP 4: PREPARE THE WORKPLAN

Once you have determined which of the TSM measures will be included in the TMP, the following information must be included on the TSM workplan:

- ◆ **Required TSM measures**
- ◆ **Discretionary TSM measures**
- ◆ **Detailed description of how each TSM measure will be implemented**
- ◆ **Implementation dates**
- ◆ **Total estimated number of employees at initial occupancy**
- ◆ **Total number of potential employees upon project completion**

A copy of the workplan is provided in Appendix C.

The Workplan

Each TSM measure must have a tentative start-up date. These dates should be based upon the estimated construction schedule of the project. Facility-related measures must have start-up dates as well as completion dates. If unforeseen problems occur with the construction of the project, the dates can be revised with approval of the City TSM Administrator. The TSM measures listed on the workplan should be grouped in two general categories as follows:

(1) Facility-related Measures

Facility-related measures are all construction-related and must be included in the building plans prior to issuance of the building permit. All facilities delineated in the workplan must be available when the first tenant occupies the project site.

(2) Service-related Measures

Service-related measures are all tenant improvement related. The actual implementation of these measures will most likely occur during the occupancy stage. Any subsidies, services and incentives must begin with the occupancy of the first tenant. ETC services must also begin with the occupancy of the first tenant. All service-related measures must go into effect based upon the implementation schedule established in the workplan.

Average Vehicle Ridership (AVR)

The goal of the TSM Ordinance is to achieve an Average Vehicle Ridership (AVR) of 1.5 persons per motor vehicle by 1999. The TSM Ordinance contains the following interim AVR goals:

Year	AVR
1994	1.1
1995	1.2
1996	1.3
1997	1.4
1998	1.5
1999 and thereafter	1.5

As the developer, your goal is to achieve the annual interim goals specified above. Achievement of the AVR will be required when the employee threshold reaches 100 employees. Sacramento Rideshare provides services that can assist you in determining the AVR for the development. The formula for calculating the AVR is included in Appendix D.

AVR Credits

TMA Membership

Five percent (5%) of the annual AVR is credited for joining a Transportation Management Association (TMA). Ten percent (10%) of the annual AVR is credited for joining a TMA if the TMA has been successful in reducing trips among its members by 30%.

On-site Child Care Facilities

On-site child care facilities may receive AVR credit. The credit will only be granted if the employer provides data (e.g. employee survey, child care study, etc.) that sufficiently documents and demonstrates that the facility, in conjunction with other TSM measures, will increase the AVR at the work site. The amount of the credit will be determined by the City TSM Administrator on a project-by-project basis.

STEP 5: FILING YOUR TMP

After you've fully developed your workplan, you are ready to assemble and complete your TMP application package. Once you have assembled your TMP, filing it with the City is a straightforward process. Fill out copies of the TMP forms provided in Appendix C and use the checklist below (also included in Appendix C) to help complete your application package.

Your TMP will be reviewed by City staff. If it is accepted, you will receive a Transportation Management Certificate (TMC). An approved TMP may be amended at the discretion of the City TSM Administrator.

Developer TMP Checklist

Your TMP must include all of the following:

- Letter of Agreement
- Project and ETC Information
- TSM Workplan
- Site Plan/Parking Diagram
- Annual Status Report (For Renewals Only)
- Annual Transportation Survey (For Renewals Only)
- Fees: Check or Money Order payable to the City of West Sacramento

Important: Be sure all elements are included in your package. City Staff can only accept complete plans with fees included.

TRANSPORTATION MANAGEMENT CERTIFICATE (TMC)

Your TMC is valid for one year. The certificate will include the expiration date of your TMP. It is very important that you remember this date—**the City sends no notice of pending renewal dates.** Your TMC need not be posted, but it should be available to the ETC.

ANNUAL STATUS REPORT

To renew your TMC, you must submit an Annual Status Report prior to the expiration date of the previous year's TMC. The Annual Status Report includes the following:

Copy of the previous year's TSM workplan

A copy of the previous year's TSM workplan with the COMPLETION DATE column filled in for each TSM measure must be included. This verifies the dates and results of the TSM measures specified in the workplan for the previous year. If a measure was not implemented within the stated time frame, you must explain why it was not done.

Summary of previous year's TSM workplan

A summary of the previous year's workplan must be provided as well. At a minimum, the summary should highlight the accomplishments of your transportation program and a summary of the facilities, services and subsidies provided to the tenants and employees to encourage alternate commute modes of travel.

Updated TMP

The updated TMP requires all of the elements listed under the Developer TMP Checklist. Additional information must also be provided regarding the following: the previous year's AVR; the AVR projected for the upcoming year; the occupancy rate of the project; and a summary of businesses in the development. A new workplan is completed using the same format. If you believe that certain TSM measures stipulated in the previous TMP are no longer feasible, you must explain why these measures will not be used. The TMP can be amended and modified to reflect current conditions of the development.

Annual Transportation Survey

All major developers are required to conduct an annual Employee Commuter Survey among tenants and employees employed at the development. A summary of this survey must be provided in the Annual Transportation Survey when the TMC is renewed. Keep a record of the results of the survey. The records can be helpful in charting the progress of your transportation program.

Survey Design

A sample survey is included in Appendix C or you may design your own form. Each developer is encouraged to use language which is appropriate to the development. You may want to add questions specific to your development to determine tenant/employee interest in particular services or facilities. The survey must, however, provide the data that is requested on the sample survey. Sacramento Rideshare can assist you in designing your survey form and tabulating the results of the survey. Survey results will also provide the AVR. The names, addresses and project-specific responses are strictly confidential and need not be reported to the City.

Survey Week

Select any five consecutive work days (Monday through Friday) to conduct the survey. The results of the survey will be important in determining the commute habits and patterns of the tenants and employees at your development and the AVR for your development.

Survey Technique

The statistical reliability of a survey depends upon the response rate (completed surveys compared to distributed surveys). The survey will have a higher response rate if you let the tenants and employees know that:

- The survey information is strictly confidential (no names or addresses will be reported to the City or to company management), and is compiled for statistical purposes only.
- The information furnished by employees is used to plan services and formulate the transportation program for the development.

Use attention-getting techniques to be sure that tenants/employees notice the survey. Include a brief introduction of the survey and a definition of ridesharing. Many people will not answer the survey questions correctly because they do not understand what is being asked. A definition of ridesharing will clear up misconceptions about ridesharing and an introduction explaining the purpose and goals of the program will yield a better response. City TSM staff recommends an 80% response rate.

OTHER

Change In Status

Developers who shift from the major to the minor developer designation will not receive a refund of any fees paid to the City.

If the use of the building changes or the property is sold, it is the responsibility of the developer to notify the City TSM Administrator 30 days after the close of escrow as to the change in ownership. The approved TMP will remain in effect unless the new property owner requests a modification of the original TMP based on the new use or current conditions of the work site. If the revised TMP is approved, another TMC will be reissued that will reflect the approval date of the revised TMP.

Changing Employee Transportation Coordinators

City TSM Staff should be notified within thirty (30) days of any changes regarding the ETC.

Part V Appeals & Enforcement

APPEALS AND ENFORCEMENT

Appeals

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Enforcement

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Good Faith Effort

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APPEALS AND ENFORCEMENT

APPEALS

Any decision of the City TSM Administrator may be appealed to the Planning Commission. The appeals process is governed by Chapter 1.08 of the West Sacramento Municipal Code. The appeal should be filed with the City Clerk within fifteen (15) calendar days of the decision of the City TSM Administrator.

The decision of the Planning Commission may be appealed to the City Council within fifteen (15) days of the Commission's decision. The City Council can approve, modify or overrule the action of the Planning Commission.

ENFORCEMENT

Failure to comply with any provision of the TSM Ordinance (see Appendix G for full text) is a violation of the Ordinance. Pursuant to Chapter 1.12 of the Municipal Code, any person or corporation violating any provision of the TSM Ordinance is guilty of an infraction. Violations are punishable by a series of fines in addition to the suspension or revocation of business licenses.

GOOD FAITH EFFORT

The TSM Ordinance includes a "good faith effort" provision that is only applicable to major employers and developers. "Good faith efforts to comply with the Ordinance shall be determined by the City TSM Administrator based on the following criteria:

- Active membership in a TMA
- Documented activities of the ETC
- Completed TMPs and Annual Status Reports on file with the City TSM Administrator
- Other criteria that may be adopted by the City

A Guide To Transportation Systems Management

TSM FORMS

NOTE

The documents included in Appendices B through G can be photocopied.

APPENDIX A

Minor Employer and Developer
TSM Compliance Record

APPENDIX B

Major Employer TMP Package

APPENDIX C

Major Developer TMP Package

APPENDIX D

Average Vehicle Ridership (AVR)
Calculation Worksheet

APPENDIX E

Reduced Emission Vehicle (REV)
Adjustment Worksheet

APPENDIX F

Resources

APPENDIX G

West Sacramento TSM Ordinance

TSM Compliance Record

Appendix A

TSM Compliance Record for Minor Employers and Developers



TSM Compliance Record for Minor Employers and Developers
 City of West Sacramento / Community Development Department

Department Use Only

TSM RECORD NUMBER: _____

APPROVED BY: _____

FEES PAID: _____

EFFECTIVE DATE: _____

EXPIRATION DATE: _____

COMPANY

Company Name: _____

Address: _____

Assessor's Parcel Number: _____

Manager: _____

Telephone: (____) - _____

COMPANY DATA

Number of employees at this site: _____

Check here if there are employees at additional sites and list the number of employees and the address(es) of additional site(s) below.

ADDITIONAL WORK SITES

Address: _____

Assessor's Parcel Number: _____

Manager: _____

Telephone: (____) - _____

Address: _____

Assessor's Parcel Number: _____

Manager: _____

Telephone: (____) - _____

The City of West Sacramento TSM Ordinance requires the implementation of a **TSM Information Program** as follows:

1. Post and/or distribute information on commute alternatives such as carpooling, transit, bicycling and vanpooling at the work site.
2. Coordinate with local and regional ridesharing agencies for distributing transit information, ridesharing applications and other information on commute alternatives at the work site.
3. Provide new employees (and all other employees at least once a year) with commute alternative information.

AGREEMENT:

My company agrees to implement a TSM Information Program in accordance with the City of West Sacramento TSM Ordinance. The company also agrees to renew this document on an annual basis prior to or on the anniversary date of the first submission.

 (Print name)

 (Title)

 (Signature)

 (Date)

NOTE: This TSM Compliance Record is valid only for the company and additional work sites shown on this document. **Minor Employer/Developer** **Community Development**



Major Employer TMP Package

Appendix B

COMPANY PROFILE

(For employer use only; not required by the City)

EMPLOYEE COMMUTER SURVEY

(For employer use)

EMPLOYER TMP CHECKLIST

LETTER OF AGREEMENT

COMPANY AND ETC INFORMATION

ANNUAL TRANSPORTATION SURVEY

TSM WORKPLAN

ANNUAL STATUS REPORT



Company Profile (optional)

TYPE OF BUSINESS

(Check one)

- RETAIL TRADE
- PROFESSIONAL HEALTH CARE SERVICES
- MARKETING / ADVERTISING / CONSULTING SERVICE
- RESEARCH AND DEVELOPMENT
- MANUFACTURING
- WHOLESALE TRADE
- TRANSPORTATION / TRUCKING
- WAREHOUSE / DISTRIBUTION
- BANKING / FINANCE
- TELECOMMUNICATIONS
- GOVERNMENT
(City, County, State, Federal)
- OTHER

TYPES OF WORK

* (Note that in transportation management, employees are classified not by duties but by work environment, such as office, retail, or production worker. These categories do not reflect actual work performed.)

Office Worker: An employee who normally works in an office at a specified location (regardless of work performed).

Production Line Worker: An employee who works in a factory or on a manufacturing or assembly line.

Retail Salesperson: An employee whose work location is inside a retail store.

Outside Sales: An employee who travels to the client's worksite, and whose work schedule is based on the needs of the customer.

On-Call Personnel: An employee who may have set hours and a worksite to report to, but whose work is performed at various locations. For example: police, firefighters, emergency medical personnel and repair persons.

Delivery or Truck Driver: An employee who drives a car, van, or truck to make deliveries & pickups, regardless of the type of materials being transported. This includes the postal service, material carriers, and delivery trucks.

Others not listed: Describe what is done and where the work is performed.

BUSINESS SPECIFICS

This form will help you select TSM measures that are compatible with the type of work the employees perform.*

1. On the list at the left, circle the category most appropriate for your business.
2. Based on this category, describe your business:

3. Number of employees _____

☞ (Do not include the employees of other companies that may be performing contracted work for your worksite, e.g., a janitorial service, delivery services, or temporary help from an employment agency.)

4. Business hours (Monday - Friday) _____

5. Employee work hours _____

☞ (Indicate overall employee work schedule, including multiple shifts.)

6. Number of worksites _____

☞ (If your company has multiple worksites in the city, list the address and number of employees at each site.)

Address	Number of employees
_____	_____
_____	_____
_____	_____
_____	_____

7. _____ Based on the list on the left, list the number of employees performing each type of work listed.

- Office Worker
- Production Line Worker
- Retail Salesperson
- Outside Sales
- On-Call Personnel
- Delivery or Truck Driver
- Other _____
- Other _____
- Other _____
- Other _____

EMPLOYER TMP

Company Profile (optional)

FACILITIES

This section will help you select TSM measures appropriate for your company's facilities.
(Use additional worksheets for each separate work site, if applicable.)

- YES NO
- Is parking available at or near your work site? (Don't include parking in public lots or on the street.)
 - Is it owned, leased or controlled directly by your company?
 - Is your company charged for any parking space allotments? If yes, how much per month or per space? _____
 - Do you subsidize the cost of your employee parking by charging a reduced rate or absorbing the cost?
 - How much do employees pay for parking per month? _____
If no parking is available at your work site, where do employees park? _____
 - Is there bus service at or near your work site? If yes, please list the routes and service providers:

 - Are there showers and clothes lockers at your work site? If yes, are they available to employees who walk or bicycle to work? YES NO
 - Is there secure bicycle parking available to employees who bicycle to work?

EXISTING BENEFITS, SERVICES, & SUBSIDIES

The measures listed in this section are your existing TSM measures. They should also be listed in your Transportation Management Plan (TMP). (Use additional worksheets for each separate work site, if applicable.)

- YES NO
- Does your company offer flexible work hour management (flextime, staggered work shifts, or reduced work weeks)? If yes, please explain:

 - Does your company offer transportation related subsidies (reduced or no cost parking spaces, transit subsidies, carpool/vanpool or buspool subsidies)? If yes, please describe:

 - Does your company offer preferential parking to carpoolers or vanpoolers? If yes, what makes it preferential?

 - Does your company have a ridesharing program in effect now? If yes, list services provided to the employees:

 - List any other services or benefits that you consider to be a supporting measure for alternative commute mode usage.

CITY OF WEST SACRAMENTO—EMPLOYEE COMMUTER SURVEY

EMPLOYER: _____

EMPLOYER #: _____

Please complete all questions. This information will be used to assess the transportation needs of employees and to develop improvements to commuter programs.

1 HOME ZIP CODE

2 ON WHICH FREEWAYS DO YOU COMMUTE? _____ (99, 50, 80, ETC.)

3 MAJOR CROSS-STREETS NEAR HOME

4 HOW FAR FROM WORK DO YOU LIVE? (ONE WAY MILEAGE)

<input type="checkbox"/> 0 - 0.9 miles	<input type="checkbox"/> 1.0 - 2.9 miles	<input type="checkbox"/> 3.0 - 5.0 miles
<input type="checkbox"/> 5.1 - 9.9 miles	<input type="checkbox"/> 10.0 - 14.9 miles	<input type="checkbox"/> 15.0 - 19.9 miles
<input type="checkbox"/> 20.0 - 24.9 miles	<input type="checkbox"/> 25 or more miles	

5 IS THERE A TRANSIT STOP WITHIN ONE-HALF MILE OF YOUR...

HOME? Y N

WORK? Y N

ACTUAL ONE-WAY MILES

6 PLEASE COMPLETE THE FOLLOWING FOR THE WEEK OF: _____	MODES										DID NOT WORK			
	CARPPOOL DRIVER	CARPPOOL RIDER	VANPOOL DRIVER	VANPOOL RIDER	BUS/TRANSIT	BICYCLE	WALK	TELECOMMUTE/WORK AT HOME	DRIVE ALONE	OTHER COMMUTE METHOD	WEEKEND/DAY OFF	1/40 DAY OFF	9/80 DAY OFF	PAID ABSENCE (Sick, Vacation)
DAYS/HOURS														
SUNDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
MONDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
TUESDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
WEDNESDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
THURSDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
FRIDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
SATURDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													

7 WHAT IS PREVENTING YOU FROM SHARING A RIDE OR TAKING THE BUS? (CHECK THE MOST IMPORTANT REASON)

<input type="checkbox"/> My hours are too irregular.	<input type="checkbox"/> It's difficult to find others to carpool with.
<input type="checkbox"/> My hours are too inflexible.	<input type="checkbox"/> I prefer to drive my own car.
<input type="checkbox"/> I need my car for work.	<input type="checkbox"/> I have to take my children to school or daycare.
<input type="checkbox"/> I need my car for personal business.	<input type="checkbox"/> Bus service isn't adequate.
<input type="checkbox"/> I cannot get home in an emergency.	<input type="checkbox"/> I am currently carpooling and/or taking the bus.
<input type="checkbox"/> I don't like to depend on others.	<input type="checkbox"/> Other. _____

8 WHICH OF THE FOLLOWING WOULD YOU USE IF AVAILABLE?

- Transit
- Improved transit services
- On-site transit pass sales
- Employer subsidized transit passes
- Alternate work hours
- Secure bicycle parking
- Shower and locker facilities
- Guaranteed ride home
- Telecommuting

EMPLOYER TMP

Employer TMP Checklist

POLICY

City TSM Staff cannot accept your Transportation Management Plan unless your program package includes all of the items included on the checklist.

- Letter of Agreement
- Company and ETC Information
- Annual Transportation Survey
- TSM Workplan
- Site Plan / Parking Diagram
- Annual Status Report *(for renewals only)*
- Fees: Check or Money Order
(Make payable to the City of West Sacramento)

Sample Letter of Agreement

(Name of Company)

City of West Sacramento
Community Development Department
1951 South River Road
West Sacramento, CA 95691

RE:

To the TSM Administrator:

The Transportation Management Plan for _____ (Name of Company) _____ is hereby submitted for your review and approval.

I understand that Ordinance 92-11 relating to Transportation Systems Management for the City of West Sacramento requires my company to file such a plan annually. I hereby acknowledge, under penalty of the law, that the information contained within this document is true, and that to the best of my ability, _____ (Name of Company) _____ will implement necessary policy changes and provide the services, subsidies and facilities as designated within this Transportation Management Plan.

(Signature)

(Title)

(Date)



Company and ETC Information

COMPANY

Company Name

Date

Business Address

Assesor's Parcel Number

Mailing Address (If Different)

() -
Telephone Number

Name of Manager

Type of Business

Number of Workshifts

Business Hours
(Include all shifts)

SURVEY DATA (Include data for all worksites)

Total Number of Employees

Number of Survey Respondents

Survey Response Rate

%

Number of Morning
Commute Period Employees *

Number of Morning Commute
Period Survey Respondents *

Morning Commute Period
Survey Response Rate *

%

ADDITIONAL WORKSITES

Business Address

Total Number of
Employees

Number of Morning Commute
Period Employees *

Business Address

Total Number of
Employees

Number of Morning Commute
Period Employees *

Business Address

Total Number of
Employees

Number of Morning Commute
Period Employees *

Business Address

Total Number of
Employees

Number of Morning Commute
Period Employees *

ETC INFORMATION

Name

Business Address

Mailing Address (If Different)

() -
Telephone Number

* Employees that report to work between 7:00 AM and 8:30 AM, Monday through Friday.

ALL SURVEY RESPONDENTS

COMMUTE MODE SPLIT

COMMUTE MODE	# of employees	% of employees
▶ SOV		
▶ Carpool: driver		
▶ Carpool: passenger		
▶ Transit: rail / bus		
▶ Vanpool: driver		
▶ Vanpool: passenger		
▶ Bicycle		
▶ Walk		
▶ Buspool: driver		
▶ Buspool: passenger		
▶ Work at home / telecommuted		
▶ Other		
Total ▶		▶ 100%

MILEAGE FREQUENCY DISTRIBUTION

MILES TRAVELED	# of employees	% of employees
▶ 0 - 0.9		
▶ 1.0 - 2.9		
▶ 3.0 - 5.0		
▶ 5.1 - 9.9		
▶ 10.0 - 14.9		
▶ 15.0 - 19.9		
▶ 20.0 - 24.9		
▶ 25 or more		
Total ▶		▶ 100%

RESIDENCE OF EMPLOYEES

PLACE OF RESIDENCE	# of employees	% of employees
▶ West Sacramento		
▶ Woodland		
▶ Davis		
▶ Winters		
▶ Other Yolo County Areas		
▶ Yuba City / Marysville		
▶ Sacramento		
▶ County of Sacramento		
▶ Other		
Total ▶		▶ 100%

MORNING COMMUTE PERIOD RESPONDENTS ONLY

COMMUTE MODE SPLIT

COMMUTE MODE	# of employees	% of employees
▶ SOV		
▶ Carpool: driver		
▶ Carpool: passenger		
▶ Transit: rail / bus		
▶ Vanpool: driver		
▶ Vanpool: passenger		
▶ Bicycle		
▶ Walk		
▶ Buspool: driver		
▶ Buspool: passenger		
▶ Work at home / telecommuted		
▶ Other		
Total ▶		▶ 100%

MILEAGE FREQUENCY DISTRIBUTION

MILES TRAVELED	# of employees	% of employees
▶ 0 - 0.9		
▶ 1.0 - 2.9		
▶ 3.0 - 5.0		
▶ 5.1 - 9.9		
▶ 10.0 - 14.9		
▶ 15.0 - 19.9		
▶ 20.0 - 24.9		
▶ 25 or more		
Total ▶		▶ 100%

RESIDENCE OF EMPLOYEES

PLACE OF RESIDENCE	# of employees	% of employees
▶ West Sacramento		
▶ Woodland		
▶ Davis		
▶ Winters		
▶ Other Yolo County Areas		
▶ Yuba City / Marysville		
▶ Sacramento		
▶ County of Sacramento		
▶ Other		
Total ▶		▶ 100%



AVR INFORMATION

Previous year's AVR: _____
(For renewals only)

Current AVR: _____

Annual projected AVR: _____

TSM MEASURES

TSM MEASURE	START DATE	COMPLETION DATE
REQUIRED MEASURES		
▶ TSM Information Program		
Post Information		
Distribute Information		
Flyers / Brochures		
Transit / Rideshare Information		
Rideshare Applications		
Newly Hired Employee's Information		
DISCRETIONARY MEASURES		
▶ Carpool Program		
Preferential Parking		
Parking Subsidies		
Other		
▶ Vanpool Program		
Preferential Parking		
Parking Subsidies		
Other		
▶ Transit Program		
Transit Subsidies		
On-site Sale		
Other		
▶ Incentive Program		
Flexible Work Hours		
Telecommuting		
Employee Travel Allowance		
Other		
▶ Others		
Bicycle Facilities		
Showers and Lockers		
Guaranteed Ride Home		
Reduced Emission Vehicles		
On-Site Child Care Facilities		
TMA Membership		
Clean Fuels Program (fleet vehicles)		

Annual Status Report

- Letter of Agreement**
- Company and ETC Information**
- Annual Transportation Survey**
- TSM Workplan**
Attach new workplan. (If TSM measures included in the previous workplan will not be included in the new workplan, please explain why these measures will not be used.)
- Site Plan / Parking Diagram**
- Annual Status Report**
Attach copy of the previous year's TSM workplan with the COMPLETION DATE column filled in for each TSM measure. Provide a summary of the previous year's TSM workplan.
- Fees: Check or Money Order**
Make payable to the City of West Sacramento

Major Developer TMP Package

Appendix C

PROJECT PROFILE
(For employer use only; not required by the City)

DEVELOPER TMP CHECKLIST

LETTER OF AGREEMENT

PROJECT AND ETC INFORMATION

TSM WORKPLAN

ANNUAL STATUS REPORT

ANNUAL TRANSPORTATION SURVEY

EMPLOYEE COMMUTER SURVEY (For Developer Use)



Project Information

Project Profile (optional)

Project Name : _____
Project Address: _____
Assessor's Parcel No.: _____
Zoning: _____
Building Size (gross square feet): _____
Total # of Potential Employees: _____

Parking Availability

Total number of spaces required: _____

Number of spaces designated for employee parking: _____

Number of spaces to be designated for preferential parking: _____

Other: _____

Transit Service Availability

Is there transit service to the project site? YES NO

Is transit service planned for the area by the expected completion date of this project? YES NO

Which transit agencies provide service to the proposed site?

Yolo Bus YES NO Route #s _____

Dial-A-Lift YES NO

Other agencies _____

List type of facilities now available at site:

Bicycle Facilities

List type and number of planned storage facilities:

Will there be a charge for bike lockers?

YES NO

How much? \$ _____ per

Is the project site accessible by bicycle?

YES NO

Explain _____

Is the project near an existing or proposed bikeway route?

YES NO

Miscellaneous Services, Facilities and Information

Is the project site readily accessible to pedestrians?

YES NO Explain: _____

Is the project site near other worksites?

YES NO Explain: _____

Does the project site have easy freeway access?

YES NO Explain: _____

Will project have passenger loading zones to accommodate carpool or vanpool pickup points?

YES NO Explain: _____

DEVELOPER TMP

Developer TMP Checklist

POLICY

City TSM Staff cannot accept your Transportation Management Plan unless your program package includes all of the items included on the checklist.

Letter of Agreement

Project and ETC Information

TSM Workplan

Site Plan / Parking Diagram

Annual Status Report *(for renewals only)*

Annual Transportation Survey *(for renewals only)*

Fees: Check or Money Order
(Make payable to the City of West Sacramento)

Sample Letter of Agreement

(Developer)

City of West Sacramento
Community Development Department
1951 South River Road
West Sacramento, CA 95691

RE:

To the TSM Administrator:

The Transportation Management Plan for _____ (Developer) _____ is hereby submitted for your review and approval.

I understand that Ordinance 92-11 relating to Transportation Systems Management for the City of West Sacramento requires my company to file such a plan annually. I hereby acknowledge, under penalty of the law, that the information contained within this document is true, and that to the best of my ability, _____ (Developer) _____ will implement necessary policy changes and provide the services, subsidies and facilities as designated within this Transportation Management Plan.

(Signature)

(Title)

(Date)



Project and ETC Information

Project Information

Date _____

Name of Property Owner _____

Mailing Address _____

Project Name _____

Project Address _____

() -
Telephone Number

- -
Assessor's Parcel Number

Zoning	Building Size (gross sq. ft.)	# of Potential Employees
--------	----------------------------------	-----------------------------

Building Uses (if available):

Office:	_____ (sq. ft.)	_____ # of Potential Employees
Commercial:	_____ (sq. ft.)	_____ # of Potential Employees
Industrial:	_____ (sq. ft.)	_____ # of Potential Employees

ETC Information

Name _____

Business Address _____

Mailing Address (If Different) _____

() -
Telephone Number

Complete the following information section to renew the TMC

_____ Total # of Current Employees	_____ Total # of Potential Employees	_____ % Occupancy Rate
_____ Total # of Current Employees	_____ # of Survey Respondents	_____ % Survey Response Rate
_____ # of Morning Commute * Period Employees	_____ # of Morning Commute * Period Survey Respondents	_____ % Survey Response Rate

For each business located at the project site, please provide the following information:
(Use additional sheets if necessary)

Business Name	Type of Business	# of Employees	# of Workshifts	Business Hours
_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____ to _____

* Employees that report to work between 7:00 AM and 8:30 AM, Monday through Friday.



AVR INFORMATION

Current AVR: _____
 (For renewals only)

Previous year's AVR: _____
 (For renewals only)

Annual projected AVR: _____

TSM MEASURES

TSM MEASURE	START DATE	COMPLETION DATE
FACILITY-RELATED MEASURES		
▶ Facilities for Posting Information (required measure)		
Bicycle Facilities		
Showers and Lockers		
Preferential Parking		
Passenger Loading Zones		
On-site Child Care Facilities		
Other		
SERVICE-RELATED MEASURES		
▶ Coordination With Transit Agency (required measure)		
▶ Coordination with Sacramento Rideshare (required measure)		
TSM Information Program		
Post Information		
Distribute Information		
Flyers / Brochures		
Transit / Rideshare Information		
Rideshare Applications		
New Tenant's Information		
Flexible Work Hours		
Telecommuting		
Employee Travel Allowance		
On-site Sale of Transit Passes		
Preferential Parking Assignments		
Parking Subsidies		
Transit Subsidies		
Employee Travel Allowance		
Guaranteed Ride Home		
Telecommuting		
TMA Membership		
Other ()		

Agreement

I, the developer, accept that all construction-related TSM measures must be included in the building plans prior to the issuance of pertinent building permit(s). I, the developer, also accept that all service-related TSM measures (subsidies, services, incentives, etc.) must be available and begin with the occupancy of the first tenant.

Developer's Signature _____

Date _____

Facility-related TSM measures should be based on the project's construction schedule.

The implementation dates of service-related TSM measures should be based on tenant improvements and the occupancy of the first tenant.

Letter of Agreement

Project and ETC Information

Annual Transportation Survey

TSM Workplan

Attach new workplan. (If certain TSM measures listed in the previous workplan are no longer feasible, please explain why these measures will not be used.)

Site Plan / Parking Diagram

Annual Status Report

Attach copy of the previous year's TSM workplan with the COMPLETION DATE column filled in for each TSM measure. This verifies the dates and results of the TSM measures specified in the workplan for the previous year. If a measure was not implemented within the stated time frame, you must explain why it was not done. A summary of the previous year's workplan must be provided as well.

Fees: Check or Money Order

Make payable to the City of West Sacramento

Survey week: _____

Annual Transportation Survey

ALL SURVEY RESPONDENTS

COMMUTE MODE SPLIT

COMMUTE MODE	# of employees	% of employees
▶ SOV		
▶ Carpool: driver		
▶ Carpool: passenger		
▶ Transit: rail / bus		
▶ Vanpool: driver		
▶ Vanpool: passenger		
▶ Bicycle		
▶ Walk		
▶ Buspool: driver		
▶ Buspool: passenger		
▶ Work at home / telecommuted		
▶ Other		
Total ▶		▶ 100%

MILEAGE FREQUENCY DISTRIBUTION

MILES TRAVELED	# of employees	% of employees
▶ 0 - 0.9		
▶ 1.0 - 2.9		
▶ 3.0 - 5.0		
▶ 5.1 - 9.9		
▶ 10.0 - 14.9		
▶ 15.0 - 19.9		
▶ 20.0 - 24.9		
▶ 25 or more		
Total ▶		▶ 100%

RESIDENCE OF EMPLOYEES

PLACE OF RESIDENCE	# of employees	% of employees
▶ West Sacramento		
▶ Woodland		
▶ Davis		
▶ Winters		
▶ Other Yolo County Areas		
▶ Yuba City / Marysville		
▶ Sacramento		
▶ County of Sacramento		
▶ Other		
Total ▶		▶ 100%

MORNING COMMUTE PERIOD RESPONDENTS ONLY

COMMUTE MODE SPLIT

COMMUTE MODE	# of employees	% of employees
▶ SOV		
▶ Carpool: driver		
▶ Carpool: passenger		
▶ Transit: rail / bus		
▶ Vanpool: driver		
▶ Vanpool: passenger		
▶ Bicycle		
▶ Walk		
▶ Buspool: driver		
▶ Buspool: passenger		
▶ Work at home / telecommuted		
▶ Other		
Total ▶		▶ 100%

MILEAGE FREQUENCY DISTRIBUTION

MILES TRAVELED	# of employees	% of employees
▶ 0 - 0.9		
▶ 1.0 - 2.9		
▶ 3.0 - 5.0		
▶ 5.1 - 9.9		
▶ 10.0 - 14.9		
▶ 15.0 - 19.9		
▶ 20.0 - 24.9		
▶ 25 or more		
Total ▶		▶ 100%

RESIDENCE OF EMPLOYEES

PLACE OF RESIDENCE	# of employees	% of employees
▶ West Sacramento		
▶ Woodland		
▶ Davis		
▶ Winters		
▶ Other Yolo County Areas		
▶ Yuba City / Marysville		
▶ Sacramento		
▶ County of Sacramento		
▶ Other		
Total ▶		▶ 100%

CITY OF WEST SACRAMENTO—EMPLOYEE COMMUTER SURVEY

EMPLOYER: _____

EMPLOYER #: _____

Please complete all questions. This information will be used to assess the transportation needs of employees and to develop improvements to commuter programs.

1 HOME ZIP CODE

2 ON WHICH FREEWAYS DO YOU COMMUTE? _____ (99, 50, 80, ETC.)

3 MAJOR CROSS-STREETS NEAR HOME

4 HOW FAR FROM WORK DO YOU LIVE? (ONE WAY MILEAGE)

0 - 0.9 miles 1.0 - 2.9 miles 3.0 - 5.0 miles
 5.1 - 9.9 miles 10.0 - 14.9 miles 15.0 - 19.9 miles
 20.0 - 24.9 miles 25 or more miles

5 IS THERE A TRANSIT STOP WITHIN ONE-HALF MILE OF YOUR...

HOME? Y N

WORK? Y N

ACTUAL ONE-WAY MILES

6 PLEASE COMPLETE THE FOLLOWING FOR THE WEEK OF: _____

DAYS/HOURS	MODES										DID NOT WORK			
	CARPOOL DRIVER	CARPOOL RIDER	VANPOOL DRIVER	VANPOOL RIDER	BUS/TRANSIT	BICYCLE	WALK	TELECOMMUTE/WORK AT HOME	DRIVE ALONE	OTHER COMMUTE METHOD	WEEKEND/DAY OFF	1/40 DAY OFF	9/80 DAY OFF	PAID ABSENCE (Sick, Vacation)
SUNDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
MONDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
TUESDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
WEDNESDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
THURSDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
FRIDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													
SATURDAY - ARRIVED <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>	<input type="checkbox"/>													

7 WHAT IS PREVENTING YOU FROM SHARING A RIDE OR TAKING THE BUS? (CHECK THE MOST IMPORTANT REASON)

My hours are too irregular. It's difficult to find others to carpool with.
 My hours are too inflexible. I prefer to drive my own car.
 I need my car for work. I have to take my children to school or daycare.
 I need my car for personal business. Bus service isn't adequate.
 I cannot get home in an emergency. I am currently carpooling and/or taking the bus.
 I don't like to depend on others. Other: _____

8 WHICH OF THE FOLLOWING WOULD YOU USE IF AVAILABLE?

Transit
 Improved transit services
 On-site transit pass sales
 Employer subsidized transit passes
 Alternate work hours
 Secure bicycle parking
 Shower and locker facilities
 Guaranteed ride home
 Telecommuting

Average Vehicle Ridership (AVR) Calculation Worksheet

Appendix D

AVERAGE VEHICLE RIDERSHIP (AVR) CALCULATION WORKSHEET (Page 1 of 2)

Step 1: Morning Commute Period Trips Calculation

- (a) Total number of morning commute period employees = _____
- (b) Multiply line a by 5 (days per week) = _____ **Total Trips**
-

Step 2: Vehicle Calculation

To determine the number of vehicles arriving at the work site during the morning commute period, count the number of people who drive alone, carpool, vanpool, etc.

	Mon	Tue	Wed	Thu	Fri.	Subtotal		Total					
(a) Drive alones	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 1 =	_____
(b) Carpools													
2-person	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 2 =	_____
3-person	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 3 =	_____
4-person	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 4 =	_____
5-person	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 5 =	_____
(c) Vanpools	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 11 =	_____
(d) Bicycles	_____	+	_____	+	_____	+	_____	+	_____	=	_____	× 0	_____
(e) Transit	_____	+	_____	+	_____	+	_____	+	_____	=	_____	× 0	_____
(f) Walk	_____	+	_____	+	_____	+	_____	+	_____	=	_____	× 0	_____
(g) Buspool	_____	+	_____	+	_____	+	_____	+	_____	=	_____	× 0	_____
(h) Telecommute	_____	+	_____	+	_____	+	_____	+	_____	=	_____	× 0	_____
(i) Non-respondents and other ¹	_____	+	_____	+	_____	+	_____	+	_____	=	_____	divide by 1 =	_____
(j) Total lines a through i :												=	_____ Total Vehicles

Step 3: Vehicle Calculation Adjustments

- (a) Reduced-Emission Vehicle Adjustment
 (Provide the total from the Reduced-Emission Vehicle Adjustment Worksheet. If none, go to Step 4. If adjustments are included, skip Step 4 and go to Step 5.) = _____ **Total Vehicles**

AVERAGE VEHICLE RIDERSHIP (AVR) CALCULATION WORKSHEET (Page 2 of 2)

Step 4: AVR Calculation

- (a) Morning Commute Period Trips Total (Step 1 total) = _____
- (b) Vehicle Calculation Total (Step 2 total) = _____
- (c) Divide line a by line b = _____ **AVR Total**
-

Step 5: AVR Calculation (includes adjustments for reduced-emission vehicles)

- (a) Morning Commute Period Trips Total (Step 1 total) = _____
- (b) Reduced-Emission Vehicle Calculation Total (Step 3 total) = _____
- (c) Divide line a by line b = _____ **AVR Total**

¹All survey non-respondents and those who indicate "other" for commute mode are counted as drive alone commutes.

Reduced-Emission Vehicle (REV) Adjustment Worksheet

Appendix E

Appendix F

Appendix F contains names, addresses and phone numbers of organizations who can help you develop and implement your transportation program.

CITY SERVICES

RIDESHARING

TRANSIT SERVICES

OTHER SERVICES

**CITY SERVICES**

For assistance, forms or other information regarding the City's TSM Ordinance, contact the Community Development Department.

COMMUNITY DEVELOPMENT DEPARTMENT (916) 373-5854

Office Hours: 8:00 am to 5:00 pm
Monday through Friday

Office Address: Community Development Department
1951 South River Road
West Sacramento, CA 95691

TRANSIT SERVICES**YOLO BUS (916) 661-0816**

Transit Director
Yolo County Transit Authority
1495 East Street, Suite A
Woodland, CA 95695

YOLO BUS provides bus service within West Sacramento and an inter-city service linking West Sacramento to Woodland, Davis and Downtown Sacramento. Transfers from YOLO BUS are valid on Regional Transit.

REGIONAL TRANSIT (916) 321-2877

Customer Service 321-2877
Marketing Department 321-2800
1400 29th Street
Sacramento, CA 95816-6406

Regional Transit serves the major metropolitan area of Sacramento with bus and light rail service.

WEST SACRAMENTO DIAL-A-LIFT (916) 371-2255

Information and Reservations
2599 Evergreen Avenue
West Sacramento, CA 95691

West Sacramento Dial-A-Lift provides door-to-door accessible service for senior and disabled residents of West Sacramento. When Dial-A-Lift is not operating or is full, registered clients who are able to ride in a taxi are eligible for a subsidized taxi ride.

OTHER SERVICES

- ◆ **For information** about telecommuting, vanpooling, Transportation Management Associations, and Employee Transportation Coordinator Training, contact **Sacramento Rideshare at (916) 445-POOL.**
- ◆ **The City of West Sacramento currently has one existing TMA.**
West Sacramento Transportation Management Association
1414 Merkley Avenue, Suite 1
West Sacramento, CA 95691

(continued on following page)

RIDESHARING
SACRAMENTO RIDESHARE (916) 445- POOL

For information about telecommuting, vanpooling, Transportation Management Associations, and Employee Transportation Coordinator Training, contact **Sacramento Rideshare**.

Sacramento Rideshare is the regional ridesharing agency for the Sacramento metropolitan area. As part of the California Department of Transportation, Sacramento Rideshare promotes the planning, development, implementation, administration, and evaluation of transportation systems management activities which decrease traffic congestion by improving the efficiency and effectiveness of our highway and street systems. Sacramento Rideshare gives direct assistance to individuals, employers and developers who wish to implement TSM strategies.

SERVICES PROVIDED BY SACRAMENTO RIDESHARE
For Individuals:

- ◆ Computer matching for carpools and vanpools
- ◆ Vanpool formation assistance
- ◆ Park & Ride lot information
- ◆ Bicycle commuting information
- ◆ Transit route and schedule information

SACRAMENTO RIDESHARE
(916) 445- POOL
1304 "O" Street
3rd Floor
Sacramento, CA 95814

For Employers:

Technical assistance with the establishment of company-sponsored ridesharing programs, including the following:

- ◆ Computer matching of employees for carpools and vanpools
- ◆ Development and administration of employee vanpool programs
- ◆ Work hour management strategies to encourage ridesharing
- ◆ Promotional materials and activities to inform employees about ridesharing
- ◆ Development of bicycle commuting support facilities
- ◆ Comprehensive training workshops for Employee Transportation Coordinators
- ◆ Transportation Management Association development and assistance

For Developers:

- ◆ Technical assistance regarding transportation systems management (including ridesharing and its supporting strategies)

West Sacramento TSM Ordinance

Appendix G

ORDINANCE NO. 92-11
AN ORDINANCE OF THE CITY OF WEST SACRAMENTO RELATING TO
TRANSPORTATION SYSTEMS MANAGEMENT

The City Council of the City of West Sacramento does ordain as follows:

Section 1. Authority. The City Council enacts this Ordinance in accordance with the authority granted to cities by Article XI, section 7 of the California Constitution.

Section 2. Additions. There is hereby added to Section 17 of the Municipal Code of the City of West Sacramento Zoning Ordinance, which is to read as follows:

17.67.000 TRANSPORTATION SYSTEMS MANAGEMENT

17.67.010 PURPOSE AND OBJECTIVES

The purpose and intent of the Transportation Systems Management (hereinafter "TSM") Ordinance is to establish TSM requirements for Employers and Developers within the City of West Sacramento. These requirements will promote Alternative Commute Modes and reduce the total number of vehicle trips as part of a program to achieve the following objectives:

- A. Increase public awareness and use of transportation alternatives to the Single-Occupant Vehicle.
- B. Maximize and promote Alternative Commute Modes.
- C. Reduce the total number of Single-Occupant Vehicle trips associated with home-to-work and work-to-home commuting which will result in a reduction of traffic congestion and vehicle emissions.
- D. Reduce present and future motor vehicle emissions as a contribution towards complying with federal and state ambient air quality standards.
- E. Achieve an Average Vehicle Ridership of 1.5 persons per motor vehicle at all Work Sites with 100 or more Employees by the year 1999.
- F. Implement General Plan Policy C.3 of the Transportation and Circulation Element which requires preparation of a TSM Ordinance applicable to major development projects and employers.

17.67.020 DEFINITIONS

The following terms are defined for purposes of this Chapter:

1. "Alternative Commute Mode" shall mean a trip for which the transportation method is other than a single-occupant vehicle.

2. "Alternative Work Schedule" shall mean a work schedule that alters the traditional forty-hour work week including, but not limited to, compressed work weeks, staggered work hours and flextime.
3. "Annual Status Report" shall mean a report prepared by the Employer or Developer and submitted in conjunction with the Transportation Management Plan that describes the actions taken to implement the Transportation Management Plan, the results during the reporting year, and any changes to the Transportation Management Plan proposed for the upcoming year. The Annual Status Report shall be required for renewal of the Transportation Management Certificate.
4. "Average Vehicle Ridership" (hereinafter "AVR") shall mean the number of Employees commuting to a work site during the Morning Commute Period, totaled over five consecutive weekdays, divided by the number of vehicles those Employees drive, totaled over the same five consecutive weekdays. Bicycles, transit vehicles, buses serving several Work Sites, and cars stopping on route to other Work Sites shall be excluded from the vehicles counted. For the purpose of calculating Average Vehicle Ridership, Reduced Emission Vehicles shall be counted per their Base Vehicle Equivalency Factor.
5. "Base Vehicle" shall mean any vehicle that is not a California Air Resources certified Reduced Emission Vehicle.
6. "Base Vehicle Equivalence Factor" shall mean the multiplier provided by the California Air Resources Board that proportionally equates a Reduced Emission Vehicle to a base vehicle in terms of non-methane organic gas emissions.
7. "Carpool" shall mean a motor vehicle occupied by two or more Employees traveling to and/or from work.
8. "City" shall mean the City of West Sacramento.
9. "City Council" shall mean the City Council of the City of West Sacramento.
10. "Commute" shall mean a home-to-work or work-to-home trip.
11. "Complex" shall mean either:
 - (1) Any non-residential use or development which is operated as a unit, whether in common or separate ownership. To be a "complex", two or more of the following conditions must be met:
 - (a) It is known by a common name.
 - (b) It is governed by a common set of covenants, conditions, and restrictions.
 - (c) It was approved or is to be approved as an entity by the City.
 - (d) It is covered either by a single subdivision or by a single parcel map.
 - (f) It is operated by a single management.
 - (g) It shares common private parking.

- (2) Any multi-tenant, non-residential building or contiguous group of buildings under common ownership, which is not covered by any of the aforementioned conditions.
12. "Employee" shall mean any worker hired by any Employer, including any part-time worker working 20 hours or more weekly and seasonal workers, but excluding any independent contractors hired by the Employer. Seasonal workers shall be included if they work more than 90 days per year.
 13. "Employee Transportation Coordinator" shall mean an individual trained and designated to promote and implement TSM strategies at the Work Site.
 14. "Employer" shall mean any public or private entity, including the City, with a permanent place of business or Work Site in the City. The maximum number of Employees on the largest shift shall determine the size of the Employer. Employer shall not include contractors with no permanent place of business in the City and other businesses with no permanent Work Site in the City.
 15. "Existing Complex" shall mean a Complex that has been issued a building permit for the building structure prior to the effective date of the TSM Ordinance.
 16. "Flextime" shall mean a work schedule that allows the Employee to adjust work hours outside of the Employer's established start and stop time.
 17. "Morning Commute Period" shall mean the morning commute hours from 7:00 AM to 8:30 AM during weekdays.
 18. "New Complex" shall mean a Complex that has been issued a building permit for the building structure after the effective date of the TSM Ordinance.
 19. "Planning Commission" shall mean the Planning Commission of the City of West Sacramento.
 20. "Reduced Emission Vehicle" shall mean a motor vehicle that is certified by the California Air Resources Board as any of the following:
 - Transitional Low Emission Vehicle (TLEV)
 - Low Emission Vehicle (LEV)
 - Ultra-Low Emission Vehicle (ULEV)
 - Zero Emission Vehicle (ZEV)
 21. "Ridesharing" shall mean the cooperative effort of two or more Employees traveling together.
 22. "Shuttle Bus" shall mean private or public transportation service providing short distance, fixed route passenger service, limited to specific destinations and connections, with parking lots and/or existing Transit services.
 23. "Single-Occupant Vehicle" (hereinafter "SOV") shall mean a motor vehicle occupied by one Employee for commute purposes.

24. "Telecommuting" shall mean working at home for the entire day and using electronic or other means to communicate with the usual Work Site.
25. "Transit" shall mean public transportation including bus or fixed rail services.
26. "Transportation Management Association" (hereinafter "TMA") shall mean a group of Employers who have formed a formal association and incorporated as a non-profit organization to work toward solving mutual transportation-related problems.
27. "Transportation Management Certificate" (hereinafter "TMC") shall mean a document issued by the TSM Administrator that verifies that the TMP complies with the requirements set forth in the TSM Ordinance.
28. "Transportation Management Plan" (hereinafter "TMP") shall mean a document detailing TSM measures to reduce vehicle trips to and from a Work Site.
29. "Transportation Systems Management" (TSM) shall mean measures to better utilize existing transportation facilities and services, reduce commute trips and promote Alternative Commute Modes.
30. "TSM Administrator" shall mean the person designated by the City with the responsibility for implementing the TSM Ordinance.
31. "TSM Advisory Handbook" shall mean an explanatory guide which incorporates the following minimum components:
 - (1) an orientation to the purpose and requirements of the TSM Ordinance;
 - (2) the basic elements of TSM including Alternative Commute Modes;
 - (3) how to develop a TMP;
 - (4) compliance specifications; appeals and enforcement procedures; and
 - (5) TSM documents.
32. "TSM Compliance Record" shall mean a document completed and signed by the Minor Employer/Developer acknowledging compliance with the requirements of the TSM Ordinance.
33. "Vanpool" shall mean six or more Employees commuting to and/or from work in the same motor vehicle.
34. "Work Site" shall mean the primary place of employment, base of operation, or predominant location of a group of Employees.

17.67.030 APPLICABILITY

The provisions of this Ordinance shall apply to all existing and future Work Sites that support or propose to support 25 or more Employees. The provisions of this Ordinance shall also apply to any development which after proposed structural expansion will support 25 or more Employees.

17.67.031 Exemptions

Notwithstanding any other provisions of this Ordinance, the following shall be exempt from the requirements of this Ordinance:

- A. Temporary construction activities, including activities performed by engineers, architects, contractors, subcontractors, and construction workers when such activities are related to the construction, development or other improvement to real property.
- B. Emergency activities in which persons are employed to render aid or other services in the event of an emergency or natural disaster.
- C. Other temporary activities which employ persons for a period of less than ninety (90) days.
- D. Developments covered by existing development agreements and transportation management plans as of the effective date of this Ordinance.
- E. Schools, colleges and universities.

17.67.032 Schedule of Compliance

- A. Minor Employers/Developers.
 - 1. All Minor Employers and Developers, doing business in the City as of the effective date of this Ordinance, shall submit a TSM Compliance Record to the TSM Administrator within one (1) year of the effective date of this Ordinance.
 - 2. All Minor Employers locating within the City after the effective date of this Ordinance shall submit a TSM Compliance Record to the TSM Administrator concurrent with making application for a business license.
 - 3. All Minor Developers locating within the City after the effective date of this Ordinance shall submit a TSM Compliance Record to the TSM Administrator prior to the issuance of a building permit.
- B. Major Employers/Developers.
 - 1. All Major Employers and Developers, doing business in the City as of the effective date of this Ordinance, shall comply with the provisions of this Ordinance within eighteen (18) months of the effective date of this Ordinance. A TMP will not be required of any Major Employer/Developer until six (6) months after the effective date of this Ordinance. After this period, each Employer/Developer shall submit a TMP to the TSM Administrator concurrent with making application for a business license or a business license renewal.
 - 2. All Major Employers locating within the City after the effective date of this Ordinance shall submit a TMP to the TSM Administrator concurrent with making application for a business license.

3. All Major Developers locating within the City after the effective date of this Ordinance shall obtain an approved TMC prior to the issuance of a building permit.

17.67.040 REQUIREMENTS

Requirements vary according to the number of Employees that are supported or proposed to be supported at the Work Site. Specific implementation requirements and methods for compliance shall be contained in the TSM Advisory Handbook.

17.67.041 Minor Employer/Developer

Each Employer or Developer employing or proposing to employ between 25 to 99 Employees, or upon reaching 25 Employees, shall be deemed a Minor Employer or a Minor Developer. All Complexes existing as of the effective date of this Ordinance shall be treated as Minor Employers. A Major Employer located in an Existing Complex shall be treated under this Ordinance as a Major Employer. On an ongoing yearly basis, Minor Employers and Minor Developers shall implement a TSM Information Program which shall include, at a minimum, the following components:

- A. Post and/or distribute informational materials which describe the benefits of Transit, Ridesharing and other Alternative Commute Modes including a description of facilities, services, schedules, rates and other pertinent information relevant to these transportation options. Materials posted at the Work Site shall be located in a conspicuous place easily available for public view.
- B. Provide newly-hired Employees with Alternative Commute Mode information that includes pertinent Transit information and Ridesharing applications.
- C. Coordinate with local transit agencies and the regional ridesharing agency for the distribution of Alternative Commute Mode information including Transit information and Ridesharing applications.

17.67.042 TSM Compliance Record

All Minor Employers and Minor Developers shall complete and submit a TSM Compliance Record to the TSM Administrator. The format of the TSM Compliance Record shall be specified in the TSM Advisory Handbook. The first TSM Compliance Record shall document acknowledgement of the TSM requirements. TSM Compliance Records filed thereafter shall document actual compliance with Section 17.67.041 of this Ordinance. The TSM Compliance Record shall be valid for a period of one (1) year and shall be renewed annually prior to or on the anniversary date of the first submission.

17.67.043 Major Employers/Developers

Each Employer or Developer employing or proposing to employ 100 or more Employees, shall be deemed a Major Employer or a Major Developer. Any New Complex that will employ 100 or more Employees shall be treated under this Ordinance as a Major Employer. All Major Employers and Major Developers shall obtain a Transportation Management Certificate (TMC) and designate an Employee Transportation Coordinator. A TMC shall be issued to the Major Employer or Developer for a one (1) year period upon approval of the TMP by the TSM Administrator.

17.67.044 Transportation Management Plans

The TMP shall, at a minimum, include the following components in a format specified by the TSM Administrator:

A. Major Employer TMP

- (1) Provide an Annual Status Report on the current commute modes of employees; the Annual Status Report shall be required for renewal of the TMC.
- (2) Incorporate TSM measures specified in Section 17.67.041 of this Ordinance for Minor Employers and Developers.
- (3) Document TSM measures selected to increase Commute Alternative Mode use and increase the AVR in accordance with the schedule set forth as follows:

<u>Year</u>	<u>AVR</u>
1994	1.1
1995	1.2
1996	1.3
1997	1.4
1998	1.5
1999 and thereafter	1.5

- (4) Provide a plan for implementing selected TSM measures for the upcoming year.
- (5) Designate an Employee Transportation Coordinator.

B. Major Developer TMP

- (1) Designate facilities to post Alternative Commute Mode information.

- (2) Delineate provisions for coordinating with appropriate Transit agencies to provide current Transit information at the time of initial occupancy and on an annual basis thereafter.
- (3) Delineate provisions for coordinating with the regional Ridesharing agency for commuter information and applications at the time of initial occupancy and on an annual basis thereafter.
- (4) Designate an Employee Transportation Coordinator.
- (5) Document specific TSM measures selected to increase Commute Alternative Mode use and increase the AVR in accordance with the schedule set forth in subsection A(3) of this section.
- (6) Provide a plan for implementing selected TSM measures.
- (7) Provide an Annual Status Report on the current commute modes of employees; the Annual Status Report shall be required for renewal of the TMC.

17.67.045 TSM Measures

Discretion shall be granted to select among a range of TSM measures. These measures shall be described in detail in the TSM Advisory Handbook. The TMP shall include a reasonable combination of implementation measures designed to achieve the goals of this ordinance. TSM measures include, but are not limited to, the following:

- A. Parking Facilities
 - (a) Preferential Parking for Carpools and Vanpools
 - (b) Perimeter or Park and Ride Lots with Shuttle Service
 - (c) Restricted Parking for SOVs
- B. Bicycle Facilities
 - (a) Secured Bicycle Parking Facilities (Class I bicycle lockers, Class II bicycle racks)
 - (b) Showers and Lockers
- C. Services
 - (a) On-site sale of Transit Passes
 - (b) Shuttle Services
 - (c) Carpool/Vanpool Matching Services
 - (d) Informational and Promotional Programs
 - (e) Guaranteed Ride-Home Program
- D. Subsidies
 - (a) Subsidies for Transit Passes/Tickets
 - (b) Parking Subsidies
 - (c) Vanpool Subsidies
- E. Special Incentives
 - (a) Creative Incentive Programs
 - (b) Disincentives

- (c) Schedules (flextime, alternative work shifts)
- (d) Telecommuting

F. Other

- (a) Membership in the Transportation Management Association
 - 1. A 5% credit shall be granted for joining a TMA.
 - 2. A 10% credit shall be granted for joining the TMA where the TMA has demonstrated 30% trip reduction.

- (b) Employee Travel Allowance

- (c) Reduced-Emission Vehicles

- (d) On-site Child Care Facilities

A credit, that will be determined by the TSM Administrator, shall be granted for providing child care facilities for Employees at the Work Site. The credit shall be granted if the Major Employer or Major Developer provides sufficient documentation demonstrating that a child care facility located at the Work Site, used in conjunction with other TSM measures, will contribute towards increasing the AVR required for the Work Site.

17.67.046 Multiple Work Sites Located in the City

Each Work Site with 100 or more Employees shall submit a TMP with TSM measures applicable for the specific Work Site. If the Employer has Work Sites with 99 or fewer employees, the TMP shall list all Work Sites and the number of Employees at each Work Site. Achievement of the AVR goals delineated in Section 17.67.044 of this Ordinance shall apply to the total number of Employees commuting to all Work Sites of the Major Employer during the Morning Commute Period.

17.67.047 TMP Coordination

- A. If the Work Site is located in a project with a Developer TMP in effect, the Employer TMP shall be coordinated with the Developer TMP. The Employer may request that the Developer revise the Developer TMP to incorporate appropriate TSM measures for their Employees.
- B. A Complex and the Employers within a Complex may, with the permission of TSM Administrator, coordinate and submit one TMP. The TMP must, at a minimum, fulfill the requirements that would apply to the largest Employer within the Complex or the Complex itself, whichever is largest. The TMP, if accepted by the TSM Administrator, would be applicable to each Employer within the Complex and to the Complex itself. Violations of the Ordinance would apply to each Employer individually.

17.67.048 TMC Issuance

All Employers and Developers required by this Ordinance to obtain a TMC shall submit a complete TMP application in a format specified by the TSM Administrator. Upon receiving the TMP, the TSM Administrator shall examine the plan to determine whether the plan complies with the provisions of Section 17.67.044 of this Ordinance. Inspection of the Work Site by City staff may be

conducted as necessary to determine compliance with these provisions. Inspection of the Work Site by City staff shall be conducted upon consent of the Employer or Developer.

Except as otherwise provided, the TSM Administrator shall approve the TMP upon finding that the requirements contained in this Ordinance have been met. The TMC shall be valid for a period of one (1) year from the date of issuance by the TSM Administrator. The TSM Administrator shall notify the applicant, in writing, of the decision to issue or not to issue the TMC.

A decision to approve or disapprove the TMP shall be deemed final fifteen (15) days after such decision, unless an appeal has been filed. If the plan is disapproved, a revised plan shall be submitted within thirty (30) days of the TSM Administrator's action if such decision has not been appealed. An amendment to an approved TMP may be approved at any time by the TSM Administrator.

17.67.049 Renewal of Certificate

The TMC shall be renewed prior to or on the first anniversary date of the initial approval. In order to renew a TMC, the Employer or the Developer shall submit to the TSM Administrator an Annual Status Report. In a format specified by the TSM Administrator, the Annual Status Report shall describe the effectiveness of the previous TMP and the TMP proposed for the upcoming year. At a minimum, the Annual Status Report shall contain the following information:

- A. An update and summary of the previous TMP.
- B. A summary of the progress achieved in meeting the annual AVR goal specified in Section 17.67.044 of this Ordinance.
- C. The TMP proposed for the upcoming year.
- D. The annual projected goals for the upcoming year.

The TSM Administrator may require additional documentation. If an Employer or a Developer is unable to provide the required information, the TSM Administrator may require the Employer or the Developer to retain a consultant. The consultant shall submit the required information to the TSM Administrator. If the Annual Status Report indicates that the Employer or the Developer has achieved the goals of the TMP, a TMC shall be renewed.

17.67.050 ADMINISTRATION

17.67.051 Fees

The City Council shall by resolution prescribe fees for the issuance and renewal of TMCs. Such fees shall be used for the purpose of defraying costs incurred in the administration, monitoring and enforcement of this Ordinance.

All fees for the issuance and renewal of TMCs shall be paid at the time of, and with the filing of the application with the TSM Administrator. No application shall be deemed valid or complete until all prescribed fees have been paid. Unless otherwise prescribed, fees shall not be refundable in whole or in part whether or not the TMC is issued or approval granted. No fee shall be refundable in whole or in part if an Employer or a Developer ceases operating under the certificate in advance of the expiration of the certificate.

17.67.052 Evaluation of Citywide Progress

The TSM Administrator shall review City-wide compliance with the requirements of this Ordinance on an annual basis. This information shall be compiled in an annual summary report which will be presented to the Planning Commission and the City Council.

17.67.053 Enforcement

A. Violations - Penalties

Violations of this Ordinance shall be punishable as an infraction as set forth in Chapter 1.12 of the Municipal Code.

B. Minor Employers and Developers

Minor Employers or Minor Developers failing to comply with the provisions of this Ordinance shall receive written notification of such failure from the TSM Administrator. Failure to achieve compliance within thirty (30) days following receipt of such written notification shall constitute a violation of this Ordinance, and shall be punishable by a fine of \$100.00, and the issuance of a second written notification of noncompliance. Failure to achieve compliance within thirty (30) days following receipt of the second written notification shall constitute a separate violation of this Ordinance, punishable by a fine of \$200.00, and the issuance of a third written notification of noncompliance. In addition, if compliance is not achieved within thirty (30) days after receipt of the second written notification, the violator's business license or business licenses shall be subject to suspension or revocation until compliance is achieved. Thereafter, each thirty (30) day period within one year from the date of the first violation during which the violating Minor Employer or Minor Developer has not achieved compliance shall constitute a separate violation of this Ordinance punishable by a fine of \$500.00

C. Major Employers and Major Developers

Major Employers or Major Developers failing to make a good faith effort to comply with the provisions of this Ordinance shall receive written notification of such failure from the TSM Administrator. Failure to achieve compliance within sixty (60) days following receipt of such written notification shall constitute a violation of this Ordinance, and shall be punishable by a fine of \$100.00, and the issuance of a second written notification of noncompliance. Failure to achieve compliance within thirty (30) days following receipt of the second written notification shall constitute a separate violation of this Ordinance, punishable by a fine of \$200.00, and the issuance of a third written notification of noncompliance. In addition, if compliance is not achieved within thirty (30) days after receipt of the second written notification, the violator's business license or business licenses shall

be subject to suspension or revocation until compliance is achieved. Thereafter, each thirty (30) day period within one year from the date of the first violation during which the violating Major Employer or Major Developer has not achieved compliance shall constitute a separate violation of this Ordinance punishable by a fine of \$500.00.

For Major Employers and Major Developers required to obtain a TMC pursuant to Section 17.67.043, a good faith effort to comply with the provisions of this Ordinance shall be determined by the TSM Administrator considering the following criteria:

1. active membership in a TMA;
2. documented activities of the Employee Transportation Coordinator;
3. completed TMPs and Annual Status Reports on file with the TSM Administrator; and
4. other criteria which may be adopted by the City from time to time.

17.67.054 Appeals

Any decision of the TSM Administrator pursuant to this Ordinance may be appealed in accordance with the provisions of Chapter 1.08 of the West Sacramento Municipal Code.

Section 3. Effective Date and Publication

This Ordinance shall take effect thirty (30) days after its adoption, and within fifteen (15) days after its passage, shall be published in a newspaper of general circulation within the City of West Sacramento.

PASSED AND ADOPTED by the City Council of the City of West Sacramento this 4th day of November, 1992 by the following vote:

AYES: Tuttle, Kristoff, Beers, McGowan, Potnick

NOES: None

ABSENT: None



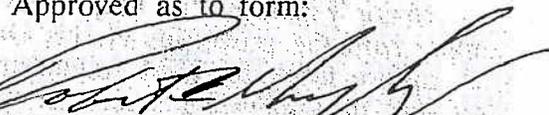
Greg Potnick, Mayor

ATTEST:



Helen M. Kanowsky, City Clerk

Approved as to form:



Robert E. Murphy, City Attorney

CODIFY ___ UNCODIFY ___

17.67.000 TRANSPORTATION SYSTEMS MANAGEMENT

17.67.010 Purpose and Objectives

The purpose and intent of the Transportation Systems Management (hereinafter "TSM") Ordinance is to establish TSM requirements for employers and developers within the City of West Sacramento. These requirements will promote Alternative Commute Modes and reduce the total number of vehicle trips as part of a program to achieve the following objectives:

- A. Increase public awareness and use of transportation alternatives to the Single-Occupant Vehicle.
- B. Maximize and promote Alternative Commute Modes.
- C. Reduce the total number of Single-Occupant Vehicle trips associated with home-to-work and work-to-home commuting which will result in a reduction of traffic congestion and vehicle emission.
- D. Reduce present and future motor vehicle emissions as a contribution towards complying with federal and state ambient air quality standards.
- E. Achieve an Average Vehicle Ridership of 1.5 persons per motor vehicle at all work sites with 100 or more employees by the year 1999.
- F. Implement General Plan Policy C.3 of the Transportation and Circulation Element which requires preparation of a TSM Ordinance applicable to major development projects and employers.

17.67.020 Definitions

The following terms are defined for purposes of this Chapter:

- 1. "Alternative Commute Mode" shall mean a trip for which the transportation method is other than a Single-Occupant Vehicle.
- 2. "Alternative Work Schedule" shall mean a work schedule that alters the traditional forty-hour work week including, but not limited to, compressed work weeks, staggered work hours and flextime.
- 3. "Annual Status Report" shall mean a report prepared by the employer or developer and submitted in conjunction with the Transportation Management Plan that describes the actions taken to implement the Transportation Management Plan, the results during the reporting year, and any changes to the Transportation Management Plan proposed for the upcoming year. The Annual Status Report shall be required for renewal of the Transportation Management Certificate.

4. "Average Vehicle Ridership" (hereinafter "AVR") shall mean the number of employees commuting to a work site during the Morning Commute Period, totaled over five consecutive weekdays, divided by the number of vehicles those employees drive, totaled over the same five consecutive weekdays. Bicycles, transit vehicles, buses serving several work sites, and cars stopping on route to other work sites shall be excluded from the vehicles counted. For the purpose of calculating Average Vehicle Ridership, Reduced Emission Vehicles shall be counted per their Base Vehicle Equivalency Factor.
5. "Base Vehicle" shall mean any vehicle that is not a California Air Resources certified Reduced Emission Vehicle.
6. "Base Vehicle Equivalence Factor" shall mean the multiplier provided by the California Air Resources Board that proportionally equates a Reduced Emission Vehicle to a base vehicle in terms of non-methane organic gas emissions.
7. "Carpool" shall mean a motor vehicle occupied by two or more employees traveling to and/or from work.
8. "City" shall mean the City of West Sacramento.
9. "City Council" shall mean the City Council of the City of West Sacramento.
10. "Commute" shall mean a home-to-work or work-to-home trip.
11. "Complex" shall mean either:
 - 1) Any non-residential use or development which is operated as a unit, whether in common or separate ownership. To be a "complex", two or more of the following conditions must be met:
 - a) It is known by a common name.
 - b) It is governed by a common set of covenants, conditions, and restrictions.
 - c) It was approved or is to be approved as an entity by the City.
 - d) It is covered either by a single subdivision or by a single parcel map.
 - e) It is operated by a single management.
 - f) It shares common private parking.
 - 2) Any multi-tenant, non-residential building or contiguous group of buildings under common ownership, which is not covered by any of the aforementioned conditions.
12. "Employee" shall mean any worker hired by any employer, including any part-time worker, working 20 hours or more weekly and seasonal workers, but excluding any independent contractors hired by the employer. Seasonal workers shall be included if they work more than 90 days per year.

13. "Employee Transportation Coordinator" shall mean an individual trained and designated to promote and implement TSM strategies at the work site.
14. "Employer" shall mean any public or private entity, including the City, with a permanent place of business or work site in the City. The maximum number of employees on the largest shift shall determine the size of the employer. Employer shall not include contractors with no permanent place of business in the City and other businesses with no permanent work site in the City.
15. "Existing Complex" shall mean a complex that has been issued a building permit for the building structure prior to the effective date of the TSM Ordinance.
16. "Flextime" shall mean a work schedule that allows the employee to adjust work hours outside of the employer's established start and stop time.
17. "Morning Commute Period" shall mean the morning commute hours from 7:00 AM to 8:30 AM during weekdays.
18. "New Complex" shall mean a complex that has been issued a building permit for the building structure after the effective date of the TSM Ordinance.
19. "Planning Commission" shall mean the Planning Commission of the City of West Sacramento.
20. "Reduced Emission Vehicle" shall mean a motor vehicle that is certified by the California Air Resources Board as any of the following:

Transitional Low Emission Vehicle	(TLEV)
Low Emission Vehicle	(LEV)
Ultra-Low Emission Vehicle	(ULEV)
Zero Emission Vehicle	(ZEV)
21. "Ridesharing" shall mean the cooperative effort of two or more employees traveling together.
22. "Shuttle Bus" shall mean private or public transportation service providing short distance, fixed route passenger service, limited to specific destinations and connections, with parking lots and/or existing transit services.
23. "Single-Occupant Vehicle" (hereinafter "SOV") shall mean a motor vehicle occupied by one employee for commute purposes.
24. "Telecommuting" shall mean working at home for the entire day and using electronic or other means to communicate with the usual work site.
25. "Transit" shall mean public transportation including bus or fixed rail services.
26. "Transportation Management Association" (hereinafter "TMA") shall mean a group of employers who have formed a formal association and incorporated as a non-profit organization to work toward solving mutual transportation-related problems.
27. "Transportation Management Certificate" (hereinafter "TMC") shall mean a document issued by the TSM Administrator that verifies that the TMP complies with the requirements set forth in the TSM Ordinance.

28. "Transportation Management Plan" (hereinafter "TMP") shall mean a document detailing TSM measures to reduce vehicle trips to and from a work site.
29. "Transportation Systems Management" (TSM) shall mean measures to better utilize existing transportation facilities and services, reduce commute trips and promote Alternative Commute Modes.
30. "TSM Administrator" shall mean the person designated by the City with the responsibility for implementing the TSM Ordinance.
31. "TSM Advisory Handbook" shall mean an explanatory guide which incorporates the following minimum components:
 1. An orientation to the purpose and requirements of the TSM Ordinance.
 2. The basic elements of TSM including Alternative Commute Modes.
 3. How to develop a TMP.
 4. Compliance specifications, appeals and enforcement procedures.
 5. TSM documents.
32. "TSM Compliance Record" shall mean a document completed and signed by the minor employer/developer acknowledging compliance with the requirements of the TSM Ordinance.
33. "Vanpool" shall mean six or more employees commuting to and/or from work in the same motor vehicle.
34. "Work Site" shall mean the primary place of employment, base of operation, or predominant location of a group of employees.

17.67.030 Applicability

The provisions of this ordinance shall apply only as mitigation measures for environmental documents.

17.67.031 Exemptions

Notwithstanding any other provisions of this ordinance, the following shall be exempt from the requirements of this ordinance:

- A. Temporary construction activities, including activities performed by engineers, architects, contractors, subcontractors, and construction workers when such activities are related to the construction, development or other improvement to real property.
- B. Emergency activities in which persons are employed to render aid or other services in the event of an emergency or natural disaster.

- C. Other temporary activities which employ persons for a period of less than ninety (90) days.
- D. Developments covered by existing development agreements and transportation management plans as of the effective date of this ordinance.
- E. Schools, colleges and universities.

17.67.032 Schedule of Compliance

A. Minor Employers/Developers

1. All minor employers and developers, doing business in the City as of the effective date of this ordinance, shall submit a TSM Compliance Record to the TSM Administrator within one (1) year of the effective date of this ordinance.
2. All minor employers locating within the City after the effective date of this ordinance shall submit a TSM Compliance Record to the TSM Administrator concurrent with making application for a business license.
3. All minor developers locating within the City after the effective date of this ordinance shall submit a TSM Compliance Record to the TSM Administrator prior to the issuance of a building permit.

B. Major Employers/Developers

1. All major employers and developers, doing business in the City as of the effective date of the ordinance, shall comply with the provisions of this ordinance within eighteen (18) months of the effective date of this ordinance. A TMP will not be required of any major employer/developer until six (6) months after the effective date of this ordinance. After this period, each employer/developer shall submit a TMP to the TSM Administrator concurrent with making application for a business license or a business license renewal.
2. All major employers locating within the City after the effective date of this ordinance shall submit a TMP to the TSM Administrator concurrent with making application for a business license.
3. All major developers locating within the City after the effective date of this ordinance shall obtain an approved TMC prior to the issuance of a building permit.

17.67.040 Requirements

Requirements vary according to the number of employees that are supported or proposed to be supported at the work site. Specific implementation requirements and methods for compliance shall be contained in the TSM Advisory Handbook.

17.67.041 Minor Employer/Developer

Each employer or developer employing or proposing to employ between 25 to 99 employees, or upon reaching 25 employees, shall be deemed a minor employer or a minor

developer. All complexes existing as of the effective date of this ordinance shall be treated as minor employers. A major employer located in an existing complex shall be treated under this ordinance as a major employer. On an ongoing yearly basis, minor employers and minor developers shall implement a TSM Information Program which shall include, at a minimum, the following components:

- A. Post and/or distribute informational materials which describe the benefits of transit, ridesharing and other Alternative Commute Modes including a description of facilities, services, schedules, rates and other pertinent information relevant to these transportation options. Materials posted at the work site shall be located in a conspicuous place easily available for public view.
- B. Provide newly-hired employees with Alternative Commute Mode information that includes pertinent transit information and ridesharing applications.
- C. Coordinate with local transit agencies and the regional ridesharing agency for the distribution of Alternative Commute Mode information including transit information and ridesharing applications.

17.67.042 TSM Compliance Record

All minor employers and minor developers shall complete and submit a TSM Compliance Record to the TSM Administrator. The format of the TSM Compliance Record shall be specified in the TSM Advisory Handbook. The first TSM Compliance Record shall document acknowledgement of the TSM requirements. TSM Compliance Records filed thereafter shall document actual compliance with Section 17.67.041 of this ordinance. The TSM Compliance Record shall be valid for a period of one (1) year and shall be renewed annually prior to or on the anniversary date of the first submission.

17.67.043 Major Employers/Developers

Each employer or developer employing or proposing to employ 100 or more employees shall be deemed a major employer or a major developer. Any new complex that will employ 100 or more employees shall be treated under this ordinance as a major employer. All major employers and major developers shall obtain a Transportation Management Certificate (TMC) and designate an employee Transportation Coordinator. A TMC shall be issued to the major employer or developer for a one (1) year period upon approval of the TMP by the TSM Administrator.

17.67.044 Transportation Management Plans

The TMP shall, at a minimum, include the following components in a format specified by the TSM Administrator:

- A. Major Employer TMP
 - 1. Provide an Annual Status Report on the current commute modes of employees; the Annual Status Report shall be required for renewal of the TMC.
 - 2. Incorporate TSM measures specified in Section 17.67.041 of this ordinance for minor employers and developers.

3. Document TSM measures selected to increase Commute Alternative Mode use and increase the AVR in accordance with the schedule set forth as follows:

<u>Year</u>	<u>AVR</u>
1994	1.1
1995	1.2
1996	1.3
1997	1.4
1998	1.5
1999 and thereafter	1.5

4. Provide a plan for implementing selected TSM measures for the upcoming year.
5. Designate an employee Transportation Coordinator.

B. Major Developer TMP

1. Designate facilities to post Alternative Commute Mode information.
2. Delineate provisions for coordinating with appropriate transit agencies to provide current transit information at the time of initial occupancy and on an annual basis thereafter.
3. Delineate provisions for coordinating with the regional ridesharing agency for commuter information and applications at the time of initial occupancy and on an annual basis thereafter.
4. Designate an employee Transportation Coordinator.
5. Document specific TSM measures selected to increase Commute Alternative Mode use and increase the AVR in accordance with the schedule set forth in subsection A(3) of this section.
6. Provide a plan for implementing selected TSM measures.
7. Provide an Annual Status Report on the current commute modes of employees; the Annual Status Report shall be required for renewal of the TMC.

17.67.045 TSM Measures

Discretion shall be granted to select among a range of TSM measures. These measures shall be described in detail in the TSM Advisory Handbook. The TMP shall include a reasonable combination of implementation measures designed to achieve the goals of this ordinance. TSM measures include, but are not limited to, the following:

A. Parking Facilities

- a) Preferential Parking for Carpools and Vanpools
- b) Perimeter or Park and Ride Lots with Shuttle Service

- c) Restricted Parking for SOVs
- B. Bicycle Facilities
 - a) Secured Bicycle Parking Facilities (Class I bicycle lockers, Class II bicycle racks)
 - b) Showers and Lockers
- C. Services
 - a) On-site sale of Transit Passes
 - b) Shuttle Services
 - c) Carpool/Vanpool Matching Services
 - d) Informational and Promotional Programs
 - e) Guaranteed Ride-Home Program
- D. Subsidies
 - a) Subsidies for Transit Passes/Tickets
 - b) Parking Subsidies
 - c) Vanpool Subsidies
- E. Special Incentives
 - a) Creative Incentive Programs
 - b) Disincentives
 - c) Schedules (flextime, alternative work shifts)
 - d) Telecommuting
- F. Other
 - a) Membership in the Transportation Management Association
 - 1. A 5% credit shall be granted for joining a TMA.
 - 2. A 10% credit shall be granted for joining the TMA where the TMA has demonstrated 30% trip reduction.
 - b) Employee Travel Allowance
 - c) Reduced-Emission Vehicles
 - d) On-site Child Care Facilities: A credit, that will be determined by the TSM Administrator, shall be granted for providing child care facilities for employees at the work site. The credit shall be granted if the major employer or major

developer provides sufficient documentation demonstrating that a child care facility located at the work site, used in conjunction with other TSM measures, will contribute towards increasing the AVR required for the work site.

17.67.046 Multiple Work Sites Located in the City

Each work site with 100 or more employees shall submit a TMP with TSM measures applicable for the specific work site. If the employer has work sites with 99 or fewer employees, the TMP shall list all work sites and the number of employees at each work site. Achievement of the AVR goals delineated in Section 17.67.044 of this ordinance shall apply to the total number of employees commuting to all work sites of the major employer during the Morning Commute Period.

17.67.047 TMP Coordination

- A. If the work site is located in a project with a developer TMP in effect, the employer TMP shall be coordinated with the developer TMP. The employer may request that the developer revise the developer TMP to incorporate appropriate TSM measures for their employees.
- B. A complex and the employers within a complex may, with the permission of TSM Administrator, coordinate and submit one TMP. The TMP must, at a minimum, fulfill the requirements that would apply to the largest employer within the complex or the complex itself, whichever is largest. The TMP, if accepted by the TSM Administrator, would be applicable to each employer within the complex and to the complex itself. Violations of the ordinance would apply to each employer individually.

17.67.048 TMC Issuance

All employers and developers required by this ordinance to obtain a TMC shall submit a complete TMP application in a format specified by the TSM Administrator. Upon receiving the TMP, the TSM Administrator shall examine the plan to determine whether the plan complies with the provisions of Section 17.67.044 of this ordinance. Inspection of the work site by City staff may be conducted as necessary to determine compliance with these provisions. Inspection of the work site by City staff shall be conducted upon consent of the employer or developer.

Except as otherwise provided, the TSM Administrator shall approve the TMP upon finding that the requirements contained in this ordinance have been met. The TMC shall be valid for a period of one (1) year from the date of issuance of the TSM Administrator. The TSM Administrator shall notify the applicant, in writing, of the decision to issue or not to issue the TMC. A decision to approve or disapprove the TMP shall be deemed final fifteen (15) days after such decision, unless an appeal has been filed. If the plan is disapproved, a revised plan shall be submitted within thirty (30) days of the TSM Administrator's action if such decision has not been appealed. An amendment to an approved TMP may be approved at any time by the TSM Administrator.

17.67.049 Renewal of Certificate

The TMC shall be renewed prior to or on the first anniversary date of the initial approval. In order to renew a TMC, the employer or the developer shall submit to the TSM Administrator an Annual Status Report. In a format specified by the TSM Administrator, the Annual Status Report shall describe the effectiveness of the previous TMP and the TMP proposed for the upcoming year. At a minimum, the Annual Status Report shall contain the following information:

- A. An update and summary of the previous TMP.
- B. A summary of the progress achieved in meeting the annual AVR goal specified in Section 17.67.044 of this ordinance.
- C. The TMP proposed for the upcoming year
- D. The annual projected goals for the upcoming year.

The TSM Administrator may require additional documentation. If an employer or a developer is unable to provide the required information, the TSM Administrator may require the employer or the developer to retain a consultant. The consultant shall submit the required information to the TSM Administrator. If the Annual Status Report indicates that the employer or the developer has achieved the goals of the TMP, a TMC shall be renewed.

17.67.050 Administration

17.67.051 Fees

The City Council shall by resolution prescribe fees for the issuance and renewal of TMC's. Such fees shall be used for the purpose of defraying costs incurred in the administration, monitoring and enforcement of this ordinance.

All fees for the issuance and renewal of TMC's shall be paid at the time of, and with the filing of the application with the TSM Administrator. No application shall be deemed valid or complete until all prescribed fees have been paid. Unless otherwise prescribed, fees shall not be refundable in whole or in part whether or not the TMC is issued or approval granted. No fee shall be refundable in whole or in part if an employer or a developer ceases operating under the certificate in advance of the expiration of the certificate.

17.67.052 Evaluation of Citywide Progress

The TSM Administrator shall review City-wide compliance with the requirements of this ordinance on an annual basis. This information shall be compiled in an annual summary report which will be presented to the Planning Commission and the City Council.

17.67.053 Enforcement

A. Violations - Penalties

Violations of this ordinance shall be punishable as an infraction as set forth in Chapter 1.12 of the Municipal Code.

Minor employers or minor developers failing to comply with the provisions of this ordinance shall receive written notification of such failure from the TSM Administrator. Failure to achieve compliance within thirty (30) days following receipt of such written notification shall constitute a violation of this ordinance, and shall be punishable by a fine of \$100.00, and the issuance of a second written notification of noncompliance. Failure to achieve compliance within thirty (30) days following receipt of the second written notification shall constitute a separate violation of this ordinance, punishable by a fine of \$200.00, and the issuance of a third written notification of noncompliance. In addition, if compliance is not achieved within thirty (30) days after receipt of the second written notification, the violator's business license or business licenses shall be subject to suspension or revocation until compliance is achieved. Thereafter, each thirty (30) day period within one year from the date of the first violation during which the violating minor employer or minor developer has not achieved compliance shall constitute a separate violation of this ordinance punishable by a fine of \$500.00.

B. Major Employers and Major Developers

Major employers or major developers failing to make a good faith effort to comply with the provisions of this ordinance shall receive written notification of such failure from the TSM Administrator. Failure to achieve compliance within sixty (60) days following receipt of such written notification shall constitute a violation of this ordinance, and shall be punishable by a fine of \$100.00, and the issuance of a second written notification of noncompliance. Failure to achieve compliance within thirty (30) days following receipt of the second written notification shall constitute a separate violation of the ordinance, punishable by a fine of \$200.00, and the issuance of a third written notification of noncompliance. In addition, if compliance is not achieved within thirty (30) days after receipt of the second written notification, the violator's business license or business licenses shall be subject to suspension or revocation until compliance is achieved. Thereafter, each thirty (30) day period within one year from the date of the first violation during which the violating major employer or major developer has not achieved compliance shall constitute a separate violation of this ordinance punishable by a fine of \$500.00.

All major employers and major developers required to obtain a TMC pursuant to Section 17.67.043, a good faith effort to comply with the provisions of this ordinance shall be determined by the TSM Administrator considering the following criteria:

1. Active membership in a TMA;
2. Documented activities of the employee Transportation Coordinator;
3. Completed TMP's and Annual Status Reports on file with the TSM Administrator;
and
4. Other criteria which may be adopted by the City from time to time.

17.67.054 Appeals

Any decision of the TSM Administrator pursuant to this ordinance may be appealed in accordance with the provisions of Chapter 1.08 of the West Sacramento Municipal Code.

**Appendix B: Transportation and Circulation
Technical Materials**

B2: Walkways and Pedestrian Circulation

RESIDENTIAL TRAFFIC CALMING PROGRAM



**City of West Sacramento
Public Works and Community Development Department
Development Services Division
Traffic/Transportation Section**

January 2007

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City of West Sacramento Residential Traffic Calming Program

INTRODUCTION

Traffic Calming Defined

The Institute of Transportation Engineers (ITE), an international association of transportation professionals, provides the following definition for traffic calming:

“Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.”

Purposes for Traffic Calming

Reduction of traffic speeds and volumes are the most common reasons for the implementation of traffic calming measures. Other reasons for traffic calming include reducing cut-through traffic, traffic noise, collisions, truck traffic, and increasing pedestrian and bicycle safety.

A Comprehensive Approach to Traffic Calming

The City of West Sacramento practices the “3 E’s” approach to traffic calming:

- **Education:** Staff provides information to residents regarding available methods and tools to make educated decisions to properly address neighborhood traffic concerns.
- **Enforcement:** Through selective enforcement, the Police Department addresses targeted traffic issues.
- **Engineering:** Staff works directly with residents to identify concerns and solutions, and implement traffic calming strategies based on established and proven traffic engineering principles.

Staff works closely with residents to address problems and provide solutions consistent with neighborhood goals. The majority of residents in a neighborhood must validate their support for a traffic calming plan. The intent is to address traffic issues, while not shifting problems elsewhere.

Traffic Calming in West Sacramento

In July of 1998, the City of West Sacramento City Council adopted the Residential Traffic Calming Program (RTCP). This comprehensive program was created to address resident concerns about traffic issues in residential neighborhoods, particularly the issues of speeding and cut-through traffic. It validated a commitment by the City to

provide safe and livable neighborhoods. The program also helped to assure that traffic calming solutions were applied in a consistent and equitable manner.

While concerns may be similar from neighborhood to neighborhood, solutions typically vary. The RTCP provides residents with an opportunity to work hand-in-hand with City staff to create and implement the best solutions for their particular neighborhood. There are choices to be considered, which include types of measures installed, location of measures, boundaries, etc. Each choice has its own cost, feasibility, and effectiveness issues.

Ideally, traffic calming represents a conscious decision to improve the residential environment of a neighborhood by reducing traffic speed and volume, and maintaining emergency vehicle and public transit access without eliminating or punishing those who reside and conduct business on the street. Traffic calming may also help to strengthen the fabric of a neighborhood by improving pedestrian safety and access.

The RTCP recognizes that vehicular traffic is only one element of a neighborhood, and that other residential needs must be given careful consideration. Through the RTCP, residents can evaluate the various requirements, benefits, and trade-offs of projects within their neighborhood and can be actively involved in the decision-making process. This policy document attempts to provide information and guidelines to help residents participate in that process.

Goals, Objectives and Polices

As the population and employment in the City of West Sacramento continue to grow, some city streets are experiencing increases in traffic. The City policy calls for accommodating growth in a way that can protect neighborhoods from the negative impacts of traffic.

The City of West Sacramento places a high value on neighborhood livability. The goal of the RTCP is to establish procedures and techniques that will enhance the quality of life in residential neighborhoods by mitigating the negative impacts of automobile traffic.

The objectives of the RTCP are:

- Promote safe and pleasant conditions for residents, pedestrians, bicyclists and motorists
- Maintain safe and reasonable vehicle speeds
- Reduce non-resident traffic volumes
- Preserve and enhance pedestrian and bicycle access
- Encourage citizen involvement in traffic management activities
- Provide a process to address residential neighborhood traffic management requests

The policies of the RTCP are:

- Keep through traffic on designated major arterial streets
- Define acceptable amounts of re-routed traffic on a project-by-project basis
- Maintain emergency vehicle access
- Deploy a variety of traffic calming measures in conformance with sound engineering and planning principles to achieve intended objectives

- Implement RTCP procedures in accordance with applicable codes and polices, and within the limits of available resources.

RESIDENTIAL TRAFFIC CALMING PROCESS

The City of West Sacramento's RTCP relies on significant community participation. Residents typically initiate traffic calming requests and must live with any modifications on a daily basis. Consequently, the City relies heavily on resident participation throughout the process. The development of a safe and effective traffic calming plan depends on the successful cooperation between residents and City staff. Implementation of a traffic calming plan is subject to available funding and resources.

Petition

Participation of a neighborhood in the traffic calming program begins with submittal of a completed "Residential Traffic Calming Program Petition Form" (Figure 1). The form must include the signatures, names, addresses, and phone numbers of at least 10 residents of the affected neighborhood, and information about the location(s) and issues of concern. Only one signature per household will be accepted.

Consideration and Prioritization

Upon receipt of the petition form, the City's Transportation Section will conduct an analysis to determine a neighborhood's eligibility. Aside from the petition requirements, a neighborhood must meet certain criteria on affected streets to be eligible. These criteria are:

- Streets must be two-lane local residential or residential collector streets with a posted speed of 25 mph.
- A speeding problem validated by means of a speed survey showing an 85th percentile (critical) speed of at least 6 mph over the posted speed.
- City staff determines the presence of a significant amount of cut-through traffic.
- Vehicular volumes on the primary streets are between 500 and 2500 vehicles per day.
- The number of speed related accidents exceeds the number typically expected under normal conditions.

Staff may determine that the concerns expressed in the petition are either not in the realm of traffic calming or are safety issues that must be addressed immediately (i.e., trimming trees or shrubs, missing signing, etc.). In these cases, issues will be handled as normal citizen requests, outside of the traffic calming program.

Neighborhoods that meet initial screening criteria will be deemed eligible for participation in the traffic calming program and will be added to the priority list. Priority on the list is determined on a first-come, first-served basis. Eligible neighborhoods willing to fully fund both the process and implementation of a traffic calming plan may be

expedited at the discretion of the Director of Public Works and Community Development, provided the requirements and procedures described in "Privately Funded Traffic Calming Plans" are met (see page 7).

Neighborhood Boundaries

The most effective traffic calming plans involve a comprehensive treatment to a designated neighborhood or area, rather than a specific block or street. Staff will work with the requestor to determine the most effective boundaries for a given neighborhood. Successful plans will help to improve safety for drivers and pedestrians, provide a greater sense of security, and increase neighborhood livability while not displacing problems to other parts of the neighborhood.

Neighborhood Kick-Off Meeting

When a neighborhood reaches the top of the priority list, staff will arrange a neighborhood kick-off meeting. Invitations will be sent to all residents within the designated neighborhood boundaries. At the meeting, staff will introduce the Residential Traffic Calming Program and present initial findings. Attendees will have an opportunity to ask questions of staff to gain a better understanding of the program's advantages and disadvantages.

At the kick-off meeting, staff will ask for volunteers to form a Neighborhood Traffic Calming Committee to work on behalf of the entire neighborhood. The size of the committee will vary, depending on the size of the neighborhood, but should be comprised of between 6 to 12 residents. Efforts will be made to form a committee that is representative of the whole neighborhood, with various ideas and viewpoints. The Traffic Calming Committee may decide to modify the affected neighborhood boundaries if desired.

Traffic Calming Committee Meetings

The ultimate goal and purpose of the Neighborhood Traffic Calming Committee will be to develop a neighborhood traffic calming plan for presentation to the neighborhood. This will be achieved through a series of committee meetings. The role of the committee is to review traffic issues and identify goals, and prepare and promote an acceptable traffic calming plan. Staff's role is to serve as a technical resource, provide administrative support, administer the voting process, and implement the approved plan.

Neighborhood Open House

Once the Neighborhood Traffic Calming Committee develops a draft traffic calming plan, the plan will be presented to the neighborhood at an Open House. City staff will send out invitations to all affected households within the neighborhood. At the Open House, which is conducted by Traffic Calming Committee members, the proposed traffic calming plan and supplemental information are put on display. There are no formal, structured presentations or discussions. Residents may come and go as they please throughout the Open House session. The Traffic Calming Committee will be available to discuss their efforts and answer questions face-to-face with their neighbors.

Committee members document feedback from residents and may meet after the Open House to incorporate these comments into the traffic calming plan, if necessary.

Balloting

Within a few weeks after the Open House, the balloting process for approval of the traffic calming plan begins. City staff will prepare a ballot, which includes a copy of the final traffic calming plan, supplemental information on the traffic calming devices proposed, and a ballot form, which is returned to the City via U.S. Mail. The balloting period generally lasts from two to three weeks. Residents vote on the proposed plan in its entirety, and conditional ballots will not be accepted. Only one ballot per household will be accepted. Ballots may be completed by either tenants or property owners.

In order to be approved, at least 60% of the ballots received must be in favor of the proposed plan and a minimum of 15% of the ballots distributed must be returned. If the plan receives the required number of votes, city staff will take the necessary steps to implement the plan. Every effort will be made to implement the plan as soon as possible, however, if the plan exceeds available funding, implementation of the plan may be postponed until adequate funding is available.

If the proposed plan does not attain the required support, the neighborhood may either abandon their effort, or be added to the end of the active priority list to try again.

Installation of the Traffic Calming Devices

If approved by residents, and adequate funding is available, the proposed traffic calming plan will be scheduled for implementation. The City will endeavor to implement traffic calming plans in the most cost-efficient and timely manner available. In the event the cost of an approved plan exceeds available funding, the implementation of the plan will be delayed until adequate funding is available.

Failure to Make Progress

If city staff determines that a neighborhood and/or its Traffic Calming Committee is not making a good faith effort to progress through the process in a timely manner, or if neighborhood participation diminishes to ineffective levels, staff may terminate activity with the neighborhood and place them at the end of the priority list.

Privately Funded Traffic Calming Plans

Neighborhoods determined to be eligible for the RTCP and willing to fully fund the process *and* implementation of a traffic calming plan may be expedited, upon approval of the Director of Public Works and Community Development. This option is available only to those neighborhoods which have the ability to complete the process phase within 30 days upon initiation. The Traffic/Transportation Manager shall determine, based on staffing and resources, if a qualified neighborhood can complete the process phase within 30 days and to what extent a qualified neighborhood may be expedited.

If a qualified neighborhood is willing and able to fund the process and implementation, the neighborhood shall deposit adequate funds with the City (as determined by the

Traffic/Transportation Manager) to cover the cost of staff time, resources and materials to complete the residential traffic calming process as prescribed. If a traffic calming plan is approved by the Traffic Committee, neighborhood representatives shall then be required to deposit adequate funds to cover the cost of implementation of the traffic calming plan. Implementation costs shall include the cost of administration, construction and inspection as determined by the Traffic/Transportation Manager.

If a neighborhood fails to deposit the proper funding for either the process or implementation within 30 days after notification by the City, the neighborhood will be considered non-responsive, and placed at their original position on the priority list with no recourse.

Removal of Traffic Calming Devices

The installation of approved traffic calming devices will remain permanent unless there is interest on the neighborhood's part to remove any or all devices. Removal of traffic calming devices will only be considered after the devices have been in place for at least one year.

To request removal of a traffic control device, a completed "Residential Traffic Calming Program Petition Form" must be submitted to the City. The petition form must include descriptions of the specific device(s) and reasons for the request. A ballot explaining the request and expected impacts will be distributed to the residents of the designated neighborhood. For approval, 60% of the ballots returned must be in favor of the removal. If approved by the neighborhood, the device(s) will be removed when funding and other necessary resources are available.

City of West Sacramento

Public Works and Community Development Department

Development Services Division

Traffic/Transportation Section

1110 West Capitol Avenue

West Sacramento, CA 95691

Phone: (916) 617-4645

Fax: (916) 371-0845

Residential Traffic Calming Program Petition Form

This petition validates neighborhood interest for participation in the City of West Sacramento's Residential Traffic Calming Program. Please complete the form by providing the information requested. Contact information and signatures must be obtained from at least 10 residents within a designated neighborhood for consideration.

Name: _____ Date: _____

1. Please describe the location of your traffic calming request (i.e., street(s), neighborhood, boundaries, etc.):

2. Please describe specific traffic safety issues and concerns in this area:

3. Please provide the names, addresses, phone numbers and signatures of at least ten (10) residents who reside within the area defined in item #1 who support the request for participation in the Residential Traffic Calming Program:

	Signature	Print Name	Address	Phone
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Submit the completed form to:

City of West Sacramento
Public Works and Community Development Dept.
Development Services Division
Traffic/Transportation Section
1110 West Capitol Avenue
West Sacramento, CA 95691
(916) 617-4645



**Appendix B: Transportation and Circulation
Technical Materials**

B3: Roadways and Vehicular Circulation



Transportation
Consultants

Vision That Moves Your Community

TECHNICAL MEMORANDUM

Date: May 28, 2008

To: Raymond A. Santiago
Traffic / Transportation Manager
City of West Sacramento
Public Works & Community
Development Department
1110 West Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

Project No.: 192-026 Task 3

From: Andrew Kluter, P.E. Jurisdiction: West Sacramento

Subject: **Triangle Specific Plan Modeling & Roadway Network Evaluation:
Revised Level of Service Analysis Results**

The purpose of this technical memorandum is to provide revised preliminary results for the subject evaluation. The aim of this study is to determine how the proposed Alternative 10 street grid in the Triangle Specific Plan Area will function in terms of traffic operations based on two potential land use buildout scenarios. The results are intended to inform the City's determination of acceptable traffic operations in 2025 for the Triangle Specific Plan Area, an area proposed for high-density, mixed-use development.

City Travel Demand Model Assumptions

Land Use

TJKM used its latest version of the City's 2025 travel demand model, which was recently modified to provide greater land use and roadway network detail for the proposed Fulcrum Development within the Triangle area. TJKM further modified the model land use data using 2025 buildout development assumptions that were provided at the sub-block level by the City's Redevelopment Agency in April 2008.

Traffic analysis zones (TAZs) account for land use in the City model. Although TJKM had added TAZs to the model to account for the added land use of the proposed Fulcrum Development, additional TAZ detail was needed to adequately account for all projected development in the Triangle area. Therefore, TJKM modified the TAZ structure to include a total of 51 TAZs (numbered 1252 to 1302) in the Triangle area to account for all projected development in the individual Triangle entitlement parcels. The Triangle area TAZ layout, as well as the study intersections and roadway segments for the traffic analysis, are shown in Figure 1.

Two Redevelopment land use entitlement buildout scenarios were evaluated in the revised model and are as follows:

- 100 percent Triangle entitlements (approximately 12.5 million square feet (sq. ft.) of mixed-use development – residential, office, retail, and other uses)
- 75 percent Triangle entitlements (approximately 9.5 million sq. ft. of mixed-use development – residential, office, retail, and other uses)

Pleasanton
3875 Hopyard Road
Suite 200
Pleasanton, CA
94588-8526
925.463.0611
925.463.3690 fax

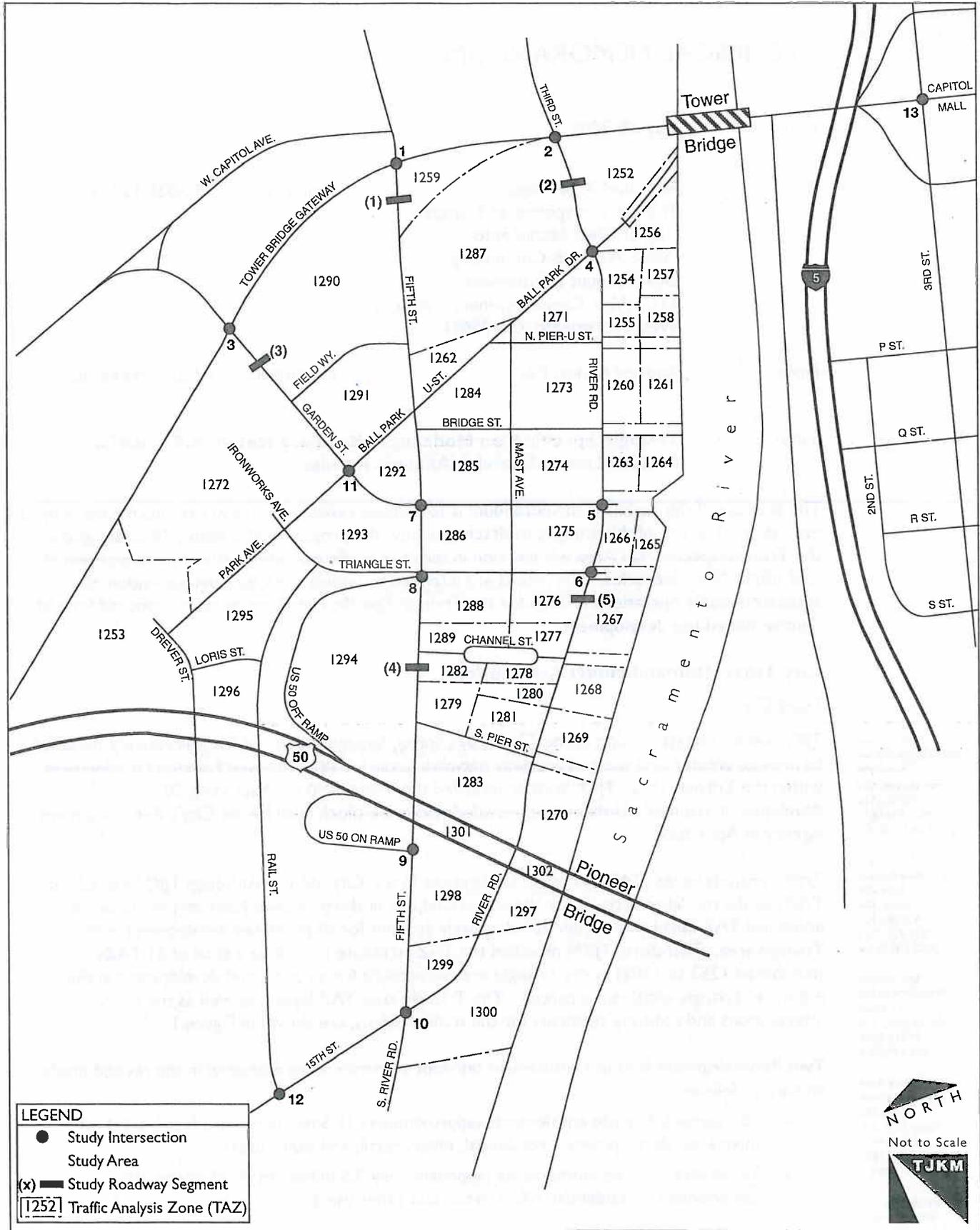
Fresno
516 W. Shaw Avenue
Suite 200
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93704-2515
559.325.7530
559.221.4940 fax

Sacramento
980 Ninth Street
16th Floor
Sacramento, CA
95814-2736
916.449.9095

Santa Rosa
141 Stony Circle
Suite 280
Santa Rosa, CA
95401-4110
707.575.5800
707.575.5888 fax

tjkm@tjkm.com
www.tjkm.com

City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis Figure 1
 Analysis Study Area



LEGEND

- Study Intersection
- Study Area
- (x) Study Roadway Segment
- [1252] Traffic Analysis Zone (TAZ)

NORTH

Not to Scale

TJKM

The City model contains two primary land use variables that are the basis for generating development trips: residential units and jobs (employees). All commercial land use including office and retail development is represented by the number of employees projected for the development. Since trip generation rates for most commercial land use types are usually expressed in trips per 1,000 square feet (ksf), TJKM used the following conversion factors consistent with the original 2005 DKS City model update:

- Retail: 2.5 employees / ksf
- Service: 3.5 employees / ksf

Roadway Network

TJKM additionally coded the City model to account for anticipated 2025 roadways and transit lines in the Triangle area. Trips related to Triangle development are assigned to model links and connectors. The links represent roadways, while the connectors simulate driveway connections to those roadways. For the Triangle roadway segments, TJKM used lane geometry in the proposed Alternative 10 roadway grid to update network link attributes in the model. Connectors from the TAZs to the roadway links were developed according to the proposed access hierarchy established by the urban design consultant Glatting Jackson. This hierarchy allows for a range of access levels from the Triangle roadways to the development parcels - from full vehicle access to pedestrian/emergency vehicle only access (i.e. Universal ("U") Streets which allow no through access for non-emergency vehicles).

For the intersection traffic analysis, TJKM assumed the intersection lane geometry contained in the Alternative 10 layout. In addition, three City-specified geometric alternatives were evaluated for the future Third Street / Tower Bridge Gateway intersection (Concepts 9, 10B, and 11). Traffic control assumptions for 2025 were developed in consultation with City engineering staff.

In addition, speed assumptions were adjusted for the second model run to more closely reflect the expected urban characteristics of the Triangle area, including River Road, which is expected to consist of speed-reducing brick pavers. Free-flow speeds in the Triangle area were assumed accordingly for the following roads:

- River Road: 20 mph (Tower Bridge Gateway to 15th Street)
- Fifth Street: 30 mph (Tower Bridge Gateway to 15th Street)
- Tower Bridge Gateway: 30 mph from Fifth Street to Third Street and 25 mph from Third Street easterly over Tower Bridge into downtown Sacramento.

Finally, it should be noted that peak spreading was assumed in the traffic analysis. That is, volumes generated by the model for the critical peak one hour contained within the typical two-hour a.m. and p.m. peak periods (7:00-9:00 a.m. and 4:00-6:00 p.m., respectively) were assumed to spread out over those periods in the traffic analysis. This is based on the reasonable assumption that as a roadway facility reaches congestion during a peak hour, some travel patterns would adjust as some travelers would shift their trips to outside the peak hour, thereby "spreading out" peak traffic.

Transit Network

The model and analysis assumptions include two streetcar lines that travel within the study area and are detailed in the *Phase I Summary Report of the Downtown / Riverfront Streetcar Study* of May 2007. Proposed alignments in this draft feasibility study show both lines originating from downtown Sacramento via the Tower Bridge and passing through the Tower Bridge Gateway / Third Street / River Road (Third / TBG) intersection.

One streetcar segment, already programmed, would have a stop on Tower Bridge Gateway immediately north of Raley Field, then continue west via Tower Bridge Gateway, Garden Street, and West Capitol Avenue towards City Hall. The other line, not yet programmed, would make a westbound left at the Third / TBG intersection and continue southerly along River Road until a turnaround at Garden Street. Mode shares for the streetcar are accounted for in the trip generation discounts described later in this technical memorandum.

The model also assumes a modest increase in Yolobus fixed-route bus service City-wide, consistent with the 2005 DKS City model update for the 2025 analysis year. At the time of the DKS update, this had been the only incremental transit improvements identified. Since then, the above streetcar lines have either been programmed or are now considered likely to be constructed by 2025.

Trip Generation Rates

TJKM used trip generation rates for Triangle-area development based on the standard traffic engineering reference *Trip Generation (7th Edition)*, published by the Institute of Transportation Engineers (ITE), in consultation with City staff and Glatting Jackson. These rates are shown in Table I.

Table I: A.M. and P.M. Peak Hour Trip Generation Rates

Land Use (Unit)	ITE Code	A.M. Peak Hour			P.M. Peak Hour		
		Rate	In %	Out %	Rate	In %	Out %
Residential							
High-Rise Apartment & Condominiums (DU)	222	0.3	25%	75%	0.35	61%	39%
Office							
General Office (KSF)	710	1.55	88%	12%	1.49	17%	83%
Retail							
Shopping Center (KSF)	820	1.03	61%	39%	3.75	48%	52%

Notes: 1) DU = residential dwelling unit; KSF = 1,000 square feet.

2) ITE Codes: 222 = High-Rise Apartment, 710 = General Office, 820 = Shopping Center)

Source: Trip Generation (7th Edition, Institute of Transportation Engineers, 2003)

Trip Generation Discounts

Since the Triangle area is proposed for high-density, mixed-use development that encourages the use of transportation modes other than the private automobile, TJKM applied discounts to the project trip generation that are consistent with this type of development vision. In a high-density, mixed use area consisting of complementary office, residential, and retail uses, it is reasonable to assume some level of internal trip matching, as well as use of non-auto modes such as public transportation, bicycling, and walking.

TJKM developed appropriate trip generation discounts based on the review of existing City model documentation in terms of mode split assumptions (auto, transit, bicycle, and pedestrian) and in consultation with City staff and Glatting Jackson. Since TJKM replaced model trip rate inputs with auto-based ITE rates in the City model, trip generation discounts were developed that take into account the likelihood of Triangle residents and employees to choose modes other than single-occupant automobile for trips that are either internal or external to the Triangle area.

TJKM applied the following discounts to the Triangle area trip generation prior to execution of the City model:

- 25 percent discount for non-automobile modes, i.e. pedestrian, bicycle, and public bus transportation (Yolobus). As mentioned earlier, a modest increase in fixed-route bus service in the Triangle is assumed, consistent with the original DKS model assumptions. This discount was applied to all 51 TAZs in the Triangle area. This discount was increased from the 15 percent discount used in the initial analysis.
- 15 percent for streetcar. This discount was applied to those TAZs whose centroid is located within a one-quarter (1/4) mile radius of the proposed streetcar stop on Tower Bridge Gateway immediately north of Raley Field and the expected River Road streetcar turnaround at Garden Street. Based on this criterion, TJKM applied this discount to 35 of the 51 TAZs (69 percent of total TAZs).
- 25 percent discount for retail pass-by trips. This was applied to all retail uses within the Triangle area. This discount accounts for the non-primary characteristic of many retail trips, in which retail is not the primary origin or destination. For example, retail is often an intermediate destination of a home-based work commute trip.

Expected Trip Generation for Triangle Area

Based on the above mentioned trip generation rates and discounts, TJKM developed expected trip generation for the two revised development scenarios with the following approximate development totals:

- 9.5 million (M) sq. ft. Retail
 - 4,416 residential units
 - 4.27 M sq. ft. office
 - 216.2 ksf retail
 - 360-room hotel (Unger-Parcel I)
- 12.5 M sq. ft. Retail
 - 5,768 residential units
 - 5.63 M sq. ft. office
 - 290 ksf retail
 - 480-room hotel (Unger-Parcel I)

It should be noted that compared to the previously analyzed 9.6 M Retail scenario, the current 9.5 M Retail scenario consists of approximately 228,800 sq. ft. less retail use, but also approximately 130,000 sq. ft. more office use. Compared to the previous 12.6 M Retail scenario, the current 12.5 M Retail scenario consists of approximately 297,000 sq. ft. less retail use and 160,000 sq. ft. more office use.

Table II provides a summary of expected trip generation for the new 9.5 M Retail and 12.5 M Retail development scenarios based on the above development assumptions and including the previously mentioned trip discounts.

Table II: Estimated Peak Hour Trip Generation for All Development Scenarios (Including All Discounts)

Triangle Development Scenario	A.M. Peak Hour			P.M. Peak Hour		
	In	Out	Total	In	Out	Total
9.5 M Retail	4,268	1,265	5,533	1,562	4,175	5,737
12.5 M Retail	5,550	1,642	7,205	2,077	5,532	7,629

Source: *Trip Generation*, (7th Edition), Institute of Transportation Engineers (2003).

Compared with the previously analyzed 9.6 M Retail scenario, expected total trips shown for the new 9.5 M Retail scenario in Table II are approximately 15 percent less in the a.m. peak hour (5,533 from 6,472) and 22 percent less in the p.m. peak hour (5,737 from 7,358). Similarly, expected total trips for the new 12.5 M Retail scenario are approximately 15 percent less in the a.m. peak hour (7,205 from 8,524) and 21 percent less in the p.m. peak hour (7,629 from 9,686) when compared to the previously analyzed 12.6 M Retail scenario.

It should be noted that the Raley Field block (TAZ 1287 in Figure 1) is not included in the trip generation estimates because the site is a special event traffic generator that does not generate typical weekday a.m. and p.m. peak hour traffic. Since typical weekday a.m. and p.m. peak hour traffic generated by anticipated Triangle development is the focus of this study, stadium traffic is excluded from the analysis. It is assumed that in 2025, special event traffic management strategies similar to what is implemented currently for Raley Field game days would be in place.

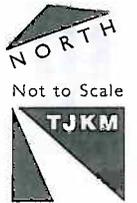
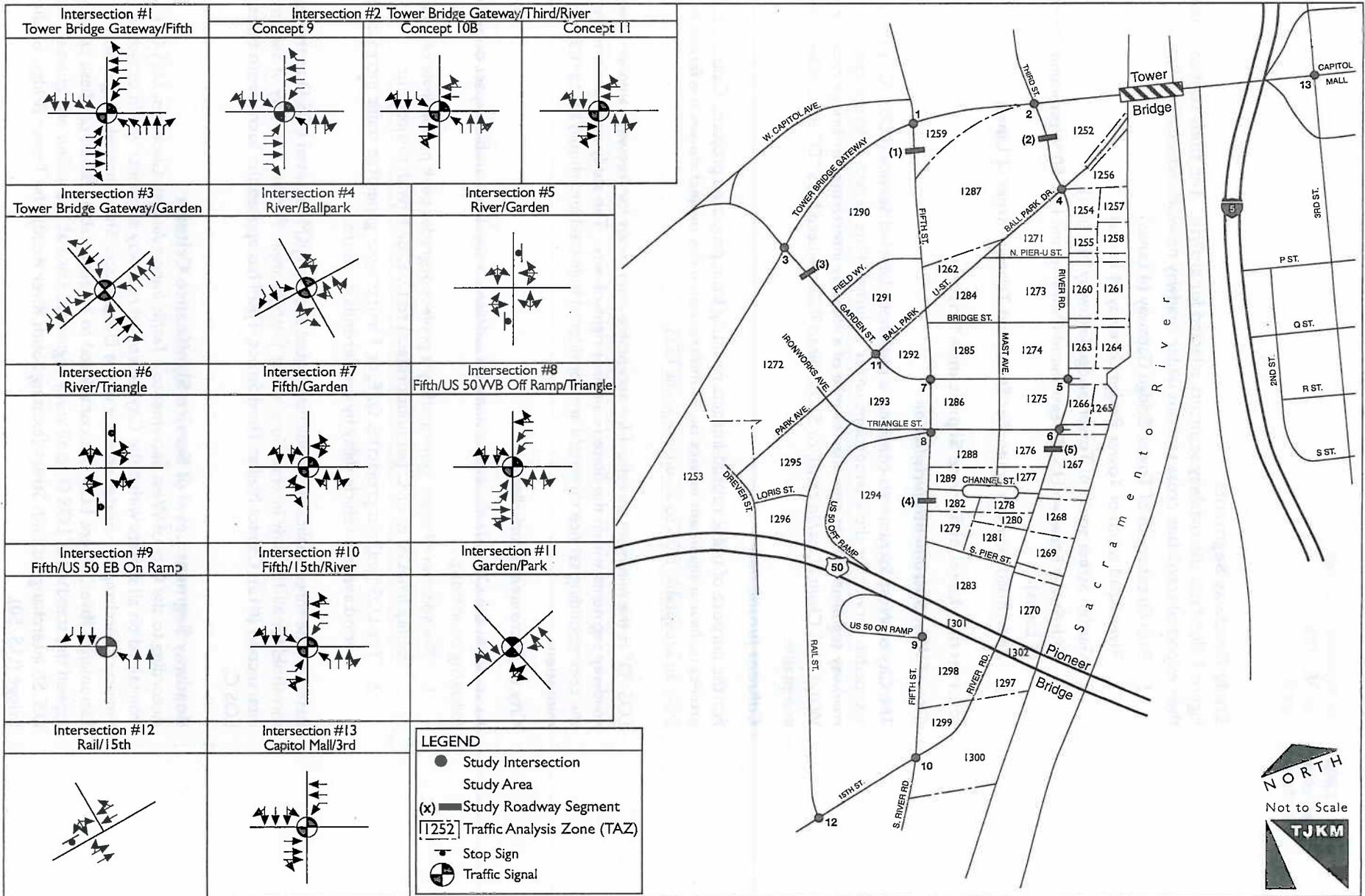
Study Intersections, Lane Geometry, and Traffic Controls

Figure 2 shows the 13 study intersections, including one in downtown Sacramento, along with expected lane geometry and traffic controls in 2025. Included are three potential configurations at the Tower Bridge Gateway / Third Street / River Road intersection. TJKM analyzed the following study intersections:

1. Tower Bridge Gateway / Fifth Street (Signal)
2. Tower Bridge Gateway / Third Street / River Road (three proposed configurations as shown in Figure 2):
 - Concept 9 (Signal). All left turns are permitted.
 - Concept 10B (Signal). Left turns are prohibited on westbound and eastbound Tower Bridge Gateway, but still permitted on the other two approaches.
 - Concept 11 (Signal). Left turns are prohibited in all directions.
3. Tower Bridge Gateway / Garden Street (Signal)
4. River Road / Ballpark Drive (Signal)
5. River Road / Garden Street (One-Way Stop on Garden Street)
6. River Road / Triangle Street (One-Way Stop on Triangle Street)
7. Fifth Street / Garden Street (Signal)
8. Fifth Street / US 50 Westbound Off-Ramp / Triangle Street (Signal)
9. Fifth Street / US 50 Eastbound On-Ramp (Signal)
10. Fifth Street / River Road / 15th Street (Signal)
11. Park Avenue / Garden Street (Signal)
12. Rail Street / 15th Street (One-Way Stop on Rail Street)
13. Third Street / Capitol Mall (City of Sacramento) (Signal)

City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis Study Intersection Lane Geometry and Traffic Controls

Figure
2



Study Roadway Segments

Figure 1 illustrates the roadway segments selected for analysis. The study segments, along with their expected travel lane cross sections under roadway network Alternative 10, are as follows:

1. Fifth Street south of Tower Bridge Gateway (4 Lanes)
2. River Road south of Tower Bridge Gateway (4 Lanes)
3. Garden Street south of Tower Bridge Gateway (4 Lanes)
4. Fifth Street between U.S. 50 Eastbound On-ramp and U.S. 50 Westbound Off-ramp (4 Lanes)
5. River Road between South Pier Street and Triangle Street (2 Lanes)

Intersection Level of Service Significance Criteria

City of West Sacramento Jurisdiction

The City of West Sacramento considers a peak hour Level of Service (LOS) "C" to be the limit of acceptable service for the intersections under its jurisdiction, except at intersections and on roadway segments within one-quarter mile of a freeway interchange or bridge crossing of the Deep Water Ship Channel, barge canal, or Sacramento River, where LOS "D" is considered to be acceptable.

Caltrans Jurisdiction

For the purpose of traffic related-impacts resulting from proposed projects, Caltrans considers a project to have a significant impact on an intersection if the project causes the facility to change from an acceptable LOS to an unacceptable LOS.

LOS "D" is the minimum threshold for acceptable operations for freeway ramp intersections and roadway segments within the State (Caltrans) right-of-way. The study intersections that fall below the corresponding service threshold are considered impacted and should be considered for mitigation.

City of Sacramento Jurisdiction

As stated in the City's *Traffic Impact Analysis Guidelines*, a significant traffic impact occurs under the following conditions:

1. The addition of traffic generated by a project degrades peak period level of service of a facility from A, B, or C (without project) to D, E, or F (with project); or,
2. The LOS (without project) is D, E, or F and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Based on the three applicable jurisdictions listed above, TJKM has used LOS D as the significance threshold for all 12 study intersections in the Triangle area. For the one City of Sacramento study intersection (#13), Capitol Mall at Third Street, TJKM has applied the Sacramento threshold of LOS C.

Roadway Segment Level of Service Significance Criteria

According to the City of West Sacramento's *Traffic Impact Analysis Guidelines*, LOS C is to be maintained on all streets within the City except on roadway segments within one-quarter mile of a freeway interchange or bridge crossing of the Deep Water Ship Channel, barge canal, or Sacramento River, where LOS D is considered to be acceptable. Based on these criteria, TJKM applied the standard of LOS D to all study segments, since all are within one quarter-mile of the U.S. 50 interchange at Fifth Street (existing South River Road), the Tower Bridge, or the Pioneer Bridge (U.S. 50).

The City uses average daily traffic (ADT) levels to determine LOS for City roadways. For the five study roadway segments, TJKM used the "Arterial - Low access control" City designation, which establishes capacities of 15,000 ADT (LOS E) for a 2-lane arterial roadway and 30,000 ADT (LOS E) for a 4-lane arterial roadway. This designation is the lowest of the three City arterial designations in terms of ADT thresholds. It was chosen based on the dense development character of the Triangle area, which is expected to promote lower overall vehicle speeds on the study area roadways.

Intersection Level of Service Analysis Results: 9.5 M Retail Development Scenario

TJKM executed the City model to produce traffic volumes for the 9.5 M Retail development scenario under the three potential configurations at the Tower Bridge Gateway / Third Street / River Road intersection (#2). Figures 3, 4, and 5 illustrate the traffic volumes resulting from the model runs for the 9.5 M Retail development scenario with Concepts 9, 10B, 11 at Intersection 2, respectively. The Synchro analysis output sheets are included in Attachment A.

TJKM used Synchro software to analyze LOS at the study intersections given the Alternative 10 street grid and projected traffic volumes under the 9.5 M Retail development scenario. LOS results are shown in Table III.

Table III: Intersection Level of Service Results: 9.5 M Retail Development Scenario

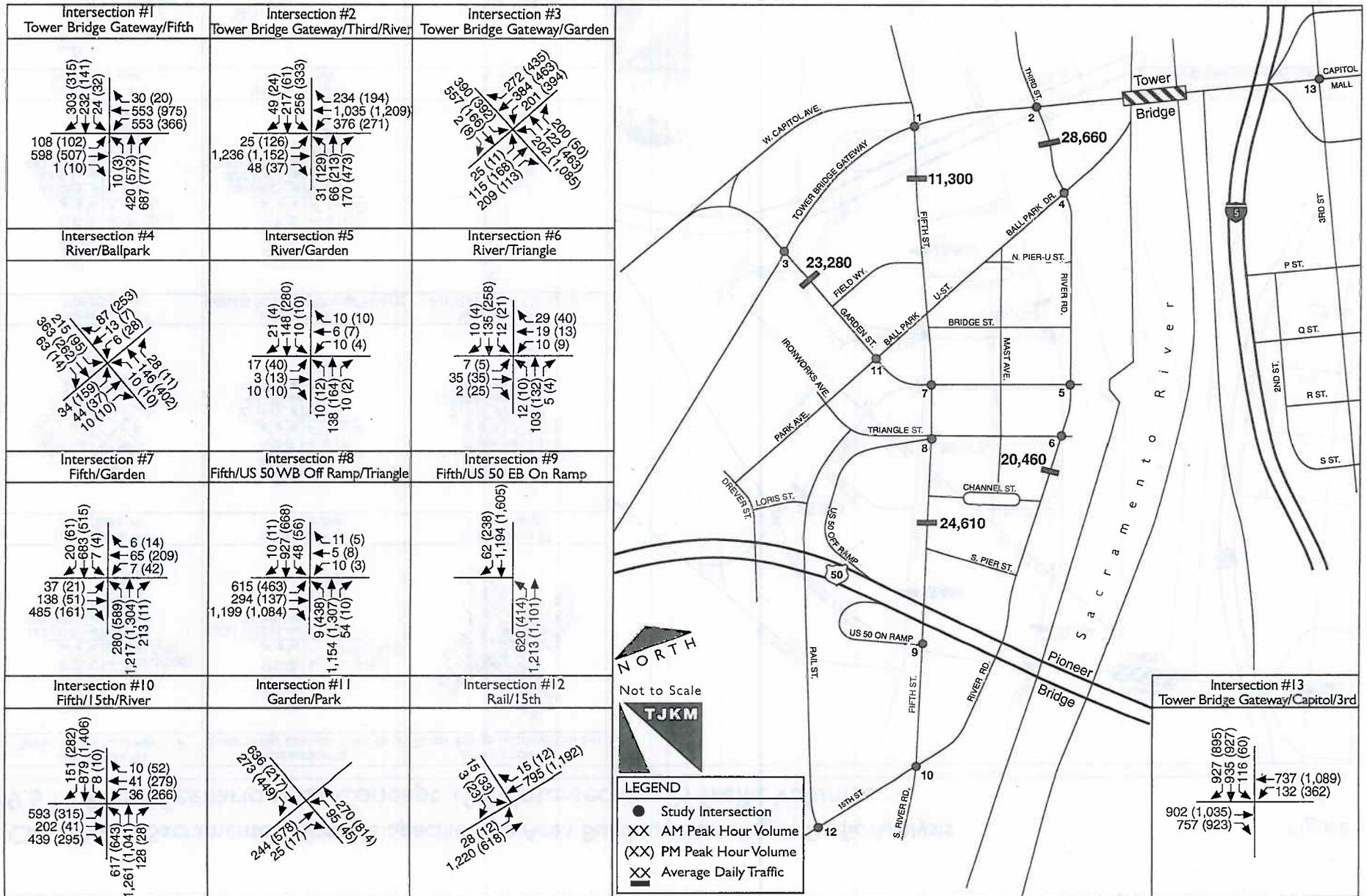
ID	Intersection	Control	9.5 M Retail Scenario					
			Concept 9		Concept 10B		Concept 11	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
			LOS	LOS	LOS	LOS	LOS	LOS
1	Tower Bridge Gateway / Fifth Street	Signal	C	C	C	C	D	C
2	Tower Bridge Gateway / Third Street/ River Road	Signal	D	E	C	D	B	C
3	Tower Bridge Gateway / Garden Street	Signal	C	F	C	F	C	F
	Modification: Add 2nd NB left turn lane and 2nd WB left turn lane	Signal	B	C	B	C	C	D
4	Ball Park Drive / River Road	Signal	B	B	C	C	C	C
5	Garden Street / River Road	2-Way Stop	B	B	B	B	B	B
6	Triangle Street / River Road	2-Way Stop	B	B	B	B	B	B
7	Garden Street / Fifth Street	Signal	C	D	C	D	C	D
	Modification: Add NB and SB left turn pockets on Fifth Street	Signal	B	C	B	C	B	C
8	US 50 WB Off Ramp / Fifth Street	Signal	D	F	E	F	E	F
	Modification: Add NB and SB left turn pockets on Fifth Street	Signal	D	C	D	D	D	C
9	US 50 EB On Ramp / Fifth Street	Signal	B	A	B	A	B	A
10	15th Street / Fifth Street / River Road	Signal	F	F	F	F	F	F
	Modification: Add 2nd NBLT, SBRT, 2nd WBLT, 2nd EBLT	Signal	C	D	C	D	C	D
11	Garden Street / Park Avenue	Signal	A	B	A	B	A	B
12	15th Street / Rail Street	1-Way Stop	E	E	D	F	E	F
	Modification: Signalize	Signal	A	A	A	A	A	A
13	Capitol Mall / Third Street (Sacramento)	Signal	D	F	D	F	E	F

- Notes:**
- 1) Delay = Overall average delay for signalized intersections and critical minor approach delay for unsignalized intersections.
 - 2) LOS = Overall LOS for signalized intersections and critical minor approach LOS for unsignalized intersections.
 - 3) **Bold** indicates LOS below established City of West Sacramento LOS standards (City of Sacramento standards for Intersection #13)

City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis

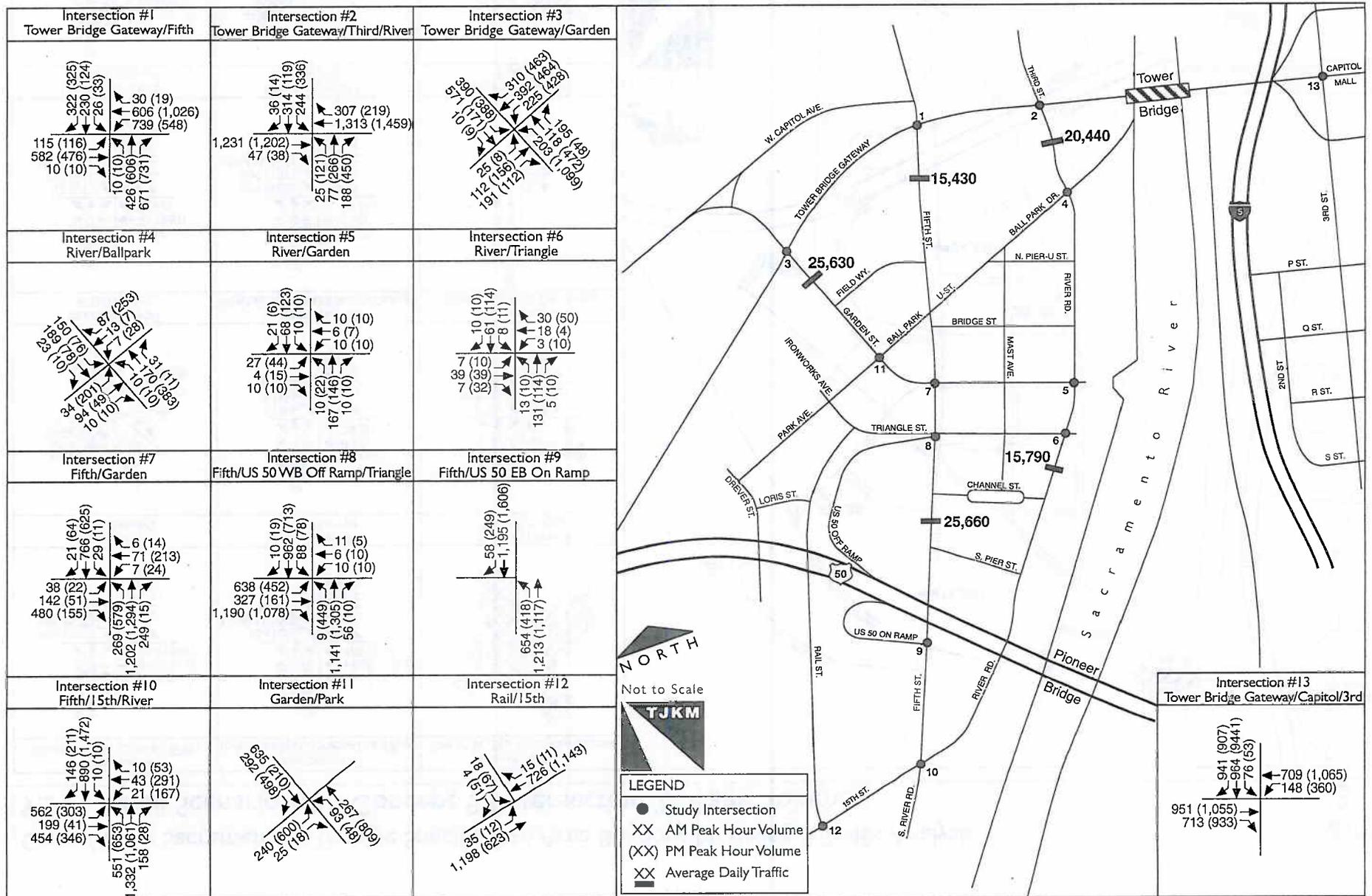
9.5 M Retail Scenario with Concept 9 (Intersection 2) Traffic Volumes

Figure
3



City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis
 9.5 M Retail Scenario with Concept 10B (Intersection 2) Traffic Volumes

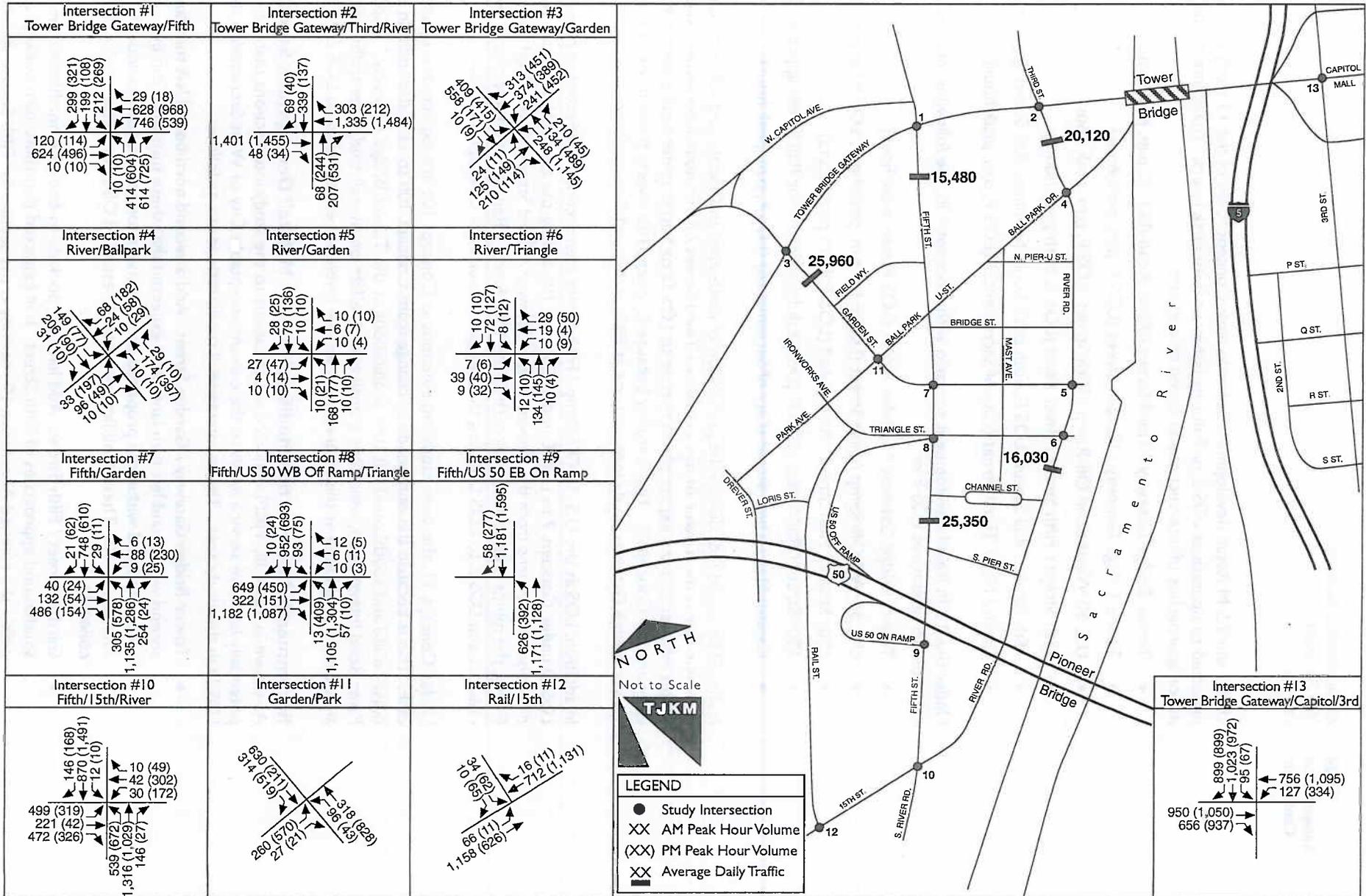
Figure 4



City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis

9.5 M Retail Scenario with Concept II (Intersection 2) Traffic Volumes

Figure
5



Under the 9.5 M Retail development scenario with Concept 9, six of the 13 study intersections are expected to operate at LOS E or F during either or both peak hours. These intersections (or minor approaches of intersections as noted below) are:

- Tower Bridge Gateway / Third Street / River Road (LOS E, p.m. peak hour)
- Tower Bridge Gateway / Garden Street (LOS F, p.m. peak hour)
- U.S. 50 Westbound Off-Ramp / Fifth Street (LOS F, p.m. peak hour)
- 15th Street / Fifth Street / River Road (LOS F, both peak hours)
- 15th Street / Rail Street (LOS E, both peak hours for minor Rail Street approach)
- Capitol Mall / Third Street (City of Sacramento) (LOS F, p.m. peak hour)

Under the 9.5 M Retail development scenario with Concept 10b, the following intersections are expected to operate at LOS E or F:

- Tower Bridge Gateway / Garden Street (LOS F, p.m. peak hour)
- U.S. 50 WB Off-Ramp / Fifth Street (LOS E for a.m. peak hour, LOS F for p.m. peak hour)
- 15th Street / Fifth Street / River Road (LOS F, both peak hours)
- 15th Street / Rail Street (LOS F, p.m. peak hour for minor Rail Street approach)
- Capitol Mall / Third Street (City of Sacramento) (LOS F, p.m. peak hour)

It should be noted that due to the prohibition of eastbound and westbound left turns under Concept 10b at the Tower Bridge Gateway / Third Street / River Road intersection, service levels at this intersection are expected to improve to LOS D or better under both peak hours when compared to Concept 9. This is mainly because Concept 10b diverts these turns to the other Tower Bridge Gateway study intersections at Fifth Street and Garden Street.

In addition, LOS at the U.S. 50 Off-Ramp / Fifth Street intersection is expected to change from LOS D under Concept 9 to LOS E under Concept 10b during the a.m. peak hour, again due to the diversion of left turns from the Tower Bridge Gateway / Third Street / River Road intersection. Finally, the minor southbound approach at the 15th Street / Rail Street intersection is expected to reduce from LOS E to LOS D during the a.m. peak hour from Concept 9 to 10b.

Under Concept 11, the same study intersections as Concept 10b are expected to operate at LOS E or F. This is because the only roadway change from Concept 10b to 11 is the addition of northbound and southbound left turn prohibitions at the Tower Bridge Gateway / Third Street / River Road intersection, which has a small overall effect on overall study area traffic volumes. With all left turns prohibited at this intersection, service levels are expected to be LOS C or better.

Recommended Intersection Modifications - 9.5 M Retail Development Scenario

As shown in Table III, TJKM evaluated modifications to the study intersections that would potentially improve service levels to the current acceptable City of West Sacramento threshold of LOS D in the study area. The recommended modifications are as follows:

- Tower Bridge Gateway / Garden Street: Add a second northbound left turn lane and a second westbound left turn lane. It is expected that these turn lanes can be accommodated within the proposed cross-sections for both roadways under Grid Alternative 10. These modifications would result in LOS D or better under all three concepts.
- Garden Street / Fifth Street: Add left turn pockets to both the northbound and southbound approaches of Fifth Street. It is expected that these turn pockets can be added within the planned Alternative 10 roadway cross section for Fifth Street. Based on the

results in Table III, these turn pockets actually may not become necessary under the 9.5 M Retail development scenario. Under this scenario, this intersection is expected to operate at LOS D or better under all three concepts without the added left turn pockets. If the turn pockets were added, service levels would improve to LOS C or better under all three concepts.

- U.S. 50 Westbound Off-Ramp / Fifth Street: Add left turn pockets to both the northbound and southbound approaches of Fifth Street. It is expected that these turn pockets can be added within the planned Alternative 10 roadway cross section for Fifth Street. With the addition of the turn pockets, service levels are expected to improve to LOS D or better under all three concepts.
- 15th Street / Fifth Street / River Road: Add a second northbound left turn lane, a southbound right turn lane, a second westbound left turn lane, a second eastbound left turn lane and an eastbound right turn lane. With these modifications, service levels are expected to improve to LOS D or better under all three concepts.
- 15th Street / Rail Street: Add signal to intersection. With this modification, service levels are expected to improve to LOS A under all three concepts.

Roadway Level of Service Analysis Results: 9.5 M Retail Development Scenario

TJKM estimated average daily traffic (ADT) based on projected p.m. peak hour volumes for the 9.5 M Retail development scenario. Past engineering experience in West Sacramento and elsewhere has shown that p.m. peak hour volumes often represent 10 percent of daily traffic on a given roadway segment. Two-way ADT on the study segments was therefore calculated by multiplying two-way p.m. peak hour roadway volumes by ten. (ADT=10*P.M.) This daily traffic estimation procedure is consistent with the recent TJKM traffic analysis performed for the Fulcrum development. As with the Fulcrum traffic study, this procedure was used in lieu of a calibrated City travel demand model with daily volumes, which was unavailable at the time of this analysis.

Table IV shows the resulting ADT and LOS for the five study roadway segments under the three intersection concepts at Intersection 2 (Tower Bridge Gateway / Third Street / River Road).

Table IV: Roadway Segment Level of Service Results: 9.5 M Retail Development Scenario

ID	Roadway Segment (Number of Lanes)	From	To	Concept 9			Concept 10b			Concept 11		
				Daily Traffic	V / C Ratio	LOS	Daily Traffic	V / C Ratio	LOS	Daily Traffic	V / C Ratio	LOS
1	Fifth Street (4)	Tower Bridge Gateway	Field Way	18,550	0.62	B	20,070	0.67	B	19,740	0.66	B
2	River Road (4)	Tower Bridge Gateway	Ballpark Drive	11,860	0.40	A	9,930	0.33	A	9,480	0.32	A
3	Garden Street (4)	Tower Bridge Gateway	Field Way	22,730	0.76	C	23,310	0.78	C	24,120	0.80	D
4	Fifth Street (4)	U.S. 50 EB On-Ramp	US 50 WB Off-Ramp	31,670	1.06	F	32,210	1.07	F	32,330	1.08	F
5	River Road (2)	South Pier Street	Triangle Street	4,290	0.29	A	2,760	0.18	A	3,190	0.21	A

- Notes: 1) Results based on an assumed capacity threshold of 15,000 ADT for a 2-lane roadway and 30,000 ADT for a 4-lane roadway.
 2) EB = Eastbound, WB = Westbound
 3) Bold indicates LOS below established City LOS standards

Under the 9.5 M Retail development scenario, all study roadway segments except one are expected to operate within current acceptable City standards of LOS D or better under all three concepts at the Tower Bridge Gateway / Third Street / River Road intersection. The exception is the Fifth Street segment between the two U.S. 50 interchange ramps, which is expected to operate at LOS F under all three concepts.

Intersection Level of Service Analysis Results: 12.5 M Retail Development Scenario

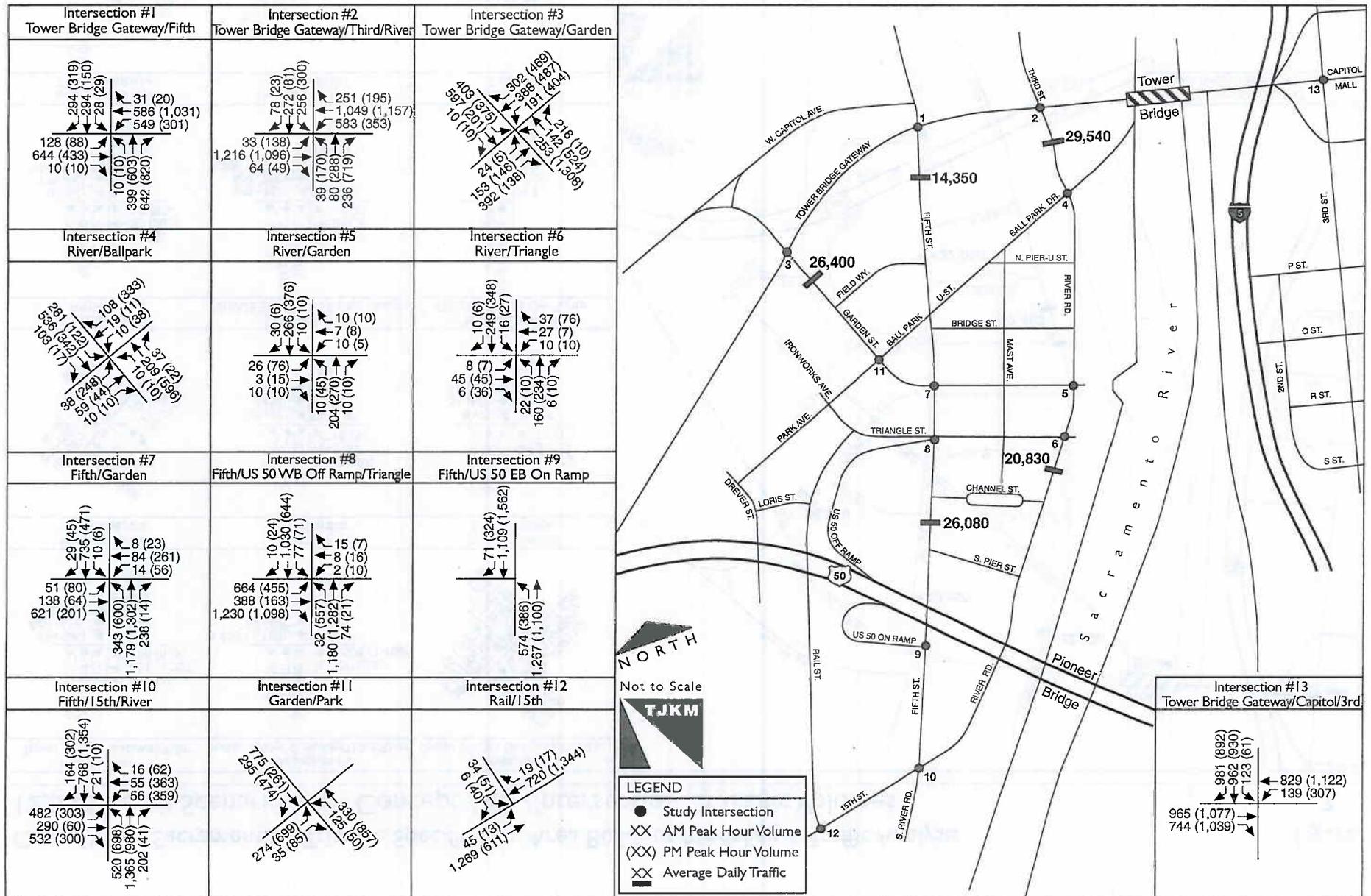
TJKM executed the City model again to produce traffic volumes for the 12.5 M Retail development scenario under the three potential configurations at the Tower Bridge Gateway / Third Street / River Road intersection (#2). Figures 6, 7, and 8 illustrate the traffic volumes resulting from the model runs for the 12.5 M Retail development scenario with Concepts 9, 10B, 11 at Intersection 2, respectively. The Synchro analysis output sheets are included in Attachment B.

TJKM analyzed LOS at the study intersections given the Alternative 10 street grid and projected traffic volumes under the 12.5 M Retail development scenario. LOS results are shown in Table V.

City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis

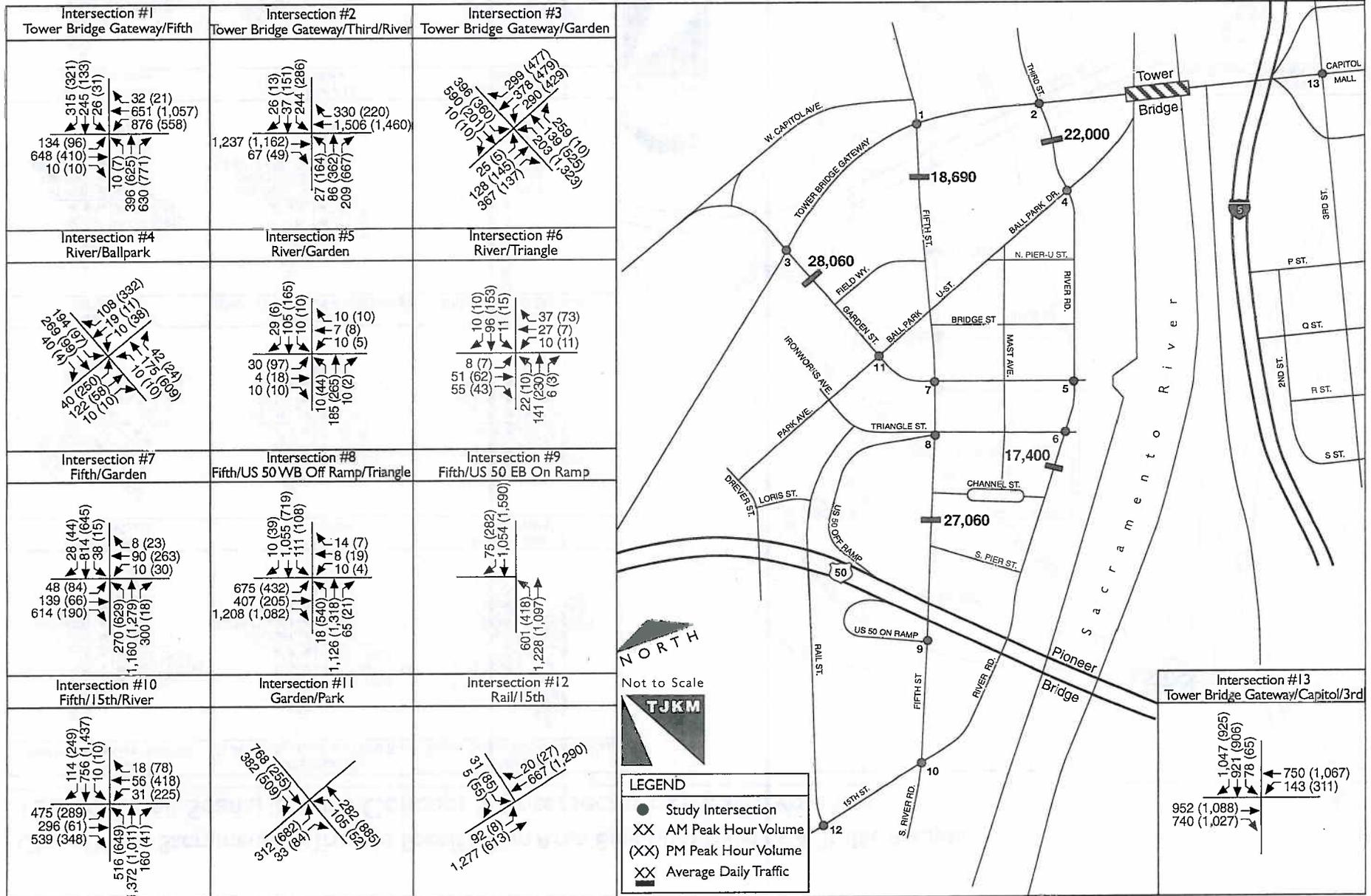
12.5 M Retail Scenario with Concept 9 (Intersection 2) Traffic Volumes

Figure 6



City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis
 12.5 M Retail Scenario with Concept 10B (Intersection 2) Traffic Volumes

Figure
7



City of West Sacramento – Triangle Specific Plan Area Buildout Modeling & Traffic Analysis
 12.5 M Retail Scenario with Concept 11 (Intersection 2) Traffic Volumes

Figure
 8

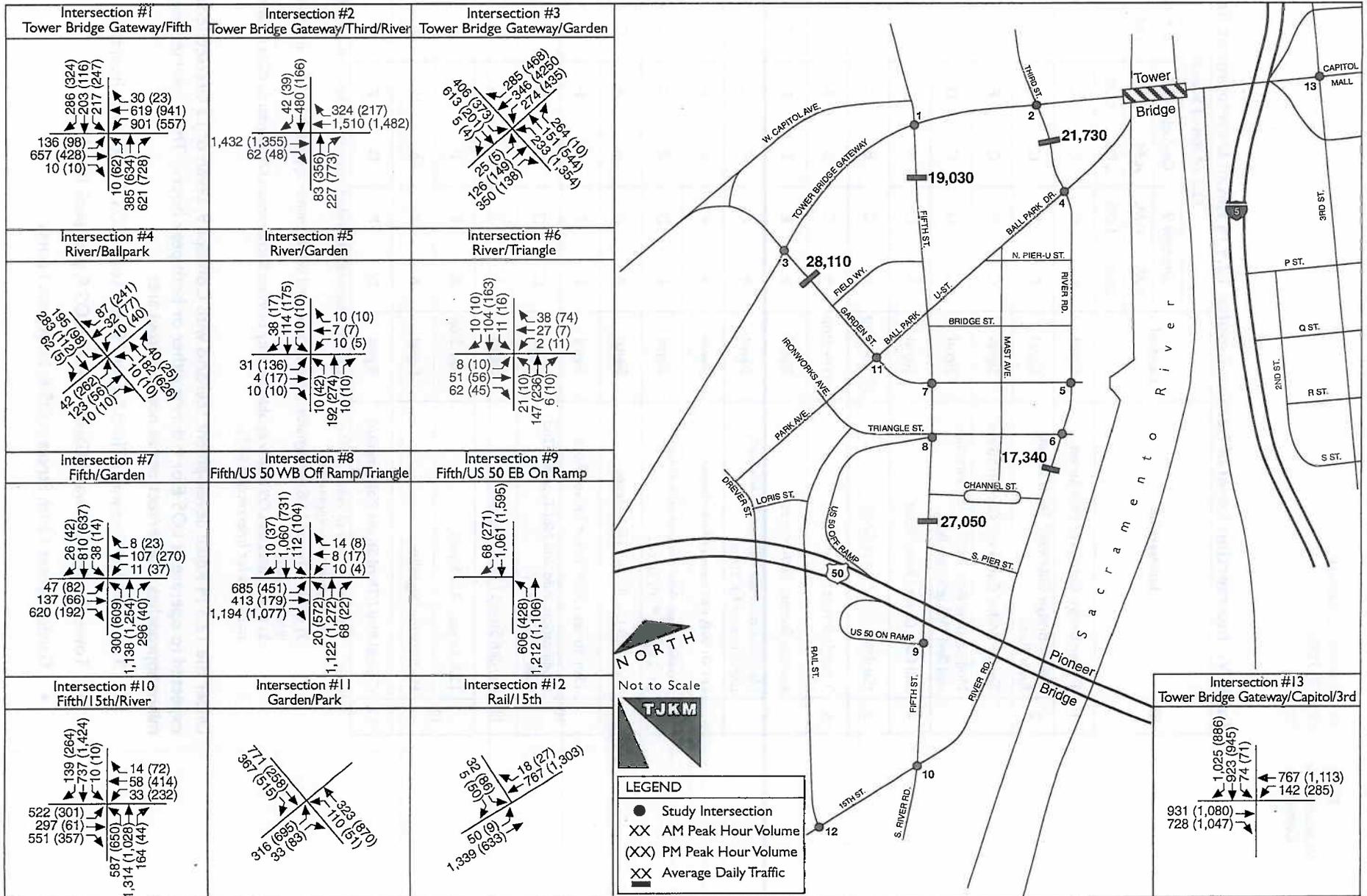


Table V: Intersection Level of Service Results: 12.5 M Retail Development Scenario

ID	Intersection	Control	12.5 M Retail Scenario					
			Concept 9		Concept 10B		Concept 11	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
			LOS	LOS	LOS	LOS	LOS	LOS
1	Tower Bridge Gateway / Fifth Street	Signal	C	C	C	C	D	C
2	Tower Bridge Gateway / Third Street/ River Road	Signal	E	E	C	E	C	C
3	Tower Bridge Gateway / Garden Street	Signal	C	F	C	F	C	F
	Modification: Add 2nd NB left turn lane and 2nd WB left turn lane	Signal	C	D	C	D	C	D
4	Ball Park Drive / River Road	Signal	B	C	B	C	B	C
5	Garden Street / River Road	2-Way Stop	B	C	B	C	B	C
6	Triangle Street / River Road	2-Way Stop	B	C	B	B	B	B
7	Garden Street / Fifth Street	Signal	E	E	E	F	E	F
	Modification: Add NB and SB left turn pockets on Fifth Street	Signal	B	C	C	C	C	C
8	US 50 WB Off Ramp / Fifth Street	Signal	F	F	F	F	F	F
	Modification: Add NB and SB left turn pockets on Fifth Street	Signal	E	D	E	D	E	D
9	US 50 EB On Ramp / Fifth Street	Signal	A	A	A	A	B	A
10	15th Street / Fifth Street / River Road	Signal	F	F	F	F	F	F
	Modification: Add 2nd NBLT, SBRT, 2nd WBLT, 2nd EBLT	Signal	C	D	C	D	C	D
11	Garden Street / Park Avenue	Signal	A	B	A	C	A	B
12	15th Street / Rail Street	I-Way Stop	E	F	F	F	F	F
	Modification: Signalize	Signal	A	A	A	A	A	A
13	Capitol Mall / Third Street (Sacramento)	Signal	D	F	D	F	C	F

Notes: 1) Delay = Overall average delay for signalized intersections and critical minor approach delay for unsignalized intersections.
 2) LOS = Overall LOS for signalized intersections and critical minor approach LOS for unsignalized intersections.
 3) **Bold** indicates LOS below established City of West Sacramento LOS standards (City of Sacramento standards for Intersection #13)

Under the 12.5 M Retail development scenario with Concept 9, seven of 13 intersections are expected to operate at LOS E or F during either or both peak hours. These intersections (or minor approaches of intersections as noted below) are:

- Tower Bridge Gateway / Third Street / River Road (LOS E, both peak hours)
- Tower Bridge Gateway / Garden Street (LOS F, p.m. peak hour)
- Garden Street / Fifth Street (LOS E, both peak hours)

- U.S. 50 Westbound Off-Ramp / Fifth Street (LOS F, both peak hours)
- 15th Street / Fifth Street / River Road (LOS F, both peak hours)
- 15th Street / Rail Street (LOS E for a.m. peak hour and LOS F for p.m. peak hour, minor Rail Street approach)
- Capitol Mall / Third Street (City of Sacramento) (LOS F, p.m. peak hour)

Under the 12.5 M Retail development scenario with Concept 10b, the same seven intersections are expected to operate at LOS E or F as under Concept 9. However, with the prohibition of eastbound and westbound left turns under Concept 10b at the Tower Bridge Gateway / Third Street / River Road intersection, service levels at that intersection are expected to improve to LOS C during the a.m. peak hour.

Under Concept 11, in which all left turns would be prohibited at the Tower Bridge Gateway / Third Street / River Road intersection, service levels would improve to LOS C at that intersection during both peak hours. Otherwise, the same study intersections as above are expected to operate at LOS E or F.

Recommended Intersection Modifications - 12.5 M Retail Development Scenario

As shown in Table V, TJKM evaluated modifications to the study intersections that would potentially improve service levels to the current acceptable City of West Sacramento threshold of LOS D in the study area. The recommended modifications are as follows:

- Tower Bridge Gateway / Garden Street: Add a second northbound left turn lane and a second westbound left turn lane. It is expected that these turn lanes can be accommodated within the proposed cross-sections for both roadways under Grid Alternative 10. These modifications would result in LOS D or better under all three concepts.
- Garden Street / Fifth Street: Add left turn pockets to both the northbound and southbound approaches of Fifth Street. It is expected that these turn pockets can be added within the planned Alternative 10 roadway cross section for Fifth Street. As a result of this modification, service levels would improve to LOS C or better under all three concepts.
- U.S. 50 Westbound Off-Ramp / Fifth Street: Add left turn pockets to both the northbound and southbound approaches of Fifth Street. It is expected that these turn pockets can be added within the planned Alternative 10 roadway cross section for Fifth Street. With the addition of the turn pockets, the intersection would improve to LOS D during the p.m. peak hour under all three concepts. However, the intersection would only improve to LOS E during the a.m. peak hour under all three concepts, which would be unacceptable under current City LOS standards.
- 15th Street / Fifth Street / River Road: Add a second northbound left turn lane, a southbound right turn lane, a second westbound left turn lane, a second eastbound left turn lane and an eastbound right turn lane. With these modifications, service levels are expected to improve to LOS D or better under all three concepts.
- 15th Street / Rail Street: Add signal to intersection. With this modification, service levels are expected to improve to LOS A under all three concepts.

Roadway Level of Service Analysis Results: 12.5 M Retail Development Scenario

TJKM estimated average daily traffic (ADT) for the 12.5 M Retail development scenario using the estimation procedure described earlier. Table VI shows the resulting ADT and LOS for the five study roadway segments under the three intersection configurations at Intersection 2 (Tower Bridge Gateway / Third Street).

Table VI: Roadway Segment Level of Service Results: 12.5 M Retail Development Scenario

ID	Roadway Segment (Lanes)	From	To	Concept 9			Concept 10b			Concept 11		
				Daily Traffic	V/C Ratio	LOS	Daily Traffic	V/C Ratio	LOS	Daily Traffic	V/C Ratio	LOS
1	Fifth Street (4)	Tower Bridge Gateway	Field Way	18,760	0.63	B	20,860	0.70	B	20,920	0.70	B
2	River Road (4)	Tower Bridge Gateway	Ballpark Drive	16,580	0.55	A	13,930	0.46	A	13,450	0.45	A
3	Garden Street (4)	Tower Bridge Gateway	Field Way	25,800	0.86	D	26,160	0.87	D	26,740	0.89	D
4	Fifth Street (4)	U.S. 50 EB On-Ramp	US 50 WB Off-Ramp	32,600	1.09	F	32,790	1.09	F	32,890	1.10	F
5	River Road (2)	South Pier Street	Triangle Street	6,320	0.42	A	4,440	0.30	A	4,620	0.31	A

- Notes: 1) Results based on an assumed capacity threshold of 15,000 ADT for a 2-lane roadway and 30,000 ADT for a 4-lane roadway.
2) EB = Eastbound, WB = Westbound
3) **Bold** indicates LOS below established City LOS standards

Under the 12.5 M Retail development scenario, all study roadway segments except one are expected to operate within current acceptable City standards of LOS D or better under all three concepts at the Tower Bridge Gateway / Third Street / River Road intersection. The exception is the Fifth Street segment between the two U.S. 50 interchange ramps, which is expected to operate at LOS F under all three concepts. The results for the above roadway segments are similar to those under the 9.5 M Retail development scenario.

TJKM appreciates the opportunity to provide results for this preliminary evaluation of the proposed Alternative 10 Triangle roadway network. We look forward to your feedback on our results. Please call me at (925) 463-0611 if you have any questions. Thank you.

Attachments

- Attachment A: Intersection Level of Service Analysis Sheets – 9.5 M Retail Scenario
- Attachment B: Intersection Level of Service Analysis Sheets – 12.5 M Retail Scenario

Triangle Roadway Network: Estimated 2025 Intersection Level of Service

Table 1 : 2025 LOS Table

ID	Intersection	Control	9.5 M Retail Scenario												12.5 M Retail Scenario											
			Concept 9				Concept 10B				Concept 11				Concept 9				Concept 10B				Concept 11			
			A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Tower Bridge Gateway / 5th Street	Signal	22.5	C	26.8	C	26.0	C	25.3	C	35.4	D	32.2	C	22.9	C	28.1	C	27.5	C	26.5	C	36.4	D	30.2	C
2	Tower Bridge Gateway / 3rd Street / River Road	Signal	52.2	D	57.3	E	28.9	C	53.4	D	17.6	B	22.3	C	70.1	E	78.2	E	35.0	C	74.2	E	23.5	C	32.6	C
3	Tower Bridge Gateway / Garden Street	Signal	18.4	B	29.4	C	19.3	B	29.7	C	20.1	C	36.3	D	21.6	C	53.9	D	22.8	C	26.5	C	24.2	C	52.5	D
4	Ball Park Drive / River Road	Signal	13.8	B	17.9	B	20.7	C	23.9	C	18.0	B	27.3	C	16.1	B	31.2	C	19.5	B	25.3	C	19.4	B	31.0	C
5	Garden Street / River Road	2-Way Stop	10.7	B	13.4	B	10.6	B	11.7	B	10.7	B	12.3	B	13.0	B	21.8	C	11.2	B	16.6	C	11.4	B	19.0	C
6	Triangle Street / River Road	2-Way Stop	11.4	B	12.3	B	10.8	B	10.8	B	10.8	B	11.0	B	13.7	B	15.1	C	11.0	B	12.6	B	11.0	B	12.7	B
7	Garden Street / 5th Street	Signal	20.1	C	33.8	C	22.0	C	31.9	C	23.8	C	32.3	C	24.2	C	40.7	D	26.2	C	41.4	D	27.3	C	41.2	D
8	US 50 Off Ramp / 5th Street	Signal	45.5	D	32.0	C	51.1	D	38.4	D	47.8	D	33.5	C	57.6	E	37.7	D	57.6	E	42.4	D	57.7	E	50.4	D
9	US 50 On Ramp / 5th Street	Signal	10.5	B	9.4	A	11.5	B	9.4	A	10.7	B	8.7	A	8.5	A	8.3	A	8.7	A	9.3	A	13.2	B	9.7	A
10	15th Street / 5th Street / River Road	Signal	28.5	C	44.6	D	28.3	C	44.5	D	28.3	C	50.1	D	29.3	C	50.9	D	31.8	C	52.8	D	30.6	C	47.1	D
11	Garden Street / Park Avenue	Signal	6.8	A	12.4	B	6.8	A	12.9	B	7.3	A	13.6	B	8.1	A	21.1	C	8.8	A	20.3	C	8.8	A	19.5	B
12	15th Street / Rail Street	Signal	4.9	A	5.3	A	5.0	A	5.6	A	5.3	A	5.9	A	5.3	A	6.0	F	5.4	A	6.5	A	5.4	A	6.5	A
13	Capitol Mall / 3rd Street (Sacramento)	Signal	35.1	D	82.1	F	37.7	D	85.8	F	72.1	E	82.9	F	42.3	D	83.1	F	40.9	D	85.1	F	22.2	C	81.4	F

Notes: Delay = Average Delay in seconds per vehicle (overall for signalized intersections; critical minor approach for stop-controlled intersections.)

LOS = Level of Service (overall for signalized intersections; critical minor approach for stop-controlled intersections.)

Table I : 2025 LOS Table with Mitigations

ID	Intersection	Control	9.5 M Retail Scenario												12.5 M Retail Scenario											
			Concept 9				Concept 10B				Concept 11				Concept 9				Concept 10B				Concept 11			
			A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour		A.M. Peak		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Tower Bridge Gateway / 5th Street	Signal	22.5	C	26.8	C	26.0	C	25.3	C	35.4	D	32.2	C	22.9	C	28.1	C	27.5	C	26.5	C	36.4	D	30.2	C
2	Tower Bridge Gateway / 3rd Street/ River Road	Signal	52.2	D	57.3	E	28.9	C	53.4	D	17.6	B	22.3	C	70.1	E	78.2	E	35.0	C	74.2	E	23.5	C	32.6	C
3	Tower Bridge Gateway / Garden Street	Signal	21.1	C	89.4	F	22.8	C	95.6	F	21.9	C	120+	F	23.6	C	120+	F	24.9	C	120+	F	26.2	C	120+	F
	Mitigated: Added 2 nd NBLT & 2 nd WBLT	Signal	18.4	B	29.4	C	19.3	B	29.7	C	20.1	C	36.3	D	21.6	C	53.9	D	22.8	C	51.5	D	24.2	C	52.5	D
4	Ball Park Drive / River Road	Signal	13.8	B	17.9	B	20.7	C	23.9	C	18.0	B	27.3	C	16.1	B	31.2	C	19.5	B	25.3	C	19.4	B	31.0	C
5	Garden Street / River Road	2-Way Stop	10.7	B	13.4	B	10.6	B	11.7	B	10.7	B	12.3	B	13.0	B	21.8	C	11.2	B	16.6	C	11.4	B	19.0	C
6	Triangle Street / River Road	2-Way Stop	11.4	B	12.3	B	10.8	B	10.8	B	10.8	B	11.0	B	13.7	B	15.1	C	11.0	B	12.6	B	11.0	B	12.7	B
7	Garden Street / 5th Street	Signal	43.1	D	92.9	F	55.5	E	94.4	F	58.4	E	97.5	F	96.5	F	109.7	F	95.1	F	120+	F	102.8	F	120+	F
	Mitigated: Added NBLT(pocket),SBLT (pocket),WBLT,EBLT	Signal	20.1	C	33.8	C	22.0	C	31.9	C	23.8	C	32.3	C	24.2	C	40.7	D	26.2	C	41.4	D	27.3	C	41.2	D
8	US 50 Off Ramp / 5th Street	Signal	72.2	E	120+	F	74.0	E	120+	F	74.7	E	120+	F	95.3	F	120+	F	100.8	F	120+	F	100.4	F	120+	F
	Mitigated: Added NBLT & SBLT	Signal	45.5	D	32.0	C	51.1	D	38.4	D	47.8	D	33.5	C	57.6	E	37.7	D	57.6	E	42.4	D	57.7	E	50.4	D
9	US 50 On Ramp / 5th Street	Signal	10.5	B	9.4	A	11.5	B	9.4	A	10.7	B	8.7	A	8.5	A	8.3	A	8.7	A	9.3	A	13.2	B	9.7	A
10	15th Street / 5th Street / River Road	Signal	110.5	F	120+	F	98.2	F	120+	F	90.6	F	120+	F	101.7	F	120+	F	93.3	F	120+	F	105.0	F	120+	F
	Mitigated: Added 2 nd NBLT,SBRT, 2 nd WBLT, 2 nd EBLT	Signal	28.5	C	44.6	D	28.3	C	44.5	D	28.3	C	50.1	D	29.3	C	50.9	D	31.8	C	52.8	D	30.6	C	47.1	D
11	Garden Street / Park Avenue	Signal	6.8	A	12.4	B	6.8	A	12.9	B	7.3	A	13.6	B	8.1	A	21.1	C	8.8	A	20.3	C	8.8	A	19.5	B
12	15th Street / Rail Street	1-Way Stop	36.5	B	41.6	B	33.8	B	65.4	E	41.3	B	56.0	B	44.3	B	86.8	F	50.1	B	120+	F	52.6	B	120+	F
	Mitigated: Signalized	Signal	4.9	A	5.3	A	5.0	A	5.6	A	5.3	A	5.9	A	5.3	A	6.0	A	5.4	A	6.5	A	5.4	A	6.5	A
13	Capitol Mall / 3rd Street (Sacramento)	Signal	35.1	D	82.1	F	37.7	D	85.8	F	72.1	E	82.9	F	42.3	D	83.1	F	40.9	D	85.1	F	22.2	C	81.4	F

Notes: Delay = Average Delay in seconds per vehicle (overall for signalized intersections; critical minor approach for stop-controlled intersections.)

LOS = Level of Service (overall for signalized intersections; critical minor approach for stop-controlled intersections.)

APPENDIX B3 ROADWAYS AND VEHICULAR CIRCULATION
ROADWAY MASTER PLAN ENGINEERING PLANS AND TECHNICAL
MATERIALS

PHASE 1 IN DEVELOPMENT BY WOOD ROGERS-AVAILABLE ON BRIDGE
DISTRICT FTP WHEN COMPLETED

TABLE B2: ROADWAY AND SIDEWALK COSTS (all facilities are backbone)
 * incorporates cost data from 11.11.08 URS (Matt Korve) estimate and other staff input.

Improvement	TOTAL COST	Cost Allocation				Notes
		Regional	Bridge	Parcel	Other	
1 Tower Bridge Gateway East Phase						
a ROW Acquisition (fair-share of Y spur)	\$1,000,000	\$1,000,000	\$0	\$0	\$0	Weyerhaeuser purchase allocated for TBG East ROWs; approx 50k sqft @\$20/sqft
b Other ROW Acq. - roadway only	\$299,839	\$299,839	\$0	\$0	\$0	\$20 per square foot acquisition cost; see Table B3 for ROW to be acquired
c Roadways	\$3,702,000	\$3,702,000	\$0	\$0	\$0	Assume 100% of roadway costs are "Regional"; requires confirmation (see Table B6)
d Roadway Median	\$59,000	\$59,000	\$0	\$0	\$0	
e Sidewalks	\$1,567,000	\$0	\$0	\$626,800	\$940,200	Assume 40% of sidewalks in Triangle, 60% outside of Triangle; requires confirmation
f Traffic Signals @ Fifth, Riverfront, Broad	\$625,000	\$625,000	\$0	\$0	\$0	
g Petroleum Pipeline Relocation	\$100,000	\$0	\$0	\$0	\$100,000	Pipeline owner cost (Kinder Morgan)
Total TBG East Phase	\$7,352,839	\$5,685,839	\$0	\$626,800	\$1,040,200	
2 Riverfront Road (Ballpark to 15th Street)						
a ROW Acquisition - roadway only	\$2,209,280	\$2,209,280	\$0	\$0	\$0	\$20 per square foot acquisition cost; see Table B3 for ROW to be acquired
b Roadway	\$5,449,000	\$5,449,000	\$0	\$0	\$0	
c Sidewalks	\$2,602,000	\$0	\$0	\$2,602,000	\$0	
d Traffic Signal @ Ballpark Drive	\$340,000	\$340,000	\$0	\$0	\$0	
e Traffic Signal @ Main Street	\$255,000	\$255,000	\$0	\$0	\$0	
f Traffic Signal @ Bridge Street	\$340,000	\$340,000	\$0	\$0	\$0	
g Traffic Signal @ Broad Street	\$340,000	\$340,000	\$0	\$0	\$0	
h Petroleum Pipeline Relocation	\$56,000	\$0	\$0	\$0	\$56,000	Pipeline owner cost (Kinder Morgan)
Total Riverfront Road	\$11,591,280	\$8,933,280	\$0	\$2,602,000	\$56,000	
3 5th Street (TBG to 15th Street)						
a ROW Acquisition - roadway only	\$1,806,652	\$1,806,652	\$0	\$0	\$0	\$20 per square foot acquisition cost; see Table B3 for ROW to be acquired
b Roadway	\$6,441,000	\$6,441,000	\$0	\$0	\$0	
c Median (btwn TBG and Casey)	\$157,000	\$157,000	\$0	\$0	\$0	
d Traffic Signal @ Main Street	\$340,000	\$340,000	\$0	\$0	\$0	
e Traffic Signal @ US 50 offramp	\$340,000	\$340,000	\$0	\$0	\$0	
j Traffic Signal @ US 50 onramp	\$340,000	\$340,000	\$0	\$0	\$0	
k Sidewalks (with exception of below)	\$1,368,000	\$0	\$0	\$1,368,000	\$0	
l Sidewalks (S. of Pioneer Brdg, westside)	\$204,000	\$0	\$0	\$0	\$204,000	Improvements outside of Bridge; allocated to Other per Collier/Jacobson 11/19/08.
Total Broad Street	\$10,996,652	\$9,424,652	\$0	\$1,368,000	\$204,000	
4 Ballpark Drive (Drever to Promenade)						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)
b Roadway (Drever Street to Main Street)	\$1,264,000	\$0	\$1,264,000	\$0	\$0	
c Sidewalks (Drever Street to Main Street)	\$477,000	\$0	\$0	\$477,000	\$0	
d U-Street (Main Street to Central Street)	\$793,000	\$0	\$0	\$793,000	\$0	Improvements only for 20 Foot public easement (assume roadway & sidewalk)
e Roadway (Central St to Riverfront Rd)	\$830,000	\$0	\$830,000	\$0	\$0	
f Sidewalks (Central St to Riverfront Rd)	\$200,000	\$0	\$0	\$200,000	\$0	
g U-Street (Riverfront Rd to Promenade)	\$174,400	\$0	\$0	\$174,400	\$0	Improvements only for 20 Foot public easement (assume roadway & sidewalk)
Total Ballpark Drive	\$3,738,400	\$0	\$2,094,000	\$1,644,400	\$0	
5 State U-Street (Central to Promenade)						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)
b U-Street (Central to Promenade)	\$245,600	\$0	\$0	\$245,600	\$0	Improvements only for 20 Foot public easement (assume roadway & sidewalk)
Total State U-Street	\$245,600	\$0	\$0	\$245,600	\$0	
6 Market Street						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)

TABLE B2: ROADWAY AND SIDEWALK COSTS (all facilities are backbone)

* incorporates cost data from 11.11.08 URS (Matt Korve) estimate and other staff input.

Improvement	TOTAL COST	Cost Allocation				Notes
		Regional	Bridge	Parcel	Other	
b Roadway	\$738,000	\$0	\$738,000	\$0	\$0	
c Sidewalks	\$184,000	\$0	\$0	\$184,000	\$0	
Total Ironworks Avenue	\$922,000	\$0	\$738,000	\$184,000	\$0	
14 Drever Street (Ballpark Drive to Soule Street)						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)
b Roadway	\$1,059,000	\$0	\$1,059,000	\$0	\$0	
c Sidewalks	\$405,000	\$0	\$0	\$405,000	\$0	
Total Drever Street	\$1,464,000	\$0	\$1,059,000	\$405,000	\$0	
15 Rail Street (Ironworks to 15th Street)						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)
b Roadway (Ironworks to Soule)	\$1,826,000	\$0	\$1,826,000	\$0	\$0	
c Sidewalks (Ironworks to Soule)	\$691,000	\$0	\$0	\$691,000	\$0	
d Recreation Trail (Ironworks to Soule)	\$336,000	\$0	\$336,000	\$0	\$0	
e Roadway (Soule to 15th Street)	\$1,549,000	\$0	\$0	\$0	\$1,549,000	Improvements outside of Bridge; allocated to Other per Collier/Jacobson 11/19/08.
f Sidewalks (Soule to 15th Street)	\$596,000	\$0	\$0	\$0	\$596,000	Improvements outside of Bridge; allocated to Other per Collier/Jacobson 11/19/08.
g Recreation Trail (Soule to 15th Street)	\$289,000	\$0	\$0	\$0	\$289,000	Improvements outside of Bridge; allocated to Other per Collier/Jacobson 11/19/08.
Total Rail Street	\$5,287,000	\$0	\$2,162,000	\$691,000	\$2,434,000	
16 Spur Street (Drever Street to Rail Street)						
a ROW Acquisition	\$0	\$0	\$0	\$0	\$0	ROW acquisition for this facility is not an eligible cost (not Regional roadway)
b Roadway	\$373,000	\$0	\$373,000	\$0	\$0	
c Sidewalks	\$129,000	\$0	\$0	\$129,000	\$0	
Total Spur Street	\$502,000	\$0	\$373,000	\$129,000	\$0	
17 15th Street (Broad Street to Jefferson Blvd)						
a ROW Acquisition - roadway only	\$210,346	\$210,346	\$0	\$0	\$0	Improv. outside of Bridge; allocated to Regional per Collier/Jacobson 11/19/08. \$20 per square foot acquisition cost; see Table B3 for ROW to be acquired
b Roadway	\$1,275,000	\$1,275,000	\$0	\$0	\$0	
c Sidewalks	\$158,000	\$0	\$0	\$0	\$158,000	Improvements outside of Bridge; allocated to Other per Collier/Jacobson 11/19/08.
Total 15th Street	\$1,643,346	\$1,485,346	\$0	\$0	\$158,000	
18 Other Universal Streets						
a Unnamed (Bridge to State, E. of Central)	\$312,000	\$0	\$0	\$312,000	\$0	Required U-Street per Specific Plan; estimate based on 11.11.08 Korve unit factors
b Unnamed (Bridge to Market, W. of Central)	\$244,000	\$0	\$0	\$244,000	\$0	Required U-Street per Specific Plan; estimate based on 11.11.08 Korve unit factors
c Unnamed (Ironworks to Main, W. of Broad)	\$152,000	\$0	\$0	\$152,000	\$0	Required U-Street per Specific Plan; estimate based on 11.11.08 Korve unit factors
Total Other Universal Streets	\$708,000	\$0	\$0	\$708,000	\$0	
19 Interim/Temporary Roadway Improvements (Prop 1C Facilities)						
Broad Street (Market to US 50 onramp)						
a Roadway Patch, Re-stripe, & Other	\$800,000	\$800,000	\$0	\$0	\$0	12.17.08 guesstimate; requires confirmation by Engineering and Wood Rodgers
b Asphalt sidewalks (E. side Ballpark to Mill)	\$125,000	\$0	\$0	\$125,000	\$0	12.17.08 guesstimate; requires confirmation by Engineering and Wood Rodgers
Riverfront Road (Ballpark to Mill)						
c Asphalt sidewalks (both sides of street) (except in front of Unger committed prjct)	\$110,000	\$0	\$0	\$110,000	\$0	12.17.08 guesstimate; requires confirmation by Engineering and Wood Rodgers
Riske Lane (intersection with Broad)						
d Temporary Roadway improvements	\$50,000	\$0	\$0	\$50,000	\$0	12.17.08 guesstimate; requires confirmation by Engineering and Wood Rodgers
State Universal Street (Riverfront to Promenade)						

TABLE C4: UTILITY TRENCH COSTS (all facilities are backbone)

0

Improvement	TOTAL COST	Cost Allocation				Notes
		Regional	Bridge	Parcel	Other	
1 <u>Backbone Utility Trench System</u>						
a Land and Easement Acquisition	\$0	\$0	\$0	\$0	\$0	Land/Easement Eligible only for "Regional" Collection Facilities
b Existing Utility Trench to Remain	\$0	\$0	\$0	\$0	\$0	Pursuant to 11.11.08 URS (Matt Korve) estimate
c New Utility Trench - Bridge District Service	\$1,310,000	\$0	\$1,310,000	\$0	\$0	Pursuant to 11.11.08 URS (Matt Korve) estimate
d New Utility Trench - nonBridge Service	\$200,000	\$0	\$0	\$0	\$200,000	Estimate on allocation (utility trench serving properties outside of Bridge District)
TOTAL UTILITY TRENCH COSTS	\$1,510,000	\$0	\$1,310,000	\$0	\$200,000	

TABLE B1: ROADWAYS - PRIMARY IMPROVEMENT BENEFIT

* Roadways include all facilities between street curbs (e.g., traffic signals, road medians) exclusive of transit facilities.

* Except where noted in Table B2, sidewalks and associated landscaping and pedestrian facilities are assigned as "Parcel" costs.

Improvement	Primary Improvement Benefit (roadway only)				Notes
	Regional	Bridge	Parcel	Other	
1 Tower Bridge Gateway East Phase	X				Major east-west arterial connecting West Sacramento and downtown Sacramento
2 Riverfront Road (Ballpark to 15th Street)	X				Secondary north-south arterial incl. streetcar line; Promenade access (regional facility)
3 5th Street (TBG to 15th Street)	X				Primary north-south arterial for "through" traffic.
4 Ballpark Drive (Drever to Promenade)					
a Between Drever and Main		X			Local connector
b Between Main and Central (U-Street)			X		Vehicular access to serve adjacent parcels; through pedestrian access
c Between Central and Riverfront		X			Local connector
d Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
5 State U-Street (Central to Promenade)			X		Vehicular access to serve adjacent parcels; through pedestrian access
6 Market Street (Broad to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
7 Grand Street (TBG to Promenade)					
a Between TBG and Riverfront	X				Main east-west connector to West Sac. civic core; potential streetcar, civic corridor
8 Bridge Street (US 50 offramp to Promenade)	X				
a Between US 50 offramp and Riverfront					Regional arterial connecting US 50 to Broad and Riverfront (Regional roads)
b Between Riverfront and Promenade (U-St)					Vehicular access to serve adjacent parcels; through pedestrian access
9 Garden Street (Broad St. to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
10 Mill Street (Broad St. to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
11 Central Street (Ballpark Drive to Mill Street)		X			Local connector
12 Casey Way (Main Street to Broad Street)		X			Local connector
13 Ironworks Ave (Ballpark Drive to Broad Street)		X			Local connector
14 Drever Street (Ballpark Drive to Soule Street)		X			Local connector; part of improvement extends outside of Bridge District
15 Rail Street (15th Street to Ironworks Street)					
a Between Ironworks and Soule		X			Local connector; part of improvement extends outside of Bridge District
b Between Soule and 15th Street				X	Entire improvement is outside of District; primary benefit is for nonDistrict properties
16 Spur Street (Drever Street to Rail Street)		X			
17 15th Street (Broad Street to Jefferson Blvd)	X				Improvement is part of Broad & Riverfront intersection realignment (Regional facility)
18 Other Universal Streets					
a Unnamed (Bridge to State, E. of Central)			X		Vehicular access to serve adjacent parcels; through pedestrian access
b Unnamed (Bridge to Market, W. of Central)			X		Vehicular access to serve adjacent parcels; through pedestrian access
c Unnamed (Ironworks to Main, W. of Broad)			X		Vehicular access to serve adjacent parcels; through pedestrian access

TABLE B3: "REGIONAL" ROADWAY RIGHT-OF-WAY RETAINED AND TO BE ACQUIRED (ROWS in square feet)

* Roadway ROW includes area between curbs; does not include ROW for sidewalks since sidewalks are always "Parcel" costs.

March 17, 2009 DRAFT, Work in Progress

To be confirmed and completed by Katie Yancey

Roadway/APN	Existing ROW	Grid 20 ROW (sqft)			Prop 1C Acquisition	Notes
		Retained ROW	To be Acquired	TOTAL		
Tower Bridge Gateway (east phase)						
058 320 09		0	4,566	4,566	4,566	
058 320 29		0	154	154	154	
058 320 32		0	2,813	2,813	2,813	
067 330 10		0	5,777	5,777	5,777	
067 330 11		0	1,682	1,682	1,682	
Wye		25,358	0	25,358	0	Acquired as part of Weyerhaeuser, ROW allocated to Prop 1C grant
Retained ROW		256,648	0	256,648	0	
Total TBG		282,006	14,992	296,998	14,992	
Riverfront						
058 320 01		0	3,738	3,738	0	
058 320 27		0	166	166	166	
058 350 01		0	44,560	44,560	0	
058 350 02		0	11,073	11,073	0	
058 350 05		0	50,927	50,927	34,920	
Retained ROW		111,894	0	111,894	0	
Total Riverfront		111,894	110,464	222,358	35,086	
5th						
058 300 11		0	651	651	651	
058 310 18		0	5,423	5,423	0	
058 310 19		0	1,820	1,820	1,820	
058 320 01		0	274	274	4,012	
058 320 22		0	19,651	19,651	19,651	
058 320 32		0	527	527	527	
058 330 01		0	13,250	13,250	0	
058 350 01		0	13,090	13,090	0	
058 350 02		0	6,540	6,540	0	
058 350 03		0	6,171	6,171	0	
058 350 04		0	3,922	3,922	0	
058 350 05		0	18,788	18,788	0	
058 990 10		0	226	226	0	
Retained ROW		81,360	0	81,360	0	
Total 5th		81,360	90,333	171,693	26,661	
Grand						
058 310 05		0	22,800	22,800	0	
058 310 18		0	7,888	7,888	0	
058 310 22		0	2,805	2,805	0	
058 320 01		0	14,605	14,605	0	
058 320 18		0	647	647	0	
058 330 04		0	640	640	0	
058 330 05		0	20,289	20,289	0	
058 370 54		0	12,449	12,449	0	
058 990 09		0	1,893	1,893	0	
058 990 10		0	31,305	31,305	0	

TABLE B1: ROADWAYS - PRIMARY IMPROVEMENT BENEFIT

* Roadways include all facilities between street curbs (e.g., traffic signals, road medians) exclusive of transit facilities.

* Except where noted in Table B2, sidewalks and associated landscaping and pedestrian facilities are assigned as "Parcel" costs.

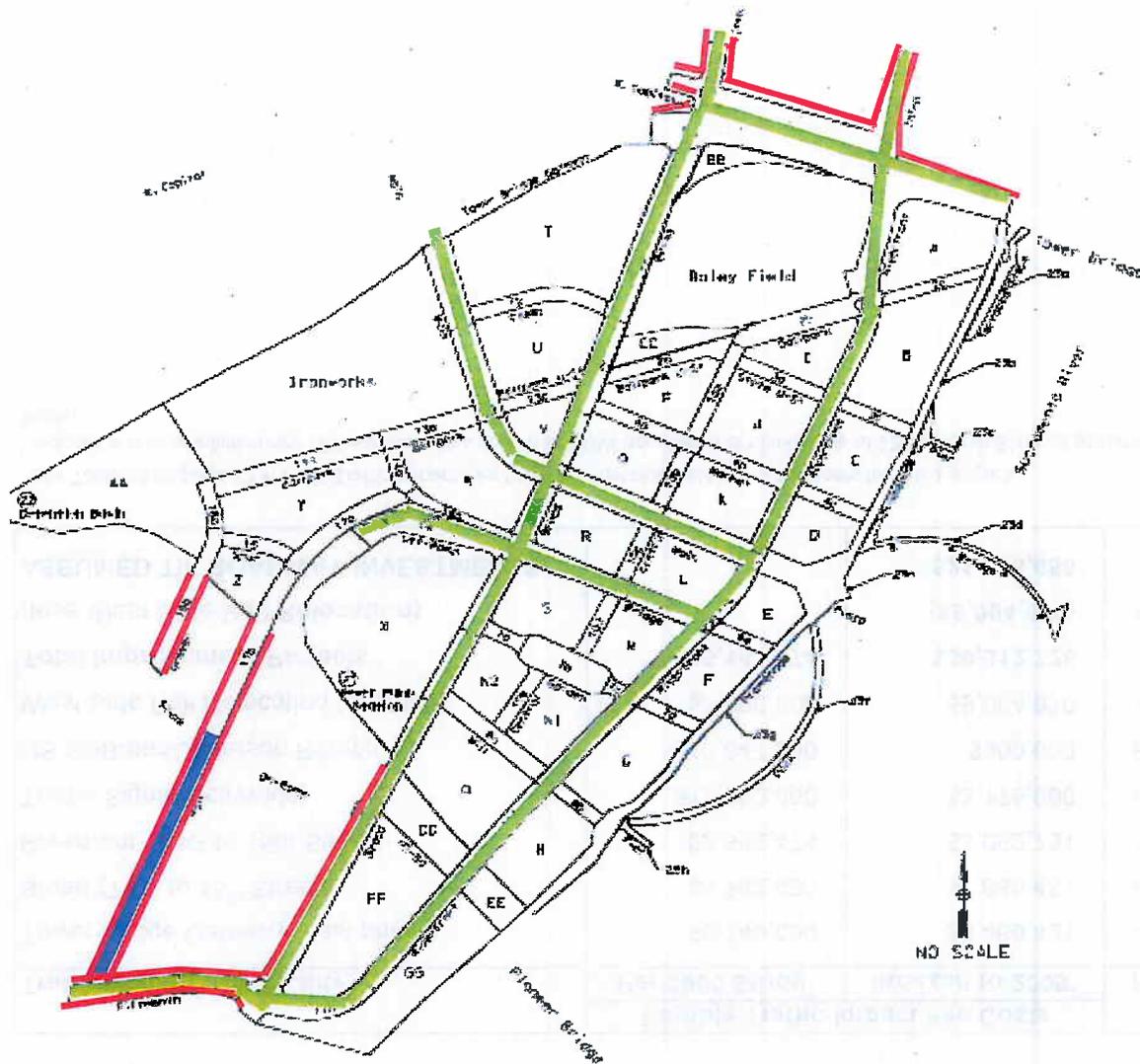
Improvement	Primary Improvement Benefit (roadway only)				Notes
	Regional	Bridge	Parcel	Other	
1 Tower Bridge Gateway East Phase	X				Major east-west arterial connecting West Sacramento and downtown Sacramento
2 Riverfront Road (Ballpark to 15th Street)	X				Secondary north-south arterial incl. streetcar line; Promenade access (regional facility)
3 5th Street (TBG to 15th Street)	X				Primary north-south arterial for "through" traffic.
4 Ballpark Drive (Drever to Promenade)					
a Between Drever and Main		X			Local connector
b Between Main and Central (U-Street)			X		Vehicular access to serve adjacent parcels; through pedestrian access
c Between Central and Riverfront		X			Local connector
d Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
5 State U-Street (Central to Promenade)			X		Vehicular access to serve adjacent parcels; through pedestrian access
6 Market Street (Broad to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
7 Grand Street (TBG to Promenade)					
a Between TBG and Riverfront	X				Main east-west connector to West Sac. civic core; potential streetcar, civic corridor
8 Bridge Street (US 50 offramp to Promenade)	X				
a Between US 50 offramp and Riverfront					Regional arterial connecting US 50 to Broad and Riverfront (Regional roads)
b Between Riverfront and Promenade (U-St)					Vehicular access to serve adjacent parcels; through pedestrian access
9 Garden Street (Broad St. to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
10 Mill Street (Broad St. to Promenade)					
a Between Broad and Riverfront		X			Local connector
b Between Riverfront and Promenade (U-St)			X		Vehicular access to serve adjacent parcels; through pedestrian access
11 Central Street (Ballpark Drive to Mill Street)		X			Local connector
12 Casey Way (Main Street to Broad Street)		X			Local connector
13 Ironworks Ave (Ballpark Drive to Broad Street)		X			Local connector
14 Drever Street (Ballpark Drive to Soule Street)		X			Local connector; part of improvement extends outside of Bridge District
15 Rail Street (15th Street to Ironworks Street)					
a Between Ironworks and Soule		X			Local connector; part of improvement extends outside of Bridge District
b Between Soule and 15th Street				X	Entire improvement is outside of District; primary benefit is for nonDistrict properties
16 Spur Street (Drever Street to Rail Street)		X			
17 15th Street (Broad Street to Jefferson Blvd)	X				Improvement is part of Broad & Riverfront intersection realignment (Regional facility)
18 Other Universal Streets					
a Unnamed (Bridge to State, E. of Central)			X		Vehicular access to serve adjacent parcels; through pedestrian access
b Unnamed (Bridge to Market, W. of Central)			X		Vehicular access to serve adjacent parcels; through pedestrian access
c Unnamed (Ironworks to Main, W. of Broad)			X		Vehicular access to serve adjacent parcels; through pedestrian access

EXHIBIT B1: "REGIONAL" AND "OTHER" ROADWAYS AND SIDEWALKS

Backbone Improvements (key assumptions)

- * Grid 19 (Korve 11.11.08); see Table B1
- * Universal Streets as Required (see SP Volume II)

- Roadway Costs Allocated as "Regional"
- Roadway Cost Allocated as "Other"
- Sidewalk Cost Allocated as "Other"



LEGEND
 19 Facility Number
 N Development Block
 ⊕ Traffic Signal Location

TABLE B6: ASSUMED REGIONAL TRAFFIC FACILITIES IN THE BRIDGE DISTRICT

Note: This table was documentation for the Finance Plan since October 2007. The finance approach was changed in mid December 2008. See CFD technical analysis for current methodology.

Traffic Impact Fee Facility	Eligible Traffic Impact Fee Costs		Notes
	Per 2005 Study ¹	Indexed to 2009 ²	
Tower Bridge Gateway (east phase)	\$5,740,000	\$6,460,421	Assumptions per 12.10.08 Zuspan/Jacobson
Broad (TBG to 15 th Street)	\$6,362,000	\$7,680,487	Assumptions per 12.10.08 Zuspan/Jacobson
Riverfront (TBG to 15th Street)	\$2,392,474	\$3,092,751	Assumptions per 12.10.08 Zuspan/Jacobson
Traffic Signals (citywide)	\$12,000,000	\$3,175,000	Indexed cost per 11.11.08 Korve estimate
US 50/Broad/Jefferson Ramps	\$10,647,000	\$900,000	Estimate of eligible costs in Bridge District
West Side Rail Relocation (citywide)	\$8,000,000	\$9,004,070	Assume reserved for grant match to relocate rail
Total Improvement Projects	\$45,141,474	\$30,312,729	
(less West Side Rail Relocation)		(\$9,004,070)	Assume reserved for grant match to relocate rail
ASSUMED TIF ROADWAY INVESTMENTS		\$21,308,658	

¹ see Table 10 on page 13 in 2005 Traffic Impact Fee Study and detailed cost estimate sheets for listed projects.

² indexed at annual inflation rate of 3 percent. Also assumes ROW acquisition at market rate of \$20/sqft, not \$10/sqft assumed in Fee Study (NOTE: ROW acq. cost determined by appraiser, not Fee Study)

**Appendix B: Transportation and Circulation
Technical Materials**

B4: Parking

APPENDIX B4 SHARED PARKING REQUIREMENTS, COST ESTIMATES,
AND ALLOCATIONS

IN DEVELOPMENT BY CITY URBAN PARKING PLAN TEAM

TO BE ADDED WHEN COMPLETE

**Appendix B: Transportation and Circulation
Technical Materials**

B5: Transit

APPENDIX B5 TRANSIT

STREETCAR/TRANSIT REPORT WWW.RIVERFRONTSTREETCAR.COM

Appendix B5 Transit Technical—Transit Routes and Assumptions

The cost of providing the level of service described here will include both capital and operating expenses. The capital cost includes rail development, bus acquisition, and improvements at stops and stations.

It's estimated that it would require two buses to provide a short loop service through the Triangle, connecting to the West Sacramento transit center on the west side and to a light rail station on the east side, operating on 15 minute frequencies. The cost of acquiring each bus is estimated at \$300,000 to \$400,000. Operating costs for bus service are estimated at \$250,000 to \$300,000 per year for a single bus operating for a 12 hour period Monday through Friday. Costs for developing and operating streetcar service would depend on the route and length of an extension off the planned backbone route, the frequency and duration of service, and whether additional vehicles would be required to operate it.

The streetcar financing plan relies entirely on local funding, will be undertaken in the next few months and coincide with circulation of a draft environmental impact report. All indications are that identified impacts from the project will be mitigable, that the financing plan will be implemented, and that the project will be in construction by 2010 and in operation in 2012 or 2013. In fact, one of the basic premises of the project is that it be fast tracked; staff and consultants were directed by the policy board to design and plan for a project that could be in construction by 2010.

Current design assumptions for the streetcar project are that operating headways will be ten minutes in peak periods, and 15 minutes off-peak, with service available seven days a week from 6:00 a.m. to midnight, as documented on page 10 in Section 2.8 of the Downtown/Riverfront Streetcar Study (Exhibit ____). A map on the following page depicts the walkable route within 0.5 mile of the streetcar stop at Tower Bridge Gateway and Third Street/South River Road.

In addition to the streetcar stop, bus service is available in and near the Triangle. Just across the Tower Bridge in downtown Sacramento, the vicinity of 3rd, 5th and L Streets is a major hub with over a dozen bus lines converging. In West Sacramento, the transit center at Merklely and West Capitol Avenues is within a half mile of the Triangle, and all of the bus lines that link West Sacramento with downtown Sacramento pass by or through the Triangle. *[Recommend including the following underline text and table in the Technical Appendix]*

A schedule of peak headway service for the transit center is also included with this Exhibit along with a map of walkable routes to the transit center within a half mile of the Delta Lane Property and the Broad and Bridge Housing Project (QIP).

Transit Service at West Capitol Avenue @ Merkley between 7:00am and 10:00am M-F

Route	Stops at WC & Merkley per Direction		Trips Serving WC & Merkley (both directions)
	EB / SB	WB / NB	
35	3	3	3
39	N/A-Does not service WC & Merkley		
40	6	6	3
41	6	6	3
42	4	3	7
240	3	3	3
241		2	2
Total	22	23	21
	7.33	7.67	7
<i>Average Trips per Hour</i>			7

EB=East Bound
 WB=West Bound
 NB=North Bound
 SB=South Bound

Total # of Stops made within relayed time frame at given stop

Source:

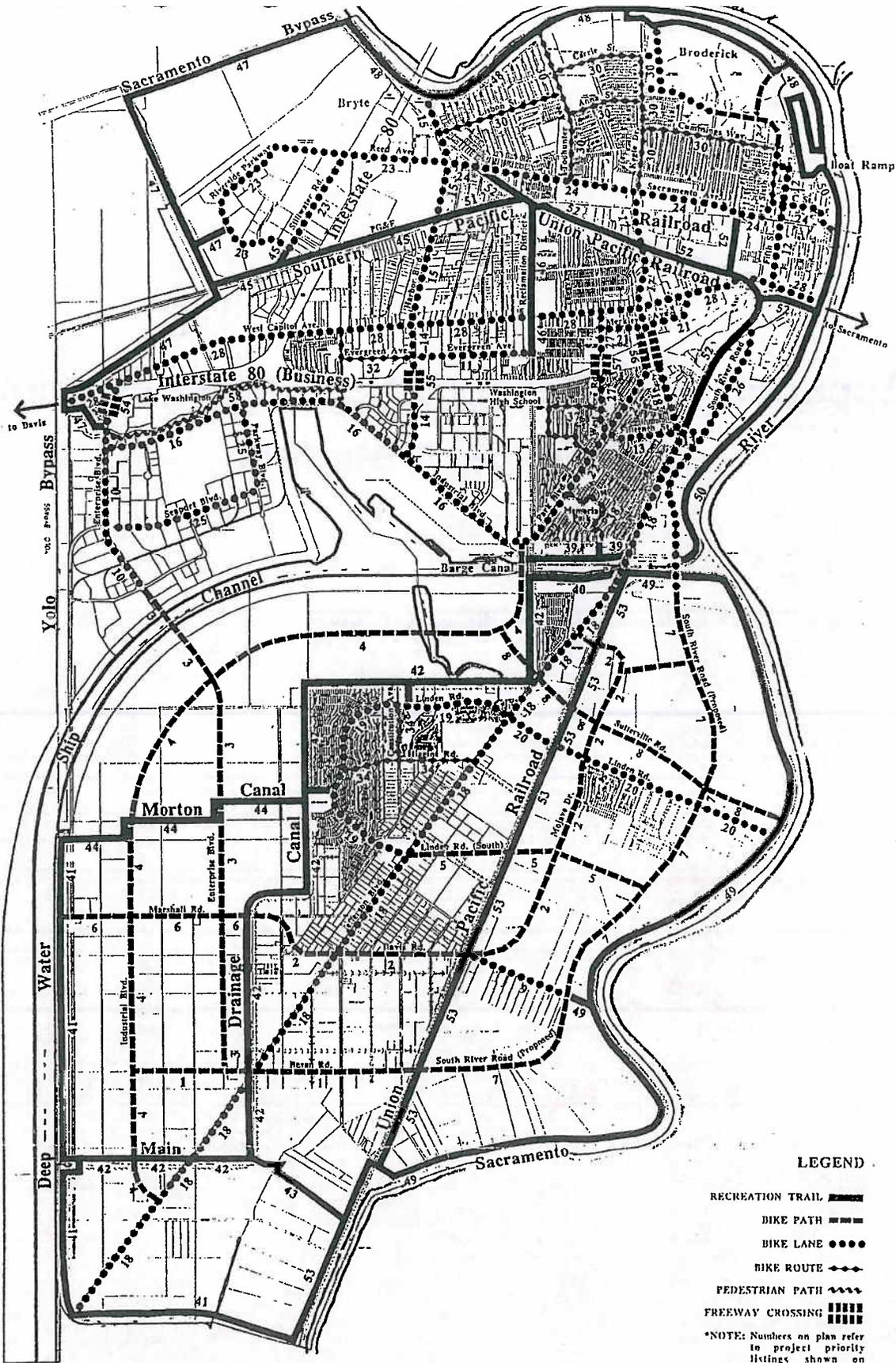
YoloBus

TABLE B4: TRANSIT AND OTHER TRAFFIC MITIGATION (all facilities are backbone)

Improvement	TOTAL COST	Cost Allocation				Notes
		Regional	Bridge	Parcel	Other	
1 <u>Streetcar</u>						
a Phase 1 Segment (from assessments)	\$700,000	\$0	\$700,000	\$0	\$0	Per 12.2.08 Jacobson (based on Pascoe & Bowman direction); Bridge share only Assume 1 mile at \$10M per linear mile streetcar; Per 12.2.08 Jacobson Assume no additional streetcar investments that are part of backbone
b Riverfront Segment and Facilities	\$10,000,000	\$0	\$10,000,000	\$0	\$0	
c Other Streetcar Segments and Facilities	\$0	\$0	\$0	\$0	\$0	
<i>Total Streetcar</i>	<i>\$10,700,000</i>	<i>\$0</i>	<i>\$10,700,000</i>	<i>\$0</i>	<i>\$0</i>	
2 <u>Other Transit and Traffic Demand Management</u>						
a Increased Bus Transit Level of Service	\$0	\$0	\$0	\$0	\$0	Per 2.05.09 Jacobson/Zuspan; may be included as supplemental investment Facilities to serve additional bus level of service; per 12.2.08 Jacobson input. Per 12.10.08 Jacobson/Zuspan; estimate to reach desired level of service
b Add'l Transit Facilities (e.g. bus shelters)	\$300,000	\$0	\$300,000	\$0	\$0	
c Other Traffic Demand Management	\$600,000	\$0	\$600,000	\$0	\$0	
<i>Total Other Transit</i>	<i>\$900,000</i>	<i>\$0</i>	<i>\$900,000</i>	<i>\$0</i>	<i>\$0</i>	
TOTAL TRANSIT	\$11,600,000	\$0	\$11,600,000	\$0	\$0	

**Appendix B: Transportation and Circulation
Technical Materials**

B6: Bikeways



LEGEND

- RECREATION TRAIL
 - DIKE PATH
 - BIKE LANE
 - BIKE ROUTE
 - PEDESTRIAN PATH
 - FREEWAY CROSSING
- *NOTE: Numbers on plan refer to project priority listings shown on

MASTER PLAN DIAGRAM



Bicycle and Pedestrian Path Master Plan

City of West Sacramento, California



Callander Associates



Landscape Architecture
and Site Planning

WEST SACRAMENTO
BICYCLE & PEDESTRIAN PATH MASTER PLAN
OCTOBER 9, 1991

Amended 1995

Prepared for The City of West Sacramento

CALLANDER ASSOCIATES

landscape architecture
park & recreation design

Walkways on Levees

Concrete and wooden walkways with handrails are permitted on both sides of levees if they do not unduly interfere with levee maintenance. The bottom of the walkway stringers on the riverside slope must be 2 feet above the design flood plane elevation. Existing stone protection, if disturbed, shall be restored to its original condition. Handrails may not be constructed on the levee crown. On a levee with a crown width less than 14 feet, handrails must be a minimum of 8 feet from the levee centerline. Walkway supports must be constructed to minimize the possibility of catching drift.

Planting and Irrigation on Levees

Vegetation retained or planted on levees is also subject to permit and is outlined in the "Interim Guide for Vegetation on Flood Control Levees", adopted September 16, 1988 by the Reclamation Board. Planting must be carefully considered for functional requirements of protection against wavewash, improvement of wildlife habitat, improvement of esthetics, and enhancement of overall environmental quality. The guidelines generally restrict vegetation other than grasses and certain ground covers from standard-sized levees. Trees are permitted on oversized levees subject to maintaining visibility for inspection purposes.

Vegetation retained or planted on levee slopes may be hand-watered; however, any water applied on the levee shall be applied so as to prevent erosion. No irrigation ditches, dug into the levee slope, are allowed, and excavation for watering basins shall be limited to a maximum depth of 12 inches. All irrigation and drainage conduits through levees must be installed with the pipe invert or bottom of conduit above the design flood plane. Permanent sprinkler systems are permitted only on the landside slope of the levee. Irrigation pipes must be an approved material, such as galvanized, plastic, or copper. Piping shall be buried no deeper than 8 inches in the levee slope. The supply line must contain an accessible control valve located a minimum of 10 feet landward of the levee toe, with the location clearly marked for maintenance personnel.

V. Master Plan

The Bicycle and Pedestrian Path Master Plan includes Bike Paths, Bike Lanes, Bike Routes, and Recreation Trails as defined in Chapter IV. Figure 15, Priority A Implementation, illustrates an initial plan that can be implemented under current conditions without major improvements to the City's infrastructure.

The Master Plan Diagram, Figure 16, illustrates the complete development of the Master Plan. Complete development is based on buildout of undeveloped areas and City infrastructure, including roads and bridges, per the existing framework plan for undeveloped areas outlined in the City's General Plan Policy Document.

Those portions of the Master Plan Diagram not shown in Priority A Implementation are classified as priority B and C implementation projects. Numbers shown on Figures 15 and 16 correspond to numbers for portions of the plan, or "projects", that are shown in Figure 20 and prioritized as "A", "B", and "C". A cost estimate for each project is also included in Figure 20. Priority A projects might occur within the next five years if funding is available, while priority B projects might not occur for ten to fifteen years, and priority C projects for fifteen to twenty years or more.

RECREATION TRAILS

The recreation trail locations shown in the Priority A Implementation Plan create extensive opportunities for development of recreational facilities for pedestrians and bicyclists. The majority of these locations are on Reclamation District easements which are currently available for trail development. These easements include areas along the Deep Water Ship Channel, Main Drainage Canal, Morton Canal, Sacramento and Yolo Bypasses, and the Sacramento River, north of the Boat Ramp.

A recreation trail, classified as priority A, is also indicated in the PG&E easement located west of Harbor Boulevard and in the Union-Pacific Railroad right-of-way south of the Barge Canal. Although land acquisition may be required by Union-Pacific, a priority A trail is shown in this location because it will provide an alternative to Jefferson Boulevard for north-south circulation and will not require costly construction of grade separations for railroad crossings.

Future Recreation Trails

Locations of recreation trails scheduled as priority B projects include the Sacramento River levee, south of the Boat Ramp and north of the Barge Canal, the Reclamation District easement, and a trail connection between the River levee and the Main Drainage Canal. Redevelopment will most likely occur adjacent to the River levee within the next ten years, and a trail could be included in this private development at no cost to the City.

The trail in the Reclamation District easement is scheduled as priority B since this location is isolated from other priority A Portions of the path sYstem. The Reclamation District recreation trail will prove more useful if coordinated with other priority B projects that provide linkage to the path system, such as the bike lanes proposed for West Capitol Avenue.

Recreation trails classified as priority C consist of project locations that are dependent on long range planning, or include costly construction elements and land acquisition. Construction of the recreation trail along the Sacramento River, south of the Barge Canal, is dependent on the long range planning goal of realigning South River Road as indicated in the General Plan Circulation

Diagram. The trail along the north bank of the Barge Canal, and the trail along the Union-Pacific Railroad north of the Barge Canal, should be coordinated with long range plans to relocate the railroad tracks from these areas. Trails along both the Union-Pacific and Southern-Pacific railroads also incur costly construction. Crossings under railroad grades will need to be constructed at two locations and land acquired, since the railroads will most likely not consider granting an easement for trail construction. Railroad crossings are discussed in further detail in a following section.

BIKE PATHS (CalTrans Class I Bikeways)

Most bike paths are classified as priority C projects due to their dependence on new roadway construction. This is evident by the predominance of bike paths located in the existing undeveloped area of Southport. The absence of bike paths in the northern half of the City reflects the predominantly built-out condition of the Bryte, Broderick, and West Sacramento areas.

The City Standard Street Cross Section shown in Figure I-2 of the General Plan Policy Document does not designate adequate widths of street right-of-ways for construction of bike paths. It is recommended that the General Plan be amended per Figure 17 so that adequate width will be provided on new city streets to accommodate bike paths. The right-of-way for all new arterial streets, both major and minor, and all collector streets in the City of West Sacramento should be established per the Amended Street Cross Section Standards.

Two bike paths that are classified as priority A and B, instead of priority C like all other bike paths, are located along the proposed alignment for Sutterville Road and the proposed extension of Marshall Road. The Marshall Road path would logically be scheduled to coincide with the priority B development of a community park proposed for Marshall Road at the Deep Water Ship Channel. The Sutterville Road path is classified as priority A since construction of Sutterville Road is projected to occur within the next five years.

BIKE LANES (Caltrans Class II Bikeways)

Opportunities exist for immediate implementation of bike lanes on city streets of sufficient width for this purpose, and for future development on streets with rights of way that are wide enough for street improvements including bike lanes. The addition of bike lanes to existing streets is accompanied by the prohibition of parking in most bike lane locations, due to insufficient right-of-way width for both bike lanes and parking. The prohibition of on-street parking is generally recommended as an acceptable means of implementing bike lanes if other alternatives do not exist, because parking on arterial and collector streets is not a high priority for transportation or transportation safety. Parking is currently prohibited intermittently in bike lane locations shown on the plan where parking must be prohibited to accommodate bike lanes, and only a few businesses in

these locations appear to currently need on-street parking. Existing streets that are planned for widening within five years should be planned to include bike lanes and to retain existing parking. In general, parking must be prohibited for bike lane locations shown for priority A implementation; however, C Street and Park Boulevard are currently wide enough to accommodate ~ bike lanes without prohibiting parking:

Sacramento Avenue and Jefferson Boulevard, from Sacramento Avenue to Interstate 80 Business, are currently striped along the street edge and signed as a bike route. These locations can easily be converted to bike lanes with the addition of striping, pavement markings and signage, per Caltrans standards defined in Chapter IV of this document.

In addition, locations where parking is currently prohibited or does not occur include:

- 1) Reed Avenue, Riverside Parkway, and Stillwater Road,
- 2) Harbor Boulevard, south of West Capitol Avenue,
- 3) Industrial Boulevard,
- 4) Linden Road, west of Jefferson Boulevard,
- 5) Seaport Boulevard and Parkway Boulevard.

The bike lanes proposed for Linden Road, west of Jefferson Boulevard, will replace existing bike paths that are substandard. The existing bike paths are recommended for conversion to pedestrian use only due to insufficient width for two-way bike Streets that are planned for widening within five years, and therefore can be planned to accommodate bike lanes are: Enterprise Boulevard, and Harbor Boulevard north of West Capitol Avenue.

Bike lane locations planned for priority A implementation where parking must be prohibited include: Fifth Street and West Acre Road.

Priority B Bike Lane Projects

Bike 1 lanes that are scheduled as priority B projects, in order to coincide with street widening that will most likely occur within ten years, are located at,

- 1) Linden Road, east of Jefferson Boulevard
- 2) Jefferson Boulevard, south of I-80 Business (Parking is currently intermittently prohibited in this location)
- 3) West Capitol Avenue
- 4)

Parking must also be prohibited at West Capitol Avenue and a portion of Jefferson Boulevard, immediately south of I-80 Business, since existing street right-of-way width is apparently insufficient to accommodate street widening, bike lanes and parking. Existing parking is intermittently prohibited in these locations.

Bike lanes at Evergreen Avenue and Merkley Avenue are scheduled as priority B projects, because these locations are dependent on other priority B projects for linkage to the path system, especially the West Capitol Avenue bike lane. The bike lane at South River Road, north of the Barge Canal, is scheduled as priority B to coincide with redevelopment south of the Boat Ramp that will most likely occur within ten years.

Bike lanes yes a t Davis Road, east of the Union-Pacific Railroad, and Fifteenth Street are scheduled .for priority C projects since street widening will probably not occur within ten years and the existing streets cannot accomodate bike lanes, even if parking is prohibited.

BIKE ROUTES (Caltrans Class III Bikeways)

Purpose of bike routes is to provide continuity between Bike Paths, Bike Lanes, and Recreation Trails where opportunity does not exist for development of these other types of path system facilities. Bike routes can also provide an interim link between priority A projects for creation of a cohesive priority A path system, without construction of major street improvements.

Bike routes listed below will be permanent locations for bike routes where insufficient right of way widths preclude development of other types of facilities, and prohibiting on-street parking is not desirable because locations are in residential areas.

- 1) Broderick and Bryte neighborhood streets (Lisbon Avenue, Carrie Street, Todhunter Avenue, Anna Street, Kegle Drive, Cummings Way, and Sixth Street)
- 2) West Sacramento neighborhood streets near Washington High School (Meadow Road west of Westacre Road)
- 3) 3) West Sacramento neighborhood streets near Memorial Park (Eighteenth Street, Regent Street, and Virginia Street south of Nineteenth Street)
- 4) Higgins Road and Constitution Avenue

A bike route will be located at Evergreen Avenue, east of Harbor Boulevard because an alternative for on-street parking of large trucks in this area is not available. The Evergreen Avenue bike route is scheduled as a priority B project because linkage to the path system depends on other priority B projects.

Temporary Bike Routes

The purpose of some of the bike routes shown in Figure 18 for priority A implementation is to provide temporary linkage with other priority A projects,

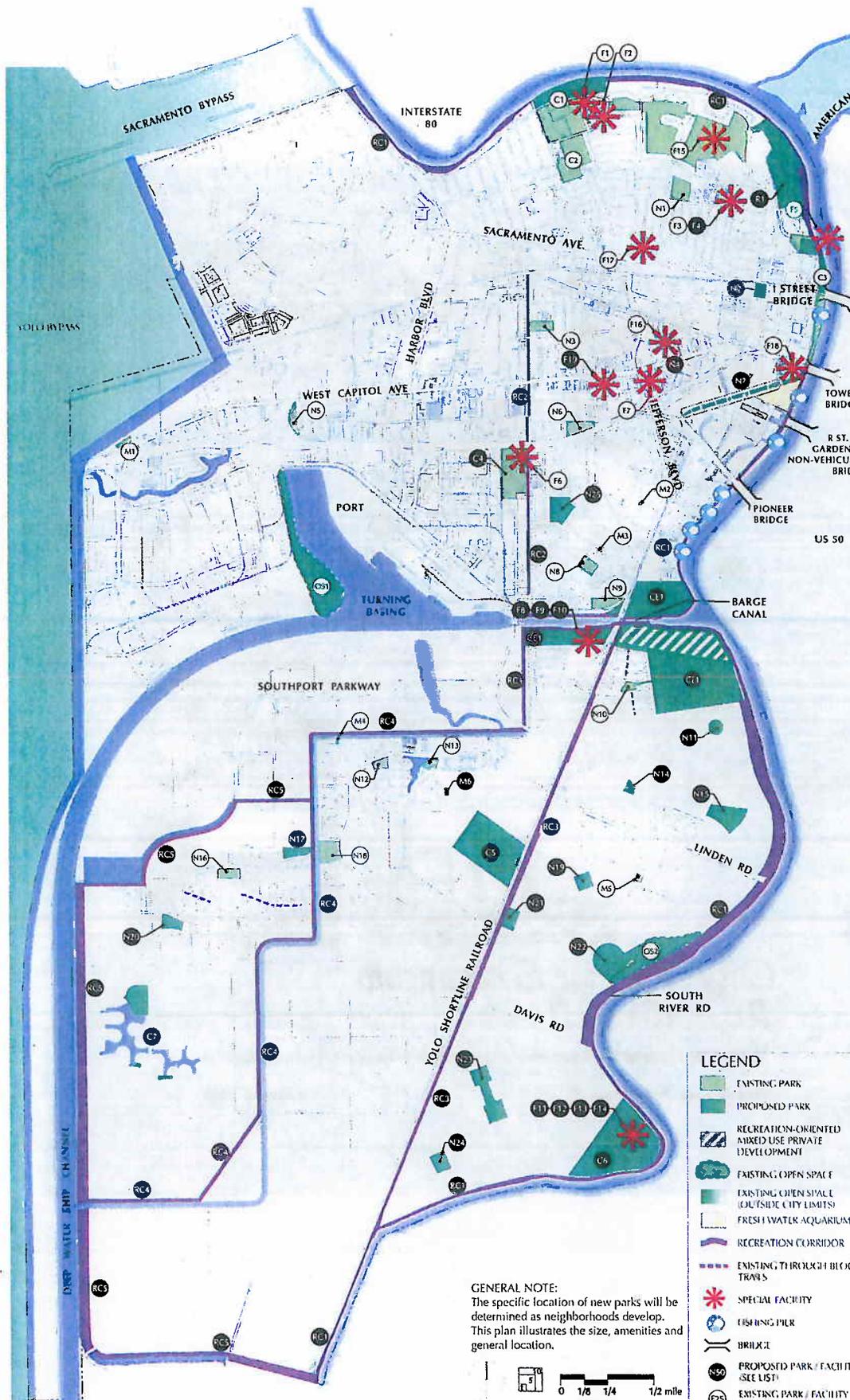


City of West Sacramento **p**arks *m*aster **p**lan

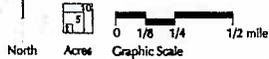
Prepared for: City of West Sacramento Department of Parks & Community Services

Prepared by: SmithGroup JJR

September 2003



GENERAL NOTE:
 The specific location of new parks will be determined as neighborhoods develop. This plan illustrates the size, amenities and general location.



LEGEND

- EXISTING PARK
- PROPOSED PARK
- RECREATION-ORIENTED MIXED USE PRIVATE DEVELOPMENT
- EXISTING OPEN SPACE
- EXISTING OPEN SPACE (OUTSIDE CITY LIMITS)
- FRESH WATER AQUARIUM
- RECREATION CORRIDOR
- EXISTING THROUGH BLOCK TRAILS
- SPECIAL FACILITY
- FISHING PIER
- BRIDGE
- PROPOSED PARK / FACILITY (SEE LIST)
- EXISTING PARK / FACILITY (SEE LIST)

- REGIONAL PARK**
- GOVERNORS RESIDENCE STATE PARK
- CENTRAL PARK**
- CENTRAL PARK
- COMMUNITY PARKS**
- BRYTE PARK
- GOLDEN STATE A.S.
- ALICE NORMAN BRYTE PLAYFIELDS
- RIVERWALK PARK
- RIVER CITY HS
- SPORTS COMPLEX
- SOUTHPORT COMMUNITY PARK
- BRIDGEWAY LAKES
- NEIGHBORHOOD PARKS**
- ELKHORN PARK (ELKHORN SCHOOL)
- WASHINGTON NEIGHBORHOOD PARK
- WESTFIELD SCHOOL PLAYFIELDS
- CENTRAL BUSINESS DISTRICT PARK
- MEADOWDALE PARK
- WESTLAKE PLAYFIELDS
- TRIANGLE PARK BLOCK
- MEMORIAL PARK
- SAM CUMBS PARK
- SOUTHPORT CATHAY NEIGHBORHOOD PARK
- SOUTHPORT NEIGHBORHOOD PARK
- LINDEN PARK
- TOLEDOSTONE LAKE PARK
- RIVER RANCH NEIGHBORHOOD PARK
- NEWPORT NEIGHBORHOOD PARK
- BRIDGEWAY ISLAND NEIGHBORHOOD PARK
- BRIDGEWAY ISLAND III NEIGHBORHOOD PARK
- SUMMERFIELD PARK
- PARK NEIGHBORHOOD PARK
- BRIDGEWAY ISLAND II NEIGHBORHOOD PARK
- SOUTHPORT NEIGHBORHOOD PARK
- SOUTHPORT NEIGHBORHOOD PARK
- SOUTHPORT NEIGHBORHOOD PARK
- SOUTHPORT NEIGHBORHOOD PARK
- WESTMORE OAKS PLAYFIELDS
- MINI PARKS**
- ROLAND HENSLEY BIKE PARK
- IRRIGLE PARK
- PENNSYLVANIA PARK
- PATRYN PARK
- REDWOOD PARK
- THASANT HOLLOW PARK
- OPEN SPACE AREAS
- TURNING BASIN RIPARIAN AREA
- BEE LAKES
- RECREATION CORRIDORS**
- SACRAMENTO RIVER BARGE CANAL
- NORTH HERN CASEMENT
- SHORT LINE TRAIL
- MAIN DRAIN
- DEEP WATER CHANNEL
- SPECIAL FACILITIES**
- CLUB WEST
- GOLDEN STATE POOL
- WEST SACRAMENTO SENIOR CENTER
- COMMUNITY CENTER
- BRODERICK BOAT RAMP
- RIVER CITY POOL
- SENIOR CENTER
- CENTRAL SWIM/GYM
- CENTRAL COMMUNITY CENTER
- CENTRAL HS. TEEN CENTER
- SOUTHPORT COMMUNITY CENTER
- SOUTHPORT HS. TEEN CENTER
- SOUTHPORT SENIOR CENTER
- SOUTHPORT SWIM/GYM
- IGA FITHOUSE
- GOLF COURSE (PRIVATELY OWNED)
- CIVIC CENTER
- RUSSIAN CHURCH OF EVANGELICAL BAPTISTS (PRIVATELY OWNED)
- RALCY FIELD (PRIVATELY OWNED)
- FRANCES A. CHUCK COLLEES TEEN CENTER

COMMUNITY PARKS

West Sacramento currently has two community parks and one special facility (the Broderick Boat Ramp) that together provide 46 acres of land. Bryte Park, Alyce Norman-Bryte Playfields, and the fields at Golden State Middle School can be considered as one community park that together provide 38 acres that meet the community park definition. River Walk Park is the second community park, and contains 4 acres. The Broderick Boat Ramp provides 4 acres that serve the entire community. At present, 56 additional acres of community park land are required to meet the 3 acre per 1000 population standard to serve the current population of 34,000. At buildout, a total of 231 acres (185 additional) would be required to meet the demand of a projected 77,000 population.

Joint use of existing school grounds is necessary to provide improved community park space in the northern half of the city. It should be noted that the existing grounds at River City High School are not included in the totals for existing community park acreage, because they are not cooperatively maintained through a joint use agreement between the City and the School District. Should the school grounds be improved under such an agreement, the acreage total would then be added to the existing supply of community park land.

The following existing and new community parks are proposed:

Bryte Park /Golden State Middle School (C1)

The playfields and park facilities at Bryte Park and Golden State Middle School provide 21 acres of community park space. In addition, Bryte Park serves as the only source of neighborhood park amenities for the Bryte neighborhood. An opportunity exists to increase the amount of community park acreage by extending Bryte Park to the Sacramento River. This would provide an additional 23 acres with formalized public access to the river, pathways, and picnic areas. This would also connect Bryte Park to the proposed Recreation Corridor RC1. Recommendations for improvements include:

- Address deferred maintenance items within the park, such as play equipment, picnic areas, benches, and pathways
- Install additional play areas for use by neighborhood children
- Install group picnic area for 300 people
- Incorporate adjacent levee and riverfront into the park design. Create river access and connection to riverfront recreation corridor

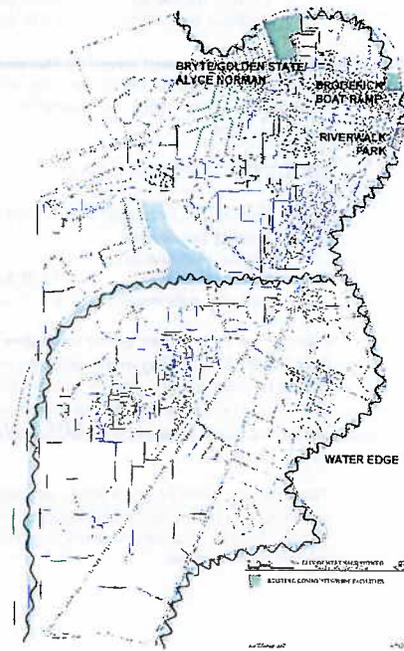


Figure 2-2: Existing Community Wide Facilities

WEST SACRAMENTO PLANNING AREA C6

Existing neighborhood park acreage:	0
Existing population:	15
Buildout population:	9,221
Existing deficiency:	0
Buildout deficiency:	18.4



Summerfield Park

Planning area C6 is the "Triangle". This area is expected to develop into an urban core characterized by high and medium-density housing. The Triangle Specific Plan proposes urban park development in the form of the "Park Blocks" (N7). The area would also be served by the extension of River Walk Park southward along the Sacramento River.

WEST SACRAMENTO PLANNING AREA C9

Existing neighborhood park acreage:	9.3
Existing population:	3,667
Buildout population:	3,667
Existing deficiency:	(-2.0) (surplus)
Buildout deficiency:	(-2.0) (surplus)

Planning area C9 is well served by **Memorial Park (N8)**, **Circle Park (M2)**, **Pennsylvania Park (M3)**, **Sam Combs Park (N9)**, and the facilities at **River City High School (C4)**. No new parks are proposed for this area. Open space improvements are currently being explored for the Westmore Oaks Elementary School site.

SOUTHPORT PLANNING AREA D1

Existing neighborhood park acreage:	21.2
Existing population:	4,223
Buildout population:	9,725
Existing deficiency:	(-12.8) (surplus)
Buildout deficiency:	(-1.7) (surplus)



South River Road (Future Recreation Corridor)

Planning area D1 is well served by **Linden Park (N12)**, **Touchstone Lake Park (N13)**, and **Summerfield Park (N18)**. Also located in this planning area is **Patwin Park (M4)**, an undeveloped mini park that should be developed to provide access from the neighborhood to the **Main Drain Recreation Corridor (RC4)** via a pedestrian bridge that would cross the Main Drain. Additional parks planned for the Bridgeway Island neighborhood (**N16**, **N17**, and **N20**) will meet the demand for neighborhood park acreage.

The Arlington Oaks neighborhood currently has no convenient access to any park facilities because it is surrounded by barriers including Jefferson Boulevard, Lake Washington Boulevard, and the Barge Canal. Creation of a new neighborhood park within this neighborhood should be pursued, at a location to be determined.

MINI PARKS

West Sacramento currently has five mini parks, two of which are traffic circles, two that are undeveloped residential lots, and the Roland Hensley Bike Park located on West Capitol. Mini parks generally provide limited sitting and play areas. This can be appropriate in high density developments and in areas where larger parks are not feasible. However, development and maintenance costs are relatively high. Therefore, it is recommended that no new mini parks be developed other than the two mini parks that have already been accepted as part of the Bridgeway Lakes subdivision.

RECREATION CORRIDORS

Recreation corridors are proposed for the city's water edges, along a utility easement, and along a rail corridor. These corridors feature multi-purpose pathways that can be used for recreation and as alternative transportation. They can be used for walking, jogging, biking and, where appropriate, equestrian use. They also help tie the community together by linking people with their destinations such as parks, recreation facilities, schools, churches, and the workplace. The proposed recreation corridor system would create several loop routes. These loop routes are typically more enjoyable than linear pathway systems that require back-tracking. The loop routes would also be attractive to cycling races and community trail rides.

Design of the recreation corridors is organized around the multi-purpose pathway as the primary feature. Recreation corridors may also include landscaping, benches, small picnic areas, small play areas, or other recreational features. These features may be further developed where the recreation corridor forms the edge of a park, such as at the proposed Bryte Park expansion and the proposed Central Park. Formalized access to the river and other waterways should be incorporated at logical locations into the design of waterside recreation corridors.

Design standards for Recreation Corridors are contained in the Southport Design Guidelines, as revised August 5, 1998. The Southport Framework Plan also describes "through-block trails", which are minor pedestrian/bicycle linkages that feed the recreation corridors. Appendix E of this Parks Master Plan reproduces the applicable portions.

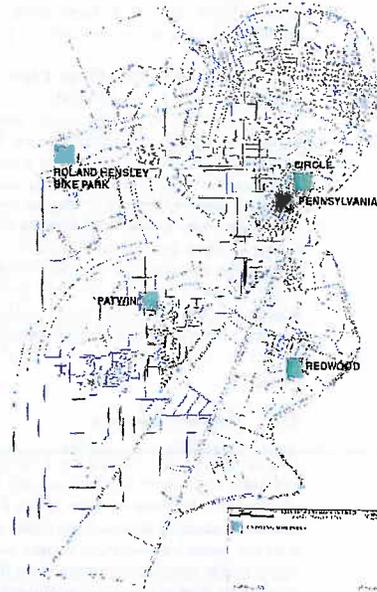


Figure 2-6: Existing Mini Parks



Barge Canal

Recreation Corridors are also encouraged on the west side of West Sacramento, and access to the Yolo Wildlife area is encouraged. The following corridors are proposed:

RC1 Sacramento River/Barge Canal
13.1 miles 192 acres

This corridor would provide a continuous recreation corridor along the entire length of the Sacramento River within the City limits. The corridor shall extend from the water's edge to include the publicly owned right-of-way gifted by property owners for the existing sections of River Walk, the future extension of River Walk from the Tower Bridge south to the Pioneer Bridge and interior paths in other areas along the Sacramento Riverfront. It would link together all of the City's community parks with the exception of the proposed sports complex. The multi-purpose path will utilize the South River Road pavement once this road is replaced by a new arterial. Construction of bicycle- and pedestrian-friendly bridge crossings of the Barge Canal at Jefferson and at the proposed River Road Bridge will be critical to maintaining the continuity of the recreation corridor.



Short Line Corridor

RC2 Northern Easement
1.7 miles 12 acres

This corridor would occupy the existing drainage easement and extend from the railroad tracks on the north to Park Boulevard on the south. Design of the recreation corridor should be pursued in coordination with the sanitary sewer main project so that the new utility improvements do not preclude the construction of the trail. Ample space exists within the easement for construction of the sewer line and pathway. Additional neighborhood-serving amenities such as tot lots and picnic areas could be incorporated into the design of the recreation corridor. The existing open drainage ditch could be designed as an attractive feature with native vegetation and other enhancements.



Lake Washington

RC3 Short Line Trail
3.5 miles 46 acres

A multi-purpose path would be constructed along the existing railroad corridor that extends south to Clarksburg. This corridor would be an example of the "rails-with-trails" concept. Appropriate safety measures would be incorporated into the design of the path to address the proximity of the active railroad.

RC4 Main Drain
5.8 miles 48 acres

This corridor would be constructed along the Main Drain from the barge canal on the north to the Deep water Shipping Channel on the south. It would provide convenient access for Southport neighborhoods and would become part of the loop systems. A pedestrian/bicycle bridge should be constructed over the Main Drain to connect the Bridgeway Island neighborhood with Summerfield Park.

Appendix



Appendix B: Demand Analysis

Summary of Demand for Parks and Recreation Services

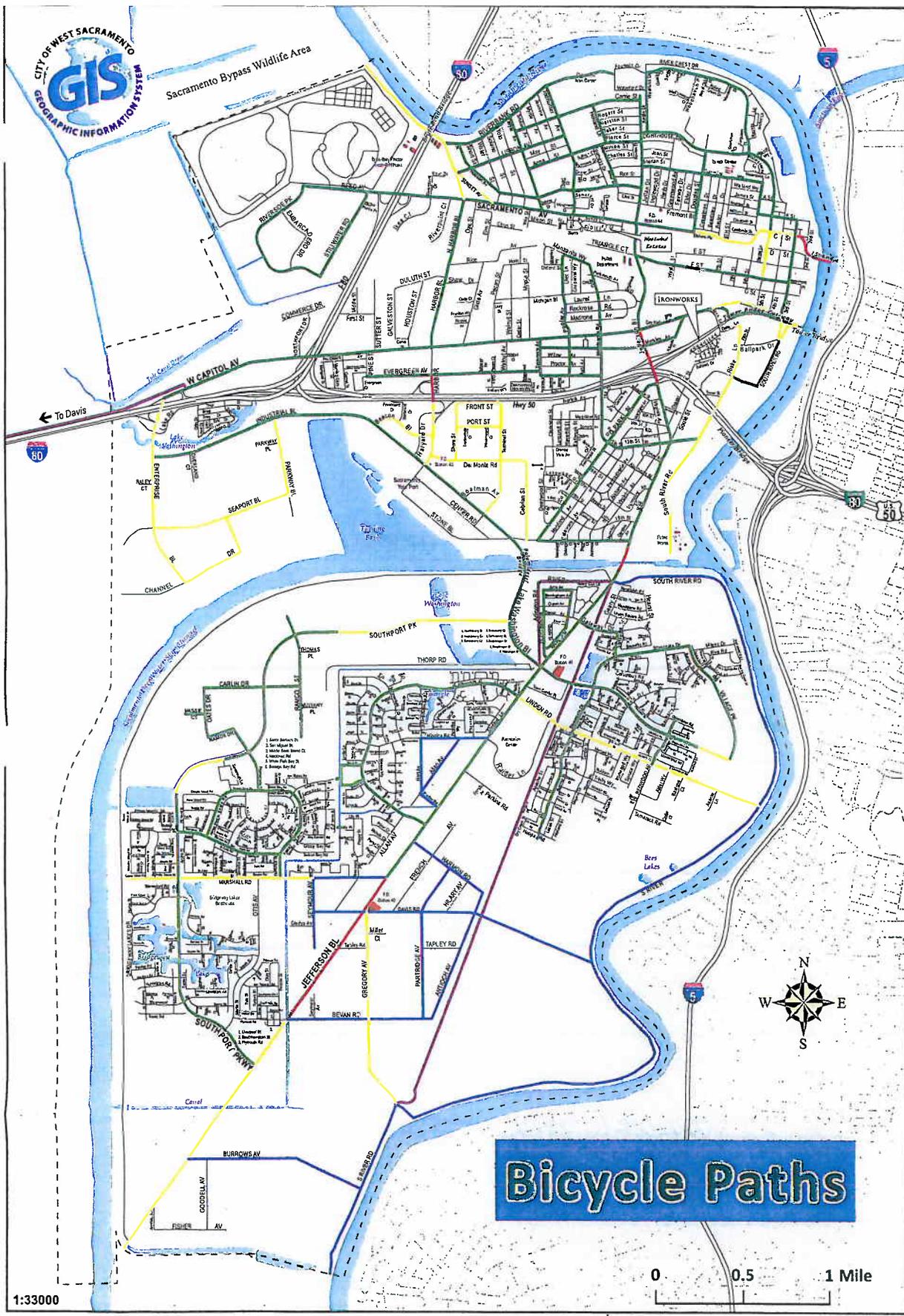
Cities provide public services in response to residents' perceived needs, or "demand". The following actions were taken to determine the current demand for park and recreation facilities in West Sacramento:

- Opinion survey
- Public meetings and focus groups
- Demographics analysis
- Comparison with comparable communities
- Review of standards
- Review of available trends literature
- Informal written questionnaire

The results of these initiatives are described in greater detail in this chapter. The reader is encouraged to review the opinion survey report document (available under separate cover through the Parks and Community Services Department). Based on the various components of the demand analysis, the following summary of demand is presented (not in order of importance):

- **A Central Park:** West Sacramento currently lacks a large park containing a variety of facilities that can be used as a community gathering space. Participants in the Community Workshop rated this as a high priority, and expressed a desire for a single park that would provide facilities for all age groups and interest. They also viewed such a facility as a means to improve the image of the City and provide an enhanced community identity.
- **Improved water access:** Residents value the water resources available in West Sacramento. They desire improved access to water-related recreation such as fishing, boating, swimming, and passive use.
- **Increased number and variety of facilities:** The City received low scores in the opinion survey relative to other California communities for the number and variety of facilities available.
- **Improvements to existing parks:** Participants expressed the perception that the City's parks are tired and old. Safety of park users is also of concern.
- **Recreation corridors and trails:** The corridor concept was supported in the public meetings and through the high scores received in the survey for bicycling, walking, and horseback riding.
- **Programs and activities for children and youth:** A high level of importance was expressed for providing after-school and sports programs for children and teens. Construction of a high school age teen center was also highly rated. The youth workshop participants expressed a desire for skatepark facilities.
- **Swimming:** Swimming is a very popular activity. A high level of support for a family aquatic park with swimming pools and water play was expressed.
- **Landscape entrances:** Beautification of gateways to the community with landscaping was rated highly in the survey.

Sacramento Bypass Wildlife Area



Bicycle Paths

1:33000

	Bike Lanes or Shoulders		Rural Route -No Shoulder		Schools
	Variable Shoulder Widths		Off Street Paths		Parks
	Limited or No Shoulder		City Limits		

**Appendix B: Transportation and Circulation
Technical Materials**

B7: Rail Removal

APPENDIX B7 RAIL REMOVAL UNDER DEVELOPMENT

Yolo Regional Freight Rail Improvement Project

DRAFT REPORT IS IN DEVELOPMENT

May 2009

Prepared for:
City of Woodland, City of West Sacramento,
Port of West Sacramento, Yolo County,
&
Yolo County Flood Control and Water Conservation District

Prepared by



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Sacramento, CA 95817
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TABLE B5: RAIL REMOVAL COSTS (projects are supplemental improvements)

Note: Strategy is to use Traffic Impact Fee project (see Table B6) for West Side Rail Removal and Relocation to leverage grant for rail removal. Traffic Impact Fee funds Regional cost; federal grant (unspecified at this time) to fund "Other" cost.

0

Improvement	TOTAL COST	Cost Allocation				Notes
		Regional	Bridge	Parcel	Other	
Rail Removal/Relocation (net costs)						
1 UP Railyard Removal/Relocation	\$0	\$0	\$0	\$0	\$0	
2 UP Main Line Relocation	\$0	\$0	\$0	\$0	\$0	
Total Rail Removal/Relocation	\$69,004,070	\$9,004,070	\$0	\$0	\$60,000,000	per 2.26.09 Les Bowman