PROJECT 1:
UPDATE SIGNAL TIMING AND DETECTION AT DESIGNATED INTERSECTIONS

Primary Responsibility: **Public Works**
Right-of-Way Control: **City**
Required Studies/Actions: **Intersection and possibly traffic studies**

Signal Timing and Detection

There are two issues that are brought up consistently among cyclists riding on the streets in Folsom, specifically at the intersections. The first is the inability for the loops in the pavement to pick up cyclists and trip the signal when no cars are present. The only other option is to use the pedestrian button located on the signal pole. This is not always the easiest or most convenient to access for most cyclists. The second item is that many signals do not currently provide sufficient time to make it through the intersection before the light changes. The timing of most signals is based the minimum green time it takes for one car to make it through the intersection, which is not enough time for a cyclist to clear the intersection. This situation is most common where a collector or residential street intersects with a major arterial street.

Based on input from local cyclist advocacy group and coordination with City of Folsom Public Works Department, the following is a list of the top 10 priority intersections that signal timing and detection needs to be addressed.

Folsom Boulevard at Parkshore Drive
Folsom Boulevard at Natoma/Forrest Street
Iron Point Road at Broadstone Parkway
Natoma Street at Stafford Street
Blue Ravine Road at Sibley/Prairie City Road
Blue Ravine Road at Plaza/Seaton
East Bidwell Street at Broadstone Parkway
Iron Point Road at Prairie City Road
Prairie City Road at Willard Drive
East Bidwell Street at Glenn Drive

Providing consistent signal timing and detection is a high priority because of improved safety and efficient movement for both the cyclist and motorist. Improving these 10 intersections is the first step in providing a comprehensive model for signal timing and detection throughout

the City.

PROJECT #2: BLUE RAVINE ROAD & HUMBUG-WILLOW CREEK TRAIL

Primary Responsibility:	**Parks & Recreation (trails)** **Public Works (bike lanes)**
Right-of-Way Control:	**City, some private property will require easements or dedications**
Required Actions/Studies:	**CEQA clearance, trail and crossing design, and new easements**

This corridor, which consists of several distinct and generally parallel bike lanes and paths, was ranked as the second most important bikeway improvement in Folsom. This corridor serves more bicyclists than any other single corridor in the City. Blue Ravine Road and the Humbug-Willow Creek Trail are considered together for the simple reason that some bicyclists prefer to use off-road pathways while others prefer riding on the side of roadways. In general, bicycle commuters will use the Blue Ravine Bike Lanes while recreational bicyclists will use the Humbug-Willow Creek Trail in tandem.

Blue Ravine Road

This major arterial already provides bike lanes for virtually its entire length. There is a short gap in the existing bike lanes between Manseau Drive and East Natoma Street which require installation. Bicyclists complain about the speed of traffic on this arterial, but there is little method of slowing this traffic given the spacing of the traffic signals, the wide right-of-way, and general roadway geometry. Locations where bicyclists must cross Blue Ravine Road, (Natoma Station Drive, Turnpike Drive, Sibley Street/Prairie City Road, Russi Road, Riley Street, East Bidwell Street, School Street, Oak Avenue, Manseau Drive, and East Natoma Street) should provide signalized crossings with signal detectors and adequate green time for bicyclists to safely cross this wide street.

Alternatives need to be addressed to improve the cyclists comfort level along this corridor. Suggested options include: reduce outside travel lane and widen the bike lane; install share the road signs along the corridor; and paint the bike lane a contrasting color to highlight the bike lane to motorists.

Humbug-Willow Creek Trail

The Humbug-Willow Creek (HBWC) Trail in its entirety is approximately 16 miles in length from Lake Natoma to Empire Ranch. As of July of 2007, fifteen miles of the system has been constructed. The remaining 3 miles is funded and is expected to be completed by the summer of 2009. The HBWC trail will provide a bike facility that will be utilized by both the recreational and commuter cyclist. It provides a direct connection between homes and businesses and new light rail stations planned along Folsom Boulevard. It also provides a direct connection to the Folsom Lake State Recreation area (Folsom Lake) and the Lake Natoma trail.

The funding for the construction of this trail is a combination of developer fees, grants and funds from the Humbug-Willow Creek Impact fee fund. Approximately 50% of funding is coming from grants with the remainder coming from developer fees and the HBWC impact fee fund.

Key elements of this trail for bicyclists include a grade separated crossing at Sibley Street, Blue Ravine Road, East Natoma Street, Parkshore Drive, and East Bidwell Street; an overcrossing at East Bidwell Street; access from the trail directly to Folsom Middle School; and a signalized bike/pedestrian crossing at Oak Avenue Parkway.

Other specific improvements that still need to be addressed on the Humbug-Willow Creek Trail include grade separated crossing improvements at: Folsom Boulevard near Parkshore Drive and at Golf Links Drive.

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PROJECT #3:
CONNECTION BETWEEN EAST LAKE NATOMA TRAIL AND THE HISTORIC TRUSS BRIDGE

Primary Responsibility:	**Parks & Recreation (trails)** **Public Works (on-street)** **State Parks Department**
Right-of-Way Control:	**State Parks, City, possibly some easements required for new access routes**
Required Actions/Studies:	**Undercrossing at Rainbow Bridge and trail design**

Completion of the Historic Truss Bridge in 2000 provided a long awaited alternative to the rainbow bridge where cyclists were forced to ride on a 4-foot wide sidewalk. The Historic Truss Bicycle/Pedestrian Bridge also provides a quieter alternative to the Lake Natoma Crossing
Bridge, being for bicycles and pedestrians only, and will also provide a more direct connection for the American River Bikeway and the East Lake Natoma Trail. The bridge, which was originally at this site and removed many years ago to Siskiyou County, was returned and re-assembled on the original bridge abutments.

The only missing link now is a direct trail connection between the Historic Truss Bridge and the new Lake Natoma Trail. This trail currently ends approximately 1 mile short of the bridge. A majority of the 1-mile trail segment is within State Park Property, and a small portion is on private property. The State and the City are working with the property owner to acquire an easement to complete this important trail segment. Once this connection is made the Class I trail system around Lake Natoma will be complete and will have a direct connection between the Lake Natoma and American River Bike trails.

This trail segment is not currently funded, but the State Department of Parks and Recreation will be applying for funding in the 02/03 grant cycle. The City will be providing matching funds.

PROJECT #4:
OAK PARKWAY TRAIL CORRIDOR
Natoma Street to Blue Ravine Road

Primary Responsibility: **Parks & Recreation**
Right-of-Way Control: **PG&E, City**
Required Actions/Studies: **Easements, CEQA clearance, trail and crossing design**

The Oak Parkway corridor between Blue Ravine Road and East Natoma Street with a future connection to the Folsom Lake Trail. This trail would provide a connection to the Historic Truss Bridge, City Hall complex, Library, Senior and Arts Center and downtown Folsom represents an important connection for recreational and commuter bicyclists in Folsom. Bicyclists currently coming anywhere from the eastern half of the City and headed downtown, the City Hall complex, or the Rainbow Bridge have relatively few options without having to use narrow streets in the older parts of the city. The Oak Parkway Trail provides an excellent alternative for bicyclists to using busy arterial streets or narrow older streets with no bike lanes.

The trail would start at Blue Ravine Road, near Big Valley Road and extend about three miles to the west to Natoma Street, at the prison entrance road. The paved 10-foot wide trail would be located within City and PG&E right-of-way (estimated to be about 200 feet in width) and designed to minimize impacts to neighbors and the environment. The right-of-way is already well-used by the local neighborhood. Formalizing the pathway would help to improve maintenance and security.

Key implementation items include a crossing of East Natoma Street at the prison entrance road and at Blue Ravine Road near Big Valley Road. Both of the crossings already have a signal in place, making it easy to integrate the trail crossing into the existing intersection.

PROJECT #5:
CONSISTENT BIKE LANES ON EAST NATOMA STREET

Primary Responsibility:	**City Parks & Recreation** **City Public Works** **State Parks & Recreation**
Right-of-Way Control:	**State, City, U.S. Bureau of Reclamation**
Required Actions/Studies:	**Easements, CEQA & NEPA clearance, trail and crossing design**

East Natoma Street from Folsom Boulevard to Green Valley Road is one of the most popular routes for cyclists traveling between El Dorado Hills and Folsom. It is the only bikeway that currently connects Folsom to El Dorado County. It currently experiences the highest volume of commuter cyclists on a daily basis and a high volume of recreational cyclists using it to access the Lake Natoma and American River Bike Trail.

East Natoma Street has two distinct roadway cross-sections. The two sections are described below:

Section 1. Between Folsom Boulevard and Stafford Street

This section has on-street parking, a separate bike lane and one travel lane in each direction. The bike lane width is consistent throughout this section but to help designate the bike lane, a double striped bike lane needs to be added between the on-street parking and the travel lane. It's also recommended that the travel lane be reduced to 11-feet wide and the bike lane widened to the City's standard 5-foot width.

Section 2. Between Stafford and Green Valley Road

This section has no on-street parking, two travel lanes in each direction and has a striped shoulder that varies in width. The inconsistent width creates areas with full width bike lanes and other area's with non-standard and no bike lanes. This creates a hazard to cyclists who have to weave in and out of the travel lane.

The Public Works Department and the Parks and Recreation Department will need to work on doing a combination of street widening and restriping to accommodate a full standard 6-foot wide bike lane for the entire section. In some areas the travel lane might have to be reduced to 11-feet wide to accommodate a 6-foot wide bike lane. There is one section in front of City hall that has no bike lanes. This area will require eliminating one travel lane in each direction to provide enough space to accommodate a 6-foot wide bike lane.

PROJECT #6: COORDINATE STREET/FREEWAY INTERCHANGE DESIGN TO ACCOMMODATE CYCLISTS

Primary Responsibility:	**City Parks & Recreation**
	City Public Works
	Caltrans
Right-of-Way Control:	**Caltrans, City of Folsom, Private**
Required Actions/Studies:	**Easements, CEQA & NEPA clearance**

Interchanges between City roadways and Caltrans freeways tend to present the biggest challenge for cyclists and motorists to share safely. Interchanges are designed to move automobiles through as quickly and with the least obstructions. This condition forces the cyclist to share the interchange with vehicles entering and exiting the freeway at very high speeds. This makes it very difficult to accommodate cyclists.

In the next 5 years there are two new interchanges that will be in the planning stages and possibly start construction and the ability to accommodate cyclists from the early planning stages should be a high priority. The two interchanges are the following.

Empire Ranch Road/Hwy 50 Interchange

Oak Avenue Parkway/Hwy 50 Interchange

The ability to accommodate the cyclist and motorist centers on the elimination or modification of the high speed ramps that are common on most newer interchanges. The

preferred alternative is to provide a separation between the cyclist and the motorist since the elimination of the high speed ramps and the resulting merging is unavoidable in most all interchanges. The most cost-effective method would be the construction of a separated bike/pedestrian crossing adjacent to the new interchange. This provides a clear separation between cyclists and motorists. Separating motorists and cyclists through the interchange allows for improved automobile movement on and off the freeway, and at the same time provides a safe route for cyclists and pedestrians of all ages and abilities to cross the freeway.

The overall cost for a separate facility is a relatively minor cost if constructed as part of the interchange project.

PROJECT #7: FOLSOM PARKWAY RAIL TRAIL

Primary Responsibility:	**Public Works**
	Parks & Recreation
Right-of-Way Control:	**City, Regional Transit**
Required Actions/Studies:	**Bike lane and trail and crossing design**

The Folsom Parkway Rail Trail is a proposed Class I facility utilizing the old Southern Pacific right-of-way along Folsom Boulevard. The alignment will be shared with the future light rail transit system. The rail trail will extend from the recently completed Highway 50 bicycle/pedestrian overcrossing at Aero Jet Road to Sutter Street in the downtown area, where it will connect with the future Folsom/Placerville Rail Trail. The project will provide an off-road alternative for bicyclists to using Folsom Boulevard, as well as direct connections to the future light rail transit stations. Specific implementation issues include design coordination with the light rail transit engineers to ensure that adequate right-of-way and access is preserved for the rail trail and design considerations are made at major street crossings (i.e. Blue Ravine Road and Glenn Drive).

PROJECT #8:
BICYCLE BOULEVARD
Natoma Station Drive (Blue Ravine Rd to Folsom Blvd.)
School Street (Dean Way To Blue Ravine Road)

Primary Responsibility:	**Parks & Recreation**
	Public Works
Right-of-Way Control:	**City**
Required Actions/Studies:	**Approval from residents along School Street**
	Traffic calming study and design (if needed)

Bicycle travel in central Folsom is problematic for two reasons: 1.) existing streets, such as East Bidwell Street, carry high traffic volumes and are too narrow to provide bike lanes; and 2.) the number of schools and commercial destinations make this corridor popular with bicyclists, however there currently is no safe access available. The School Street corridor is already a popular bike route alternative to using East Bidwell Street, and it provides a direct connection to several schools and major retail centers.

The current street widths (between 40' and 44') cannot accommodate bike lanes without eliminating on-street parking. There are several options, which can be selected to enhance the safety and usability of this corridor for bicyclists:

1. Develop combination parking/bike lanes that prohibit parking between 8 a.m. and 5 p.m., so that bicyclists (especially children) have a safe place to ride.
2. Develop shoulder striping that provides 10' wide travel lanes to help slow traffic and

provide bicyclists with a small refuge area.

3. Enhance intersection controls so that bicyclists can access and use the corridor, especially at Blue Ravine Road and East Natoma Street.
4. Provide traffic calming features such as traffic circles, chicanes, neck-downs as needed to help control the flow and speed of traffic through this neighborhood.
5. Provide a Bicycle Boulevard along School Street, discourage through automobile traffic, maintain on-street parking, and encourage and promote bicycle travel along the corridor.

PROJECT #9: SIBLEY STREET BIKE LANES BETWEEN EAST NATOMA STREET AND BLUE RAVINE ROAD

Primary Responsibility: **Parks & Recreation**
Public Works
Right-of-Way Control: **City, County**
Required Actions/Studies: **CEQA clearance, and construct new shoulder**

Sibley Street is a north-south collector that provides one of the only north-south routes for cyclists. The other north-south streets are Riley Street and East Bidwell Street, which are high speed and high volume arterial streets. East Bidwell Street does not have bike lanes through a 2-mile segment and Riley Street has non-standard width bike lanes for a majority of the street length.

Sibley Street has one travel lane in each direction with very narrow shoulders, varying from 1-foot to as much as 8-feet wide. The traffic volumes are low and the speed limit is 25 mph. It provides an ideal route for cyclists to travel across town in an efficient and safe manner.

Sibley Street needs to be widened approximately 6-feet on both sides to accommodate a standard 6-foot bike lane. The City already owns the required right-of-way.

PROJECT #10: FOLSOM/PLACERVILLE RAIL TRAIL

Primary Responsibility:	**Parks & Recreation (off-street)** **Public Works (on-street)**
Right-of-Way Control:	**City**
Required Actions/Studies:	**Bike lane design, possibly traffic analysis, and trail and crossing design**

The Folsom/Placerville Rail Trail is a proposed multi-use pathway along the abandoned right-of-way of the Southern Pacific Railroad Placerville Branch, starting at the Folsom Rail Trail near Bidwell Street/Folsom Boulevard intersection. The trail leads through the heart of Folsom eventually turning southeasterly along East Bidwell Street and under S.R. 50 towards El Dorado County. The alignment is being considered for recreational and commuter rail, which will impact the location of any trail within the corridor. The trail would be used by both recreational and commuter bicyclists, providing a direct connection to employment centers in East Folsom and to the future light rail transit line. This corridor also runs adjacent to the Colomas Community College.

Key implementation issues include: 1.) methods of sharing the right-of-way with future rail service; 2.) crossings of Sibley, Blue Ravine, East Bidwell, Oak Avenue Parkway, and Iron Point Road; 3.) integration into other nearby bikeways including the Willow Creek and Humbug Creek systems; 4.) coordination with El Dorado County and Sacramento County on their portions of the right-of-way; and 5.) potential neighborhood concerns about

privacy, noises, and other impacts.

PROJECT #11:
BIKE LANES ON COLLECTOR STREETS, WHILE STILL PRESERVING ON STREET PARKING

Primary Responsibility: **Public Works (on-street)**
Right-of-Way Control: **City**
Required Actions/Studies: **Traffic calming study and design (if needed)**

Bicycle travel on the major arterial streets in Folsom is problematic for two reasons: 1.) arterial street's carry high traffic volumes and travel at high speeds; 2.) cyclists have expressed apprehension about using these streets because of the traffic issues. The many collector streets in Folsom provide a realistic alternative to arterial streets for cyclists. They only have one travel lane with sufficient width to accommodate on-street parking and a separate bike lane. This type of layout also helps to reduce traffic speeds.

The following collector streets are excellent candidates for bike lanes and on street parking.

Willow Creek Drive	Silberhorn Drive
Dean Way	Randall Drive
Bundrick Drive	Stafford Drive
Halidon Way	School Street
Black Diamond Drive	Coloma Street

Lembi Drive
Montrose Drive
Wales Drive

PROJECT #12:
GLENN DRIVE
BIKE LANES FROM EAST BIDWELL TO SIBLEY STREET

Primary Responsibility:	**Parks & Recreation**
	Public Works
Right-of-Way Control:	**City**
Required Actions/Studies:	**Narrowing travel lanes and restriping**

Glenn Drive is considered a major east-west route for cyclists and there is a segment that has no bike lanes (between Sibley Street and Riley Street). This creates a significant gap in the Glenn Drive bike lane corridor. Cyclists do not have another safe and direct alternative for traveling through this corridor. Glenn Drive at Folsom Boulevard is planned to have a light rail station and the potential for bicycle access to this station is limited if this gap remains.

The street cross-section is wide enough to accommodate two travel lanes in each direction and still have a 4-5 foot wide bike lane. The travel lanes would need to be reduced to 11 feet to provide enough space for the bike lane. The cost for this improvement is very small

and would have an immediate positive impact to cyclists.