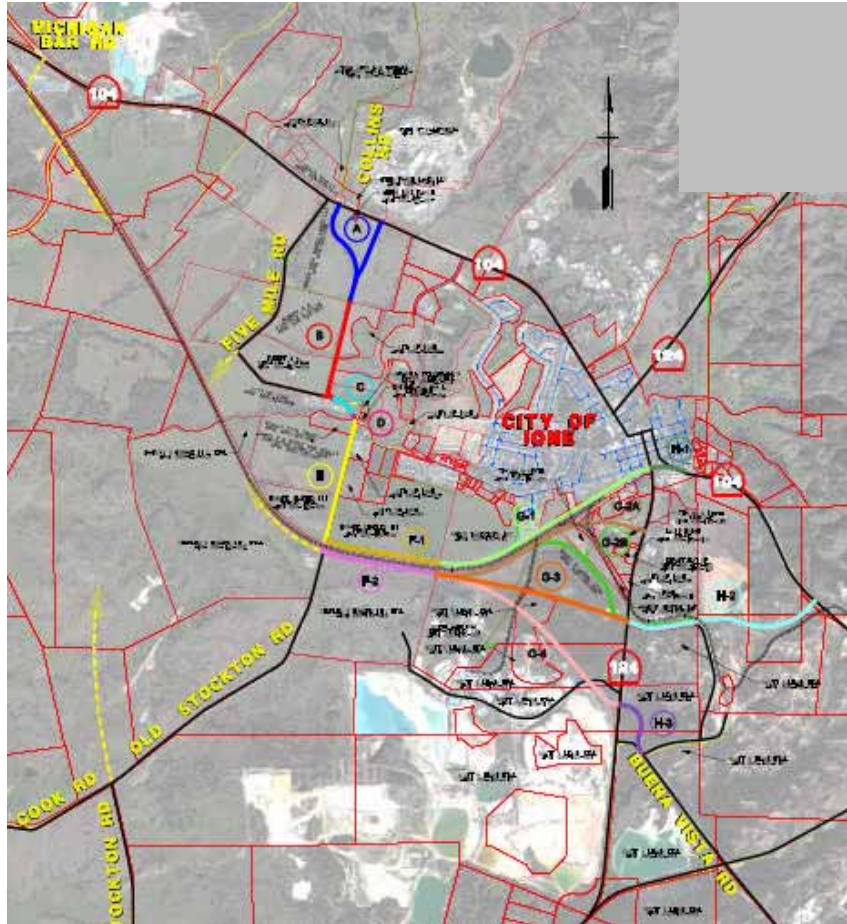


# Western Ione Roadway Improvement Strategy

---

## Technical Memorandum #2 Preliminary Alternatives



Prepared by:  
**DOKKEN**  
ENGINEERING

Prepared for:  
City of Ione

Administered by:  
Amador County Transportation Commission

---

August 4, 2008



**City of Ione**  
**1 East Main Street**  
**Ione, CA 95640**  
**(209) 274-2412**

**City Council**

<b>Mayor</b>	<b>Andrea Bonham</b>
<b>Vice-Mayor</b>	<b>Lee Ard</b>
<b>Councilpersons</b>	<b>Skip Schaufel</b>
	<b>Jerry Sherman</b>
	<b>Jim Ulm</b>

**Project Steering Committee**

**Charles Field, Executive Director, Amador County Transportation Commission**  
**Richard Forster, Supervisor, County of Amador**  
**Christopher Jordan, City Planner, City of Ione**  
**Kim Kerr, City Manager, City of Ione**  
**Kathleen McClafin, Caltrans, District 10**  
**Larry Petersen, Public Works Director, County of Amador**  
**Jerry Sherman, Mayor, City of Ione**  
**Jim Ulm, Councilmember, City of Ione**



## Western Ione Roadway Improvement Strategy

### Technical Memorandum #2: Preliminary Alternatives

Prepared for:

City of Ione  
1 East Main Street  
Ione, CA 95640  
(209) 274-2412

On behalf of the Regional Traffic Impact Mitigation Fee Program, administered by:

Amador County Transportation Commission  
11400 American Legion Drive  
Jackson, CA 95642  
(209) 267-2282

Prepared by:

DOKKEN Engineering  
2365 Iron Point Rd., Ste. 200  
Folsom, CA 95630  
(916) 858-0642

## Table of Contents

Introduction .....	1
Alternatives .....	2
Prior Work .....	2
Overview of Alternatives .....	4
“No Project” and Other Alternatives .....	4
Preliminary “Build” Alternatives.....	5
Segment “A” .....	7
Segment “B” .....	9
Segment “C” .....	12
Segment “D” .....	13
Segment “E” .....	15
Segment “F”.....	16
Segment “G” .....	18
Segment “H” .....	20
 Appendix - References	

## List of Tables and Figures

Table 1 .....	6
Figure 1: Overview of Corridor .....	23
Figure 2: Segment A, B, C, D .....	24
Figure 3: Segment E .....	25
Figure 4: Segment F .....	26
Figure 5: Segment G, H-1 .....	27
Figure 6: Segment G-2A .....	28
Figure 7: Segment G-2B, H-2A, H-2B .....	29
Figure 8: Segment G-3, G-4 .....	30
Figure 9: Segment H-3 .....	31



## INTRODUCTION

Amador County is rapidly developing. The City of Ione, and the Amador County Transportation Commission (ACTC), have demonstrated a commitment to well-planned communities that are served by an integrated, multi-modal transportation system.

Continuing to meet this objective necessitates that long-range infrastructure is planned and financing mechanisms developed, to ensure that current levels of mobility are sustained.

One part of the planned future transportation system is a new facility referred to in preliminary planning documents as the Ione “Interim West Bypass” project. As the project is now being formally planned and designed it is entitled the Western Ione Roadway Improvement Strategy.

Local and regional efforts to advance the Western Ione Roadway Improvement Strategy (WIRIS) have occurred for more than 20 years, although no precise route was ever identified or adopted.

In order to ensure protection of the preferred corridor the City, the County of Amador, and the ACTC are advancing planning and design work to:

- Determine a preferred alignment;
- Identify segments with independent utility;
- Prepare a detailed implementation strategy; and,
- Develop agreements between the City, County, ACTC, and Caltrans to ensure implementation of the Western Ione Roadway Improvement Strategy.

This work will generally follow the following sequence of steps, in two phases:

### *Phase 1 – Concept Verification*

- Community Workshop #1
- Technical Memorandum #1: Background / Purpose and Need / Evaluation Criteria
- Technical Memorandum #2: Preliminary Alternatives
- Community Workshop #2



- Technical Memorandum #3: Preliminary Evaluation of Alternatives
- Agency Approval to Proceed to Phase 2

Phase 2 – Implementation Strategy and Agreements

- Connection Alternatives
- Detailed Implementation Strategy, including preliminary engineering, Funding and Phasing
- Implementation Agreements

**ALTERNATIVES**

*Prior Work*

For more than 20 years local, regional, and statewide plans have studied the need for a new transportation route in or near the City of Ione.

This planning process is designed to advance – rather than revisit - the substantial amount of work that has been completed in recent years, and upon which adopted City, County, and regional plans are dependent.

This prior work resulted in several key conclusions and actions.

- Another route is needed as an alternative to the existing State Route 104 and State Route 124 alignments through downtown Ione.
- Thorough study was given to several possible ‘bypasses’ and ‘connectors’ that could circumnavigate the City of Ione, and connect State Route 104 east and west of the City of Ione, and State Route 124 north and south of the City of Ione.
- Three bypass alternatives were fully analyzed as part of the 1996/97 Regional Transportation Plan process. In addition to the “interim west bypass,” the “ultimate west bypass” and the “eastern bypass” were fully considered.
- Another alternative considered was widening State Route 104 and State Route 124 through Ione. This alternative was determined to be infeasible due to the destruction it would cause to existing land uses including historic buildings.



- The “no project” alternative was eliminated from consideration in the earlier transportation planning process because it would leave the City of Ione with problems being created by large trucks traveling through the downtown area, as well as projected inadequate traffic flow levels of service.
- The “ultimate west bypass” was eliminated from further short-term consideration during the earlier planning processes because of the high cost, lack of available funding, and the lack of justification for this route being necessary within the next twenty years. However, the “ultimate west bypass” may still be needed as part of the very-long-range transportation planning horizon (beyond 20 years).
- The remaining two options, the “interim west bypass” and the “eastern bypass” became the subject of much discussion during workshops and public hearings, while the *Revised Draft 1998 Ione Circulation Element* was being prepared.
- The City Council voted to direct that the interim west bypass should be the preferred route due primarily to cost, feasibility and environmental factors. The cost and feasibility of the interim west bypass would be less than the eastern bypass because it takes advantage of existing roadways and bridges and developable industrial land. The eastern bypass would be considerably more costly because it requires a new bridge across Sutter Creek, crosses lands with greater topographic constraints, and would require right-of-way to be provided by three state agencies, including the Mule Creek State Prison.
- The most-feasible and preferred route is along the western and southern sides of the City of Ione. This determination was made after thorough and thoughtful consideration of several criteria, including topography, constructability, cost, alleviation of traffic congestion, and impact to existing facilities.
- The ‘interim’ route would consist of two segments: a north-south segment on the west side of the City of Ione and an east-west segment on the south side of the City of Ione:
  - The north-south segment would consist of a combination of new roadway on a new alignment, and improvements to existing roadways on approximately the existing alignment.
  - The east-west roadway would consist of a new roadway.
- Conceptual alignments for both the north-south and east-west segments were identified and program level environmental approvals under the



California Environmental Quality Act (CEQA) were obtained as part of the City of Ione *General Plan Circulation Element* and Amador County Transportation Commission *Regional Transportation Plan*.

The prior work is best summarized in the 2004 Amador County Regional Transportation Plan Update:

*The Interim West Bypass involves the construction of a roadway (arterial or collector) to serve some local traffic and to route truck traffic around the downtown area. The route includes use of a North-South road proposed west of Castle Oaks Drive and a new segment of roadway between SR 104 and Old Stockton Road. It may also include improvements to existing Buena Vista Road from SR 88 to SR 124. While the City of Ione has determined that a bypass is necessary to eliminate illegal and unsafe truck travel on SR 104 and SR 124 through the downtown area, peak hour traffic congestion is also a growing concern.*

#### *Overview of Alternatives*

The purpose of Technical Memorandum #2 is to identify alternative alignments, by segment, for the 'build' or 'project' scenario. This work is based upon refining and updating prior work.

These alternatives have been developed for purpose of advancing prior studies, and in support of obtaining sponsoring agency approval to advance to Phase 2 (detailed implementation plan and agency agreements).

Should this effort progress to Phase 2 further refinement of the preferred alternative is anticipated as part of the detailed implementation plan.

#### *"No Project" and Other Alternatives*

A 'no build' or 'no project' alternative will also be evaluated, in accordance with established planning practices, and requirements.

The other alternative that will be considered is transportation demand management (TDM). A TDM solution differs from a 'no build' or 'no project' alternative.

A 'no build' scenario simply is that future conditions are evaluated assuming no action (e.g. no construction or other activity).



In contrast, a TDM solution consists of specific actions to address the project purpose and need that do not involve increasing the roadway capacity, but are focused on managing the demand or need for travel. A common TDM solution is ridesharing which seeks to combine trips. When trips are combined the demand (the need for travel) is not changed, but the impact of the demand on the transportation system is lessened because 2 trips are made in 1 vehicle.

For the City of Ione, developing a viable TDM solution will require additional creativity. TDM activities that might be considered in some combination to address the 20-year need include working with area schools and employers to modify employee shifts and school days so that peak travel demand is lessened or distributed over a greater period of time; and, “school pool” programs where parents work together to rideshare trips to pick-up and drop-off students at school.

#### *Preliminary “Build” Alternatives*

The proposed WIRIS corridor is envisioned to serve as a complete facility offering parallel and alternative capacity to existing State Routes 104 and State Route 124. Segments of the corridor will also serve as independent, usable segments.

Technical Memorandum #2 presents alternatives for each of eight major segments (labeled “A” through “H”) as listed below and depicted in Figure 1.

- Segment A State Route 104 to Castle Oaks northern boundary*
- Segment B Castle Oaks (northern boundary to southern boundary)*
- Segment C Castle Oaks southern boundary to north end of Old Stockton Road Bridge over Sutter Creek*
- Segment D Old Stockton Road Bridge over Sutter Creek*
- Segment E South end of Old Stockton Road Bridge over Sutter Creek to intersection with east-west segments*
- Segment F Old Stockton Road to junction with Segment G*
- Segment G Junction with Segment F to State Route 124*
- Segment H State Route 124 to State Route 104 or Buena Vista Road realignment*

Some segments have essentially a single alignment alternative, and others have multiple alignment alternatives.

The north-south roadway on the west side of the City of Ione would consist of a combination of new roadway on a new alignment, and improvements to existing roadways on approximately the existing alignment.



The east-west roadway on the south side of the City of Ione would consist mostly of new roadway on a new alignment. The east-west roadway is being considered as a possible part of the future State Highway system. It is likely that any segment of the WIRIS corridor that becomes a component of the State Highway System would need to be constructed to standards that are somewhat different from the standards that would apply to the same segment constructed to local road standards.

Table 1 summarizes the differences between State and local road standards for comparable 2- or 4-lane facilities.

<b>Table 1</b>			
<b>Comparison of State and Local Road Standards</b>			
<b>Standard</b>	<b>Lane Width</b>	<b>Shoulder Width</b>	<b>Pedestrian/Bicycle facilities</b>
State	12 ft	8 ft	Class II, using the shoulder
Local	12 ft	4 ft	Separate Class I, 10 ft multi-use*

\* Previously identified as part of the 'typical cross section' for the WIRIS corridor

Aside from the technical distinctions in standards, there are two important policy differences between likely State and local standards.

1. Access control

Current State policy is that 'bypasses' of existing State highways are generally constructed to expressway or freeway standards, with restricted or limited access. The underlying State interest is in the regional and inter-regional movement of people, goods, and services. Restricting points of access is important to the State ensuring smooth traffic operations on any new segments of the State highway system. This will be achieved by securing the access rights from the adjoining property owners and designing specific access points, spaced standard distances apart.

2. Cost

A number of factors generally combine to ensure that new facilities designed to State highway standards will cost somewhat more than a similar facility designed to local road standards. These factors include:

- Roadway dimensions, including shoulder widths and pavement structural sections.



- Right-of-way acquisition costs, particularly as relates to acquiring access restrictions, which is above the standard acquisition cost.

The remainder of Technical Memorandum #2 describes the “build” alternatives under consideration, by segment.

*Segment A -- State Route 104 to Castle Oaks northern boundary*

Segment A is depicted in Figure 2. This Segment is contained within assessors parcel number 005-320-006.

**Terrain:**

The terrain Segment A covers is generally flat fields, with a few oak trees. The western part of the parcel, bound by Five Mile Road, has more tree cover than the remaining eastern portion, bound by Mule Creek.

**Connection Points:**

The northern limit of Segment A could connect to State Route 104 at many points. However, two connection points are far superior as they would create a 4-way intersection with State Route 104.

One possible connection point is at Collins Road, an existing two-lane county road that extends north approximately ½ mile from SR 104 and along the west boundary of the Mule Creek State Prison before ending. Collins Road has very low traffic volumes, and provides access to rural lands with very few dwellings.

The other possible connection point is opposite the Mule Creek State Prison driveway entrance onto State Route 104. Connecting Segment A opposite the driveway would create a 4-way intersection. The nearest major intersection on SR 104 from the Mule Creek Prison entrance is Castle Oaks Drive, 0.42 miles to the east.

While possible, it is less desirable for Segment A to connect at a mid-point between the existing Mule Creek State Prison entrance onto SR 104 and the Collins Road/SR 104 intersection due to the resulting close intersection spacing that would be created on SR 104.

Connection points to State Route 104 west of Collins Road or east of Mule Creek State Prison are the least desirable due to environmental, roadway design, and traffic circulation factors.



The southern limit of Segment A will be defined by construction of Segment B which is required to be built by JTS Communities as a condition of approval on the Castle Oaks development.

Alignment:

The alignment of Segment A is contained within a single parcel of land and can take several paths as shown in the exhibit depending on the connection points to SR 104 and to Segment B. The alignment of Segment A should be defined as part of a proposal to develop the property to ensure that the alignment is consistent with accommodating through traffic, but also allows for the best overall site plan.

Typical Section:

Segments A through E are all proposed to be constructed to local road standards as these north-south segments of the new transportation corridor on the west side of the City of Ione. Local and regional plans all identify this as an ultimate two-lane facility, and no long-range plans envision the north-south segments to be accepted into the State Highway system at any future date.

As shown in Figure 2, the ultimate right-of-way width for this typical section is 68 feet:

- One 12-foot travel lane will be provided in each direction.
- One 12-foot center turn lane can be accommodated, if and when needed.
- 4-foot shoulders will be provided in both directions.
- In the northbound direction, a concrete curb and gutter will be installed at the edge of pavement.
- In the northbound direction, a 6-foot wide landscaped buffer will separate the curb and gutter from a multi-use path.
- In the northbound direction, a 10-foot wide, two-way multi-use path will be constructed for mixed bicycle and pedestrian use on the outside of the landscaped buffer.

This multi-use path will satisfy the Class I bike path requirements, and will carry the pedestrian and bicyclist traffic for this segment.



- In both directions, an additional 4-foot section within the right-of-way will be preserved to accommodate drainage improvements, slopes to adjacent properties, and for vehicle emergency parking off the paved shoulder.

Typical cut/fill slopes will be 2 horizontal: to 1 vertical (2:1) to minimize grading impacts to adjoining lands and needed slope easements. However, if and when land development occurs adjacent to this segment it is possible that the City will require a more formal drainage system.

As an option the ultimate right of way width can be reduced to 48 feet, but this does not provide extra width for turn lanes to be constructed within the right of way, and is not recommended.

#### Implementation Concept:

Segment A could be constructed under two scenarios. First, and most likely, Segment A could be constructed as part of on-site improvements in conjunction with development of APN 005-320-006. Second, if needed to complete the north-south leg of the South and West Ione Transportation Corridor, this segment could be constructed as a local or regional transportation project.

The Class 1 bicycle/pedestrian path could be constructed in advance of roadway improvements.

#### *Segment B -- Castle Oaks (northern boundary to southern boundary)*

Segment B is also depicted in Figure 2. Segment B is adjacent to the approved Castle Oaks development.

#### Terrain:

The terrain Segment B covers is generally flat fields, with random oak trees scattered about. Segment B crosses Mule Creek near the halfway point of the segment. Once Segment B intersects Five Mile Drive, the terrain is existing roadway and right of way.

#### Connection Points:

The alignment, including the northern and southern connection points to Segments A and C, have been defined by the City of Ione as conditions of



approval on the Castle Oaks development and the submitted plan by JTS to the City.

It is anticipated that Segment B will include a new, standard three-way intersection at Five Mile Drive.

#### Alignment:

The precise alignment of Segment B is defined by the City of Ione's agreements with the developers of the Castle Oaks project. The Castle Oaks subdivision will connect into Segment B approximately 550 feet north of Five Mile Drive.

#### Typical Section:

As shown in Figure 2, the ultimate right-of-way width for this typical section is 68 feet:

- One 12-foot travel lane will be provided in each direction.
- One 12-foot center turn lane can be accommodated, if and when needed.
- 4-foot shoulders will be provided in both directions.
- In the northbound direction, a concrete curb and gutter will be installed at the edge of pavement.
- In the northbound direction, a 6-foot wide landscaped buffer will separate the curb and gutter from a multi-use path.
- In the northbound direction, a 10-foot wide, two-way multi-use path will be constructed for mixed bicycle and pedestrian use on the outside of the landscaped buffer.

This multi-use path will satisfy the Class I bike path requirements, and will carry the pedestrian and bicyclist traffic for this segment.

- In both directions, an additional 4-foot section within the right-of-way will be preserved to accommodate drainage improvements, slopes to adjacent properties, and for vehicle emergency parking off the paved shoulder.

Initially, typical cut/fill slopes will be 2 horizontal:1 vertical (2:1) to minimize grading impacts to adjoining lands and needed slope easements. However, if and when land development occurs adjacent



to this segment it is possible that the City will require a more formal drainage system.

As an option the ultimate right of way width can be reduced to 48 feet, but this does not provide extra width for turn lanes to be constructed within the right of way, and is not recommended.

#### Implementation Concept:

Segment B could be constructed under two scenarios.

First, and most likely, is that Segment B is constructed as part of on-site improvements in conjunction with development by JTS. More specifically, the Castle Oaks project is required to construct Segment B to a 48-foot cross section. This 48-foot section is comprised of the following:

- One 12-foot travel lane will be provided in each direction.
- 4-foot shoulders will be provided in both directions.
- In the northbound direction, a concrete curb and gutter will be installed at the end of pavement
- Also in the northbound direction, a 6-foot wide landscaped buffer will separate the curb and gutter from a multi-use path.
- Finally, in the northbound direction, a 10-foot wide, two-way multi-use path will be constructed for mixed bicycle and pedestrian use on the outside of the landscaped buffer.

This multi-use path will satisfy the Class I bike path requirements, and will carry the pedestrian and bicyclist traffic for this segment.

In the southbound direction, in addition to the 4-foot wide paved shoulder, a 3-foot wide graded dirt shoulder will be provided for emergency use.

Outside the right-of-way the City will require cut/fill slopes to minimize grading impacts to adjoining lands and drainage facilities. These slopes and drainage facilities will be in easements.

This 48-foot section differs from the 68-foot ultimate section in the following ways:

- There will be no center turn lane.



- Slope and drainage easements will be required outside the 48-foot right-of-way to accommodate standard 2:1 slopes to original ground and to accommodate drainage facilities.

Second, if needed to complete the north-south leg of the WIRIS corridor, this segment could be constructed as a local or regional transportation project.

Although an unlikely scenario, the Class 1 bicycle/pedestrian path could be constructed in advance of roadway improvements.

*Segment C -- Castle Oaks southern boundary to north end of Old Stockton Road Bridge over Sutter Creek*

Segment C is also depicted in Figure 2.

**Terrain:**

The existing terrain is flat and consists of existing roadway.

**Connection Points:**

The “northern” terminus point is the three-way intersection of Segment B and Five Mile Drive. The southern terminus is the Old Stockton Road Bridge over Sutter Creek.

**Alignment:**

Existing Five Mile Drive from the new intersection with Segment B to the bridge over Sutter Creek would be widened to meet the ultimate standard. Access will be maintained to the sewer treatment plant and local residences along Five Mile drive.

**Typical Section:**

As shown in Figure 2, the ultimate right-of-way width for this typical section is 68 feet:

- One 12-foot travel lane will be provided in each direction.
- One 12-foot center turn lane can be accommodated, if and when needed.
- 4-foot shoulders will be provided in both directions.



- In the northbound direction, a concrete curb and gutter will be installed at the edge of pavement.
- In the northbound direction, a 6-foot wide landscaped buffer will separate the curb and gutter from a multi-use path.
- In the northbound direction, a 10-foot wide, two-way multi-use path will be constructed for mixed bicycle and pedestrian use on the outside of the landscaped buffer.

This multi-use path will satisfy the Class I bike path requirements, and will carry the pedestrian and bicyclist traffic for this segment.

- In both directions, an additional 4-foot section within the right-of-way will be preserved to accommodate drainage improvements, slopes to adjacent properties, and for vehicle emergency parking off the paved shoulder.

As an option the ultimate right of way width can be reduced to 48 feet, but this does not provide for an extra width for turn lanes to be constructed within the right of way, and is not recommended.

#### Implementation Concept:

Segment C, as part of a north-south leg of the South and West Ione Transportation Corridor, could be constructed as a local or regional transportation project.

The projected roadway volumes are relatively low and widening of the existing roadway should be undertaken as warranted and occur incrementally from the existing roadway to the ultimate section, as warranted.

The Class 1 bicycle/pedestrian path could be constructed in advance of roadway improvements.

#### *Segment D – Old Stockton Road Bridge over Sutter Creek*

Segment D is also depicted in Figure 2. The segment consists of the existing Old Stockton Road Bridge over Sutter Creek. The bridge is 28 feet wide and was constructed in 1989.

#### Terrain:

The existing terrain is the bridge.



#### Connection Points:

The connections points for this segment are the north and south ends of the existing bridge.

#### Alignment:

It is proposed that the South and West Ione Transportation Corridor cross Sutter Creek on the existing bridge alignment.

#### Typical Section:

There are basic two options to achieve the ultimate facility across Sutter Creek.

First, a new bridge with a class 1 bicycle facility can be constructed to replace the existing bridge. To match the transportation corridor for Segments B and D, the bridge would need to be 44 feet wide.

- One 12-foot travel lane will be provided in each direction.
- 4-foot shoulders will be provided in both directions.
- In the northbound direction, a 2-foot barrier will separate the roadway from a Class 1 Bicycle/Pedestrian facility.
- In the northbound direction, a 10-foot wide, Class 1 Bicycle/Pedestrian facility.

Second, a new parallel bicycle/pedestrian bridge can be constructed on the east side of the existing bridge.

#### Implementation Concept:

The projected roadway volumes are relatively low and widening of the existing bridge should be undertaken as warranted.

There are two possible implement concepts for Segment D.

One, maintain the existing 28-foot bridge (2 – 14 foot lanes) and construct a new parallel bicycle/pedestrian bridge over Sutter Creek on the east side of the bridge, in the general location of the old Sutter Creek bridge crossing that was replaced in the 1989. One option for this pedestrian/bicyclist bridge is restoring the old steel bridge still that remains near the site. As needed



replace the existing bridge with a 32-foot wide structure, providing 4-foot shoulders on either side of two, 12-foot travel lanes.

Two, replace the existing Old Stockton Road Bridge with a new bridge up to 44 feet in width as described above under “Typical Section.”

*Segment E South end of Old Stockton Road Bridge over Sutter Creek to intersection with east-west segments*

Segment E is depicted in Figure 3.

#### Terrain:

The terrain Segment E covers is generally flat fields. There are road side ditches and overhead utility lines along the west side of the existing roadway. Along a portion of the east side of the existing road is the City of Ione waste water treatment plant.

#### Connection Points:

The north terminus of Segment E is the Old Stockton Road Bridge over Sutter Creek, near the intersection of Old Stockton Road and West Marlette Street. The south terminus would be the at-grade crossing of Old Stockton Road over the Southern Pacific Railroad. This is the end of the north-south segments of the WIRIS corridor. Segments F through H represent the east-west segments of the corridor.

#### Alignment:

Segment E would be aligned along the existing Old Stockton Road. Widening would be primarily to the west to avoid impacting the sewage treatment facility along the east side of the road. The existing intersection of W. Marlette Street and Old Stockton Road would be maintained.

#### Typical Section:

As shown in Figure 4, the ultimate right-of-way width for this typical section is 68 feet:

- One 12-foot travel lane will be provided in each direction.
- One 12-foot center turn lane can be accommodated, if and when needed.



- 4-foot shoulders will be provided in both directions.
- In the northbound direction, a concrete curb and gutter will be installed at the edge of pavement.
- In the northbound direction, a 6-foot wide landscaped buffer will separate the curb and gutter from a multi-use path.
- In the northbound direction, a 10-foot wide, two-way multi-use path will be constructed for mixed bicycle and pedestrian use on the outside of the landscaped buffer.

This multi-use path will satisfy the Class I bike path requirements, and will carry the pedestrian and bicyclist traffic for this segment.

- In both directions, an additional 4-foot section within the right-of-way will be preserved to accommodate drainage improvements, slopes to adjacent properties, and for vehicle emergency parking off the paved shoulder.

As an option the ultimate right of way width can be reduced to 48 feet, but this does not provide for an extra width for turn lanes to be constructed within the right of way, and is not recommended.

### Implementation Concept

The projected roadway volumes are relatively low and widening of the existing roadway should be undertaken as warranted and occur incrementally from the existing roadway to the ultimate section, as warranted.

Segment E, as part of a north-south leg of the WIRIS corridor, could be constructed as a local or regional transportation project.

Construction of the Class 1 bicycle/pedestrian path could be constructed independent of roadway improvements. In the case of Segment E, the existing sewer treatment facility will constrain options for constructing a standard bicycle/pedestrian facility without reconstructing the roadway although it is possible to construct a narrow pedestrian facility between the existing roadway and the sewer treatment facility.

### *Segment F – Old Stockton Road to junction with Segment G*

Segment F is depicted in Figure 4.



#### Terrain:

The terrain is a gentle sloping pastureland. The Union Pacific Railroad alignment is at the base of the hill and natural drainage collects along the railroad corridor. The Segment F corridor includes a few scattered ranch outbuildings.

#### Connection Points:

The west terminus of Segment F is the intersection of Old Stockton Road. The East terminus of Segment F is the junction of Segment G.

#### Alignment:

The alignment of Segment F is generally east-west. Segment F parallels the Union Pacific Railroad (UPRR). The South and West Ione Transportation Corridor alignment would be outside of the existing railroad right of way. Right of way impacts to the railroad would be avoided when designing this segment.

Obtaining new at-grade crossings of operable railroads (even if those corridors do not currently have active railroad uses) is difficult. Therefore feasible east-west segments must minimize new railroad crossings.

As a result, there are two feasible alignments for Segment F. Alignment F-1 is immediately north of the UPRR right of way. Alignment F-2 is immediately south of the UPRR right of way.

Because of differences in roadway and railway design, the South and West Ione Transportation Corridor is not a constant 100-foot wide new corridor. The minimum width of the corridor is 100-feet. Where curve radii for the railroad and the roadway are different the South and West Ione Transportation Corridor right-of-way is greater than 100 feet wide.

#### Typical Section:

Segment F (as well as Segments G and H) can be planned to either State Highway or local roadway standards. In either case the proposed corridor is a minimum of 100-feet wide.

The key factor if the facility is to be potentially included in the State Highway System at a later date is that current State policy is that 'bypasses' of existing State highways are generally constructed to expressway or



freeway standards, with restricted or limited access. The underlying State interest is in the regional and inter-regional movement of people, goods, and services. Restricting points of access is important to the State ensuring smooth traffic operations on any new segments of the State highway system. This will be achieved by securing the access rights from the adjoining property owners and designing specific access points, spaced standard distances apart to insure smooth traffic operation.

#### Implementation Concept:

There are two possible implementation concepts for Segment F.

First, all or a portion of Segment F can be constructed as a stand-alone facility that would allow access to adjacent lands.

Second, as part of the east-west leg of the WIRIS corridor, Segment F could be constructed as a local or regional transportation project.

#### *Segment G – Junction with Segment F to State Route 124*

Segment G is depicted in Figures 5, 6, 7 and 8.

#### Terrain:

The terrain is varied by alignment. North of the UPRR and Amador Central Railroads (ACRR) the terrain is partly undeveloped lowlands and partly a developed portion of the City of Ione.

South of the UPRR and ACRR the terrain varies from slightly to very hilly, with a variety of industrial and mining land uses, and undeveloped lands. In undeveloped areas the terrain is hilly, and covered in dense oak woodlands and manzanita between the ACRR railroad corridor and SR 124.

Once turning away from the tracks, the alignment becomes especially steep and has more gullies.

One alignment crosses through a developed section consisting of a trucking company's fleet yard and associated buildings.

#### Connection:

The west terminus of Segment G is the junction with Segment F. The east terminus of Segment G is State Route 124.



## Alignment:

The general alignment of Segment G is east-west. Within Segment G several possible alignments provide connectivity to State Route 124.

Alignment G-1 (see Figure 5) is north of the UPRR and ACRR. Alignment G-1 connects with Alignment F-1 on the west. Alignment G-1 connects to State Route 124 through the existing City of Ione, impacting several existing buildings in order to provide a 100' corridor width.

Alignment G-2A (see Figure 6) is along the southern edge of the UPRR corridor but crosses a private rail spur that accesses mining operations. Alignment G-2A also crosses the ACRR in two locations. Alignment G-2A connects to State Route 124 opposite the main entrance to Howard Park.

Alignment G-2B (see Figure 7) is also south of the UPRR. Alignment G-2B also crosses the rail spur line but rather than crossing the ACRR, Alignment G-2B stays to the south of the ACRR and connects to State Route 124, opposite the northern Brickyard Road intersection (Segment H-2A). A section of the alignment utilizes a private road alignment already constructed.

Alignment G-3 (see Figure 8) is south of the UPRR. Alignment G-3 also crosses the private rail spur line but is located further south of Alignment G-2B through the wooded ridges and gullies. Alignment G-3 connects to State Route 124 at the Brickyard Road intersection. Alignment G-3 would create a 4 way intersection with Alignment H-2 and State Route 124.

Alignment G-4 (also see Figure 8) is the furthest south of the Segment G alignments. Alignment G-3 also crosses the private rail spur and connects to State Route 124 just north of existing Buena Vista Road.

Alignment G-4 attempts to miss active mining operations on the 4 parcels it crosses, and will make a connection to the existing access road to the mine site approximately 450 west of the SR 124 intersection.

Alignment G-4 would likely require realignment of a section of Buena Vista Road (Alignment H-3).



#### Typical Section:

Segment G (as well as Segments F and H) can be planned to either State Highway or local roadway standards. In either case the proposed corridor is 100-foot wide.

The key factor if the facility is to be potentially included in the State Highway System at a later date is that current State policy is that 'bypasses' of existing State highways are generally constructed to expressway or freeway standards, with restricted or limited access. The underlying State interest is in the regional and inter-regional movement of people, goods, and services. Restricting points of access is important to the State ensuring smooth traffic operations on any new segments of the State highway system. This will be achieved by securing the access rights from the adjoining property owners and designing specific access points, spaced standard distances apart to insure smooth traffic operation.

#### Implementation Concept:

There are two possible implementation concepts for Segment G.

First, all or a portion of Segment G can be constructed as a stand-alone facility that would access to adjacent lands.

Second, as part of the east-west leg of the WIRIS corridor, Segment G could be constructed as a local or regional transportation project.

#### *Segment H - State Route 124 to State Route 104 or Buena Vista Road realignment*

Segment H is depicted in Figures 5, 7 and 9.

#### Terrain:

Alignment H-1 is within the existing developed portion of the City of Ione. Some impacts to existing development will occur in order to achieve a 100-foot right-of-way.

Terrain for Alignments H-2 and H-3 is hilly and covered in oak and manzanita. This manzanita and oak woodland is most dense between Brickyard Road, State Route 124, and State Route 104.



#### Connection Points:

Alignment H-1 is the connection of State Route 124 and State Route 104 in the Downtown Ione area.

Alignments H-2 is the connection between State Route 124 and State Route 104 near developing areas in the southeast portion of Ione.

Alignment H-3 is the realignment of Buena Vista Road to align with Alignment G-3. The realignment would conform back to the existing Buena Vista Road just south of the Brickyard Road intersection with Buena Vista Road. H-3 does not provide a connection back to State Route 104 east of downtown Ione, but connects to State Route 88 via Buena Vista Road.

#### Alignment:

The alignment of Segment H is generally east-west. Within Segment H several possible alignments provide connectivity from State Route 124 to State Route 104 or Buena Vista Road.

Alignment H-1 (see Figure 5) is north of Howard Park and the elementary school. Alignment H-1 connects to Alignment G-1 and would be from the intersection of West Washington Street & State Route 124 to the intersection of East Washington Street & State Route 104.

Alignment H-2 (see Figure 7) is along the northern section of Brickyard Road to the Wildflower subdivision. The H-2 Alignment crosses the ACRR tracks and heads in an easterly direction to intersect State Route 104.

Alignment H-3 (see Figure 9) is a short realignment of Buena Vista Road to accommodate Alignment G-4. The existing segment of Buena Vista Road would be relinquished.

#### Typical Section:

Segment H (as well as Segments F and G) can be planned to either State Highway or local roadway standards. In either case the proposed corridor is 100-feet wide.

The key factor if the facility is to be potentially included in the State Highway System at a later date is that current State policy is that 'bypasses' of existing State highways are generally constructed to expressway or freeway standards, with restricted or limited access. The underlying State



interest is in the regional and inter-regional movement of people, goods, and services. Restricting points of access is important to the State ensuring smooth traffic operations on any new segments of the State highway system. This will be achieved by securing the access rights from the adjoining property owners and designing specific access points, spaced standard distances apart to insure smooth traffic operation.

Implementation Concept:

There are two possible implementation concepts for Segment H.

First, all or a portion of Segment H can be constructed as a stand-alone facility that would allow access to adjacent lands.

Second, Segment H could be constructed as part of the east-west leg of the WIRIS corridor, as a local or regional transportation project, or as a condition of development on a land development project.



## **APPENDIX**

### **References**



## References

*2003 Circulation Element*, City of Ione, Ione, CA, June 3, 2003.

*Amador County Regional Transportation Plan Update*, Amador County Transportation Commission, Jackson, CA, September 15, 2004

*City of Ione Circulation Element*, Administrative Draft Report, City of Ione and Amador County Transportation Commission, May, 1997.

*City/County Population Estimates with Annual Percent Change (Report E-1)*, California Department of Finance, Sacramento, CA, May, 2007.

*Final 2003-2008 Housing Element*, City of Ione, Ione, CA, May 17, 2005.

*Ione Corridor Study Phase III*, Amador County Transportation Commission, Jackson, CA, November 14, 1990.

*Ione Corridor Study Phase IV*, Amador County Transportation Commission, Jackson, CA, October, 1991.

*Ione Corridor Study Phase V*, Amador County Transportation Commission, Jackson, CA, May, 1993.

*Race/Ethnicity for California and Its Counties 2000-2050 (Report P-1)*, California Department of Finance, Sacramento, CA, July, 2007.

*State Route 104 Transportation Concept Report*, California Department of Transportation, Stockton, CA, October 2003.

*State Route 124 Transportation Concept Report*, California Department of Transportation, Stockton, CA, December 2003.