Meeting of the Board of Directors

Location: Rancho Cordova Council Chambers
2729 Prospect Park Drive
Rancho Cordova, CA

Date: Friday March 8, 2013, 8:30 am – 10:30 am

Roll Call: Directors: Hume, Mikulaco, Nottoli, Sander, Starsky

Members of the public may comment on any item on the agenda at the time that it is taken up by the Board. We ask that members of the public complete a request to speak form, submit it to the Clerk of the Board, and keep their remarks brief. If several persons wish to address the Board on a single item, the Chair may impose a time limit on individual remarks at the beginning of the discussion.

Public Comment: Any person wishing to address the Board on any item not on the agenda may do so at this time. After ten minutes of testimony, any additional testimony may be heard following the New Business Items.

CALL TO ORDER / ROLL CALL

PLEDGE OF ALLEGIANCE

PUBLIC COMMENT

1. Executive Director’s Report

Consent Agenda

2. Minutes of February 8, 2013, Board Meeting

3. Resolution: Authorize Amendment No. 3 to the Contract with MMS Strategies
   a. Attachment – Staff Report
   b. Attachment – 2012 Year End Report
   c. Attachment – Resolution

4. Resolution: Authorize the Board Chair to Sign a Support Letter for AB603
   a. Attachment – Staff Report
   b. Attachment – Resolution

5. Overview of Upcoming General Plan Amendment Process and Relationship to Plan of Finance and Project Design Guidelines
   a. Attachment – Staff Report

New Business Items

6. Update on the South Sacramento Habitat Conservation Plan (SSHCP)
   a. Attachment - Staff Report

7. Presentation: Kammerer Road
   a. Attachment - Staff Report
8. **Resolution: Adopt Project Design Guidelines**
   a. Attachment - Staff Report
   b. Attachment - Project Design Guidelines
   c. Attachment – Resolution

9. **Resolution: Adopt Plan of Finance**
   a. Attachment - Staff Report
   b. Attachment - Plan of Finance
   c. Attachment - Resolution

10. **Adjournment**

The Board may take action on any matter, however listed on this Agenda, and whether or not listed on this Agenda, to the extent permitted by applicable law. Staff Reports are subject to change without prior notice.

If requested, this agenda can be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990 and the Federal Rules and Regulations adopted in implementation thereof. Persons seeking an alternative format should contact the Board Secretary for further information. In addition, a person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in a public meeting, should telephone or otherwise contact the Board Secretary as soon as possible. The Board Secretary may be reached at 10640 Mather Blvd., Suite 120, Mather, CA 95655 or by telephone at 916-876-9094.
Executive Director’s Report

Issue: An Executive Director’s report is filed every month on current JPA activities

Recommendation: Receive and File

Discussion: The following is a brief status report on some of the more significant issues and activities currently being pursued by the Connector JPA staff.

Administrative

- The Executive Director continues to meet with elected officials to provide information regarding the next steps in the development of the project. Since approval of General Plan Amendments is required to move forward, the discussions are focusing on the member jurisdictions’ policy boards. Staff anticipates the initiation of the General Plan amendment process at the staff level in late spring. Formal requests before the policy boards are not anticipated until fall, 2013.

- The next JPA Board meeting is currently scheduled for April 12th. This is the Friday prior to the annual Metro Chamber Cap to Cap trip. Staff is requesting the Board members provide their availability and/or decide if a meeting is necessary in April. The next Board meeting after that is currently scheduled for Friday, May 10th.

- The Executive Director is planning to make a presentation on the Connector Project to the Sacramento Transportation Authority (STA) Board on April 11th to provide an overall update on the project status and to request future consideration in support of the Plan of Finance.

Project

- State Assembly Member Ken Cooley introduced AB 603 on February 20, 2013, in support of the Capital SouthEast Connector Project. The purpose of the bill is to extend the current design-build authorization for transportation projects to the Connector JPA and to eliminate the current authorization sunset of December 31, 2013. Passage of this proposed legislation is considered critical to expedited delivery of the project. The JPA will continue to work with Assembly Member Cooley through the hearing process for the bill and is requesting a letter of support from the Board as outlined in today’s agenda item #4.

- The JPA submitted a sustainability-oriented grant request to the Federal Highway Administration (FHWA) on February 15th. The purpose of the grant program is to support the FHWA’s desire to expand their investment in sustainable highway projects and programs by thorough documentation of case studies and best practices of actual projects in development. Results of the application process are expected later in March.
• A request has been made through the South Sacramento Habitat Conservation Plan for the JPA to consider the purchase of a 238 acre parcel of mitigation land in the vicinity of Grant Line Road and Sloughouse Road. Staff is evaluating the request and is considering underwriting an appraisal of the property to establish its value. Should this proposal advance further, staff will provide the Board with additional details prior to any commitment beyond this exploratory stage.

• The JPA successfully worked with Director Mikulaco and the El Dorado County staff to create a mutually acceptable process to meet the needs of the County expressed in the November 29, 2012 letter to the JPA. The Plan of Finance resolution (Item #9-c), reflects language that provides an additional 90 days to prepare amendments in response to County concerns over indebtedness and eminent domain. Thanks to El Dorado County for their cooperation in forging this resolution which was approved by the El Dorado County Board of Supervisors on Tuesday, March 5th.

Fiscal

• There are no fiscal items of significance to be reported this month

Media

• February 6, 2013 – Elk Grove Citizen article– Connector JPA to focus on dollars
• February 15, 2013 – Elk Grove Citizen article – City Officials question JPA role
• March 1, 2013 - Sac Business Journal - It’s decision time for massive Capital SouthEast Connector Project
• March 1, 2013 – National Public Radio – Connector discussion based on Sac Business Journal article

Correspondence

• No correspondence of significance has been received since the last Board meeting

Miscellaneous

• The Executive Director made a presentation of the Connector Project to the 50 Corridor TMA group on February 13th. The group expressed their thanks and support for the Connector as a reliever of the growing congestion on US 50.

• The Executive Director will be attending a three-day seminar and training on Design Build project delivery mechanisms on March 18-20th sponsored by the Design Build Institute of America (DBIA) in Orlando, Florida. DBIA is the recognized leader in design-build project development and has previously supported the Connector Project by underwriting participation by the Executive Director to their 2012 National Conference.

Respectfully Submitted,

Tom Zlotkowski
Executive Director
March 8, 2013

Action Minutes of the February 8, 2013, Meeting

The Capital SouthEast Connector Authority’s Board of Directors met in regular session on February 8, 2013, in the Rancho Cordova Council Chambers, located at 2729 Prospect Park Drive, Rancho Cordova, CA, at 8:30 a.m.

Call to Order: Director Sander called the meeting to order at 8:35 a.m.

Roll Call: Directors Hume, Mikulaco, Nottoli,* Sander, and Starsky were present.

*Director Nottoli arrived during Item 6 below.

Executive Director’s Report: Mr. Tom Zlotkowski, the Executive Director of the Authority, summarized the highlights from his Executive Director’s Report, including the status of the following items: welcoming Director Ron Mikulaco as the new Board member from the County of El Dorado; the potential re-scheduling of the April Board meeting; the SSHCP; and the Cordova Hills Project in Sacramento County.

Consent Agenda

The consent agenda included: (1) minutes of the December 14, 2012, meeting; (2) accepting the FY 2011-12 Audit Report; (3) FY 2012-13 Mid-Year budget status report; and (4) contract amendment to the contract with Smith, Watts, & Martinez for governmental relations services. It was moved by Director Hume, seconded by Director Starsky, and passed by unanimous vote that:

THE CAPITAL SOUTHEAST CONNECTOR AUTHORITY BOARD OF DIRECTORS APPROVES THE FOLLOWING ITEMS FROM THE CONSENT AGENDA: (1) MINUTES OF THE DECEMBER 14, 2012, MEETING; (2) ACCEPTING THE FY 2011-12 AUDIT REPORT; (3) FY 2012-13 MID-YEAR BUDGET STATUS REPORT; AND (4) CONTRACT AMENDMENT TO THE CONTRACT WITH SMITH, WATTS, & MARTINEZ FOR GOVERNMENTAL RELATIONS SERVICES.

New Business Items

Update of Draft Design Guidelines: Mr. Zlotkowski presented the staff report and the draft design guidelines and proposed bringing back the Design Guidelines for approval in March. Public comment on this item was received. *Director Nottoli arrived during this item.

Update on Plan of Finance: Mr. Zlotkowski presented the staff report and the proposed bringing the Plan of Finance to the Board for approval in March. Public comment on this item was received.

Adjournment: The meeting adjourned at 10:33 a.m.

Approved By: Attest:

______________________________       _____________________________
Director Sander            Tom Zlotkowski
Chairperson              Board Secretary
Authorize Amendment No. 3 to Contract with MMS Strategies

**Issue:** In order to continue to provide public outreach and website management for the Connector Project, an amendment to the current contract with MMS strategies is being proposed.

**Recommendation:** Approve the attached resolution authorizing the Executive Director to execute Amendment No. 3 to the contract with MMS Strategies.

**Background:** Effective February 1, 2012, the JPA entered into a one year contract with MMS Strategies for a variety of public outreach and website management services including: Public Outreach and Advocacy Development, Strategic Visioning/Communication, Website Management, and Measurement and Value Assessment. Since entering into the contract, MMS strategies has assisted the JPA team in a number of critical project elements including:

- Facilitation of the Advisory Committee process to assistance with Project Design Guidelines development
- Participation on behalf of the JPA with the Metro Chamber Transportation Committee, SACOG Transportation Committee, the Building Industry Association of Northern California, and the Sacramento Bee, amongst others
- Development of an interactive map for the JPA website and routine updates
- Preparation, facilitation, and participation in the first phase of the Member Jurisdiction General Plan Amendment process that secured resolutions of support for the project general alignment
- Preparation and distribution of weekly e-blasts and news stories on the JPA website
- Coordination of Connector JPA meetings and activities on the annual Cap to Cap trip
- Coordination of various meetings and outreach opportunities with Board members, property owners, and associated interests

Amendment No. 1, approved by the JPA Board in October 2012, increased the not-to-exceed amount for the contract, and Amendment No. 2, approved by the Executive Director, extended the term of the contract for one month to prevent its expiration on February 1, 2012. Amendment No. 2 did not increase the not-to-exceed amount for the contract.

The staff report that accompanied contract Amendment No. 1, presented in October, anticipated that MMS Strategies would make a presentation to the Board in early 2013 on the JPA’s outreach-related accomplishments of 2012. Based on that statement, MMS Strategies has provided an end-of-the-year report and presentation that summarizes the 2012 accomplishments of the strategic visioning and communications effort. The executive summary of the report is attached, however, given the length of today’s agenda, staff felt it best to postpone the presentation until the April JPA Board meeting.

Below is a quick summary of the significant accomplishments of 2012 listed in the report:
• Development of a communications plan that encompassed a number of significant efforts to improve awareness, public education, partnering, and communication effectiveness through measurements
• Coordination and execution of the Public Stakeholder process to provide support for the Project Design Guidelines
• Review and support for the Connector “brand” to serve as a foundation for communications and presentation of key messages to audiences and stakeholders
• Improved and concentrated media relations for improved visibility and positive messaging
• Website evolution that included design and content enhancements along with continuous, real-time website management and updates
• Improved and enhanced outreach materials including project fact sheets, reproducible e-blasts, project information tri-fold brochure, and revised interactive mapping information

Given these significant accomplishments, at this time, staff recommends extending the term of the contract for one additional year, with an initial six-month review/reassessment period. This structure is considered necessary in light of the fact that the first six months of the contract calls for a considerable increase in strategic outreach (approximately 28-32 hours per week) to support both existing and upcoming major processes. Depending on the success of these project milestones, the remaining six months of the contract scope and compensation can be adjusted accordingly. This contract is considered essential to the success of coordinating and developing the JPA’s proposed General Plan amendment process with the member jurisdictions and relationships with the local transportation agencies. Under the contract, each six month period contains a not-to-exceed cost of $94,800, with a 10% additional contingency established for possible additional services to be provided at the request of the Executive Director.

The proposed amendment is consistent with the Request for Proposals issued in 2011 (which led to the selection of MMS Strategies in January 2012), which provided that the contract with the selected consultant would be for an initial twelve month period with the opportunity to extend the contract annually for up to four years.

Respectfully Submitted:

[Signature]

Tom Zlotkowski
Executive Director
Executive Summary

At the onset of 2012, the Capital SouthEast Connector was at a critical juncture, starting the recirculation of the DPEIR public comment period and undertaking major project milestones, including redraft of the Project Design Guidelines, drafting of the Plan of Finance and coordination of an Economic Impact Analysis. The Connector retained the services of our team—MMS Strategies, Crocker & Crocker and Endicott Communications—to provide comprehensive public outreach, communications and advocacy services for the year.

Understanding the constraints and planning for the future, our team re-evaluated the project’s communications goals and developed new strategies for increasing the level of understanding and support among key stakeholders and the public, both within the jurisdictions and throughout the region. The team developed a communications plan to serve as a road map for implementing the various communication strategies and tactics to support the Connector outreach program throughout 2012 in order to build awareness and support necessary for the project’s success.

The goals of the JPA in 2012 were identified and as such our team was able to strategically design a communications plan, incorporating these key milestones.

JPA primary goals for 2012:
- Coordinate and execute three Committees to provide support on the PDG
- Recertify the PEIR
- Settle litigation
- Finalize the PDG
- Craft and build support for the Plan of Finance
- Complete an Economic Impact Analysis on the project

Communications team primary goals for 2012:
- Initiated a more active approach to communication
- Educating the public and stakeholders about the project benefits
- Generating excitement, enthusiasm and positive support
- Empowering the elected board with better communications tools and opportunities
- Partnering with member agencies and stakeholder groups
- Measuring results of outreach communications

The Connector brand was reviewed to identify brand assets to serve as a foundation for communications and packaging of key messages to audiences and stakeholders. Brand assets include:
- Name – Officially titled as the Capital SouthEast Connector but commonly referred to as “Connector” after first reference.
• Slogan – “It’s about Time” was created to associated with the core benefit of creating travel efficiencies in Sacramento County and taking steps toward completing this necessary project which has been needed for quite some time.

• Theme – Applying the word and meanings of “time” creatively in communications as well as connecting people for a better overall quality of life.

• Look and feel – Focused on roadway and transportation infrastructure, sustainability and human quality of life.

• Longevity – All elements will be applied consistently to ensure clear conveyance of messaging.

Our team strategized on developing a more robust and comprehensive set of communications tactics tied together by the common thread of key messaging and stabilizing influence of a strategic timeline for implementation. Tactics included:

• Key messages
• Website management
• Email blasts and database management
• Fact sheets
• Social media

• Media releases
• Partnerships with member agencies
• Relationships with civic and community organizations
• Measuring program success

2012 was a successful year for the Connector through strategic implementation of outreach efforts. Looking ahead, the Connector team will continue calculated outreach based on year-end assessments and future goals and objectives.
Scope of Work
Capital SouthEast Connector 2012 communications tasks comprised of public outreach, advocacy development, strategic visioning and communications, website management, measurement and value assessment, project management and outreach materials.

Public Outreach
Keeping the public, stakeholders and elected officials informed and engaged was a critical path in 2012. Generating excitement about the project and creating coalitions of support was the main focus of the public outreach.

Two key milestones, the ECOS settlement and release of the Economic Impact Analysis, created good opportunities for media exposure. Coupled with the Committee process and release of the draft Plan of Finance, our team worked hard to ensure all of our target audience was well informed.

Tactical Execution:
- Updating and ongoing maintenance of policy maker and civic leader stakeholder database
- Presentations and updates to the Sacramento Metro Chamber Transportation Committee, Region Builders, the North State Building Industry Association, SAGE and the Urban Land Institute
- Re-launched Twitter feed
- Developed and sent requests to regional stakeholders to subscribe to Connector Facebook and Twitter accounts
- Outreach to 50 Corridor employers regarding participation in website video project and requests for meetings or presentations to provide project updates, including:
  - DST Output
  - Kaiser
  - Bank of America
  - Intel
  - GenCorp
  - Blue Shield
- Meeting with 50 Corridor TMA, regarding communications and outreach opportunities
- Meetings with key land owners along the Connector route
- Weekly coordination and staffing of the TAC, SAC and SCC
- Meetings with all elected officials within the member jurisdiction areas
- Quarterly meetings with DOT, public works and planning staff for each jurisdiction
- Presentation and MOU completed with each jurisdiction

Advocacy Development
Our team was cognizant at the start of the year of the ongoing continued relationship and coordination with our member agencies; as such we ensured our presence was made on a consistent basis. Ever so mindful of the interconnectedness, we monitored agenda and background reports on a weekly basis.
**Tactical Execution:**

- Weekly review of Board/ Council agendas and staff reports for the member jurisdictions
- Weekly review of the agendas/ staff reports for SACOG, SMAQMD, STA, RT, EDCTC
- Monitoring of stakeholder meetings including ECOS, SSHCP, Chambers of Commerce, SAGE, ULI, BIA, Region Builders, etc.
- Attendance at various monthly meetings including BIA South County Cmte, Region Builders Land Use Cmte, Metro Chamber Land Use and Transportation Cmtes, SACOG Transportation and Land Use Cmtes, etc.
- Attendance, as needed, at City Council and Board of Supervisor meetings
- Support staff for the TAC, SCC and SAC
- Political monitoring

**Strategic Visioning/Communications**

Tactics were developed to guide the Connector project team through day-to-day communications with stakeholders and the public throughout the region. Tactics identified were used together to effectively reach audiences through various avenues including email blasts, fact sheets, social media, media relations and member agency partnerships.

**Tactical Execution:**

- Developed communications plan
- Produced key messages documents
  - Environment
  - Quality of life
  - Economic benefits
- Developed and sent email blasts (16/16)
- Developed and sent additional email blasts (2/4)
  - February board meeting – on hold until Feb 2013
  - Additional email blast – on hold until Feb 2013
- Produced fact sheet documents (in substitution for newsletters)
  - General
  - Economic Impacts
  - Plan of Finance
- Created and updated Facebook posts
- Created and updated Twitter posts
- Assisted staff in responding to email inquiries
- Augmented electronic database for email distribution
- Worked with PIOs to integrate Connector information into regular communications
  - Wrote general story on project status for distribution by stakeholder groups and PIOs
  - Sent PIOs economic impact study news release and information
- Helped arrange the Connector’s involvement at White Rock Road ribbon-cutting
Media Relations
Throughout the year, we sought to leverage JPA and jurisdiction developments for media visibility, which produced coverage throughout the year. Key media relations activities and results included:

Tactical Execution:

- Meeting and follow up with the Sacramento Bee editorial board
- Tom Zlotkowski interview on Capital Public Radio Insight program
- Outreach to Sacramento Bee and Sacramento Business Journal news staff related to ED’s appearance at the Urban Land Institute’s infrastructure program
- Coordination with Sacramento County on development and distribution of Connector news release on White Rock Road project ground breaking
- Discussion with Comstock’s magazine Editor Doug Curley regarding potential Connector coverage
- Development and distribution of news release on ECOS settlement, which generated coverage in the Sacramento Bee, Sacramento Business Journal, NPR and on KFBK radio
- Developed and distributed news release on Economic Impact Analysis, which generated coverage in the Sacramento Business Journal, Fox40, Mountain Democrat, Elk Grove Citizen, El Dorado Hills Telegraph and Folsom Telegraph
- Posted Economic Impact Analysis story on Sacramento Press
- Coordinated ED interview with American Society of Civil Engineers, which generated significant project coverage in ASCE’s Civil Engineering Magazine
- Monitored regional and national media, and communications on pertinent coverage for posting on the JPA website, Facebook and Twitter accounts

Website Management
The Connector website is the face of the project and serves as a one-stop shop for all project information. Crocker & Crocker set the website as a top priority within the communications plan by performing design and content enhancements along with continuous, real-time website management and updates.

Tactical Execution:

- Website development – spring 2012
  - Updated and created new copy
  - Created new webpage layout and managed site overhaul
  - Created new brand “It’s About Time” and quality of life approach
- Developed redesign– Late summer/early fall 2012
  - Developed new homepage and secondary website look and feel for year two
- Conducted website maintenance and updates – ongoing
  - Posted updates on website (web posts)
    - Board meeting information
    - Board materials
    - Relevant national and regional news articles
Committee updates
Photos
Social updates (fun facts)

Updated documents
- Removed and updated website with appropriate PEIR documents
- Included news releases and media coverage
- Included Economic Impact Study document

Measurement and Value Assessment
Implementation of communications strategies and tactics were monitored and evaluated to measure and assess the outcomes of outreach efforts. Metrics were collected and reviewed on a monthly basis followed by a final annual report.

Tactical Execution:
- Developed and submitted monthly metrics report (12/12)
- Developed and submitted annual year-end metrics report

Project Management
Internal communications was an important factor to the project success. The Connector team kept close communications with one another to ensure comprehensive strategic planning and implementation.

Tactical Execution:
- Attended project kickoff meetings
- MMS: Prepared monthly project schedules
- Participated in bi-weekly team meetings with the communications team
- MMS: Created agendas, coordinated and participated in weekly strategy calls with the JPA consultant team
- MMS: Provided follow up to the weekly consultant and bi-weekly communication meetings
- MMS: Attended PDT meetings
- Created meeting minutes
- Attended meetings with the ED as necessary
- Attended all JPA Connector board meetings to-date
- Prepared and submitted monthly progress reports
- Prepared and submitted annual end-of-year report
- MMS: Committee coordination
- MMS: General Plan consistency and Plan of Finance jurisdiction coordination
- Document preparation
Outreach Materials

Strategic planning does not end at the onset of a project. Throughout 2012, various additional outreach opportunities arose to better communicate with various audiences including the development of an interactive map for the website (and for print) and a redesigned project brochure. Tactical Execution:

- Coordinated with client on goals and objectives
- Strategized concept and conducted research into other interactive maps
- Developed and designed map look and feel as printable version—overall and five segments
- Worked with internal and external graphic artists
- Developed phase one and phase two interactive programming
  - Phase one
    - Designed interactive map
  - Phase two
    - Worked with programmer to create interactivity
    - Completed interactive map
- Developed and designed new Connector brochure

Scope Printouts

- Printouts of itemized contracted scope items, listed above
RESOLUTION NO. 2013-03

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE CAPITAL SOUTHEAST CONNECTOR AUTHORITY
AUTHORIZING AMENDMENT NO. 3 TO THE CONTRACT
WITH MMS STRATEGIES FOR PUBLIC OUTREACH STRATEGY AND
WEBSITE MANAGEMENT SERVICES

BE IT RESOLVED by the Board of Directors ("Board") of the Capital SouthEast Connector Authority that the Executive Director is authorized to execute Amendment No. 3 to the Agreement for Public Outreach/Strategy and Website Management Services between the Capital SouthEast Connector and MMS Strategies.

This Resolution shall take effect from and after the date of its passage and adoption.

* * * * *

PASSED AND ADOPTED this 8th day of March, 2013, by the following vote:

AYES:

NOES:

ABSENT:

Chairperson

ATTEST:

Secretary
Authorize the Board Chair to Sign a Support Letter for AB 603

**Issue:** To present to the Board a request to support the passage of AB 603 through the submission of a letter signed by the Chairman of JPA Board of Directors.

**Recommendation:** Authorize the Chairman of the Board to sign a letter of support regarding Assembly Bill 603.

**Background:** As noted in the Plan of Finance, a critical aspect of accelerating construction of the Connector Project is the application of the Design-Build delivery method of construction. This delivery method has proven in most cases to not only save time but money on large scale construction projects such as airports, public buildings, and transportation facilities across the United States and the world. The recently constructed Terminal B expansion at Sacramento International Airport is a local example of a successful application one such delivery mechanism achieving project completion both ahead of schedule and under budget.

Since 2009, state law has provided Caltrans with authority to seek up to ten projects for use of the design-build method on state highways, subject to approval of the California Transportation Commission (CTC). To date, 8 projects have been authorized and Caltrans has recently submitted a request for use of the 2 remaining slots. The design-build demonstration authority also provides 5 slots for use by defined local entities for application of design-build on local systems. To date these 5 slots remain available in part due to the narrow definition of “local entities” to include only “Regional Transportation Agencies,” which would not include the Connector JPA. In addition, the current legislation sunsets on January 1, 2014. This does not provide adequate time to advance the Connector Project through the required levels of approval.

**Discussion:** Recognizing the value that the design-build delivery process brings to project, staff approached Assembly Member Ken Cooley (AD 8) of Rancho Cordova to introduce a bill to specifically provide the Capital SouthEast Connector JPA the authority to use the design-build provisions currently available under existing law. Based on the importance of the project to both the circulation system of the area and the local economy, Assemblyman Cooley introduced the bill on February 21, 2013. As introduced, AB 603 expands the definition of “local entities” that may use the design-build method to include JPAs. Additionally, this bill also specifies that the Capital SouthEast Connector JPA, located in Sacramento County, may utilize the design-build method, if approved by the CTC.

The bill also removes the requirement that a local entity-sponsored project include state funding programmed in the STIP, SHOPP, TCRP or Proposition 1B categories on the grounds that the Connector and presumably, other JPA-sponsored projects, will utilize local funding sources for their projects off of the state highway system.

Passage of this bill is considered essential to the value and timing of the Connector Project as outlined in the Plan of Finance. Up to two additional years of project development work and up to 20% of additional construction cost could be at stake should the project not qualify for the use of the design-build delivery method.
Staff requests that the Board authorize the Chair of the JPA Board to sign a letter of support for AB 603 and work with both Assembly Member Cooley and local stakeholders to provide additional support, as needed. It is anticipated that the first hearing on this bill before the Assembly Transportation Committee will be scheduled sometime around the middle of April. Therefore, the timing of letters of support is critical to the positive movement of the bill toward the governor’s desk for approval in the fall of 2013.

Respectfully Submitted:

[Signature]

Tom Zlotkowski
Executive Director
RESOLUTION NO. 2013-04

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE CAPITAL SOUTHEAST CONNECTOR AUTHORITY
AUTHORIZING THE BOARD CHAIR TO SIGN
A LETTER OF SUPPORT FOR ASSEMBLY BILL 603

BE IT RESOLVED by the Board of Directors ("Board") of the Capital SouthEast Connector Authority that the Board Chair is authorized to sign a Letter of Support for Assembly Bill 603.

This Resolution shall take effect from and after the date of its passage and adoption.

* * * * *

PASSED AND ADOPTED this 8th day of March, 2013, by the following vote:

AYES:

NOES:

ABSENT:

__________________________________________
Chairperson

ATTEST:

__________________________________________
Secretary
Overview of Upcoming General Plan Amendment Process and Relationship to Plan of Finance and Project Design Guidelines

**Issue:** To inform the Board of Directors of the process planned for updating the jurisdictions’ General Plans to include the Connector Project, and why the Plan of Finance and Project Design Guidelines are important JPA policy documents to support that update.

**Purpose:** To provide an overview on the anticipated General Plan amendment process and explain the relationship of that process to the Plan of Finance and Project Design Guidelines to be considered for approval by the JPA Board today.

**Background:** Between 2004 and 2006, Sacramento County, El Dorado County, Folsom, Rancho Cordova, and Elk Grove engaged in an initial planning process, led by SACOG, to determine the best means for moving this project forward. This process culminated in December 2006, when the five member jurisdictions entered into a Joint Powers Agreement to coordinate the planning and construction of a regional project, consistent with the description in Measure A, to connect the communities of Elk Grove, Rancho Cordova, Folsom, and El Dorado Hills.

The Joint Powers Agreement included the “Functional Guidelines” to assist in the design and function of the project and contemplated that the JPA would update these guidelines in the future. The Joint Powers Agreement also requires the JPA to develop a funding plan specifying a plan or formula for funding the JPA’s operations and any project phases that are the responsibility of the JPA.

The Plan of Finance and Project Design Guidelines are necessary not only to guide the further development of the Connector Project, but they are essential to inform the General Plan amendment process needed to incorporate the Connector Project, as contemplated in the Program EIR, into the member jurisdictions’ General Plans later this year. The Joint Powers Agreement also contemplates two phases of the JPA’s work program. Phase I included the Program-level EIR certified by the JPA Board in March 2012. Phase I was completed during Spring of 2012, when each of the member jurisdictions approved resolutions of support for the Project Alignment approved by each of the JPA Board. In each resolution of support, the member jurisdictions directed their staffs to coordinate with the JPA and participate in the development of the Project Design Guidelines.

Phase II of the Connector Project is defined in the Joint Powers Agreement as “All actions deemed necessary or desirable by the Authority to approve plans, specifications, and estimates, to assemble land, and to construct improvements.”

As part of Phase II work, JPA staff undertook an extensive process for the development of Project Design Guidelines, including a committee process involving staff from each of the member jurisdictions, as well as SACOG, Regional Transit, SMAQMD, and other agencies, as well as community stakeholders interested in
sustainability and the integration of the Project in the communities it will become part of. In addition, the JPA has developed a Plan of Finance for the project, consistent with the Joint Powers Agreement.

**Use of Plan of Finance and Project Design Guidelines:** The Plan of Finance and Project Design Guidelines are the result of a collaborative process that will be ongoing following their adoption. Once adopted, the Plan of Finance will be updated annually to reflect changes in the anticipated funding and financing sources and opportunities, and actual project-related revenues and expenditures. By approving the Plan of Finance, the JPA Board is not committing its member jurisdiction to any fees or authorizing the exercise of eminent domain. It is simply outlining the basic financial components and timing of the project construction to establish the JPA’s intention. The Plan of Finance is not a commitment by the member jurisdictions to finance the project – that will require a Reciprocal Use and Funding Agreement (RUFA), as described further below, which will be developed in concert with and presented to each jurisdiction during the General Plan Amendment process. The RUFA will be the result of negotiation with each jurisdiction and may change with time and development, and as the needs of the region change.

In the absence of the approved RUFA, most of the project will likely be built by the member jurisdictions over the next 30 years as outlined in the “Do Nothing” approach studied and discussed by the JPA Board during the Plan of Finance development process. The Plan of Finance is a project delivery outline developed under current assumptions and will have no impact on the member jurisdictions unless they agree to its implementation through the subsequent RUFA process. The Project Design Guidelines will have some influence over the development of the corridor by reflecting major project elements and requirements contained in the Programmatic Environmental Impact Report (PEIR), adopted by the JPA Board in April, 2012. Member jurisdiction compliance with these guidelines for their portions of the Connector is considered an essential element in the development of a functional regional facility. Once adopted, the Design Guidelines will be incorporated into the General Plan process most likely as a condition of the RUFA, and serve as a reference to define the significant elements of the project on the jurisdictions’ General Plans. The Design Guidelines will provide the basis for subsequent project level environmental review, right-of-way acquisition, and design details.

**General Plan Amendment Process:** JPA staff has met with staff from each jurisdiction to discuss the process needed to amend each General Plan to include the Connector Project. The General Alignment of the project, as approved by the JPA Board, is consistent with planned roadway development in each jurisdiction’s General Plans. However, General Plan amendments are necessary to incorporate key elements of the project, as studied in the Program EIR, into each General Plan to ensure that the regional nature of the project is maintained.

Key project elements to be identified as part of the General Plan amendment include:

- Right-of-way widths and number of lanes for each project segment within the jurisdiction
- Roadway designations for each segment (such as “expressway” or “thoroughfare”)
- Acceptable levels of service for the continued operation of the project
- The identification of points of access and potential future interchanges, and
- Approximate time of expected construction of major project components and facilities

JPA staff will continue to work with staff from each jurisdiction to refine this process and determine if additional or alternative elements should be included in a jurisdiction’s General Plan.
As identified during the JPA’s February Board meeting, JPA staff also intends to use the General Plan amendment process as an opportunity for each member jurisdiction to make key decisions about the level of involvement and authority the JPA will have in the future in the planning, construction, and operation of the Connector Project. During the General Plan Amendment Process, each jurisdiction will consider a Reciprocal Use and Funding Agreement (RUFA). Key elements of the RUFA will include:

- A recognition and commitment to the regional nature of the facility
- Commitments to updating of key Connector documents
- Proposed committee structures and relationships
- An agreement to shared use of the necessary Right-of-Way for construction of the project
- The delegation of authority to the JPA necessary to allow the JPA to contract for the construction of the project under a Design-Build contract
- A funding commitment between the JPA and the member jurisdictions

JPA staff will work with each jurisdiction’s staff and legal counsel to develop a draft RUFA to be presented during the General Plan amendment process, first to the JPA Board then to the individual policy boards of the member jurisdictions. The role the JPA would play in constructing and financing the Connector Project is very similar to other joint powers agencies that have been formed historically in the region to deliver projects that are regional in nature, such as levee improvements, light rail, and highway interchanges, as set forth in more detail in the “Other Regional Projects” section.

To further inform the overall General Plan amendment/RUFA process, JPA staff plans to present the JPA’s Plan of Finance and Project Design Guidelines to each jurisdiction’s Board or Council prior to the request for inclusion of the Connector into their plans. Because the key elements of the Plan of Finance and Project Design Guidelines will necessarily overlap with and be incorporated through the key elements of the General Plan amendment and Regional Agreement, JPA staff does not plan to ask each jurisdiction to adopt the Plan of Finance and Project Design Guidelines independently. But it is important for the JPA Board to adopt these documents independently to clarify the position of the JPA Board on the key elements to be incorporated in the General Plan amendments and the accompanying RUFA.

**Other Regional Projects:** As previously discussed at the February Board meeting, below are several examples of Joint Powers Authorities in the Sacramento area that were formed to provide mutual benefit and involvement for various public infrastructure deemed necessary and critical for the regions’ future.

**Sacramento Area Flood Control Agency (SAFCA):** Formed in 1989, SAFCA is a Joint Powers Agency created to lead flood control improvement efforts for the Sacramento area. Its members include the City and County of Sacramento, U.S. Reclamation District 1000, American River Flood Control District, Sutter County, Sacramento County Water Agency, and the Sutter County Water Agency. The JPA has the power to study, plan, develop, construct, maintain, repair, and manage water control works, but the affected member must consent before SAFCA can perform water control functions within its geographic boundaries; construct facilities within its boundaries; assume maintenance and operation responsibilities; or impose any assessment fee or tax for a project located within its boundaries.

**Bizz Johnson Highway 65:** Placer County and the cities of Roseville and Rocklin formed a JPA, staffed by the City of Roseville, to fund four interchanges on Highway 65. The joint powers agreement mandates that each member pay its “fair-share” costs of the project based on the economic impact of the individual improvements delivered to each respective jurisdiction.
Sacramento Transportation Development Agency (STDA): STDA, a JPA, was formed in 1983 by the City and County of Sacramento and the Sacramento Regional Transit District to plan and develop the light rail system in and around the Sacramento area. STDA was authorized to contract, lease, acquire, construct, manage, and maintain works or improvements. Once constructed, all light rail facilities were to be owned by RT. The STDA was funded through assessment and taxes on its members, as well as state and federal grants.

Once the Board has approved both the Plan of Finance and the Project Design Guidelines as required by the JPA agreement of 2006, staff will report back to the Board with a recommended process including participants, timing, policy guidance, and required staffing to complete the General Plan Amendment process and associated project delivery processes.

Respectfully Submitted:

[Signature]

Tom Zlotkowski
Executive Director
Update on the South Sacramento Habitat Conservation Plan (SSHCP)

**Issue:** To update the Board on the process and schedule for the South Sacramento Habitat Conservation Plan (SSHCP) as required in the executed Memorandum of Agreement (MOA).

**Recommendation:** To hear an update on the progress of the SSHCP and provide any input as desired.

**Background:** The South Sacramento Habitat Conservation Plan (SSHCP) is a regional effort that will provide development and infrastructure components with streamlined, predictable federal and state permitting processes while creating a preserve system to protect sizeable habitat preserves, open space, and agricultural lands. The SSHCP is the most efficient means of complying with this regulatory requirement and will greatly assist the Connector Project in obtaining many of the federal permits required for construction. The SSHCP is a regional project. In addition to the JPA, the joint applicants include the County of Sacramento, the Cities of Elk Grove, Galt, and Rancho Cordova, the Sacramento County Regional Sanitation District, and the Sacramento County Water Agency.

In July, 2010, your Board approved an MOA with the SSHCP Partners for the continued development and funding of the SSHCP. The MOA established a formal cost-sharing mechanism to allocate the cost of completing the SSHCP in an equitable manner. The MOA identified the Connector JPA’s fiscal contribution at $500,000 paid on the basis of significant milestones to be achieved during the SSHCP development process. An initial payment was made to the SSHCP consistent with the terms of the MOA in November, 2010. A subsequent MOA for FY 2011-12, consistent with the original FY 2010 document, further defined and tied the payments to specific milestones as follows:

(i) $75,000 shall be paid upon completion of the Draft Programmatic 404 Permit application, and all associated documents, and its release to the plan participants for internal review; and

(ii) $175,000 shall be paid upon publication of the Notice of Availability, the Draft EIR/EIS, the Draft HCP, and the Draft Implementation Agreement.

In addition to scheduling payments upon completion of the above mentioned milestones, the SSHCP committed to providing the JPA Board with quarterly updates on the progress of the plan.

**Discussion:** At your September 2012 Board meeting, the Board heard a presentation from SSHCP leadership on the progress of the plan and reported out a number of significant efforts in that regard including:

- Continued development of a draft document by the SSHCP consultant with an expected completion date of mid-2014
• Technical coordination with the federal agencies on a number of required elements including National Environmental Policy Act (NEPA)

• Coordination with the Bay Delta Conservation Plan on areas of common interest and regulation

• Selection of a EIR/EIS consultant to prepare the various documents required to complete the SSHCP

• Preparation of a revised schedule and Memorandum of Understanding for FY 2011-13

Since that presentation last September, several aspects of these pursuits have been necessary in order to keep the overall project on track. Most notable is the delay in the execution of the contract with an EIR consultant until late last month (Feb. 2013). This delay is of concern to JPA staff and has prompted the investigation of possible alternative approaches to cover the various unique and specific study requirements for the Connector in the event the SSHCP process lags further. This investigation of alternatives to the SSHCP process is specific to the project itself and would not interfere with the overall progress of the plan should the JPA feel it necessary to pursue them. Should that be the case, staff of both the JPA and the SSHCP leadership will provide a full report to the Board prior to taking any action.

In recognition of this potential and a scheduled quarterly update on the SSHCP at today’s meeting, staff has requested representatives of the SSHCP Partners be prepared to provide additional information regarding future SSHCP schedule, cost, and coverage of unique requirements of the Connector Project as is currently expected from the EIR/EIS process. In that way, JPA staff can better inform the Board as to its options for keeping the environmental and permitting aspects of the project on track. It will also provide the Board with information to assist with any requested amendment to the milestones currently outlined in the current MOA between the JPA and the plan partners for FY 2012-13.

Respectfully Submitted:

Tom Zlotkowski
Executive Director
Presentation on the City of Elk Grove’s Kammerer Road Project

Issue: To present the Board with an update on the City of Elk Grove’s Kammerer Road Project.

Recommendation: To hear a presentation on the City of Elk Grove Kammerer Road Project and provide feedback to ascertain the consistency and impacts on the SouthEast Connector Project.

Background: The City of Elk Grove is currently pursuing a Project Approval/Environmental Document (PA/ED) that will establish the project purpose and need, preliminary design, and obtain NEPA approval for the Kammerer Road project.

The Kammerer Road Project (between Lent Ranch Parkway west of State Route 99 (SR 99) and Interstate 5 (I-5)) proposes widening and completing a link in the roadway infrastructure between the two state freeways. The majority of the Kammerer Road Project is within Sacramento County, but is included in a current application for the expansion of the City of Elk Grove’s Sphere of Influence. The existing Kammerer Road extends west from SR 99 and terminates at Bruceville Road. There currently exists six lanes from SR 99 to just west of Lent Ranch Parkway, where it tapers down to two lanes for the remainder of its length. The proposed project would widen the existing 2.5-mile long Kammerer Road from the current two lanes to four lanes between Lent Ranch Parkway intersection and Bruceville Road. In addition, the proposed improvements would construct a 3-mile long, four-lane extension of Kammerer Road from the Bruceville Road intersection to the east side of the I-5 / Hood Franklin Road Interchange.

The Project is identified in the 2035 MTP and 2013/16 MTIP as two separate projects. Project SAC24094 describes the Kammerer Road Extension Project as a four-lane facility from Bruceville Road to I-5, modifying the I-5/Hood Franklin interchange and constructing a crossing over the Union Pacific Railroad (UPRR) east of Franklin Boulevard by the year 2016. Project SAC24114 describes the widening of Kammerer Road from two to four lanes from approximately 6000 feet west of SR 99 to Bruceville Road by the year 2017. The City of Elk Grove has requested an amendment to the MTIP to include the environmental clearance of SAC24114 in SAC24094 and change the completion year for both segments to the year 2018.

The City has formed a Project Development Team (PDT) consisting of representatives of City of Elk Grove Public Works and Planning Departments, Sacramento County Department of Transportation, and Sacramento County Department of Environmental Review and Assessment (DERA). JPA staff is also participating in the regular PDT meetings and has provided input on the Project Purpose and Need, as well as the Project Description.

The Kammerer Road Project is Segment A of the SouthEast Connector Project and is included in the Plan of Finance being presented to the Board for approval. In September, October, and November 2012 staff provided an update to the Board on the continued coordination with the City of Elk Grove on their advance project development process for the Kammerer Road portion of the Connector. Staff reported that additional meetings are scheduled over the next several months to propose a final configuration to be submitted for environmental review, and that
staff has inquired as to the intent of the project planning as it relates to the overall development of the Connector and its environmental and finance plan elements. In February 2013, the Board requested a presentation on the Kammerer Road project to better understand how the project will be consistent with the SouthEast Connector.

Discussion: The JPA and the City of Elk Grove should work toward maintaining consistency and continuity between the projects with regard to scope, environmental review, project timing, and funding.

Scope Consistency: JPA staff has been working with the PDT members and the current project scope is consistent with regard to the access and cross section identified in the PEIR. The City has identified an alternative bypass option (Bypass Option B) that would shift the Kammerer Road alignment south to avoid existing residential and commercial structures along the base alignment. This option would place the alignment outside of the environmental study area in the PEIR.

Environmental Consistency: The JPA certified a Program EIR and subsequent settlement agreement with the Environmental Council of Sacramento (ECOS). The City is not presently tiering off of the SouthEast Connector PEIR. Pursuing a separate NEPA document related to FHWA/Caltrans and the regulatory agencies may affect the JPA’s future environmental process.

Project Timing and Funding: The Kammerer Road Project description states that the project is expected to be completed by 2018, although no construction funding sources have been identified. It is unclear how the timing and funding of both projects would be coordinated, and whether or not the Kammerer Road project will be competing for funding with the Connector Project. As indicated in the Connector Plan of Finance, any and all major project segments that are pursued independently without new- found revenues will have a negative effect on the current cash flow model.

The purpose of today's presentation is to provide the Board with an update on the Kammerer Road Project in an effort to coordinate how the Kammerer Road Project will interface with the Connector. Elk Grove City staff has been requested to provide additional details and respond to questions, if desired by the Board.

Respectfully Submitted:

Tom Zlotkowski
Executive Director
Adopt Project Design Guidelines (PDG)

Issue: To present to the Board the Project Design Guidelines (PDG) of the Connector Project for approval.

Recommendation: Adopt the Project Design Guidelines for the SouthEast Connector Project and direct staff to continue with their development through additional input from the stakeholder advisory processes.

Background: The Project Design Guidelines have been prepared to establish a single guidance document to enable consistent planning and design of the Connector. They provide for the development of the Connector Project such that it has the following characteristics:

- Is uniform in character, appearance, facilities provided, and blends with the communities
- Is positioned effectively with the surroundings to minimize impacts
- Provides effectively planned access to maximize the operational efficiency of the corridor
- Integrates alternate modes of travel and provides a high level of service
- Provides well-coordinated, efficient traffic operations
- Implements sustainable solutions
- Maintains the integrity of the regional transportation systems
- Allows for a cost-effective implementation of the project

The PDG is a technical tool used for development of a facility to provide clarity in scope, shape, and appurtenant features. In addition, the PDG and the Final Programmatic Environmental Impact Report (FPEIR) will provide supporting documentation to the JPA and the local jurisdictions for the General Plan amendment process to incorporate the Connector Project.

The PDG establish design guidance for the project planning and are intended to help designers as follows:

- Establish street configurations
- Identify and plan appurtenant facilities
- Identify anticipated project right-of-way (ROW)
- Identify areas of ownership/responsibility
- Maintain continuity between project segments
- Maintain continuity with the communities

The level of detail included is commensurate with the phase of project development. The guidelines are intended to be updated periodically as additional clarification is made and future phases of the project(s) begin.

Over the past year, the three committees (Technical, Sustainability, and Stakeholder) met on multiple occasions to provide input and collaboration on the development of the PDG and a Sustainability Assessment program.
The project team facilitated three Technical Advisory Committee (TAC) meetings and also met individually with each of the member jurisdictions to engage the members in technical discussions and to solicit input and feedback on the PDG. The project team also facilitated three Sustainability Concept Committee (SCC) meetings involving the preparation and development of an in-depth Sustainability Assessment and evaluation of sustainable solutions. Outcomes from the assessment were included in the PDG and programmatically categorized for individual consideration during future project implementation. Finally, the project team facilitated four community Stakeholder Advisory Committee (SAC) meetings which included a mobility mapping exercise, aesthetics/thematic workshop, and a comment/review meeting with the SAC members. The SAC activities were summarized in a SAC Involvement Memorandum, which captured the SAC input in an illustrative array of thematic images that are also included as community character elements in the PDG.

Through an iterative development process, the culmination of all committee input and participation was recorded and addressed. Technical, sustainability, and community items directly affecting the current version of the PDG were incorporated and addressed within the guidelines. While the final committee work was being incorporated into the draft PDG, the project team met individually with the public works and planning staffs of each member jurisdiction. These meetings occurred in October, 2012, and provided an opportunity for the individual jurisdictions to focus their attention on areas that might be specific to their own needs. Presented in those meetings were a list of technical comments from previous committee meetings along with responses compiled by the project team and the proposed action (if any) to address the stated concern. In total, over 250 comments were noted and/or addressed through this resolution matrix process with only several comments remaining to be worked out outside of the process. They include:

- Technical or Non-Technical Exception Processes
- Cooperative Agreements
- Right-of-Way Administration
- Utility Coordination and Agreements

On January 31st, 2013, a PDT meeting was held to update the members on the PDG efforts to-date and to receive support and recommendation to present to the JPA Board the PDG and the supporting documentation prepared in collaboration with the committees. To address the outstanding issues listed above, the project team prepared a draft Design Exception Process intended to address the areas of concern on a case by case basis. This exception process would be available for use in any number of circumstances even beyond those listed above and would be classified into three different levels of approval depending upon the extent of the requested exception. It required that all design exception requests be approved by the local policy board of the requesting entity prior to being submitted to the JPA for consideration. The three categories of exception were classified as follows:

**Category 1** – Non safety/non-controversial design elements of aesthetic or non-functional nature.

**Approval Body** – Local Jurisdiction and JPA Executive Director.

**Category 2** - Exceptions to the design standards that are generally classified as “technical”, but not involving significant interaction with local jurisdictional policy and/or adjacent land use planning.

**Approval Body** – JPA Technical Committee and the JPA Executive Director (the Technical Committee would be comprised of Transportation and/or Public Works Directors from each of the five member jurisdictions, Planning Director from SACOG, and the JPA Executive Director).
**Category 3** – Design exceptions that include safety, access, right-of-way standards, or controversial items that involve considerations outside of the development of the project itself.

**Approval Body** – JPA Board of Directors.

In all cases, if agreement cannot be reached at given approval level, the process can be appealed to the next level. The exception to that is Category 3, in which the JPA Board is the final authority.

To be approved, exceptions cannot: (1) adversely affect Levels of Service, safety, or project financing; or (2) be inconsistent with Measure A or the JPA’s original Functional Guidelines. The benefits of any Design Exception granted must outweigh the impacts, and may be subject to supplemental CEQA review.

While the group unanimously supported the concept of the Design Exception Process, some issue was taken with this policy because it is based on the premise that the JPA is the “owner” of the project and is responsible for the overall delivery of the project itself. This is the premise that the JPA staff has worked under in the development of numerous project policies including the PEIR and the Draft Plan of Finance. Prior to advancing these PDG forward, a more thorough understanding of this issue should be discussed and/or resolved for the purposes of informing subsequent processes critical to project delivery.

**Discussion:** At the February, 2013 Board meeting, staff introduced the PDG to the Board to provide an opportunity to discuss with staff and take testimony from the public on their content. At that meeting, the discussion primarily centered on two topics: 1) The hard work and success of the three committees (Technical, Sustainability, and Stakeholder) in providing input and collaboration on the development of the Project Design Guidelines and a Sustainability Assessment Program, and 2) Who retains the ultimate design exception approval authority; the JPA or the member jurisdictions?

The primary issue of who retains approval authority is contingent upon whether or not the JPA Board is considered the appropriate body to be making decisions on the interface between the adjacent land use in the member jurisdictions and the project. This is representative of the interface and pressures of private development with individual agencies, primarily related, but not limited to, access along the Connector. The remaining technical and stakeholder related aspects of the PDG have been well supported without significant comment or concern.

The question of who retains the ultimate approval also brings forth a much larger policy issue of either reinforcing or redefining the JPA’s role with regard to the delivery of the project. The JPA was formed to carry out the completion of the Connector Project as a result of the project being included in the voter approved 2004 Measure A Sales Tax renewal as a regionally significant and important project. As a result, staff has moved the project forward under the premise that the JPA is responsible for the overall delivery and construction of the project. This is based on the analysis that demonstrates that a single project administration is most advantageous to the delivery of the entire corridor. Staff continues to support the recommendation of a JPA formation by SACOG as the delivery body to successfully accomplish a cost-effective, efficient, regional project. This 2006 recommendation is backed by the financial analysis of the Connector Plan of Finance which is also under consideration for approval by the Board.

While the two topics (the JPA’s role in delivering the project and who retains design exception approval authority) are not mutually exclusive, approval of the PDG does not constitute approval of the JPA on any land use policies, eminent domain, or ownership of the project. The larger policy issue as to the JPA’s role in delivering the project
will be vetted through a much more rigorous process that involves drafting of Reciprocal Use and Funding Agreements (RUFA) with the individual jurisdictions as an element of the upcoming General Plan Amendment process. The PDG will simply reinforce the consistency with the certified PEIR and other associated legal settlement agreements, and are a living document that can and will be updated as needed.

It should also be noted that the design exception process that is included in the PDG is a starting point that establishes an important and necessary policy moving forward. Future discussions and coordination with the member jurisdictions could result in alterations/modifications to the Design Exception Policy.

Once adopted initially, staff will develop a means to provide updates to the PDG through the committee processes already established and will report back to the Board with a recommended annual timeline and expense as part of the annual work plan process.

Respectfully Submitted:

Tom Zlotkowski
Executive Director
The Project Design Guidelines document has been prepared with the support and collaboration from the member jurisdictions of the Capital SouthEast Connector JPA. The member jurisdictions that participated in the development process of these guidelines approve of this document and the information contained herein.

_____________________________             _______________________
Director, Public Works                   Date
City of Elk Grove

_____________________________             _______________________
Director, Public Works                   Date
City of Folsom

_____________________________             _______________________
Director, Public Works                   Date
City of Rancho Cordova

_____________________________             _______________________
Director, Transportation                Date
County of El Dorado

_____________________________             _______________________
Director, Transportation                Date
County of Sacramento

_____________________________             _______________________
Executive Director                      Date
Capital SouthEast Connector JPA
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Appendix
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Capital SouthEast Connector Stakeholder Advisory Committee (SAC) Involvement Summary Memorandum
## Acronyms and Abbreviations List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
</tr>
<tr>
<td>ADA</td>
<td>U.S. Department of Transportation’s Americans with Disabilities Act</td>
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<td>BRT</td>
<td>bus rapid transit</td>
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<tr>
<td>CA</td>
<td>California</td>
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<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
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<td>CEQA</td>
<td>California Environmental Quality Act</td>
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<td>Connector</td>
<td>Capital SouthEast Connector</td>
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<tr>
<td>ETW</td>
<td>edge of traveled way</td>
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<td>FHWA</td>
<td>Federal Highway Administration</td>
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<tr>
<td>FPEIR</td>
<td>final program environmental impact report</td>
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<td>ft</td>
<td>feet</td>
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<td>HDM</td>
<td>Caltrans Highway Design Manual</td>
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<tr>
<td>HMA</td>
<td>hot-mix asphalt</td>
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<tr>
<td>I-5</td>
<td>Interstate 5</td>
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<td>in</td>
<td>inch</td>
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<tr>
<td>ITS</td>
<td>Intelligent Transportation System</td>
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<tr>
<td>JPA</td>
<td>Joint Powers Authority</td>
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<tr>
<td>LED</td>
<td>light-emitting diode</td>
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<tr>
<td>MPH</td>
<td>miles per hour</td>
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<tr>
<td>MUTCD</td>
<td>California Manual of Uniform Traffic Control Devices</td>
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<tr>
<td>NACTO</td>
<td>National Association of City Transportation Officials</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
</tr>
<tr>
<td>PCCP</td>
<td>Portland cement concrete pavement</td>
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<tr>
<td>PDPM</td>
<td>Caltrans Project Development Procedures Manual</td>
</tr>
<tr>
<td>PUE</td>
<td>Public Utility Easement</td>
</tr>
<tr>
<td>R</td>
<td>radius</td>
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<tr>
<td>ROW</td>
<td>right-of-way</td>
</tr>
<tr>
<td>R-value</td>
<td>resistance values</td>
</tr>
<tr>
<td>SAC</td>
<td>Stakeholder Advisory Committee</td>
</tr>
<tr>
<td>SCC</td>
<td>Sustainability Concept Committee</td>
</tr>
<tr>
<td>SCIS</td>
<td>Sacramento County Improvement Standards</td>
</tr>
<tr>
<td>Se</td>
<td>superelevation (Emax = maximum superelevation)</td>
</tr>
<tr>
<td>SR 99</td>
<td>State Route 99</td>
</tr>
<tr>
<td>SSD</td>
<td>stopping sight distance</td>
</tr>
<tr>
<td>SSHCP</td>
<td>South Sacramento Habitat Conservation Plan</td>
</tr>
<tr>
<td>STAA</td>
<td>Surface Transportation Assistance Act</td>
</tr>
<tr>
<td>TAC</td>
<td>Technical Advisory Committee</td>
</tr>
<tr>
<td>UPRR</td>
<td>Union Pacific Rail Road</td>
</tr>
<tr>
<td>US 50</td>
<td>United States Highway 50</td>
</tr>
<tr>
<td>VC</td>
<td>vertical curve</td>
</tr>
</tbody>
</table>
Policies

Design Exception Policy (February 26, 2013)
Title

Herein describes an exception approval process for non-standard or special conditions which deviate from the standard policy or requirements contained in the Connector Project Design Guidelines (PDG).

Policy

Approvals for proposed non-standard conditions are needed when the JPA and a local jurisdiction(s) or project partner are sharing responsibilities or funding for a project along the Connector. The approval process should be documented to record the background and basis for the deviation from standard policy or requirements contained in the PDGs. Approval of exceptions should be pursued and obtained as early as possible in the project development process, particularly when the project concepts, costs or funding depend upon the approvals.

Definition and Background

The Connector project consists of a combination of existing and new roadway alignments through rural and urban environments. The development of the Connector project is anticipated to be accomplished in phases (noted as segments in this Project Design Guidelines) that will be generally consistent with these environments. Also, planned projects within the Connector corridor are in various stages of design and construction by state and local agencies that will construct portions of the Connector. The order of implementing the various segments is not determined at this time. It will be subject to funding availability and existing and future traffic demand.

The PDGs have been prepared to establish one overall guidance document to enable consistent planning and design of the Connector. They provide for the development of the Connector project such that it has the following characteristics:

- Is uniform in character, appearance, facilities provided, and blends with the communities.
- Is positioned effectively with the surroundings to minimize impacts.
- Provides effectively located access to maximize the efficiency of the corridor.
- Integrates other modes of travel and provides a high level of service.
- Provides well-coordinated, efficient traffic operations.
- Implements sustainable solutions.
- Maintains the integrity of the regional transportation systems.
- Allows cost-effective implementation of the project.

The PDGs are a technical tool used for development of a facility to provide clarity in scope, shape, and appurtenant features. In addition, the guidelines and the final program environmental impact report (FPEIR) will provide supporting documentation to the JPA and the local jurisdictions for the various general plan amendment processes to incorporate the Connector project.
The guidelines establish design guidance for the preliminary planning and are intended to help designers as follows:

- Establish street configurations.
- Identify and plan appurtenant facilities.
- Identify anticipated project right-of-way (ROW).
- Identify areas of ownership/responsibility.
- Maintain continuity between project segments.
- Maintain continuity with the communities.

The level of detail included is commensurate with the phase of project development. The guidelines are intended to be updated periodically as additional clarification is made and future phases of the project(s) begin.

Where guidelines conflict or information is missing, the designer should bring it to the attention of the JPA for resolution. The JPA will maintain ownership of the project design guidelines and will provide periodic updates at its discretion. Changes to the guidelines will require review and approval by the JPA Board of Directors before being used on the project.

**Design Exceptions**

Design exceptions assist designers and owners in finding a transportation solution that balances impacts to design characteristics, site constraints, site specific needs, and environmentally sensitive areas while still providing for safety and mobility. Due to circumstances presented within the multi-agency corridor, a situation may arise in which the existing design criteria cannot be met, the impact of meeting the criteria would be too great, or the jurisdiction along the corridor requests changes due to other factors. In this case, designers or individual jurisdictions must request a design exception.

Design exceptions will be classified into three categories which have different levels of approvals required. All design exception requests are required to have preliminary approval of the governing Local Jurisdiction Staff prior to a formal request being sent to the JPA.

**Category 1** (Local Agency /JPA Executive Director Approval Authority):

Category 1 design exceptions include minor exceptions to the design standards that are not classified as Category 2 or Category 3, are deemed to be non-safety and non-controversial between jurisdictions, or are consistent with the examples listed in Table 1. Approval for Category 1 design exceptions lies with the Local Jurisdiction and the JPA Executive Director. If there is disagreement between the two approval authorities, the exception request is elevated to Category 2.

**Category 2** (JPA Technical Committee/JPA Director Approval Authority):
Category 2 design exceptions include exceptions to the design standards that are generally classified as technical design standards or those listed in Table 1. Approval for Category 2 design exceptions lies with the JPA Technical Committee and the JPA Executive Director.

If there is disagreement between the two approval authorities, the exception request is elevated to Category 3.

**Category 3 (JPA Board Approval Authority):**
Category 3 design exceptions include exceptions to the design standards that are generally related to safety, access, right-of-way, or involve public controversy, such as the examples listed in Table 1. Recommendations shall be made by the Local Agency, Technical Committee and Executive Director but final approval authority for Category 3 design exceptions lies with the JPA Board of Directors.

To be approved, exceptions cannot: (1) adversely affect Levels of Service, safety, or project financing; or (2) be inconsistent with Measure A or the JPA’s original Functional Guidelines. The benefits of any Design Exception granted must outweigh the impacts, and may be subject to supplemental CEQA review.

Table 1 – Examples of Design Exception Categories

<table>
<thead>
<tr>
<th>Design Exception</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Technical Design</td>
<td></td>
</tr>
<tr>
<td>- design elements*</td>
<td></td>
</tr>
<tr>
<td>- cross section elements*</td>
<td></td>
</tr>
<tr>
<td>- structural section</td>
<td></td>
</tr>
<tr>
<td>- other considerations*</td>
<td></td>
</tr>
<tr>
<td>Drainage</td>
<td>X</td>
</tr>
<tr>
<td>- hydrologic and hydraulic design standards*</td>
<td></td>
</tr>
<tr>
<td>- stormwater quality analysis and design standards*</td>
<td></td>
</tr>
<tr>
<td>- construction stormwater standards*</td>
<td></td>
</tr>
<tr>
<td>Integrated Travel Modes*</td>
<td>X</td>
</tr>
<tr>
<td>Interchanges &amp; Intersections*</td>
<td></td>
</tr>
<tr>
<td>- interchange/intersection spacing and locations</td>
<td></td>
</tr>
<tr>
<td>- access that differs from the PEIR</td>
<td></td>
</tr>
<tr>
<td>Right-of-Way, Utilities &amp; Railroad Facilities*</td>
<td>X</td>
</tr>
<tr>
<td>Structures</td>
<td>X</td>
</tr>
<tr>
<td>Traffic</td>
<td></td>
</tr>
<tr>
<td>- pavement delineation &amp; striping</td>
<td></td>
</tr>
<tr>
<td>- signal equipment, lighting &amp; ITS*</td>
<td></td>
</tr>
</tbody>
</table>
## Landscaping & Aesthetics*

<table>
<thead>
<tr>
<th>Landscaping &amp; Aesthetics*</th>
<th>X</th>
</tr>
</thead>
</table>

### Sustainability

<table>
<thead>
<tr>
<th>Sustainability</th>
<th>X</th>
</tr>
</thead>
</table>

### Environmental*

- sounds barriers
- wildlife crossings
- South Sacramento Habitat Conservation Plan

*As defined in the Project Design Guidelines and/or Program EIR

## Roles and Responsibilities

### JPA Technical Committee

- The JPA Technical Committee shall consist of:
  - Transportation and/or Public Works Directors from each of the five member jurisdictions
  - Planning Director from SACOG
  - JPA Executive Director
- Develops policies and procedures to implement the Policy objective.
- Reviews, oversees, and ensures compliance with agreed upon terms through the implementation process, including supplemental studies, review, or analyses required to evaluate outcomes.
- Coordinates the development of language or process documentation in collaboration with other involved agencies or entities as necessary.
- Coordinates review and approval of documented process by approving authorities.
- Participate in resolving requests by local entities for deviation from JPA standard policies and procedures.

### JPA Executive Director

- Coordinates the review and approval by legal counsel, accounting, and other entities, as necessary.
- Reports on the status of policy review, approvals, and implementation to the Board of Directors.
- Executes Board policies.
- Approves Category 1 design exceptions.
- Provides recommendations to the JPA Board of Directors on Category 2 Design Exceptions.

### JPA Board of Directors

- Approves or adopts JPA policies and exceptions from standard policy processes or implementation.
Applicability

- Technical or Non-Technical Exception Process
- Cooperative Agreement
- Right of Way Administration
- Utility Coordination and Agreements
I. Introduction

In December 2006, the Cities of Elk Grove, Rancho Cordova, and Folsom, and Counties of Sacramento and El Dorado (member agencies) collaborated to form the Capital SouthEast Connector Joint Powers Authority (JPA) to facilitate the Capital SouthEast Connector Project (also known as the “Connector”). The project is a 35-mile-long multi-modal transportation facility, extending between Interstate 5 (I-5) and U.S. Highway 50 (US 50), that will link communities in Sacramento and El Dorado Counties, including Elk Grove, Rancho Cordova, Folsom, and El Dorado Hills. See Figure 1 for the project vicinity. When completed, the proposed project would be a roadway of four to six traffic lanes with limited access points that would accommodate a variety of regional transportation needs. The Connector will achieve the following:

- Relieve demand on local streets and roads and regional freeway facilities (US 50, State Route [SR 99], and I-5).
- Provide options for a variety of travel modes throughout the project corridor.
- Provide transportation options that enable flexibility among automobile, transit service, bicycle, and pedestrian uses, while incorporating Intelligent Transportation System (ITS) elements where possible.
- Discourage growth in areas not designated for growth as determined by local jurisdiction general plans.

A program-level environmental impact report (EIR) has been prepared for the Connector. The program-level EIR acts as the first-tier analysis for subsequent, more detailed project-specific environmental review. Use of a tiered EIR allowed the selection of a maximum 800-foot-wide corridor. The subsequent, project-specific environmental documents for corridor segments will incorporate by reference the previously prepared EIR, and concentrate solely on the issues specific to the environmental analysis prepared for a project segment.

The Connector project consists of a combination of existing and new roadway alignments through rural and urban environments. The development of the Connector project is anticipated to be accomplished in phases (noted as segments in this Project Design Guidelines) that will be generally consistent with these environments. Also, planned projects within the Connector corridor are in various stages of design and construction by state and local agencies that will construct portions of the Connector. The order of implementing the various segments is not determined at this time. It will be subject to funding availability and existing and future traffic demand.

The JPA is responsible for selecting the Connector corridor and is the California Environmental Quality Act (CEQA) lead agency for the purpose of conducting environmental review. Sacramento County, El Dorado County, and the Cities of Elk Grove, Rancho Cordova, and Folsom may carry out future development of specific projects that would be a part of the Connector and, therefore, are responsible agencies under CEQA.
II. Purpose

These Project Design Guidelines has been prepared to establish one guidance document to enable consistent planning and design of the Connector. They provide for the development of the Connector project such that it has the following characteristics:

- Is uniform in character, appearance, facilities provided, and blends with the communities.
- Is positioned effectively with the surroundings to minimizes impacts.
- Provides effectively located access to maximize the efficiency of the corridor.
- Integrates other modes of travel and provides a high level of service.
- Provides well-coordinated, efficient traffic operations.
- Implements sustainable solutions.
- Maintains the integrity of the regional transportation systems.
- Allows cost-effective implementation of the project.

The Project Design Guidelines is a technical tool used for development of a facility to provide clarity in scope, shape, and appurtenant features. In addition, the guidelines and the final program environmental impact report (FPEIR) will provide supporting documentation to the JPA and the local jurisdictions for the general plan amendment process to incorporate the Connector project.

The process of developing the Connector Project Design Guidelines has included the attention and input from three committees formed to represent key stakeholder focus areas: Technical, Sustainability, and Community. These committees were organized to focus on their subject matter expertise as follows:

- The Technical Advisory Committee consisted of representatives from each of the five member jurisdictions and other transportation related agencies and planning organizations. This advisory committee, with expertise in the technical application of engineering policy, planning, and design guidelines, provided input to the JPA on the Project Design Guidelines for the Connector corridor.
- The Sustainability Concept Committee (SCC) consisted of business/industry, agency, program, and advocacy representatives with focused interest and expertise in sustainability (also referred to as the “Triple Bottom Line” for economy, people, and environment). This advisory committee, consisting of individuals with an understanding and expertise in the application and implementation of sustainable solutions, provided input to the JPA through the successful completion of a sustainability assessment process to identify concepts and opportunities to apply to the Connector corridor.
- The Stakeholder Advisory Committee (SAC) consisted of members from the community, regional organizations, and business or property owners. This advisory committee provided input from the perspective of the eyes, ears, and pulse of the community regarding community elements and broader issues of the Connector corridor.

The Connector JPA Sustainability Assessment Update Memorandum and Capital Southeast Connector SAC Involvement Summary Memorandum are included in the appendix to these Project Design Guidelines.

III. Project Design Guidelines

These guidelines provides sufficient criteria to allow for the planning and development of the Connector corridor at a preliminary engineering level with detail necessary for the general plan amendment
process with the local jurisdictions and for project-level environmental documentation activities during project development.

These guidelines establish design guidance for the preliminary planning and are intended to help designers as follows:

- Establish street configurations.
- Identify and plan appurtenant facilities.
- Identify anticipated project right-of-way (ROW).
- Identify areas of ownership/responsibility.
- Maintain continuity between project segments.
- Maintain continuity with the communities.

The level of detail included is commensurate with the phase of project development. The guidelines are intended to be updated periodically as additional clarification is made and future phases of the project(s) begin.

Where guidelines conflict or information is missing, the designer should bring it to the attention of the JPA for resolution. Consistent with the joint powers agreement, the JPA will maintain ownership of the project design guidelines and will provide periodic updates at its discretion. Changes to the guidelines will require review and approval by the JPA Board of Directors before being used on the project. For policy guidance on guideline updates and review process, see Policies section of these guidelines.

IV. Project Documents

The following list of documents has been prepared for the planning, environmental clearance, and design of the Connector project. The Connector and its project segments should maintain consistency with the requirements, mitigations, recommendations, and conclusions of the following documents unless superseded by a more recently approved document or directed by the JPA:

- FPEIR for the Capital SouthEast Connector Project, revised February 2012
- Functional Guidelines, dated November 8, 2006
- Integrated Modes Policy

Change in the areas surrounding the Connector will occur. Changes that are proposed within a local jurisdiction that affect the Connector and the approved PFEIR may require separate studies and approvals. The proposed changes should be investigated by the local agency and/or the project proponent to determine the impact on the Connector. Any action(s) requiring a change should include the affected portion of the Connector, and separate documentation and approvals obtained by the parties involved, including the modifications to the Connector.

V. Route Description

The 35-mile-long Connector corridor identified in the EIR traverses the southern Sacramento Valley and eastern foothills through the Cities of Elk Grove, Rancho Cordova, and Folsom, and Counties of Sacramento and El Dorado, via Kammerer Road, Grant Line Road, and White Rock Road, with connections to I-5 at Hood-Franklin Road Interchange, SR-99 at Grant Line Road, SR-16/Jackson Road at Grant Line Road, and US 50 at the Silva Parkway Interchange. Table 1 lists and describes the five segments of the Connector corridor along with the Route Segment Map shown in Figure 2.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Description</th>
<th>Local Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Four-lane expressway, on Kammerer Road from the I-5/Hood-Franklin Road Interchange to Bruceville Road</td>
<td>Elk Grove, Sacramento County</td>
</tr>
<tr>
<td>B</td>
<td>Four- to Six-lane thoroughfare, on Kammerer Road and Grant Line Road from Bruceville Road to Bond Road</td>
<td>Elk Grove, Sacramento County</td>
</tr>
<tr>
<td>C</td>
<td>Four-lane roadway, on Grant Line Road from Bond Road to Calvine Road (Sheldon Area)</td>
<td>Elk Grove, Sacramento County</td>
</tr>
<tr>
<td>D</td>
<td>Four- to Six-lane expressway, on Grant Line Road and White Rock Road from Calvine Road to the Sacramento-El Dorado County line</td>
<td>Rancho Cordova, Sacramento County, Folsom</td>
</tr>
<tr>
<td>E</td>
<td>Four- to Six-lane thoroughfare, on White Rock Road from the County line to US 50/Silva Valley Parkway Interchange</td>
<td>Folsom, El Dorado County</td>
</tr>
</tbody>
</table>

Table 1 – Connector Project Segments

![Figure 2 – Route Segment Maps](image-url)
VI. Design Standards

Standards should be applied to the Connector and the associated improvements, to provide uniformity to the regional transportation network, in the following order:

- Connector mainline, interchanges, and intersections
- Local jurisdiction cross streets, frontages, and adjacent street modifications
- Connectivity to the state highway facilities

A. Application of Standards

The order in which standards are applied should maintain this continuity (see Figure 3).

SouthEast Connector

Planning and design of the Connector should be in accordance with American Association of State Highway and Transportation Officials (AASHTO) “A Policy on Geometric Design of Highways and Streets,” dated 2004 (Green Book), and these design guidelines.

Connector Intersections

Where the Connector intersects with the cross streets identified in these Project Design Guidelines, the improvements at the intersection should be designed in accordance with the Sacramento County Improvement Standards (SCIS), dated October 6, 2006, or an approved equivalent, and these guidelines, for all facilities within the planned ROW footprint and access control limits of the Connector and the intersection.

Caltrans State Highways

Where connections are made to I-5, SR-16, SR 99 and US 50, the improvements should be planned and designed in accordance with the California Department of Transportation (Caltrans) Highway Design Manual (HDM), most current edition, for all facilities within the ROW and control of access for the highway or interstate (see Figure 3).

Local Jurisdiction

Where local street improvements are made to accommodate the Connector, including intersecting cross streets, adjacent local roads, and frontage roads, the improvements should be designed in accordance with the improvement standards of the local jurisdiction and these Project Design Guidelines.

Design manuals and criteria to be used on the project are as follows:

- AASHTO Geometric Design of Highways and Streets, 2004
- AASHTO Guide for Development of Bicycle Facilities, 1999
- County of Sacramento County, Municipal Services Agency, Improvement Standards, dated October 1, 2006
- Sacramento County Volume 2 Hydrology Standards, December 1996
- City of Elk Grove Improvement Standards, dated June 1999
- City of Elk Grove Rural Road Improvement Policy, dated November 14, 2007
• City of Elk Grove Rural Road Improvement Standards, dated November 14, 2007
• City of Elk Grove Trails Master Plan, dated January 10, 2007
• City of Folsom Design and Procedure Manual and Improvement Standards, dated May 22, 2003
• County of El Dorado Design and Improvement Standards, dated May 18, 1990
• El Dorado County Standard Plans, 2011 (Draft – pending adoption)
• County of El Dorado Drainage Manual, March 1995
• U.S. Department of Transportation’s Americans with Disabilities Act (ADA) Standards for Transportation Facilities, 2006 and updated by the Department of Justice’s 2010 ADA Standards for Accessible Design
• Federal Highway Administration (FHWA), Equestrian Design Guidebook for Trails, Trailheads and Campgrounds, December 2007
• Caltrans Highway Design Manual, Current Edition
• Caltrans Project Development Procedures Manual (PDPM), Current Edition
• Caltrans ROW Manual, Current Edition
• Caltrans Traffic Manual, Current Edition
• California Manual of Uniform Traffic Control Devices (MUTCD), Current Edition
• Caltrans Bridge Design Procedures and Design Aids, Current Edition(s)
• National ITS Architecture – Version 7.0 (http://www.iteris.com/itsarch/)
• Regional ITS Architecture for Sacramento area
• FHWA Rule 940
• FHWA Systems Engineering Guidebook for ITS (http://www fhwa dot gov/cadiv/segb/)
• FHWA Freeway Management and Operations Handbook (http://www.ops fhwa dot gov/freewaymgmt/publications/frwy_mgmt_handbook/)
• Institute of Transportation Engineers Manual of Traffic Signal Design
• Caltrans Highway Performance Monitoring System

B. Design Exceptions
Where criteria established in these Project Design Guidelines are not met, a design exception will be required. The criteria to be met should be the minimum standard design values established by these guidelines.

For policy guidance on the exception process, see Policies section in these guidelines.

Existing SouthEast Connector Segments
The existing Kammerer Road, Grant Line Road, and White Rock Road street system is extensively developed. At certain locations, the existing street may be consistent with all or a portion of the proposed Connector identified in the FPEIR. At these locations, the roadway, ROW, and public utility easements established, and drainage, traffic, utility, and integrated modes infrastructure already in place.

Where this condition exists, the infrastructure may not conform to the criteria defined in these guidelines, and making modifications may create excessive impacts to the existing infrastructure and adjacent properties. Under these conditions, a design exception may be requested for the standards not met.
The intent of an exception for the existing street conditions is to effectively use existing sections of the roadways that materially and functionally conform to the defined Connector project. It is not intended to exclude sections of the roadway system or specific features from improvement.

The following areas have tentatively been identified:

**Segment A**
- The I-5/Hood-Franklin Road Interchange

**Segment B**
- Grant Line Road, from Lent Ranch Parkway to Mosher Road
- SR 99/Grant Line Road Interchange
- Grant Line Road/Union Pacific Railroad (UPRR) Grade Separation project, pending completion of design and construction

**Segment E**
- White Rock Road, from Carson Crossing to Post Street
- US 50/Silva Valley Parkway Interchange project, pending completion of design and construction

Other improvements identified as part of the Connector that can be accommodated within the location under consideration should be provided for, including, but not limited to, the following:

- Median and intersection channelization
- Lighting, traffic, and ITS improvements
- Landscape, transit, and non-motorized facilities

Each location should be accessed for impacts on the ultimate project and any phased conditions under consideration. Approval of a design exception for an early phase of the project does not apply to the ultimate Connector project unless specifically stated. Separate design exception approval should be obtained for each location being considered.

**VII. SouthEast Connector and Cross Street Facility Types**

The Connector project is a significant connection between the urban areas along the corridor and, in accordance with AASHTO, is defined as an “Urban Principal Arterial.” The Connector has been described as three different types of roadways – expressway, thoroughfare, and rural roadway – depending on the segment location and accessibility requirements. For these guidelines, the facility type is further defined by segment as follows.

A. **Segment A – Kammerer Road from the I-5/Hood-Franklin Road Interchange to Bruceville Road**

**Intent** – Provide a high-speed connection to I-5 with limited cross street connections.

**Consideration** – The Connector would join two existing streets, Hood-Franklin Road and Kammerer Road. The alignment is through farmlands and rural properties (natural terrain) except where it meets...
with Hood-Franklin Road at I-5. Currently, local traffic circulation and property access occur on the existing street system, adjacent to the Connector alignment, except at the I-5 connection.

**Facility Type:** Expressway – A high-speed, fully divided, urban arterial.

**B. Segment B – Kammerer Road and Grant Line Road from Bruceville Road to Bond Road**

**Intent** – Provide an urban arterial street that is consistent with the existing developed street and maintains identified cross street connections.

**Consideration** – These streets currently serve as an urban arterial roadway leading into and through the southern limits of Elk Grove. The roadway is on the existing street alignment and currently provides access to residential and commercial properties through individual driveways, local road intersections, and to SR 99 at the Grant Line Road Interchange.

**Facility Type:** Thoroughfare – An urban arterial with raised median.

**C. Segment C – Grant Line Road from Bond Road to Calvine Road (Sheldon Area)**

**Intent** – Provide an urban arterial street that is consistent with the rural arterial setting of the existing developed street and maintains identified cross street connections.

**Consideration** – Grant Line Road currently serves as a rural roadway through Sheldon and passes through its business district. The roadway is on the existing alignment and currently provides access to closely spaced residential and commercial properties through individual driveways and local road intersections.

**Facility Type:** “Special Section” – To Be Determined – Urban arterial with divided median and rural arterial setting.

**D. Segment D – Grant Line Road and White Rock Road from Calvine Road to the Sacramento-El Dorado County Line**

**Intent** – Provide a high-speed arterial street with limited cross street connections.

**Consideration** – These connecting streets currently serve as a rural roadway between Elk Grove and the El Dorado Hills Community. The alignment is on the existing roadway and currently runs along rural properties (natural terrain) with widely spaced driveways and road intersections. Local access is provided by the roadway.

**Facility Type:** Expressway – A high-speed, fully divided, urban arterial.

**E. Segment E – White Rock Road from the County Line to US 50/Silva Valley Parkway Interchange**

**Intent** – Provide an urban arterial street that is consistent with the existing developed street, maintains identified cross street connections, and accommodates key local access locations.
Consideration – White Rock Road currently serves as an urban arterial through the El Dorado Hills Community. The alignment is developed as a limited-access facility over the majority of its length. Local access is through the connecting street intersections. Residential and commercial driveway accesses are along its length. It will also provide access to US 50 through the US 50/Silva Valley Parkway project, which will construct a new interchange on US 50 and develop the easternmost end of the Connector project between Valley View Parkway and US 50.

Facility Type: Thoroughfare – An urban arterial with raised median.

F. Cross Streets

Intent – Provide arterial street connections to the Connector that are consistent with the facility type identified for that arterial by the local jurisdiction.

Consideration – The cross streets that intersect or cross the Connector are defined by the local jurisdiction as part of their transportation system and vary in type and width. In some cases, the street system is already developed. The current definition of the street type and width should be maintained to enable regional roadway continuity. The SCIS have been used to develop the Connector thoroughfare segments and will be used to develop the intersections on the Connector alignment.

Facility Type: To Be Determined.

On the basis of the FPEIR traffic studies, the cross streets identified to provide access to the Connector include the following intersection types: interchanges, signalized intersections, and unsignalized controlled-access intersections consisting of right-in/right-out or left-in/right-out connections. See FPEIR Table 16-3 and Figure 16-6 in the Appendix for a complete listing of cross street locations and intersection details.

VIII. Roadway Design

Planning and design of the Connector and cross streets should be in accordance with AASHTO Green Book Chapter 2, “Design Controls,” Chapter 3, “Design Elements,” Chapter 4, “Cross Section Elements,” and the following:

- Segments A and D – Expressway, AASHTO Chapter 7 for a high-speed, divided, urban arterial
- Segments B and E – Thoroughfare, SCIS or equivalent, and AASHTO Chapter 7 for a high-speed urban arterial
- Segment C – Special Section to be determined, SCIS or equivalent, Elk Grove Rural Road Improvement Standards, and AASHTO Chapter 7 for an urban arterial
- Cross street intersections – Thoroughfare, SCIS or equivalent

Planning and design of the cross streets, local roads, and frontages should be planned and designed in accordance with the local jurisdiction standards.

The following additional criteria modify or add to the above guidelines and standards and are provided for the planning and design of the Connector project.
A. Segments A and D – Expressway

The expressway segments are planned to provide a fully divided facility, with grade-separated interchanges or signalized intersections, and frontage improvements. The following figures are typical sections for the 6- and 4-lane facilities. See Figures 4-1, 4-2, and 4-3.

![Figure 4-1 – Six Lane Expressway with Multi-Use Path on One Side](image1)

![Figure 4-2 – Four Lane Expressway with Multi-Use Path on One Side](image2)

![Figure 4-3 – Four Lane Expressway at Signalized Intersection](image3)

**Design Controls**

- Segment A, terrain conditions = flat.
- Segment D, south of Grant Line Rd/White Rock Rd, terrain conditions = flat.
- Segment D, north of Grant Line Rd/White Rock Road, terrain conditions = rolling hills.
- Design speed = 65 miles per hour (MPH).
- Posted speed = 55 MPH.
- Design vehicle on the Connector and cross streets intersections = STAA Design Vehicle.

**Design Elements**

- Minimum stopping sight distance (SSD) = 645 feet (ft).
- Minimum horizontal radius (R) = 2,000 ft; 3,000 ft preferred.
- Superelevation (Se) = use Method 5.
- Se, E max = 6 percent, AASHTO Exhibit 3-26.
- Standard cross slope, lanes and shoulders = 2 percent.
- Cross slopes on existing streets = 1.5 percent minimum to 3 percent maximum.
- Vertical grades, maximum grade = 5 percent; 4 percent preferred.
- Vertical grades, minimum grade = 0.35 percent; 0.5 percent preferred.
• Vertical curves (VC) = Crest and sag VC lengths should be based on minimum K-values for the design speed.
  • VC length, mainline = 200 ft minimum.
  • Vertical alignment, maximum grade break, Connector = 0.5 percent.
  • Construction alignments should be set at the centerline of the ultimate roadway for plan, profile, and Se.

Cross Section Elements
• Connector lane requirements = four to six lanes; subject to traffic studies.
  • Lane width, mainline and auxiliary = 12 ft.
  • Lane width, high-occupancy vehicle = 12 ft (6-lane mainline only).
  • Lane width, left turn = 12 ft (signalized intersection only).
  • Lane width, right turn = 10 ft (signalized intersection only).
  • Shoulder width, outside = 10 ft.
  • Shoulder width at right turn lane, outside = 4 ft (signalized intersection only).
  • Shoulder widths, inside = 5 ft (4-lane mainline); 10 ft (6-lane mainline).
  • Median = fully divided, graded (4-lane mainline); barrier separated (6-lane mainline).
  • Median width, 4-lane = 46 ft.
  • Median width, 6-lane = 22 ft.
  • Median slope = 6:1 or flatter.
  • Graded shoulder width between edge of shoulder and hinge point, outside and inside = minimum 3 ft at -5 percent.
  • Roadway side slopes = 6:1 or flatter preferred, 4:1 or flatter (fill condition), maximum 2:1 (cut condition and structure approaches).
  • Horizontal clear recovery zone, mainline = Design in accordance with AASHTO Roadside Design Guide; 30 ft preferred.
  • Vertical clearance = 16 ft 6 inch (in) minimum over the traveled way of the Connector and cross streets.
  • Vertical clearances = 16 ft 6 in over Caltrans facilities and 23 ft 6 in over UPRR facilities. Clearance requirements should be confirmed for each crossing location and for minor structures.
  • A Class I multi-use path should be provided adjacent to the ROW. In high-demand areas, a path on each side of the expressway may be required. A minimum separation of 30 ft (or a minimum distance equal to or greater than the width of the clear recovery zone) from the nearest edge of traveled way (ETW) should be provided, where feasible, or barrier separation provided.

Other Considerations
• A standard crown cross section of -2 percent (no Se) with sufficient curve radii to comply with design standards is preferred.
  • Where possible, partially or fully depress the Connector at interchange locations.
  • In areas of sensitive habitat, position the Connector alignment horizontally and vertically to protect/preserve wildlife passage.
  • Provide grade separation structures across railroad crossings where they have been identified to remain in service.
  • All roadway treatments within the clear zone are to conform to the roadside safety provisions in the AASHTO Roadside Design Guide.
  • Access control barriers should be provided at the ROW and at the Class I multi-use path. Barriers include fencing, sound walls, or other approved types.
• Consider retaining walls to reduce ROW width requirements from excessive side slopes.
• Interchanges, signalized intersections, and limited-access intersections are allowed on expressways at identified cross street locations.
• Direct connection of driveways and local roads, not identified as a cross street in Table 16-13 in the Appendix, may be allowed as a phased condition only. Where connections are necessary, they should be consolidated to the greatest extent practical. Use of frontage and local access road connections to the adjacent street system is preferred.

B. Segments B and E – Thoroughfare

Thoroughfare segments should be planned in accordance with the typical section, channelization, and striping details for a 96-ft ROW thoroughfare in SCIS. It should provide a partially divided facility with signalized intersections, limited-access street connections, and frontage improvements. The following Figure 4-4 is a typical section for the 4- and 6-lane thoroughfare.

![Figure 4-4 – Thoroughfare](image)

**Design Controls**

• Segment B terrain conditions = flat.
• Segment E terrain conditions = rolling hills.
• Design speed = 50 MPH.
• Posted speed = 40 MPH.
• Design vehicle on the Connector and major arterial cross streets intersections = STAA Design Vehicle.

**Design Elements**

• Minimum SSD = 425 ft.
• Segment B, minimum horizontal R = 2,000 ft; 3,000 ft preferred.
• Segment E, minimum horizontal R = 1,000 ft; 2,000 ft preferred.
• Se = use Method 5.
• Se, E max = 4 percent, AASHTO Exhibit 3-25.
• Standard cross slope, lanes, and shoulders = 2 percent.
• Cross slopes on existing streets = 1.5 percent minimum to 3 percent maximum.
• Vertical grades, maximum grade= 6 percent; 5 percent preferred.
• Vertical grades, minimum grade = 0.35 percent; 0.5 percent preferred.
• VCs = Crest and sag VC lengths should be based on minimum K-values for the design speed.
• VC length, mainline = 100 ft minimum.
• Vertical alignment, maximum grade break, Connector = 0.5 percent.
• Construction alignments should be set at the centerline of the ultimate roadway for plan, profile, and Se.
Cross Section Elements

- Connector lane requirements = four to six lanes; subject to traffic studies.
- Lane widths, mainline = 12 ft/11 ft (see SCIS for 96 ft thoroughfare).
- Lane widths, left turn = 10 ft.
- Lane widths, right turn = 10 ft.
- Shoulder widths, outside = 5 ft, ETW to lip of curb and gutter, for Class II bicycle lane.
- Shoulder widths, inside = 0 ft (at face of median curb).
- Median = 6-in raised curb median with landscape or hardscape surface treatment.
- Median width = 12 ft minimum on mainline, 2 ft at intersections.
- Median openings = for left turns at signalized intersections and at limited-access intersections for left-in movements.
- Roadway side slopes = 6:1 or flatter preferred, 4:1 or flatter (fill condition), maximum 2:1 (cut condition and structure approaches).
- Curb, gutter, and sidewalk = Provide Type 2 curb and gutter (SCIS) with a separated 10 ft Class I multi-use path and 8 ft landscape buffer on both sides of the roadway.
- Horizontal clear recovery zone, mainline = Design in accordance with AASHTO Roadside Design Guide for urban conditions with barrier curb protection.
- Vertical clearance = 16 ft 6 in minimum over the traveled way of the Connector and cross streets.
- Vertical clearances = 16 ft 6 in over Caltrans facilities and 23 ft 6 in over UPRR facilities. Clearance requirements should be confirmed for each crossing location and for minor structures.

Other Considerations

- Connector horizontal and vertical alignments should follow the existing alignments to the greatest extent practical to minimize impacts to the surrounding properties.
- A standard crown cross section of -2 percent (no Se) with sufficient curve radii to comply with design standards is preferred.
- In areas of sensitive habitat, position the Connector alignment horizontally and vertically to protect/preserve wildlife passage.
- Equestrian paths may be required in areas adjacent to Segment C. See Segment C and equestrian criteria in these guidelines.
- Provide grade separation structures across railroad crossings where they have been identified to remain in service.
- All roadway treatments within the clear zone are to conform to the roadside safety provisions in the AASHTO Roadside Design Guide.
- Access control barriers should be provided at the ROW where necessary. Barriers include fencing, sound walls, or other approved types.
- Consider retaining walls to reduce ROW width requirements from excessive side slopes.
- Signalized intersections for identified cross streets have 1 mile preferred spacing, except in areas with existing cross streets where 0.5 mile minimum spacing is allowed.
- Limited-access intersections, including right-in/right-out and left-in/right-out connections, should be allowed where identified in Table 16-13 in the Appendix. Connections should meet the minimum intersection spacing requirements wherever possible.
- Other local road connections, not identified as cross streets in Table 16-13 in the Appendix, may be allowed as a phased condition if the relocation creates excessive impacts to the adjacent properties. Connections should be consolidated to the greatest extent practical.
• Direct connection of driveways may be allowed subject to the intersection spacing requirements. Individual driveways where allowed should connect no closer than 750 ft to the signalized intersection and should be right-in/right-out only.

C. Segment C – Sheldon Area
The Sheldon Section will be planned to provide a partially divided facility, with signalized intersections, limited-access street connections, driveway accesses without cross median access, and frontage improvements. The following Figure 4-5 is a typical section for the 4-lane Special Section.

![Figure 4-5 – Four Lane Typical Section for Sheldon Area](image)

**Design Controls**
- Segment C, terrain conditions = flat.
- Design speed = 50 MPH.
- Posted speed - 40 MPH.
- Design vehicle on the Connector and cross streets intersections = STAA Design Vehicle.
- Design vehicle on local streets, frontage roads, and driveway connections – Sheldon Area – to be determined = WB40 minimum (i.e., Design Vehicle with 40-ft wheel base).

**Design Elements**
- Minimum SSD = 425 ft.
- Minimum horizontal R = 850 ft; 2,000 ft preferred.
- Se = use Method 5.
- Se, E max = 4 percent, AASHTO Exhibit 3-25.
- Standard cross slope, lanes, and shoulders = 2 percent.
- Cross slopes on existing streets = 1.5 percent minimum to 3 percent maximum.
- Vertical grades, maximum grade = 6 percent; 5 percent preferred.
- Vertical grades, minimum grade = 0.35 percent; 0.5 percent preferred.
- VCs – Crest and sag VC lengths should be based on minimum K-values for the design speed.
- VC length, mainline = 100 ft minimum.
- Vertical alignment, maximum grade break, Connector = 0.5 percent.
- Construction alignments should be set at the centerline of the ultimate roadway for plan, profile, and Se.

**Cross Section Elements**
- Connector lane requirements = four or five lanes; subject to traffic studies.
- Lane widths, mainline = 12 ft.
- Lane widths, left turn = 10 ft.
- Lane widths, right turn = 10 ft.
- Shoulder widths, outside = 6 ft, for Class III bicycle route.
- Shoulder widths, inside = 0 ft (at face of median curb).
• Median = 6-in raised curb median with landscaped or paved surface treatment. Median curb can be eliminated where sufficient median separation is provided.
• Median width = 12 ft preferred (5 ft minimum) on mainline, 2 ft at intersections.
• Median openings = for left turns at signalized intersections and at limited-access intersections for left-in movements.
• Graded shoulder width between edge of shoulder and hinge point, minimum 3 ft at -5 percent.
• Roadway side slopes = 6:1 or flatter preferred, 4:1 or flatter (fill condition), maximum 2:1 (cut condition and structure approaches).
• Horizontal clear recovery zone, mainline = Design in accordance with the AASHTO Roadside Design Guide.
• Vertical clearance = 16 ft 6 in minimum over the traveled way of the Connector and cross streets.
• Vertical clearances = 23 ft 6 in over railroad facilities. Clearance requirements should be confirmed for each crossing location and for minor structures.
• Equestrian Trail = Design in accordance with the Elk Grove Trails Master Plan.
• Class I multi-use path – Design in accordance with the Elk Grove Trails Master Plan.

Other Considerations
• Connector horizontal and vertical alignments should follow the existing alignments to the greatest extent practical to minimize impacts to the surrounding properties.
• A standard crown cross section of -2 percent (no Se) with sufficient curve radii to comply with design standards is preferred.
• In areas of sensitive habitat, position the Connector alignment horizontally and vertically to protect/preserve wildlife passage.
• Where the multi-use path or equestrian trail is contiguous with the roadway, a minimum separation distance equal to or greater than the width of the clear recovery zone from nearest ETW should be provided, or barrier curb installed.
• Provide grade separation structures across railroad crossings where they have been identified to remain in service.
• Where curb and gutter is not required, drainage swales should be used along the outside edge of roadways.
• All roadway treatments within the clear zone are to conform to the roadside safety provisions in the AASHTO Roadside Design Guide.
• Access control barriers should be provided at the ROW where necessary. Barriers include fencing, sound walls, or other approved types.
• Signalized intersections for identified cross streets have a 1-mile preferred spacing, except in areas with existing cross streets where 0.5-mile minimum spacing is allowed.
• Limited-access intersections, including right-in/right-out and left-in/right-out connections, should be allowed where identified in Table 16-13 in the Appendix. Connections should meet the minimum intersection spacing requirements wherever possible.
• Other local road connections, not identified as cross streets in Table 16-13 in the Appendix, may be allowed as a phased condition or if the relocation creates excessive impacts to the adjacent properties. Connections should be consolidated to the greatest extent practical.
• Direct connection of driveways may be allowed subject to the intersection spacing requirements. Connections should be consolidated to the greatest extent practical. Use of frontage and local access road connections to the adjacent street system is preferred wherever possible.
• Individual driveways, where allowed, should connect no closer than 750 ft to the signalized intersection and should be right-in/right-out only.

D. Cross Streets
Cross streets identified in Table 16-13 in the Appendix should be planned and designed in accordance with local jurisdiction standards for the facility type and width established by the agency. In the absence of specific local jurisdiction standards and to encourage consistency in the design standards along the Connector corridor, the following guidelines may be considered.

Where the cross street is planned to intersect the Connector via an interchange or a signalized intersection, the cross street should meet the minimum requirements identified by the local jurisdiction for the type of facility involved. Where the identified facility type is found to be insufficient for the Connector project traffic demand, the facility provided should conform to the provisions as specified in Section VII under, Segments B and E – Thoroughfare, of these guidelines and the following.

Design Elements
• In Sacramento County – minimum horizontal R = 2,000 ft.
• In El Dorado County – minimum horizontal R = 1,000 ft.
• VC length = 50 ft minimum.
• Vertical alignment, maximum grade break = 1.5 percent.

Cross Section Elements
• Lane requirements = subject to traffic studies.
• Curb, gutter, and sidewalk = Provide curb, gutter, and sidewalk consistent with the existing street design to provide continuity to the existing condition.
• Class I multi-use path = Provide accommodation for a path at locations where the existing street provides a Class I path. The planned path should be consistent with the existing facility. Where there is no path or the existing path is determined to be outside the project limits, connect the multi-use path to the existing pedestrian and bicycle facilities on the existing street.
• PUE corridors and landscape buffers should be provided to match with the existing street.

Other Considerations
• Direct connection of individual driveways and streets is allowed outside the Connector control of access.

E. Other Roadways
Other roadways not identified in Table 16-13 in the Appendix that are necessary for the project include the following:

• New public frontage roads – These are new roadways located generally along the Connector ROW, are used to consolidate existing street and driveway access, and do not currently exist as part of the local street network. A facility type should be identified in conjunction with the local jurisdiction that meets the project need and maintains continuity with the surrounding street network.
• Existing public streets – These streets are either new or existing streets requiring modification as part of the project and are part of the local jurisdiction street network. The facility type identified by the local jurisdiction should be followed.
• Private driveways and streets – These driveways and streets are privately owned accesses that require modification to maintain access to the existing or proposed street network.
These improvements should be planned and designed in accordance with the appropriate local jurisdiction standards. In the absence of specific local jurisdiction standards and to encourage consistency in the design standards along the Connector corridor, the following guidelines may be considered.

**Design Controls**
- Design and posted speed = to be determined.

**Design Elements**
- Vertical grades, maximum grade = 6 percent; 5 percent preferred.
- Vertical grades, minimum grade = 0.35 percent; 0.5 percent preferred.
- VCs – Crest and sag VC lengths should be based on minimum K-values for the design speed.
- VC length = 50 ft minimum.
- Vertical alignment, maximum grade break = 2 percent.

**Cross Section Elements**
- Lane requirements = subject to adjacent street system and traffic studies.
- Roadway side slopes = 6:1 or flatter preferred, 4:1 or flatter (fill condition), maximum 2:1 (cut condition and structure approaches).
- New frontage road ROW width = 50 ft minimum.

**Other Considerations**
- A half street widening may be used in accordance with the local standards.
- Proposed street improvements that are part of a planned development may be impacted by the Connector design. Where this occurs, the Connector will be designed consistent with the requirements of the Project Design Guidelines and to accommodate the revisions to the planned development. Modifications required to the planned development to accommodate the Connector will remain the responsibility of the planned development area.

**F. Interchanges and Intersections**
Interchanges and intersections should be provided at the locations listed in Table 16-13, “Assumed Travel Lanes and Access to Connector for Proposed Project,” in the Appendix. Any new or alternative points of access would be subject to the design exception process as set forth in the Policies section of these guidelines as well as further environmental review and public hearings.

In general, the connecting streets will be limited to the following:

- 1 mile preferred, 0.5 mile minimum spacing on the expressways
- 0.5 mile minimum spacing on thoroughfares and in the Sheldon Area

**Interchanges**
The preferred intersection connection type for expressways is the interchange, as follows:

- Interchanges should be designed at the locations identified in Table 16-13.
- Caltrans HDM, Chapter 500, should be the basis of design for the interchanges and ramps.
- The interchange type selected should be determined through detailed analysis of the applicability of the interchange to the project conditions, including standard interchange design requirements, traffic demand, existing and future site conditions, and project phasing. Uniformity in the types of interchanges included along the Connector should also be considered.
• The preferred interchange type should be a Type L-1 “compact (narrow) diamond” configuration, subject to confirmation of its applicability.
• Every effort should be made to minimize the footprint of the selected interchange type.
• Where access beyond the Connector is not desirable because of environmental conditions or to limit development, a Tee interchange-type connection should be considered to limit the extension of the roadway beyond the Connector.
• Spacing between ramp intersections should be based on storage length requirements for left-turn movements and channelization for the storage pockets. Side-by-side left-turn lanes that extend the entire distance between ramp intersections are acceptable, but the lanes should not extend through the intersections.
• The design of the interchanges and ramps should provide for the future accommodation of ramp metering and auxiliary lanes.
• Ramps should intersect the cross street at a preferred 90 degree angle, but not less than 75 degrees.
• Ramps should have 12 ft lanes, 4 ft left and 8 ft right shoulders.
• Ramp intersections should be designed to comply with current ADA requirements.
• Provisions for bus stops are not allowed on the cross street between ramp intersections.
• Side slopes and graded shoulders should match the conditions of the Connector and the connecting roadway.
• Interchanges and ramp design should accommodate a Class I multi-use path and/or PUE at the ROW line.
• Where traffic studies show that a signalized intersection will operate at a Level of Service C or better at the expressway intersection in lieu of the interchange, the footprint for the interchange should be established for the ROW based on the preferred Type L-1 diamond configuration, and a signalized intersection should be designed as a phased improvement.
• Where existing intersections cannot be economically relocated to accommodate the required interchange spacing, a right-in/right-out connection or a signalized intersection meeting the minimum spacing requirements may be considered as a phased condition. Any connection considered should be analyzed to enable acceptable traffic operations for the proposed connection.
• No driveway or street connections should be allowed within the interchange control of access.
• Street and driveway connections to the interchange cross street that are within 500 ft of a planned ramp intersection should be right-in/right-out only.

Signalized Intersections
The preferred connection type for thoroughfares and for the Sheldon Area is the signalized intersection, as follows:

• Signalized intersections should be provided at the locations identified in Table 16-13.
• Planning and design of signalized intersections should conform to the requirements in SCIS for a 96-ft-wide thoroughfare and in AASHTO Green Book, Chapter 9, “Intersections.”
• Where traffic studies indicate the proposed signalized intersection cannot meet the LOS C or better criteria, an alternative intersection configuration that can meet the criteria should be identified. An interchange may be considered subject to meeting minimum spacing requirements.
• Cross streets should intersect at a preferred 90 degree angle, but not less than 75 degrees.
• Intersection channelization should accommodate the design vehicles specified for the connecting streets.
• Intersections should be designed to comply with current ADA requirements.
• Profile grades of the larger street should govern over the smaller connecting street. The smaller street profile should connect at the projected lip of gutter of the larger street (larger street determined by higher volume/higher standard).
• No driveway or street connections will be allowed within the cross street control of access.
• Street and driveway connections to the cross street that are within 500 ft of a planned intersection should be right-in/right-out only.

Other Intersection Types
The following unsignalized intersection connections have been identified in Table 16-13 in the Appendix, to provide limited access to the Connector:

• Right-in/Right-out Tee intersection
• Left-in and Right-in/Right-out Tee intersection

Where these connections are included, they should provide for the following:

• Speed-change lanes and transitions on the Connector alignment of sufficient length to accommodate traffic operations
• Intersection channelization using raised medians and islands to discourage wrong-way movements
• Passage of pedestrian, bicycle, and equestrian traffic, where present

Alternate intersection designs may be considered, where appropriate and improvement to the Connector traffic operations is realized, subject to approval by the JPA.

G. Integrated Travel Modes
Integrated travel modes, including transit, bicycle, pedestrian, and equestrian, should be considered when planning and designing the Connector.

Transit
The Connector project will coordinate with transit providers to coordinate transit services and facilities needs to better use the corridor in accordance with the Integrated Modes Policy and the Functional Guidelines as follows:

• Work with transit providers to plan transit services and provide facilities that maximize transit route and service planning for new/modified local fixed route, express bus, and bus rapid transit (BRT) with the transit operators including City of Elk Grove, Folsom Stage Lines, El Dorado Transit, and Sacramento Regional Transit.
• Help provide ROW and/or facilities to create meaningful travel time improvement for transit routes within the Connector corridor.
• May support strategic, cost-effective transit improvements such as queue jumps and signal priority/ITS equipment on other roadway segments, especially on parallel routes that show strong potential for successful, well-used service.
• Where identified, expressway segments should provide more than four lanes, the fifth and sixth lanes should be high-occupancy vehicle/transit unless the traffic analyses show unacceptable traffic operations for a segment.
• Encourage connectivity between different travel modes; that is, help provide park and ride lots and transit centers at strategic locations within the corridor accessible by pedestrian, bicycle, bus, and auto travel modes.
• Encourage smart growth with developers/jurisdictions to provide transit-friendly development within Connector corridor.
Pedestrians and Bicycles
The Connector will provide continuous, uniform bicycle and pedestrian facilities with access and connectivity to the roadway, transit, and other bicycle/pedestrian facilities. The alignments and access points will be coordinated between the Connector facilities and the following:

- Existing and future development of the off-corridor multi-use trail system
- Locations where local/regional trails intersect
- Local development access within 0.5 mile of the corridor
- Existing and future transit facilities
- Existing and future equestrian facilities

Planning and design of the Class I path should be in accordance with the Elk Grove Trail Master Plan and, as referenced, Caltrans HDM, Chapter 1000. Where information is not available, the design should conform to the NACTO Urban Bikeway Design Guide, as follows:

- On expressways, the paths should be 12 ft wide with graded shoulders a minimum of 2 ft.
- On thoroughfares and off-corridor locations, the path should be 10 ft wide graded shoulders a minimum of 2 ft.
- Class I paths should connect to cross streets at the nearest signalized intersection.
- Where bicycle and pedestrian volumes along the Connector are high and may adversely affect the cross street operations, a grade-separated crossings of the affected cross street(s) should be considered.
- Where spacing between intersections is greater than 0.5 mile and where bicycle and pedestrian crossing demand is anticipated to be high, a protected crossing should be provided. The following types should be considered, subject to safe traffic and crossing operations:
  - A grade-separated structure
  - Pedestrian signals with raised median refuge – thoroughfares only
  - As a phasing option, separate paths on both sides of the Connector with access via planned cross streets
- Where grade-separated structures are proposed, both overcrossing and undercrossing structures should be considered.
- On expressways, access control fencing should be installed between the path and traveled way. The fence height should be a minimum of 54 in and should not be a hazard to the drivers or bicyclists. Where installations are necessary within the expressway clear recovery zone, it should be designed integrally with the protective barrier.
- On thoroughfare Segments B and E, protective-barrier curb and a landscape buffer should be provided between the roadway and path, and access fencing will not be required.
- On Segment C – Sheldon Area, when an off-corridor alignment is not used, barrier protection should be provided if the separation from the roadway is less than the horizontal clear recovery zone.
- Class I paths should intersect frontage roads and driveways as close to a 90 degree angle as possible, with no connection less than 75 degrees.
- Street and driveway crossings should meet ADA standards for grade and cross slope.
- Transportation Management Plans and traffic control plans should consider pedestrians, equestrians, and bicyclists through construction work zones.

Equestrian
The Connector will provide equestrian facilities to maintain continuity of the existing equestrian trail systems near the communities of Sheldon and Wilton in Segment C. The alignments and access points will be coordinated between the Connector facilities and the following:
• Planned bicycle and pedestrian facilities
• Existing and future development of the off-corridor multi-use trail system
• Locations where local/regional trails intersect
• Local development access within 0.5 mile of the corridor

Planning and design of the trail should be in accordance with the Elk Grove Trail Master Plan. Where information is not available, the FHWA Equestrian Design Guidebook for Trails, Trailheads and Campgrounds will be used, including the following guidance:

• The trail may be located either immediately adjacent to the roadway ROW or off-corridor along a separate trail or local roadway system.
• If the location is close to the Connector, sufficient separation should be provided to eliminate the need for barrier protection. If insufficient separation is available, barrier curb separation will be required at the edge of roadway.
• Where a Class I multi-use path is planned, the equestrian trail may be located jointly with the path, as shown on Figure 5 of the Elk Grove Trails Master Plan.
• The trail should provide connections to the existing trail system where appropriate.
• The trail should provide the trail connectivity identified in the master plan through Segment C.

IX. Structural Section
Planning and design of roadway structural sections should be in accordance with Caltrans HDM, Chapter 600, “Pavement Engineering,” methodology. Traffic indices and soils resistance values (R-value) for each roadway in each segment of the Connector will be developed as follows:

• The traffic index for each roadway will be developed based on volumes from the traffic report. At a minimum, the following values should be used for each type of roadway unless the traffic data show a larger value is necessary:
  ▪ I-5, SR 99, and US 50 – coordinate with Caltrans
  ▪ Expressway and thoroughfare segments – traffic index = 10
  ▪ Cross streets, frontage roads, and local roadways and driveways – coordinate with local jurisdiction standards
• R-values will be established, based on project-specific soils reports, for all segments of the Connector and all major arterial cross streets.
• On local streets and frontage roads, a minimum R-value of 5 may be used in lieu of a soils report with JPA approval.
• New roadway structural sections should consist of one of the following:
  ▪ Hot-mix asphalt (HMA), aggregate base, and subbase materials (where necessary)
  ▪ Portland cement concrete pavement (PCCP)
• Life-cycle cost analysis should be done for HMA vs. PCCP surfacing.
• Where R-values are low and highly variable, stabilization/treatment of the subgrade materials with cement, lime, geotextile materials, or others soil-strengthening methods, will be considered.
• Alternate road-building materials may be used, as recommended by the geotechnical engineer or as required to mitigate traffic noise impacts as follows:
  ▪ Subgrade stabilizing, isolating geotextiles, and grids
  ▪ Pavement stress-absorbing layers
  ▪ Subgrade add mixtures
  ▪ Recycled materials
  ▪ Rubberized asphalt concrete (AC) or open graded asphalt
• Subbase drainage facilities
• Where roadways are planned to be constructed in phases, either by the project or in coordination with future development, the interim (temporary) street structural section should be planned and designed to provide the full structural section for future widening.
• In transition areas between street standards, the stronger structural section should be used in the transition area.

X. Drainage
Drainage within the corridor is a mix of natural drainage ways and culvert crossings in the rural or undeveloped areas of Segments A, B, C, and D, and closed-conduit curb and gutter sections in the developed areas in Segments B and E. Areas of flooding and creek influences are on the Connector corridor. To provide a consistent approach to the design and construction of drainage and stormwater infrastructure, the following design approach, standards, and design criteria should be used for construction of the project. The drainage design should be consistent with the mitigation measures set forth in the FPEIR and achieve the following:

• Maintain existing drainage flow patterns and incorporate existing drainage infrastructure as much as possible, given the existing physical constraints.
• Minimize diversions from one watershed to another.
• Provide low-impact development and stormwater treatment best management practices to treat the pavement runoff to the maximum extent practicable in accordance with applicable National Pollutant Discharge Elimination System (NPDES) permit requirement.
• Improve water quality of stormwater runoff leaving the ROW.
• Protect stormwater quality from the impacts of the project.
• Control flows to minimize erosion and sedimentation downstream.
• Reduce water pollution from construction activities.

A. Hydrologic and Hydraulic Design Standards
The following design manuals and permits should be used to perform hydrologic and hydraulic analysis and design of drainage features for the project, and are incorporated by reference.

For projects within Caltrans’ ROW, the following design standards and manuals should be used:

• HDM, Chapter 800
• Stormwater Quality Handbook, Project Planning Design Guide
• California Bank and Shore Protection Manual

For projects within Sacramento County, the Sacramento City/County Drainage Manual, Volume 2: Hydrology Standards should be used.

For projects within the County of El Dorado, the County of El Dorado Drainage Manual should be used.

Where local and state design manuals do not provide adequate design criteria, other available engineering design manuals may be used; for example, the following:

• FHWA Hydraulic Engineering Circulars
• FHWA Hydraulic Design Series
• United States Army Corps of Engineers Engineering Manuals
• City of Sacramento Design and Procedures Manual, Section 11 – Storm Drainage Design Standards
• Design and Construction of Urban Stormwater Management Systems (American Society of Civil Engineers Manual of Practice No. 77)

The following standard design criteria should be applied for the Connector project:

• All roadway drainage facilities design should be based on a 10-year, 25-year, and 100-year storm events, dependent on the facility involved.
• Drainage systems for Segments A and D – expressways and Segment C – Sheldon Area should consist of open-swale systems and cross culverts/structures to convey stormwater from the corridor to its natural water course.
• Drainage systems for Segments B and E – thoroughfares should be closed-conduit systems, matching the existing conditions, with inlets, laterals, manholes, and storm drain mainlines connecting to existing water courses.
• The Connector drainage systems should be planned and designed based upon the drainage needs of the ultimate conditions.
• The Connector is an emergency route and should be designed to be above the 100-year flood event.
• Where established waterway crossings occur, the design of the crossing should consider wildlife passage in the area when selecting the crossing structure. Types include the following:
  ▪ Bridges
  ▪ Open-bottom concrete box culverts or arches
  ▪ Reinforced concrete box culverts
  ▪ Pipe culverts
• Maintenance access roads should be provided where required for upkeep of the facilities. The preferred locations of the maintenance access connections are at the cross streets.

B. Stormwater Quality Analysis and Design Standards
The following design manuals and permits should be used to perform stormwater quality analysis and design:

• Projects within Caltrans ROW are subject to Caltrans’ Statewide NPDES permit (Order No. 99-06-DWQ). This permit is anticipated to be renewed in 2012, and Caltrans is expected to reissue its Stormwater Quality Handbook. For projects within Caltrans ROW, use the Caltrans Stormwater Quality Handbook, Project Planning Design Guide, 2010.
• Projects within the unincorporated areas of El Dorado and Sacramento Counties are subject to Order No. 2003-0005-DWQ. This permit is anticipated to be renewed in 2012, with new requirements. Projects within the unincorporated areas of El Dorado and Sacramento Counties should comply with the most current version of this permit.

Projects should incorporate low-impact design to slow down runoff and reduce peak flows and volumes. Preference is given toward design measures that rely on evapotranspiration, infiltration, and rainwater harvesting. Specific examples of stormwater treatment best management practices include the following:
• Bioretention areas
• Extended detention basins
• Flow-through planter boxes
• Infiltration trenches and basins
• Media filters
• Tree well filters
• Vegetated buffer strips
• Vegetated swales
• Green roofs
• Pervious paving

Where required by the NPDES permits, projects should also incorporate hydromodification management measures that promote infiltration or otherwise minimize the change in the rate and flow of runoff, when compared to the predevelopment condition.

C. Construction Stormwater Standards
Construction of any project will be subject to the requirements of the Construction General Permit (Order No. 2009-0009-DWQ) plus amendments (Order No. 2010-0014-DWQ). Projects constructed within Caltrans ROW will also be subject to Caltrans’ Statewide NPDES Permit (Order No. 99-06-DWQ). This permit is currently being considered for renewal by the State Water Resources Control Board. A draft permit is under review and subject to public review and comment period. The new permit is anticipated to be issued in 2012.

XI. Right-of-Way, Utilities, and Railroad Facilities
The existing roadways that make up the Connector are established public ROW and utility corridors. The ROW ownerships include federal, state, local, and private lands. The utilities include both public and privately owned facilities that are located in various types of property ownerships and easements. They often share the ROW or are built and maintained in easements adjacent to transportation facilities and include water, wastewater, stormwater, and sewer systems; solid waste management systems; petroleum pipelines; natural gas; electrical; and telecommunications services.

The ROW and utility corridors will be maintained, modified, and/or supplemented with new ROW and utility easements/corridors as part of the Connector project. ROW and utility planning, design, and relocation activities will be done in accordance with the Caltrans ROW Manual and the following.

A. Right-of-Way
• For policy guidance on Right-of-Way, see Policies section of these guidelines.

B. Utilities
• For policy guidance on Utilities, see Policies section of these guidelines.

C. Railroad Facilities
Several identified railroad facilities are within the segments as follows:
• Segment A – UPRR railroad east of Franklin Boulevard
• Segment B – UPRR railroad west of Waterman Road
• Segment C – Sacramento Northern, east of Aleilani Lane
• Segment D – Sacramento Placerville Transportation Corridor
These facilities are planned to be grade separated at the Connector crossings where the facility is identified to remain in operation. The crossings should be planned in conjunction with the local jurisdiction, the Public Utilities Commission, and the railroad company requirements.

Where Connector roadways, paths, and trails cross the railroad ROW, they should be grade separated in the ultimate condition. Use of at-grade railroad crossings as a phase of the project is subject to the railroad company approval.

XII. Structures

A. Bridges

Roadway bridge crossings and planned railroad grade separation are within the project limits. Locations of the current facilities, either in design or constructed, are as follows:

- US 50/Silva Parkway (proposed)
- UPRR/Grant Line Road (proposed)
- SR 99/Grant Line Road
- I-5/Hood-Franklin Road
- UPRR/Franklin Road

These structure types are typical of the roadway bridge structures in the region, consisting of cast-in-place concrete box structures.

New crossing structures are anticipated at following locations:

- Interchanges on expressways – Roadway overcrossings or undercrossings
- Railroads – Grade separations over or under the railroad tracks
- Creeks and streams – Roadway bridges or culvert crossings over the drainage
- Paths and trails – Bridges or culvert crossings over or under the Connector or cross streets

B. Retaining Walls

Retaining wall locations are to be determined.

Where bridge and retaining wall structures are required, the structures should be planned and designed in accordance with Caltrans Bridge Design Standards and Design Aids, including project structure design requirements for the following:

- Design loads
- Minimum clearances (during both construction and operation)
- Material requirements
- Design life
- Durability standards
- Geotechnical assessments and potential foundation types
- Standard design details

All structures proposed on the project should follow the Caltrans structure type selection process for approval by the JPA. To maintain continuity throughout the corridor, structure types should consider the following:
The existing character of structures and facilities across the segment should be considered to achieve a consistent design aesthetic, rather than a series of disconnected and random structures.

New construction should be of the same design family as existing facilities.

Individual projects should be considered as part of the larger context of the Connector facilities.

Construction-related studies should include staging approaches, potential traffic management approaches during construction over existing operating roadways and railways, and approaches for widening existing bridges. Staging of structures at major interchanges with I-5, SR 99, and US 50 should be studied to determine potential impacts on structures types and feasibility of construction.

A consistent aesthetic should be maintained for the bridges, walls, and other structures along the length of the corridor. Visual quality standards that address forms, textures, details, and other design features should be developed in conjunction with the project public involvement program and allow for community preferences.

XIII. Traffic

A. Pavement Delineation and Signing

Pavement delineation and signing should be planned and designed in accordance with the following:

- Expressways – Caltrans Traffic Manual, California MUTCD
- Thoroughfares – SCIS, California MUTCD
- Cross streets, local roads, and frontages – Local jurisdiction standards, California MUTCD

In addition to these guidelines, the FPEIR, Functional Guidelines, and Integrated Modes Policy specify the following:

- Proposed project signing should minimize the visual impact on the Connector corridor.
- Signalized intersections should have marked cross walks on all four corners.
- School cross walks should be marked where crossing guards are provided.
- At unsignalized uncontrolled intersections, marked cross walks and safety enhancements (such as, medians and curb extensions) should be provided.
- Marked cross walks may be installed at other high-volume locations without median or curb extensions if a traffic study shows a benefit.

B. Signals, Lighting, and Intelligent Transportation System

The Connector is a mix of free-flowing expressways with interchanges, high-speed urban arterials with signal control, rural arterials with signal control, and intermittent unsignalized limited-access control connections. In addition, there are six different agencies with jurisdiction over the regional system that the Connector serves.

These facilities should be coordinated, through the use of a combination of effective traffic signing and pavement delineation, signalization of intersections and crossings, and ITS solutions to provide an efficient transportation system.

Traffic signals and lighting on the Connector should comply with the SCIS. Where the signal and lighting are part of a State highway facility, the traffic signal and lighting and any required modifications should
comply with Caltrans standards. Where the traffic signal lighting is on a cross street or other local roadway, it should comply with the requirements of the local jurisdiction.

Items for consideration during the planning and implementation of traffic signals include the following:

- Provide traffic signals at Connector intersections.
- Provide pedestrian and bicycle push button and loop detector facilities at all signalized crossings.
- Provide railroad signal and crossing gate systems where at-grade crossings are allowed.
- Provide interchange ramp metering signals where required.
- Consider signalized mid-block pedestrian crossings on thoroughfares, where appropriate.
- Consider transit signal priority, where appropriate.

Items for consideration during the planning and implementation of lighting systems include the following:

- Provide roadway lighting systems for the Connector interchanges and intersections.
- Provide street lighting systems for the cross streets and local streets.
- Provide lighting systems for the Class I multi-use paths, where appropriate. Consider continuous lighting.
- Provide continuous street lighting along thoroughfare segments.
- Provide lighting fixtures that are the same or similar throughout the Connector corridor.
- Provide lighting methods consistent with the FPEIR that minimize the release of light and glare upward or toward residences and properties adjoining the corridor.
- Provide lighting facilities that are uniform and meet current energy star requirements.
- Provide lighting fixtures that are “Dark Star”-compliant.
- Low energy lighting systems, such as light-emitting diode (LED) fixtures, should be evaluated for application.

Items for consideration during the planning and implementation of ITS systems and solutions include the following:

- Provide ITS systems to interconnect traffic signal systems on the Connector to efficiency of moving traffic through the major intersections.
- Consider providing ITS systems to interconnect the Connector signal systems with the local jurisdiction traffic signal network.
- Consider other ITS solutions to maximize efficiency and safety of the Connector and adjacent street network.

XIV. Landscaping, Aesthetics, and Community

Aesthetics is how we translate our visual appeal with respect to the appearance of our surroundings to a project. We think about and design the aesthetics features of a project to look appealing or pleasing in a particular setting. Aesthetics are usually accomplished by employing the shape, texture, color, type of material, symmetry, and simplicity of repeated patterns used in the design. For the Connector, aesthetics should be included in the development of the project. The aesthetic features should include the following:

- Application of a common thematic design to enable uniformity to the Connector as a single facility.
- Application of unique thematic detail to represent the character of individual communities.
• Incorporation of the urban, rural, natural environmental and historical settings that surround the Connector corridor.
• Strategic placement of facilities to blend with the surroundings.
• Minimization of visual obstructions through lowered profile designs and undergrounding of overhead infrastructure.

Landscaping and aesthetics includes the application of shape, texture, and color to roadway bridges, retaining walls, barriers, fencing, sound walls, and the inclusion of vegetation, surface treatments, and materials selection into the roadsides, urban and rural streetscapes, and other infrastructure improvements to aid in the blending of the Connector with the surroundings, consistent with the FPEIR and adopted mitigation measures.

The JPA, through the SAC has provided initial guidance on project aesthetics. The results of their efforts are included in the Capital Southeast Connector SAC Involvement Summary Memorandum included in the Appendix.

The purpose and role of the SAC is as follows:

• To represent the pulse of the users and communities within the project area.
• To provide a community perspective and input on the aesthetic elements for the Project Design Guidelines.
• To identify and collaborate on themes that can translate throughout the project.
• To work with the project team to better understand how people circulate within the communities along the Connector and the region, considering various integrated modes of transportation.

Their work has provided initial community input on thematic principles for the Connector, for the individual communities, and for the environments. This work will be continued in subsequent efforts to be incorporated in the Connector project.

Figure 5 – Thematic Image Concept

Figure 5 is an image concept developed to memorialize the SAC’s contribution and support for defining and enhancing the beauty, character, and functionality of the Connector. This image is intended to illustrate the regionally and historically significant oak tree leaf blending into the Connector roadway in a natural color scheme.

Working with the community through a series of SAC meetings and an aesthetics workshop, project Fact Sheets were developed which summarize the SAC perspectives and input that are unique to each segment yet thematically contiguous along the corridor. See Figures 6 through 10 which represent the SAC input on local mobility, aesthetics, and theme by each segment along the corridor.

In addition, the Connector project has identified features that should be considered as part of the project development process consistent with the FPEIR, Functional Guidelines, and the Integrated Modes Policy. These are summarized as follows:
- High-canopy trees and landscaping should be considered as a buffer and for shading on the Class I path where space allows.
- Where appropriate, include landscaping; quality materials; treatments for medians; pedestrian areas; and adjacent facilities, barriers, and buffer zones.
- Aesthetics need to consider users and adjacent properties.
- Landscape buffer may be used between the roadway and the Class I path.
- Consider using native, noninvasive, drought-tolerant plant species.
- Consider using plants that will not pose a safety hazard to the corridor.
- Consider a layering concept based on the appropriate clear zone for the roadway segment.
- Consider vegetative bioswales for filtration of road runoff.
- Where landscape and aesthetic concepts are implemented, they should be consistent and uniform in color and design throughout the corridor.
Character and Theme through Eyes of the Community

How We Move...
Current mobility needs identified through mobility mapping with the SAC

Motorized Movements
• East Franklin residential area is using Bruceville Rd on the east.
• Majority of residential area on west is using Hood Franklin Blvd for a back route into/out of Elk Grove.
• Hood Franklin community has concerns about traffic through their community.
• Majority of the traffic generated in the southern area of Elk Grove uses SR99.
• The two existing access points could get really congested.
• Ranchers with farm machinery are accessing these narrow roads.
• Industrial area is limited in access points.

Bicycle and Pedestrian Movements
• Not aware of any current bike/pedestrian movements.
• A pathway towards and along the river would be a draw.
• A bike trail would probably get a lot of recreational use.
• Very few people would use for work, only recreational use.
• It is rare that you see people running or biking since Kammerer Road is so narrow.
• People are not cycling or walking, but if it were built, they would use it.
• Bike commuters won’t go west.
• No one wants to recreationally ride on such a busy highway.

Transit and Commute Movements
• Parking at SR-99 and I-5 for commuters.

Future Planned Development Projects
• There have been discussions about a college with dorms coming into the area.
• Tolling will be a problem if the goal is to attract businesses to this area. We can’t tell these businesses their only access is a toll road.

How It Feels...
SAC members selected from a sampling of families that represent the feeling of the land, fabric, structure, and color of their communities.

SEGMENT A
Four lane expressway, on Kammerer Road from the I-5/Hood Franklin Interchange to Bruceville Road

Aesthetic Continuum
Each segment falls within different levels of intensity along the aesthetic continuum.

INTENT
Provide a high speed connection to I-5 with controlled access.

CONSIDERATION
The Connector joins two existing streets, Hood-Franklin Road and Kammerer Road. The alignment is along farmlands and rural properties (natural terrain) except where it meets with Hood-Franklin at I-5. Currently, local access uses the adjacent street system and is not reliant on the Connector alignment for traffic circulation and property access, except at the I-5 connection.

FACILITY TYPE
EXPRESSWAY – A high speed, fully divided, urban arterial.
Character and Theme through Eyes of the Community

How We Move...
Current mobility needs identified through mobility mapping with the SAC

Motorized Movements
- Lots of farm equipment and agricultural access from SR-99 east on Grant Line Road.
- Residents use Waterman Road south and north into and out of Elk Grove.
- Residents use Bradshaw Rd., Elk Grove Blvd and Bond Rd as main access in and out of Elk Grove.
- Parcels south of Grant Line Road use Wilton Rd to Dillard Rd to access farming land and SR-99 and traffic is increasing.
- Levee Road is not heavily used.

Bicycle and Pedestrian Movements
- Potential recreational trail use through Southeast Policy Area following creek bed.

Transit and Commute Movements
- Park and Ride at Grant Line Rd and SR-99.
- Transit destination at W. Stockton Blvd. and Promenade Parkway where there is heavy commercial development.
- Long term light rail (bus rapid transit) will eventually be built through Southeast Policy Area into the Sterling Meadows Development.

Future Planned Development Projects
- East of SR-99 to UP RR: Industrial, residential, rural use.

How It Feels...
SAC members selected from a sampling of families that represent the feeling of the land, fabric, structure, and color of their communities.

SEGMENT B
4 to 6 lane thoroughfare, on Kammernor Road and Grant Line Road from Brucenville Road to Bond Road

Aesthetic Continuum
Each segment falls within different levels of intensity along the aesthetic continuum.

Intent
- Provide an urban arterial street that is consistent with the existing developed street plans and maintains major street connections.

Consideration
These connecting streets currently serve as urban arterial roadways leading into and through the southern limits of Elk Grove. The roadway is on the existing street alignment and currently provides access to residential and commercial properties through individual levees, through local road intersections, and to SR-99 at the Grant Line Road Interchange.

Facility Type
Thorofare - An urban arterial with raised median.

FIGURE 7 - SEGMENT B FACT SHEET
Character and Theme through Eyes of the Community

How We Move...
Current mobility needs identified through mobility mapping with the SAC

Motorized Movements
- The circulation issue is property owners need access. There are about 100 owners between Calvine and Bond.
- There is limited existing property access.
- The main issue is property owners only have one way to get in and out. They turn directly onto/off of Grant Line Rd from their property.
- People like the way it works now.
- As more traffic happens, it will eventually be an issue, but currently okay.

Equestrian Movements
- Customers of the local businesses come from all over, not just local customers.
- Most local trips, but there are regional trips to/from the commercial core.
- There is a school on Pleasant Grove School Road that uses Grant Line Rd for access.

Bicycle and Pedestrian Movements
- People are walking on other roads but no one is walking to the businesses.
- There are bikes and pedestrians along the commercial core area. Bikes and pedestrians need to cross Grant Line Rd.

Future Planned Development Projects
- None noted.

How It Feels...
SAC members selected from a sampling of families that represent the feeling of the land, fabric, structure, and color of their communities.

Equestrian Movements
- There is an equestrian trail that follows the old railroad line.
- There is limited equestrian parking. It is needed for local business access along Grant Line Rd between Sloughhouse and Bond roads.
- There are a dozen equestrian centers within a 10-mile radius in the area.
- People ride their horses to/from the commercial core and leave them outside to do business.

SEGMENT C
Four lane roadway, on Grant Line Road from Bond Road to Calvine Road (Sheldon Area)

Aesthetic Continuum
Each segment falls within different levels of intensity along the aesthetic continuum.

INTENT
Provide a rural arterial street that is consistent with the existing developed street system and maintains major street connections.

CONSIDERATION
Grant Line Road currently serves as a rural roadway for the communities of Sheldon and Wilton. It passes through the center business district of Sheldon. The roadway is on the existing alignment and currently provides access to closely spaced residential and commercial properties through individual driveways and through local road intersections.

FACILITY TYPE
“SPECIAL SECTION” - A rural arterial,

FIGURE 8 - SEGMENT C FACT SHEET
How We Move...
Current mobility needs identified through mobility mapping with the SAC

Motorized Movements
- This is a high speed area.
- High truck volumes on Grant Line Rd to Sunrise Blvd.
- Commuters use Grant Line Rd to Sunrise Blvd from Elk Grove.
- Lots of through traffic in this area from Rancho Cordova.
- Lots of people in Elk Grove go to Folsom area for work.
- Lots of farm equipment along Grant Line Rd.
- People use Dillard Rd as an alternative to Grant Line Rd.
- Lone/Jackson commuters use Jackson Road to get to US 50.
- Lots of truck traffic or from landfill east of Keeler Blvd.
- High volumes at White Rock Rd and Grant Line Rd.

Teichert Gravel pit has high truck volumes.
Prairie City Rd sees high volumes especially during ski season when US 50 is at capacity.
El Dorado Hills residents take Prairie City Rd to Scott Rd to White Rock Rd and vice versa.
High year-round volumes at Prairie City State Vehicular Recreation Area.

Transit and Commute Movements
- High commute segment with need for Park and Ride (Sunrise Blvd and Jackson Rd).
- High commute area at White Rock Rd and Grant Line Rd.

Future Planned Development Projects
- Significant development planned along Prairie City Rd.
- Folsom Planning Area shows more access locations at Grant Line Rd.

Bicycle and Pedestrian Movements
- More bike/pedestrian potential further to west and south.
- There is a planned bike/pedestrian pathway east of Prairie City Rd.
- Minimal bike/pedestrian demand between White Rock Rd and Calvine Rd.
- Multiple planned bike trails including underpass at the Connector to tie into the trail near Deer Creek Hills.

How It Feels...
SAC members selected from a sampling of families that represent the feeling of the land, fabric, structure, and color of their communities.

Aesthetic Continuum
Each segment falls within different levels of intensity along the aesthetic continuum.

INTENT
Provide a high speed arterial street with limited access.

CONSIDERATION
These connecting streets currently serve as a rural roadway between Elk Grove and the El Dorado Hills Community. The alignment is on the existing roadway and currently runs along rural properties (natural terrain) with widely spaced driveways road intersections. Local access is provided by the roadway.

FACILITY TYPE
EXPRESSWAY – A high speed, fully divided, urban arterial.
Character and Theme through Eyes of the Community

How We Move... Current mobility needs identified through mobility mapping with the SAC

Motorized Movements
- White Rock Rd to Placerville Rd to US 50 is a high volume route.
- High trip volume on Latrobe to White Rock Rd to and from business park.
- High volumes of El Dorado Hills residents crossing US 50 to get to shopping and services on the south side of US 50.
- The public parking on Latrobe and White Rock Rd is totally full. People are parking outside the public parking area.
- Four Seasons will become an island surrounded by traffic.
- Highly developed commercial business park cannot accommodate all parking.
  - Senior housing, schools, medical offices, swim school, day care
  - A lot of service businesses in this area.

Sunday traffic, due to large church. The church has many activities throughout the week, not just on Sundays.
- Fire department
- Heavy traffic because coffee shop and In and Out Burger opened. There have been several collisions.

Bicycle and Pedestrian Movements
- El Dorado Hills is a big bike area.
- Bikers take Iron Point Rd to the America River Trail.
- High bike volumes along White Rock Rd from Latrobe Rd to Payen Rd.
- People are walking to shopping centers (Target, Nugget) from Serrano Parkway.
- People are walking to shopping from the Carson Crossing area to Latrobe Rd.
- Heavily traveled area for bike users from the County line to Placerville Rd is horrible.

No sensors on traffic signals that pick up bike riders.
- Not enough time to walk across Latrobe Rd at White Rock Rd.
- Not an equestrian area.

Transit and Commute Movements
- High commute volumes to/from business park using Latrobe and back streets to White Rock Rd.
- Commuters use White Rock Rd to Scott Rd and Placerville City Rd to get to US 50.
- Park and Ride opportunities in this area.

Future Planned Development Projects
- Fire Department is building a new training facility in the business park area.

How ItFeels...
SAC members selected from a sampling of families that represent the feeling of the land, fabric, structure, and color of their communities.

1. Historic
2. Timeless
3. Pastoral
4. Regional Facility
5. Historic

INTENT
Provide an urban arterial street that is consistent with the existing developed streets, maintains major street connections and accommodates key local access locations.

CONSIDERATION
White Rock Road currently serves as an urban arterial through the El Dorado Hills Community. The alignment is developed as a limited access facility over the majority of its length. Local access is through the connecting street intersections. There are a few remote residential and commercial driveways along its length. It will also provide access to US 50 via the US 50/Silva Valley Parkway project, which will construct a new interchange on US 50 and develop the eastern-most end of the Connector project between Latrobe Road and US 50.

FACILITY TYPE
THOROUGHFARE – An urban arterial with raised median.

FIGURE 10 - SEGMENT E FACT SHEET
XV. Phasing

The Connector project is anticipated to be planned, designed, and constructed in phases to accommodate funding conditions, logical termini of facilities, and design and construction constraints. The Connector project delivery and phasing plan will be a function of the Plan of Finance and the General Plan amendment process in coordination with the local jurisdictions.

As stated in the FPEIR, the JPA or individual jurisdictions may move forward with project-level design and environmental review to implement specific project components. Improvements could take place where design and planning has advanced or where funding will become available. Phasing of the Connector will be planned and coordinated with the local jurisdictions.

There are locations where improvements are necessary on the proposed Connector alignment, or directly adjacent to the corridor, prior to any improvements proposed as part of the project. These include the following:

- Traffic operations and safety improvements at intersections
- New or modified property access from individual properties
- Proposed development projects that will affect Grant Line Road or White Rock Road public ROW or create access to/from adjacent development

The public project improvements will be coordinated with the JPA and Connector improvements to minimize future reconstruction costs. If possible, the improvements should be located to accommodate the Connector.

Access at individual properties will be coordinated with the JPA and Connector improvements to minimize consolidation. Proposed development improvements should be coordinated with the JPA and the Connector.

XVI. Sustainability

The JPA, through the SCC has provided an initial assessment of a best practice approach to integrate sustainability into planning, design, and construction of the Connector. The results of their efforts are included in the Connector JPA Sustainability Assessment Update Memorandum included in the Appendix.

The purpose and role of the SCC is as follows:

- To provide input/feedback on the sustainability assessment process.
- To help identify sustainable solutions that can make the project more sustainable.
- To provide guidance on technical aspects of sustainable solutions.
- To integrate sustainability into the project.

Their work will be continued in subsequent efforts to be incorporated in the Connector project.

In addition, the Connector project, as part of FPEIR, Functional Guidelines, and the Integrated Modes Policy and a separate sustainability assessment, has identified sustainable design and construction practices that should be considered throughout the corridor as part of the project development process consistent with the FPEIR. These are summarized as follows:

- Recycled materials (pavement, Poly-pipe, etc.)
- Noninvasive native, drought-tolerant plant species for landscaping
• Oversized drainage structures to improve ecological connectivity, where practical
• Roadway lighting or luminaires that meet current energy star requirements
• Solar panels to offset energy requirements for illuminated signs, etc.
• Permeable pavement in the shoulders and/or multi-use paths
• Quiet pavement for the travel lanes
• Vegetative bioswales or natural drainage systems for treatment of water runoff, where appropriate
• Reduction of fossil fuel requirement for the non-road construction equipment fleet and required use of biofuel or biofuel blends as a replacement for fossil fuel in a percentage of the construction equipment
• Use of local materials
• Warranty for the pavement structure

XVII. Environmental

Environmental impacts and mitigations have been identified as part of the FPEIR in Table S-1, “Summary of Environmental Effects of the Capital SouthEast Connector Project.” This information will be refined as part of the project-level environmental documents. The design of the Connector project segments and adjacent facilities should take identified impacts into consideration and strive to lessen the impacts and associated mitigations required.

A. Sound Barriers

The corridor passes through a mix of open lands, urban commercial, and urban and rural residential areas. The existing facilities along the established street sections of the corridor consist of masonry block fencing at the property lines. These residential areas and other new locations may require mitigation for noise-level increases based on noise studies performed during the Tier II environmental process. In the areas where noise attenuation is identified and cannot feasibly be addressed with setbacks or site design, sound barriers should be planned and designed as follows:

• Sound barriers should be planned and designed in accordance with Caltrans PDPM, Chapter 30, “Highway Traffic Noise Abatement,” and the Caltrans Memo To Designers, 22-1 “Soundwall Design Criteria.”
• Sound-barrier materials considered should include the following:
  ▪ Masonry block
  ▪ Precast concrete panel
  ▪ Other concrete, timber, steel, plastic, composite, or recycled material designs
  ▪ Additional information on the above material types are included in the FHWA, Noise Barrier Design Handbook, Chapter 5, “Noise Barrier Materials and Surface Treatments.”
• Wherever possible, the use of earthen berms should be considered, as follows:
  ▪ Where the Connector profile is depressed
  ▪ Where ROW is not constrained
  ▪ Where wall heights would be considered excessive
  ▪ Where a wall would not be consistent with the corridor aesthetics
• The dimensions of the earthen berms should be determined on a location by location basis.
• Where there are existing walls adjacent to the proposed location(s), the same or similar wall type and aesthetic treatment should be maintained.
• Wall types used should be consistent throughout each location. If multiple locations are in proximity, the wall type used for the series of locations should also be consistent.
• Sound barriers should be located at the ROW line unless the noise study identifies additional need or an alternate location to improve attenuation.
• Vegetation should be used in barrier design, where appropriate for both aesthetic appeal and to discourage graffiti.

B. Wildlife Crossings
The project corridor traverses through widely varied wildlife habitats and terrain conditions. To incorporate the corridor into these surroundings, animal crossings have been identified as potential mitigation in the FPEIR. No specific locations are established.

Crossings will vary widely to accommodate the types of terrain and degree of development, including rural, urban, farmland, river, creeks, rolling foothill, and other conditions. Crossings should consider the following:

• Species and size of animal
• Type and location of habitat crossing
• Development – existing and future conditions
• At-grade surface crossings
• Grade-separated crossings
• Modification of existing roadway and drainage crossing locations to accommodate wildlife crossings
• Combined wildlife crossings, subject to compatibility:
  ▪ Drainage/stream
  ▪ Equestrian/pedestrian
  ▪ Connector and cross street roadway structures
• Appurtenances for effective crossing control, including fencing and advanced warning signage

Following the assessment of potential locations for crossings, further study should be conducted into appropriate crossing configurations and geometric requirements.

Where crossings are identified to be included in the project, the planning and design of the crossing infrastructure should be in accordance with the following:


C. South Sacramento Habitat Conservation Plan
The Connector is included in the South Sacramento Habitat Conservation Plan (SSHCP) as a covered project. The SSHCP is currently under preparation; an administrative draft was prepared in July 2010 (Sacramento County, 2010a, <http://www.southsachcp.com/Documents>). The SSHCP will protect plants and wildlife, vernal pool, wetland, and stream habitats that are subject to the federal Clean Water Act, California’s Porter-Cologne Water Quality Control Act, and Streambed Alteration Agreement requirements under Fish and Game Code Sections 1600, et seq. The SSHCP will be carried out through an Implementation Agreement among SSHCP participants that include Sacramento County, City of Elk Grove, City of Galt, City of Rancho Cordova, Sacramento County Water Agency, Sacramento Regional Sanitation District, Sacramento Area Sewer District, and the JPA. The Connector design should be consistent with the SSHCP.
### Revised Table 16-13. Assumed Travel Lanes and Access to Connector for Proposed Project

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<th>Connector Roadway</th>
<th>Cross Street</th>
<th>Future without Project</th>
<th>Future with Project</th>
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<td>Lanes - Facility Type</td>
<td>Traffic Signal</td>
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<td>US 50 EB Ramps</td>
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<td>OHV Park West Ent/ Aerojet Rd</td>
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1 Other connections will only be allowed along the Proposed Project if the JPA determines that the design would ensure an acceptable LOS and meet performance standards for the Connector.
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<tr>
<th>Connector Roadway</th>
<th>Cross Street</th>
<th>Future without Project</th>
<th>Future with Project</th>
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<td>Connector Roadway</td>
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<td>Red = Future Roadways</td>
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<td>Source: DKS Associates 2010.</td>
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WHEREAS, pursuant to California Government Code, section 6500 et seq., the Capital SouthEast Connector Joint Powers Authority (Connector JPA) was formed by the cities of Rancho Cordova, Elk Grove, and Folsom, and the counties of Sacramento and El Dorado, to provide for the coordinated designation, acquisition, planning, designing, financing, construction, operation, and maintenance of a multi-modal transportation corridor to connect the City of Elk Grove, the County of Sacramento, the City of Rancho Cordova, the City of Folsom, and the County of El Dorado, known as the “Connector Project”; and

WHEREAS, planning for the Connector Project, which is a regional transportation beltway/expressway to connect Interstate 5, State Route 99, and U.S. Highway 50, has been in process for more than two decades;

WHEREAS, the joint powers agreement which formed the Connector JPA includes certain “planning principles” and incorporates a set of “Functional Guidelines” for the planning, design, engineering, and construction of the Connector Project;

WHEREAS, the proposed Project Design Guidelines are an extension of the Functional Guidelines and are the result of a collaborative process that has been ongoing since the Board of Directors was first presented the “Draft Preliminary Design Guidelines” in July 2011;

WHEREAS, on March 7, 2012, the Board of Directors, by means of Resolution No. 2012-09, incorporated herein by this reference, certified that the Final Program EIR for the Connector Project was been prepared in full compliance with the terms of the California Environmental Quality Act;

WHEREAS, the Project Design Guidelines are within the scope of the Final Program EIR, which adequately describes the Project Design Guidelines (referred to in the EIR as “Project Design Criteria”) and their impact on the environment for the purpose of CEQA;

WHEREAS, the Board of Directors, by means of Resolution No. 2012-11, incorporated herein by this reference, approved a Mitigation Monitoring and Reporting Program for the Connector Project;

WHEREAS, following the certification of the Final Program-level EIR and selection of a General Alignment, the JPA undertook an extensive outreach process for the Project Design Guidelines, including staff from each of the member jurisdictions, as well as SACOG, Regional Transit, SMAQMD, other agencies, and community stakeholders interested in sustainability and the integration of the Project in the community;
WHEREAS, nothing herein affects Resolution 2012-25, adopted by the Connector JPA on December 14, 2012, in which the JPA agreed not to exercise its power of eminent domain or financially obligate a member jurisdiction without that jurisdiction’s prior agreement;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE CAPITAL SOUTHEAST CONNECTOR JPA RESOLVES AS FOLLOWS:

1. The Board of Directors hereby approves the Project Design Guidelines for the Connector Project, attached hereto and incorporated herein by this reference, and as described in the February 8, 2013, and March 8, 2013, staff reports.

2. The Project Design Guidelines are within the scope of the Final Program EIR, certified on March 7, 2012, which adequately describes the Project Design Guidelines (referred to in the EIR as “Project Design Criteria”) and their impact on the environment for the purpose of CEQA.

3. The Board of Directors is relying on the previously approved Final Program EIR, certified by Resolution 2012-09 and adopts the Findings of Fact and Statement of Overriding Considerations set forth in Resolution 2012-10, incorporated herein by this reference.

4. No further environmental review is required as there are no substantial changes to the Project, the circumstances under which the project is taken, or new information of substantial importance.

5. The “Mitigation Monitoring and Reporting Program for the Connector Project,” as approved by Resolution 2012-11 on March 7, 2012, and as amended, is hereby adopted and incorporated herein by reference as though wholly set forth herein.

6. The Project Design Guidelines do not authorize the Connector JPA to exercise its power of eminent domain in any jurisdiction or impose a financial obligation on any of its member jurisdictions. The Connector JPA will request that each member jurisdiction approve a separate agreement to address the use of eminent domain and any funding commitments, which will amend the joint powers agreement.

7. No later than July 31, 2013, the Project Design Guidelines shall be revised as necessary to address the additional comments provided subsequent to Project Development Team review, including those submitted by El Dorado County in its letter dated March 5, 2013.

8. The Project Design Guidelines, as they may be revised from time to time, shall provide the basis for subsequent project-level environmental review, right-of-way acquisition, and design details.

9. The Executive Director is authorized to file a Notice of Determination reflecting the approval of the Project Design Guidelines with the State Clearinghouse, and the Clerks of Sacramento County, and El Dorado County.
This Resolution shall take effect from and after the date of its passage and adoption.

* * * *

PASSED AND ADOPTED this 8th day of March, 2013, by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chairperson

ATTEST:

______________________________
Secretary
March 8, 2013

**Adopt the Plan of Finance (POF) for the SouthEast Connector Project**

**Issue:** To present to the Board the Capital SouthEast Connector Initial Plan of Finance for approval.

**Recommendations:** 1) Adopt the Initial Plan of Finance for the SouthEast Connector Project; 2) Direct staff to work with the jurisdictions to develop detailed annual contribution commitments for the discretionary amounts of the state and federal funding sources and developer contribution fees; and 3) Direct staff to present to the Board an annual update of the POF at the end of every fiscal year.

**Background:** In order to proceed in a timely manner with the Connector Project, a Plan of Finance has been in development. The initial report was prepared as required by the JPA formation document to primarily outline the Planning and Project Development aspects of the JPA, as the principal delivery entity for the project. With the economic downturn and a shift in transportation funding policy away from the historical earmarking of major capital projects, the JPA hired a financial consultant in late 2009 to assist in the exploration of various funding and finance strategies for the project.

Since August 2012, staff has also worked extensively to study a number of alternative delivery mechanisms in an attempt to accelerate the overall project delivery by taking advantage of the cost saving opportunities afforded a project of this scale. As a result of this work, it has become evident that entering into a comprehensive agreement with a design-builder/private partner would result in significant time and capital cost savings in comparison to a multi-jurisdictional approach to delivery.

In December 2012, staff presented the Draft Initial Plan of Finance which is based on the project approved in the Program Environmental Impact Report (PEIR) certified by your Board in April, 2012. Extensive cost estimate work was performed to develop a cost description that accurately reflects a design-build procurement. Recognizing that there are a number of variations that can be developed using the design-build delivery model, the cost analysis took a moderately conservative approach to potential scheduling efficiencies and unit cost reductions that such a mechanism can provide. This approach reflects the assumption that the initial use of a design-build mechanism will require some flexibility and adjustment during delivery in areas such as right-of-way acquisition, utility relocation, and access re-configuration, amongst others.

The Draft Plan of Finance (POF) initiated a discussion of phasing that separates the project into two separate phases based on a desire to complete a backbone Connector Project that will provide an acceptable level of service for a number of years as a first phase of work. Phase two of the program completes the project identified in the approved PEIR over a series of subsequent contracts to provide supplemental capacity, as needed, to allow build-out of the land uses analyzed in the PEIR. These phase two improvements are expected to be completed over a 10 to 15 year time frame following the initiation of the first phase of the project. Also included in the POF was an initial ranking of the nine segments using a number of critical elements related to safety, traffic volumes, environmental considerations, funding, and ease of construction. At this point in the Draft POF, the possible sequence of segment construction has yet to be determined, since the overall concept of a design-build delivery
mechanism still requires a number of policy level decisions before any particular sequence can be decided. The Draft POF provides this information as a way to initiate discussions regarding project sequencing amongst the jurisdictions, the JPA, and interested parties. To that end, the overall project costs are projected in the report on an annual basis for the life of the current Measure A sales tax, since it is the only major secured form of funding currently identified. It should be noted that extending this funding to the end of the Measure A program results in an overall surplus of revenue when combined with a number of other revenue assumptions presented in the funding chapter of the Draft POF.

The Draft POF also provided a comparative value of currently anticipated costs and project details between the current design-build project and the "Do Nothing" option. The capital construction costs of the entire project (i.e., the upfront capital required to deliver the project) were analyzed for both of these scenarios. Those costs are represented in Figure 1 as two separate capital cost estimates in both 2011 and YOE (year of expenditure) dollars.

![Figure 1](image)

Figure 2 outlines the likely delivery schedule and funding gap for projects proposed by the member jurisdictions to complete their current General Plan build-outs of the Connector Alignment for the “Do Nothing” delivery option. This comparison shows that for the General Plan Build-out, the funding gap for the project segments over the 23-year delivery window widens considerably toward the end of that construction period and does not provide adequate funds necessary to complete the entire project. This shortfall is attributable to the inefficiency of the delivery process as well as the expected escalation of project related materials and labor disproportionate to the increased value of revenue over a corresponding time period.

Comparatively, the Connector Project Cash Flow projections for the phased Design Build scenario indicate that there should be adequate revenues to fund the construction of the Connector through build-out given the timing of the construction program and the assumptions about the various revenue sources. It also indicates a revenue surplus at the end of the planned construction schedule.
In February 2012, staff reported that the JPA team has met with all the member jurisdictions’ staff as well as staff from Sacramento Transportation Authority (STA) and the Sacramento Area Council of Governments (SACOG) in an attempt to provide more detail to the plan and request comments. The initial reaction from jurisdiction staff to the POF was positive but cautious. General comments and issues addressed during the meetings included:

**Share of Federal and State Funds**
1. Recognition that the proposed share of federal and state funds is reasonable and consistent with the percentage shown in the current Metropolitan Transportation Plan (MTP/SCS), but could create some additional shortfalls to local projects during specific years.
2. The assumptions for receiving over 50% of all State and Federal revenues through the Regional MPO (SACOG) seem very high since SACOG is an entity that has 28 member agencies all competing for the same pots of monies. The entities of the JPA are only 5 of the 28 SACOG members, even if we collectively received no additional allocations for our respective agencies the revenue assumptions using SACOG allocated monies seems high.
3. The assumption that any federal monies will be available to the Connector is highly speculative considering a NEPA document was not developed.

**Developer Fee Contributions**
4. The total developer fee contributions may need to be recalculated to reflect a number of issues including: recent fee reductions in some jurisdictions and the recent approval of new projects.
5. The reality of allocating funds to the JPA from existing capital programs could create a cash flow problem for jurisdictions that isn’t addressed in the Plan of Finance. It seems more work is needed in determining a realistic cash flow from all sources of revenue but particularly the impact fee revenue source since they are correlated to new building permits.
Bridge Loan Concept to cover Cash Flow Shortages

6. The Draft Plan of Finance discusses several options for addressing cash flow shortages during the life of the Connector Project through borrowing or funding advances. One of the options discussed is a short-term loan backed by a set-aside of Measure A sales tax funds that would be paid back by future revenues from other Connector fund sources. Because such a loan could impact other Measure A projects in the County, including delaying construction, this option would require very careful consideration and close consultation with all STA jurisdictions.

Project Cost Estimate

7. One jurisdiction felt the costs from the JPA may be on the low side by about 10%-20%.

8. A 20% savings in project costs due to the utilization of the Design-Build is too high. Also, the JPA cannot use Design–Build without authorizing legislation. The fact that this legislation has not even been introduced for discussions makes the assumption of Design-Build highly speculative.

Discussion: Since the February meeting, staff has met and coordinated with both public works and planning staffs of the five member jurisdictions to discuss and address the concerns raised at the February Board meeting, as well as other comments provided thereafter. These meetings resulted in staff modifying the Plan of Finance to address the issues raised. These changes are summarized below:

Share of Federal and State Funds

1. Federal and state funds are derived from annual apportionments to SACOG for funding of transportation projects and historically represent 33% of project costs for those projects listed in the MTIP/MTP. The POF has been revised to reduce the overall Federal/State revenue estimates from 33% to 30% of project costs. This reduces the overall state/federal revenue assumption from $151M to $137M.

2. The reduction from 33% to 30% federal/state funds was derived by reducing the maximum amount allocated to the Connector in any given year from $9.5M to $7.5M. In an effort to further reduce the discretionary state/federal share allocated to the Connector, the plan makes a conservative assumption of revenue from Other Potential Funding sources. As additional funds are realized, this would lessen the need for state/federal funding from the SACOG. In addition, the portion of federal/state funds used in the POF represent only funds apportioned to Sacramento County and its municipal jurisdictions (cities) and therefore would not have an effect on the remaining SACOG entities shares.

3. The JPA intends to federalize only portions of the project in an effort to limit the need for multiple National Environmental Policy Act (NEPA) documents. However, a NEPA document is being considered, possibly at a programmatic level, or project specific level when it is determined which segments will be federalized. The Connector partnership with the South Sacramento Conservation Habitat Plan (SSHCP) is intended to provide some of the required permitting and documentation that is normally associated with a project of this nature. Since staff feels the timing of initial construction is constrained more by funding availability than other processes, it is likely that ample time exists to obtain the required NEPA approvals.

Developer Fee Contributions

4. Based on our meetings with the jurisdictions, the total developer fee contributions have been recalculated to reflect a number of issues including: recent fee reductions in some jurisdictions and the recent approval of new
projects. The POF revenue from developer fee contributions has been reduced from $238M to $197M. Additionally, the East Sacramento Quarry Mitigations fees were reduced from $32 to $24M. A very nominal amount of this revenue reduction was recaptured by increasing the Other Potential Funding sources from $75M to $80M. This still results in a very conservative assessment of other potential funds.

5. The issue of potentially creating a cash flow problem for jurisdictions by allocating funds from the existing jurisdictions capital programs was a common concern among jurisdictions. The Draft Plan of Finance utilized the developer fee data for Connector related development in each jurisdiction and assumed an equal yearly contribution from each jurisdiction toward the project. However, it should be noted that Initial Plan of Finance details the anticipated cost and revenues through the life of the project, and will require periodic updates to account for the changes in the economic climate. Additionally, the actual member contributions, timing and structure of these payments will need to be worked out prior to entering into the Memorandum of Understandings between the JPA and member agencies.

Bridge Loan Concept to cover Cash Flow Shortages

6. The SouthEast Connector Project is one of the projects specifically identified in Measure A along with a dedicated amount of Measure A funding. It is not expected that a short-term bridge loan backed by the set-aside of Measure A sales tax funds would impact or delay other Measure A projects in the County. As the need for the bridge loan arises, if STA does indicate that the loan would impact other projects in their expenditure plan, the JPA could pursue a separate loan from private sources that are simply secured with the Measure A funds. It is also possible that the Request for Proposals from potential design-build teams could include a financing option to be made available to the JPA as necessary.

Project Cost Estimate

7. The project costs were estimated assuming that the JPA is responsible for constructing the project in much larger segments than the individual jurisdictions could construct individually. There is very significant cost savings that are realized with larger projects on a multitude of levels, including the reduction in material prices with larger quantities. A 20-25% contingency (based on a qualitative analysis of assumed risks that that could lead to an increase in the cost of the project during construction) has been built into the project costs, as well as an additional 10-15% allotment for other “unknown” minor items that could occur on a segment. It should also be noted these costs are estimated assuming the JPA is to be responsible for delivering the project, as detailed in the Plan of Finance.

8. The costs savings realized by design-build procurement will certainly vary from project to project. As detailed in the POF, the JPA will be responsible for the right-of-way acquisition, utility relocation, and environmental approval, which will take the majority of the risk away from the contractor. In addition to the cost savings associated with the schedule acceleration of a design-build procurement, the contractor will have the flexibility for innovation in the selection of design, materials and construction methods. With regard to the legislation, a bill is currently being introduced to extend the design-build legislation and it is expected that this extension will be approved.

Conclusion and Next Steps

As a result of the above comments, as well as others received over the three-month review period, the JPA team has adjusted the overall cash flow table 1 in the POF. The anticipated overall revenue in 2012 dollars has gone from $610.4M to $548.2M which reflects adjustments in the various funds previously mentioned. The capital cost
estimate has remained the same since staff believes there is sufficient contingency to cover any unexpected project elements. A design-build procurement is, however, still anticipated. The reduction in overall revenues requires a bridge loan of a total $80.9M during substantial construction periods at an interest expense of $7.9M. This results in a reduction in overall surplus funds at the end of the POF of $83.9M in 2012 dollars, a reduction of $67.4M. Staff believes there is even more flexibility within the plan to provide for interim projects of limited scope either on a cash basis or through reimbursement depending on timing and project scope. Additional details on this aspect of the plan will be developed over the upcoming months as well as up-to-date adjustments to the fee program within the member jurisdictions. Due to the recent level of activity in this area, not all finalized calculations may be represented in the current plan.

The Initial Plan of Finance is a vital first step in providing the financial framework required to advance the project concepts to the next stage of discussion involving delivery responsibility, mutual project benefit and identity, and project ownership. Once the Initial Plan of Finance is adopted, staff will continue collaborating with the member jurisdictions to work out an equitable developer fee payment schedule and move forward with developing Memorandums of Agreement (MOA). These MOA’s will eventually formalize the relationship between the JPA and member jurisdictions and will be pursued in conjunction with the approval of General Plan Amendments to designate the Connector on the respective plans of the member jurisdictions. It is critical that the POF be adopted early in this process to provide a backdrop for the discussions to follow and to focus the attention of the member jurisdictions and local/regional staffs on the expectations contained therein. As outlined in the accompanying resolution, the POF does not bind any of the member jurisdictions to future indebtedness or remove the flexibility of future adjustments to their fee programs. It also calls for the development of agreements/amendments to be developed over the next 90 days to address a number of governance elements known to exist. In recognition of the nature of transportation funding and the necessary financial flexibility of the individual jurisdictions, the Plan of Finance will be updated annually at the end of the fiscal year. The first update of the plan in July, 2013 will allow time to further work through comments and concerns brought forward in this report as well as other that may surface as the project further develops.

Respectfully Submitted:

[Signature]

Tom Zlotkowski
Executive Director
2013 Initial Plan of Finance

Date Submitted: March 2013
Capital SouthEast Connector Project
2013 Initial Plan of Finance

Prepared By:
Capital SouthEast Connector Joint Powers Authority
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Executive Director
(916) 876-9094

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Economic & Planning Systems, Inc.
Smith, Watts, and Martinez, LLC
Fehr and Peers
DKS Associates
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Chapter 1 - EXECUTIVE SUMMARY

The Capital SouthEast Connector is a 35-mile long multi-modal transportation facility that will link communities in Sacramento and El Dorado Counties, including Elk Grove, Rancho Cordova, Folsom, and El Dorado Hills. The project is a state-of-the-art controlled access facility that extends from the Interstate 5 (I-5)/Hood Franklin Road interchange in southwest Sacramento County to approximately 35 miles northeastward, terminating at U.S. Highway 50 (US 50) in the community of El Dorado Hills, near Silva Valley Parkway approximately 3 miles east of the Sacramento County/El Dorado County line.

The Project is divided into 5 transportation corridor segments that were based on several factors including geographic and jurisdictional boundaries, roadway classification, adjacent community characteristics, projected traffic demand, and potential financing opportunities.

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>DESCRIPTION</th>
<th>LOCAL JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4-lane expressway, on Kammerer Rd from the I-5/Hood Franklin IC to Bruceville Rd and 6 Lane thoroughfare from Bruceville Rd. to SR99</td>
<td>Sacramento County</td>
</tr>
<tr>
<td>B</td>
<td>4 to 6 lane thoroughfare, from SR 99 to Bond Rd</td>
<td>Elk Grove, Sacramento County</td>
</tr>
<tr>
<td>C</td>
<td>4-lane roadway, on Grant Line Rd from Bond Rd to Calvine Rd (Sheldon Area)</td>
<td>Elk Grove, Sacramento County</td>
</tr>
<tr>
<td>D</td>
<td>4 to 6 lane expressway, on Grant Line/ Rd and White Rock Rd from Calvine Rd to the Sacramento-El Dorado County line</td>
<td>Rancho Cordova, Sacramento County, Folsom</td>
</tr>
<tr>
<td>E</td>
<td>4 to 6 lane thoroughfare, on White Rock Rd from the County line to US 50/Silva Valley Pkwy IC</td>
<td>Folsom, El Dorado County</td>
</tr>
</tbody>
</table>

Due to the availability of timely funding to construct the $456 million project, the Plan of Finance (POF) analyzes a phased, but accelerated, approach to allow the JPA to develop a portion of the project and accelerate some of the benefits to the region, while the JPA also continues to seek out additional funding sources to close the funding gap for the remaining phases. The Plan of Finance is organized into the following Sections:
Chapter 2 - Introduction to the Capital SouthEast Connector Project
Presents the project and the sponsoring agencies.

Chapter 3 - Project Cost Estimate to Completion
Identifies the key cost components and estimating methodology for the project.

Chapter 4 - Project Implementation Plan
Presents the project schedule and identifies the actual and projected expenditures by fiscal year.

Chapter 5 - Project Financing and Revenues
Identifies committed and anticipated funding from the following sources:
- Measure A
- Federal/State Regional
- Member Jurisdiction Developer Impact Fees
- Other Contributions
- Member Jurisdiction Contributions
- Future Potential Revenue Funds
  - Supplemental Local Sales Tax
  - State Vehicle License Fee
  - Federal Stimulus Funds
  - Federal Transportation Grants
  - User Fees
  - Other Miscellaneous Revenues

Chapter 6 - Project Cash Flow
Summarizes anticipated funding account balances on an annual basis and concludes sufficient funds will be in place to meet capital expenditure requirements.

Chapter 7 - Other Factors
Includes cost containment strategies, responsibilities of the sponsors, as well as related agreements and issues pertaining to the project financing requirements.

Appendices
Includes a discussion on design-build procurement and various contracting options, a summary of the evaluation criteria that will be used as a tool to eventually decide how the project should be phased, a preliminary schedule of the projects by contract, a cash flow summary, and a comparison of the scope and cost differences between the Project and the current Metropolitan Transportation Plan (MTP).
Chapter 2 INTRODUCTION

Project Description

The proposed project is a 35-mile multi-modal transportation facility that will link communities in Sacramento and El Dorado Counties, including Elk Grove, Rancho Cordova, Folsom, and El Dorado Hills. The project limits extend from the Interstate 5 (I-5)/Hood Franklin Road interchange in southwest Sacramento County to approximately 35 miles northeastward, terminating at U.S. Highway 50 (US 50) in the community of El Dorado Hills, near Silva Valley Parkway approximately 3 miles east of the Sacramento County/El Dorado County line.

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4 lane expressway, on Kammerer Rd from the I-5/Hood Franklin IC to Bruceville Rd &amp; 6 lane Thoroughfare from Bruceville Rd to SR99</td>
</tr>
<tr>
<td>B</td>
<td>4 to 6 lane thoroughfare, from SR 99 to Bond Rd</td>
</tr>
<tr>
<td>C</td>
<td>4 lane roadway, on Grant Line Rd from Bond Rd to Calvine Rd (Sheldon Area)</td>
</tr>
<tr>
<td>D</td>
<td>4 to 6 lane expressway, on Grant Line/White Rock Rd from Calvine Rd to the Sacramento-El Dorado County line</td>
</tr>
<tr>
<td>E</td>
<td>4 to 6 lane thoroughfare, on White Rock Rd from the County line to US 50/Silva Valley Pkwy IC</td>
</tr>
</tbody>
</table>

Exhibit 2-1: Project Overview

The Connector is envisioned to link residential areas and employment centers in the Project corridor, serving both local and regional travel needs and substantially reducing the excessive traffic volumes that currently overburden existing two-lane roadways, which were never intended to serve as major commuter routes. When completed, the proposed project would be a road of four to six traffic lanes with
limited access points that would accommodate a variety of regional transportation needs.

The project will consist of the following features for a significant portion of the entire project:

- Controlled access facility
- 3 or 4-leg Interchanges at various locations throughout the facility
- Various typical sections (as shown in the exhibits 2-2 through 2-5), depending on the type of roadway classification and surrounding land uses including:
  - Expressway (4-6 lanes, expansive natural median, Class I multi-modal trail, limited access, intersection/interchange access connections)
  - Thoroughfare (6 lanes, continuous improved median, Class I or II bikeway, limited intersection spacing)
  - Arterial (4 lanes, continuous improved median, Class I or Class II bikeway, limited intersection spacing)
  - Special Sheldon Community section (4 lanes, continuous improved median, unimproved shoulders, Class I multi-modal trail, selected intersection spacing and adjacent parcel access)

- Sustainability elements throughout the corridor, as defined by the Sustainability Concept Committee (SCC). As a result of the committee’s recommendations, 8% of the construction costs (5% of the overall project costs) have been included in the project costs for sustainability elements (The SCC recommendations and input can be found in a separate report titled “Capital SouthEast Connector Project Sustainability Approach and Final Assessment Results” dated September 18, 2012).

- Corridor aesthetics, as well as specific segment aesthetic elements as defined by the Stakeholder Advisory Committee (SAC). (The SAC recommendations and input can be found in a separate report titled “Capital SouthEast Connector Stakeholder Advisory Committee (SAC) Involvement Summary” dated November 6, 2012).

---

1 The Sustainability Concept Committee (SCC) consists of business/industry, agency, program, and advocacy representatives with focused interest and expertise in sustainability.

2 The Stakeholder Advisory Committee (SAC) consists of members from the community, regional organizations, and business or property owners. This advisory committee is viewed as the pulse of the community and was formed to provide input on the community elements and broader issues of the Connector Project.
Intelligent Transportation System (ITS) elements that include:

- Dynamic message boards
- Corridor access management
- CCTV
- Transit queue jumps
- 100-year flood protection
- Continuous way finding and signage

Exhibit 2-2: Typical Expressway w/ Frontage Road Cross Section

Exhibit 2-3: Typical 4 to 6-Lane Thoroughfare Cross Section
Exhibit 2-4 Typical 4 Lane Thoroughfare at Intersection

Exhibit 2-5: Sheldon Area Typical Section
Project Benefits

The Connector will provide options for a variety of travel modes throughout the project corridor, supporting several of the seven principles of the Sacramento Area Council of Governments’ (SACOG’s) Blueprint, which is an in-depth analysis of land use and transportation development patterns that addresses Vehicle Miles Traveled (VMT) and air quality emissions in SACOG’s six-county, 22-city region (Sacramento Area Council of Governments 2004). The 35-mile controlled access facility is intended to:

- Decrease traffic on several local arterial/collector roadway segments in the traffic analysis study area, as well as decreased traffic volumes on portions of area freeways
- Reduced congested VMT and VHT percentages on area roadways in the study area
- Substantially reduced delay and travel times along the project alignment
- Reduced travel times between communities
- Improved good movement capabilities in the study corridor
- Provide comprehensive protection of natural resources in the corridor
- Introduce a number of positive sustainable practices in project delivery and operations to reduce overall GHG emissions
- Provide a continuous all weather alternative emergency route across the entire south County of Sacramento
- Accelerate project completion to enhance the corridor’s economic competitiveness

The Connector’s design will strike a balance between meeting regional transportation needs; preserving open space, habitat and agriculture; and maintaining the livability of neighboring communities. When built, the Connector will have four to six traffic lanes, with limited access points in some areas to keep traffic moving and minimize impacts to local roads. The Connector will provide options for a variety of travel modes throughout the corridor, including transit, bicyclists, pedestrians and even equestrians.

- Less time behind the wheel
- More livable communities
- Easier access to work, shop and play
- Less congestion on freeways
- Less fuel consumption
- Less air pollution
The project is anticipated to provide extensive positive economic benefit in the form of additional construction, direct and indirect benefits. These benefits will be both increased and accelerated by the construction of the facility as envisioned in this Plan of Finance as opposed to its build-out as currently envisioned.

Project History

Planning for a regional transportation facility, such as the Connector, to serve the project corridor has proceeded for more than two decades. Sacramento County conducted the East Area Transportation Study in 1984, which identified a need for a circumferential “beltway” to accommodate increasing development, population, and transportation demands (Sacramento County 1984). This became the focus of a feasibility study conducted by SACOG in 1985. In 1986, the California Department of Transportation (Caltrans) prepared a route concept report for two proposed highways in southern Placer County and eastern Sacramento County: State Route (SR) 65 and SR 148. The beltway and the proposed alignments of the highways were located within the corridor between Elk Grove in the south and southern Placer County in the north (Caltrans 1986).

In 1988, the voters of Sacramento County passed Measure A, a countywide 0.5% sales tax to be levied over a 20-year period (1989–2009). The proceeds of the tax were specified to be used to fund a comprehensive program of roadway and transit improvements. In 2004, the voters extended the tax an additional 30 years. The ballot text of the Measure A extension, as approved by the voters, identifies the proposed project as the “I-5/SR99/US50 Connector” and specifies that receipt of funding for construction is contingent on the establishment, approval, and adoption of a habitat conservation approach by the local recipient of funds.

In the early 1990s, Caltrans undertook the SouthEast Area Transportation Study (SATS) to identify transportation alternatives for meeting future travel demand in the same general corridor that had been identified in SACOG’s Metro Study. The SATS was intended to be a feasibility study for a broader area that included the corridor, but with a greater emphasis on multi-modal transportation options (Caltrans 1993).

During preparation of the Metropolitan Transportation Plan (MTP) 2025 by SACOG in 2002, a project in the corridor area was designated as the “Elk Grove-Rancho
Cordova–El Dorado Connector” (Sacramento Area Council of Governments 2002). Immediately following adoption of MTP 2025, SACOG undertook a project planning process—the Elk Grove–Rancho Cordova–El Dorado Connector Study—to generate input from a wide range of stakeholders on project purpose and need for the Connector corridor, and to define a set of conceptually defined project alternatives to be considered in a future environmental review process. As a result of this process, four conceptual alternatives along with a no-project alternative were developed, which generally follow Hood Franklin, Kammerer, Grant Line, and White Rock Roads, and include segments using either Bradshaw Road or Sunrise Boulevard.

As part of the project planning process, SACOG facilitated extensive participation by local government agencies, community residents, and other stakeholders affected by the project. A Stakeholder Advisory Committee (SAC) and a Technical Advisory Committee (TAC) met regularly to develop the elements of the project’s objectives and purpose and need, which were presented to a policy advisory committee that included representatives from each of the five member agencies. During this pre–environmental studies phase, these committees continued to meet regularly. Community residents and other members of the public attended these meetings and the six public information sessions. Oral and written comments were received from committee members, local residents, community representatives, and other interested parties. In May 2005, the SACOG Board of Directors approved a final concept plan report (Sacramento Area Council of Governments 2005).

Detailed descriptions of the conceptual alternatives developed during the Connector study were outlined in the report, along with initial elements of purpose and need. The project was also included in MTP 2035 (Sacramento Area Council of Governments 2008), and is part of the current planning efforts to update MTP 2035 to include sustainable communities requirements and be in compliance with Senate Bill (SB) 375.

**History of the Plan of Finance**

The initial Plan of Finance (POF) for the Connector was approved by the JPA Board in February, 2009. It was developed primarily to outline the Planning and Project Development Funding aspects of the JPA and to allocate costs amongst the member jurisdictions. The aspect of Construction Funding was deferred until such a time that more information regarding the specifics of the Project (alignment, size, right-of-way, resource mitigation) could be determined. With the economic downturn significantly impacting potential project revenues in FY 2009-10, the focus of the plan shifted from developing a capital cost estimate that would accurately
convey the cost of the project to exploring alternative funding sources to supplement the known forms of revenue.

In January, 2010, the JPA Board of Directors heard a presentation on the value of P3’s (Public Private Partnerships) as a mechanism to provide the necessary financing to accelerate project delivery. One of the considerations of such a partnership would introduce the potential for the Connector to be tolled (or partially tolled) in order to provide the necessary revenue over time to reimburse the private partner and financier. The Board instructed staff to continue to explore the details of such a concept but to not rely on it exclusively as a revenue source.

In March, 2011 and again in January, 2012, the JPA’s financial advisor provided the additional details regarding traffic and revenue estimates for developing certain portions of the project as toll facilities. The results indicated variable success with tolling as a primary component of a funding strategy and introduced questions regarding the public acceptance of such a proposal. Complications regarding access, parallel facility requirements, long-term lifecycle costs, and industry compatibility further complicated the concept. Staff began the exploration of revenue alternatives to tolling in earnest but kept the user fee (tolling) model as part of a back-up plan.

Since August, 2012, staff has presented a number of alternative delivery mechanisms with and without tolling a primary component of the plan. Staff also provided the details of a project delivery by the individual member jurisdictions as an alternative to pursuing any comprehensive project development by the JPA. In October 2012, staff recommended that a Design-Build delivery without tolling should be considered as the primary method to fund the project with the Design-Build with tolling as a back-up plan in the event that no reasonable alternative could be considered. The Design-Build strategy also used the concept of project phasing as one way to overcome cash flow and financing cost issues associated with an accelerated project delivery window.

**Environmental Documentation**

The project represented in this report is described in further detail in the Program Environmental Impact Report for the Capital SouthEast Connector, State Clearinghouse #2010012066 and certified by the JPA Board of Directors in April, 2012.
Chapter 3 - Project Cost Estimates

Structure of the Cost Estimate

For increased flexibility related to the timing of funding availability, the 5 main corridor segments (A-E) were broken down into smaller segments that were based primarily on geographic and jurisdictional boundaries and roadway classification. The cost estimate for the Capital SouthEast Connector Project is divided into these 9 segments to analyze for potential phases, as shown in Exhibit 3-1 below.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Phase</th>
<th>Roadway Segment</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>3.04</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>Bruceville Road to State Route 99</td>
<td>3.01</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>State Route 99 to Bond Road</td>
<td>4.38</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>2.72</td>
</tr>
<tr>
<td>D</td>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>4.47</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>Jackson Road to White Rock/Grant Line Road</td>
<td>7.22</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>White Rock/Grant Line Road to Sacramento/El Dorado County Line</td>
<td>6.37</td>
</tr>
<tr>
<td>E</td>
<td>E1</td>
<td>El Dorado County Line to Latrobe</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Latrobe to US-50/Silva Valley Parkway</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>33.41</strong></td>
</tr>
</tbody>
</table>

Within each of the project segments, five cost elements have been identified to breakdown the estimate to a greater level of detail, as shown in Exhibit 3-2. To further refine the estimates, major items were identified for the construction cost estimate as shown in Exhibit 3-3.

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Cost Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preliminary Engineering</td>
<td>Costs include the design consultant contracts under the design-build procurement plan as well as JPA staffing costs.</td>
</tr>
<tr>
<td>2. Right-of-Way</td>
<td>Costs include all non-mitigation related right-of-way</td>
</tr>
<tr>
<td>3. Right-of-Way Administration</td>
<td>Costs include Production Consultants, Property Managers, Production/Property Management Oversight, and state staffs.</td>
</tr>
<tr>
<td>4. Environmental Mitigation</td>
<td>Costs include environmental mitigation</td>
</tr>
<tr>
<td>5. Construction</td>
<td>Costs include construction costs for all segments. Components of the costs are broken down to include roadway, signalized intersections, interchanges, frontage road improvements, multi-use trails, landscaping and irrigation, traffic handling, and sustainability elements.</td>
</tr>
</tbody>
</table>

Exhibit 3-1: Project Segments

Exhibit 3-2: Cost Elements
Cost Estimate Methodology

The methodology explains how the cost estimate in current and constant dollars are derived for the Connector Project. The Project was estimated consistent with the Final Program Environmental Impact Report (FPEIR) for the Capital SouthEast Connector at its final buildout. However, two phases were introduced that allows for the base project to be completed while maintaining the flexibility of constructing other improvements (i.e. interchanges, landscape and irrigation, and widening) as the need arises and funding becomes available.

Project Delivery Method

Although the cost analysis was initially performed assuming a design-bid-build process, the project finance plan is built upon constructing the Capital SouthEast Connector as a design-build project. While there are many risks to benefit variations within the general design-build delivery model, the numbers represented in this Plan of Finance represent a more conservative approach of procurement. It assumes the JPA to be responsible for completion of a number of advance development components such as right-of-way acquisition, utility relocation, and project level environmental review. This reduced level of risk transfer to the design-builder is reflected in a more conservative reduction in overall project costs over what might normally be expected with a greater degree of project development responsibility transfer in other alternative design-build delivery models. Once refinements to a selected delivery process are agreed to prior to contract execution, they will be presented in subsequent updates of this report and they could affect the overall schedule and phasing of the segments. A summary of the various contract options that will be investigated further is discussed in Appendix A.

Cost Estimate in Current Dollars ($ 2012)

The previous cost estimates prepared for the Environmental Impact Report were reviewed for both content and methodology. Assumptions were reviewed, items that had the most impact on costs were identified, and considerations were given to 1) the size of the project, 2) the proximity of material sources, 3) items of work that cannot be easily quantified at this stage of the project, and 4) the project delivery method.

The cost estimate was developed assuming that only minor improvements are needed at the I-5 and SR 99 connections. It was also assumed that the Silva Valley Parkway Interchange will be completed with El Dorado Traffic Impact Mitigation Fees (and other outside funding sources), and the project is not included in this estimate. Other projects along the Corridor that are assumed to be funded and
constructed and funded by others include the 4-lane widening of Grant Line Road between Prairie City and White Rock Road (Sacramento County), and the 4-lane widening between East Stockton Blvd. and Waterman, including construction of the 4-lane railroad grade separation (City of Elk Grove).

Exhibit 3-3 summarizes the methodology, assumptions, and factor considered for each of the major cost elements, with the construction categories broken down into greater detail.

<table>
<thead>
<tr>
<th>Item of Work</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Planning &amp; Preliminary Engineering</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Project Support Costs               | - Reviewed historical data  
                                   - Estimated at 20% of the capital construction costs  
                                   - Includes environmental, design, and construction management                                                                         |
| **Right of Way**                    |                                                                                                                                     |
| Acquisition                         | - Based on EIR estimates  
                                   - 15% Contingency for Eminent Domain and Unforeseen Items  
                                   - Reflects additional costs associated with acquisition of access rights along certain locations within the project  
                                   - Some dedication assumed along the length of the Connector                                                                             |
| **Right of Way Administration**     |                                                                                                                                     |
| Engineering and Support Costs       | - Includes allowance for owner appraisals  
                                   - Approximately 11% of the capital costs                                                                                                 |
| **Environmental Mitigation**        |                                                                                                                                     |
|                                    | - Includes the dedicated $15M in Measure A funds for open space protection  
                                   - Included funds necessary for compliance with the Programmatic EIR for the project                                                                 |
|                                    | - Reflects the commitments made in settlement agreements on prior litigation  
                                   - Includes estimated funds required for compliance with the future SSHCP and project permits                                                                 |
| **Construction**                    |                                                                                                                                     |
| Clearing and Grubbing               | - Calculated from non-paved area within Proposed R/W                                                                                   |
| Roadway Excavation                  | - Volume based on excavation required for structural section  
                                   - Factor for Additional Earthwork established based on                                                                                   |
**Basis for Escalation**

Both Present Value Dollars (current dollars) and Year of Expenditure (YOE$) Dollars are presented in the Plan of Finance. However, the Cost Estimates in this Chapter are presented in Present Value Dollars. YOE$ were calculated using an inflation rate and cost increase of 4.79%, which was derived from Caltrans historical data.

**Summaries of the Current Cost Estimates**

Summaries of the cost estimates are presented in two different ways as shown in Exhibits 3-4A and 3-4B, Present Value Dollars. The first summary allocates the project costs by segment. The second method apportions the project cost estimates by the major project cost elements listed in Exhibit 3-2.
### Exhibit 3-4A: Project Cost Estimate by Segment (PV)

<table>
<thead>
<tr>
<th>Major Segment</th>
<th>Segment</th>
<th>Roadway Segment</th>
<th>Total Project Cost Estimate</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>$45,998,000</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>Bruceville Road to State Route 99</td>
<td>$30,196,000</td>
<td>7%</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>State Route 99 to Bond Road</td>
<td>$56,746,000</td>
<td>12%</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>$25,471,000</td>
<td>6%</td>
</tr>
<tr>
<td>D</td>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>$50,721,000</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>Jackson Road to White Rock/Grant Line Road</td>
<td>$106,590,000</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>White Rock/Grant Line Road to Sacramento/El Dorado County Line</td>
<td>$118,324,000</td>
<td>26%</td>
</tr>
<tr>
<td>E</td>
<td>E1</td>
<td>El Dorado County Line to Latrobe</td>
<td>$10,654,000</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Latrobe to US-50/Silva Valley Parkway</td>
<td>$11,700,000</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong>: <strong>$456,400,000</strong></td>
<td></td>
<td><strong>100%</strong></td>
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</tbody>
</table>
Cost Allocation by Project Element and Contract

The following cost estimates, presented in Exhibits 3-5A&B, are organized by six standard project cost categories (per Exhibit 3-2) for each of the 5 major segments.

<table>
<thead>
<tr>
<th>Element</th>
<th>Segment A</th>
<th>Segment B</th>
<th>Segment C</th>
<th>Segment D</th>
<th>Segment E</th>
<th>Total Project Cost Estimate</th>
</tr>
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<tr>
<td>Project Delivery Costs</td>
<td>10.5</td>
<td>6.4</td>
<td>3.0</td>
<td>40.7</td>
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<td>63.2</td>
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<td>Right-of-Way</td>
<td>4.7</td>
<td>12.5</td>
<td>3.9</td>
<td>4.4</td>
<td>3.6</td>
<td>29.0</td>
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<td>Right-of-Way Administration</td>
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<td>0.8</td>
<td>0.8</td>
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<td>13.1</td>
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<td>11.8</td>
<td>282.5</td>
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<td>Construction Contingency</td>
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<td>4.4</td>
<td>2.5</td>
<td>36.0</td>
<td>2.5</td>
<td>53.8</td>
</tr>
<tr>
<td>Totals (PV)</td>
<td>75.7</td>
<td>56.7</td>
<td>25.5</td>
<td>275.6</td>
<td>22.4</td>
<td>455.9</td>
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</table>

Exhibit 3-5A: Project Cost Estimate by Segment Chart (PV $ in millions)

Exhibit 3-5B: Total Project Cost Estimate by Cost Category Chart (PV)

Costs Incurred to Date (2007 - October 2012)

Exhibit 3-6 summarizes the approved budget and expenditures to date, as well as a summary of the budget vs. expenditures on a per year basis. Since the inception of the Joint Powers Authority, the JPA has expended $8.7 million from 2007 through October, 2012, out of a total estimated project cost of approximately $456 Million. This amounts to approximately 1.7% of the overall project costs that have been
spent to date. The voter approved Measure A is the primary revenue source for the current activities.

Expenditures to date included the formation of the JPA, Project Administration Costs, Project Planning, preparation and approval of the Final Program Environmental Impact Report, Preliminary Engineering to support the Final EIR and cost estimates, development of the Project Design Guidelines, preparation of the Plan of Finance, and various Public Outreach and Agency Coordination.

<table>
<thead>
<tr>
<th></th>
<th>FY 07/08</th>
<th>FY 08/09</th>
<th>FY 09/10</th>
<th>FY 10/11</th>
<th>FY 11/12</th>
<th>FY 12/13</th>
<th>Totals</th>
</tr>
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<tr>
<td>JPA Annual Budget</td>
<td>$1,275,000</td>
<td>$1,776,454</td>
<td>$2,775,507</td>
<td>$2,609,800</td>
<td>$2,666,688</td>
<td>$3,004,902</td>
<td>$14,108,351</td>
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<tr>
<td>Expenditures</td>
<td>$ 455,243</td>
<td>$ 1,651,178</td>
<td>$ 1,807,969</td>
<td>$ 2,827,723</td>
<td>$ 1,427,134</td>
<td>$ 598,895*</td>
<td>$ 8,768,142</td>
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<tr>
<td>Balance</td>
<td>$ 819,757</td>
<td>$ 125,276</td>
<td>$ 967,538</td>
<td>$(217,923)</td>
<td>$ 1,239,554</td>
<td>$ 2,406,007</td>
<td>$ 5,340,209</td>
</tr>
</tbody>
</table>

*Exhibit 3-6: Total Revenue vs. Total Expenditures as of October 2012*  
*Thru 10/2012*
Chapter 4 - PROJECT IMPLEMENTATION PLAN

<table>
<thead>
<tr>
<th>Major Segment</th>
<th>Segment</th>
<th>Roadway Segment</th>
<th>Phase 1 Cost Estimate</th>
<th>Phase 2 Cost Estimate</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>$44,444,304</td>
<td>$1,553,552</td>
<td>$45,997,856</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>Bruceville Road to State Route 99</td>
<td>$24,099,838</td>
<td>$6,096,544</td>
<td>$30,196,382</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>State Route 99 to Bond Road</td>
<td>$45,850,190</td>
<td>$10,896,296</td>
<td>$56,746,486</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>$24,810,822</td>
<td>$660,000</td>
<td>$25,470,822</td>
</tr>
<tr>
<td>D</td>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>$35,384,781</td>
<td>$15,336,192</td>
<td>$50,720,973</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>Jackson Road to White Rock/Grant Line Road</td>
<td>$45,450,559</td>
<td>$61,139,733</td>
<td>$106,590,292</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>White Rock/Grant Line Road to State Route 99 to Bond Road</td>
<td>$69,371,880</td>
<td>$48,951,704</td>
<td>$118,323,584</td>
</tr>
<tr>
<td>E</td>
<td>E1</td>
<td>El Dorado County Line to Latrobe</td>
<td>$10,653,793</td>
<td>-</td>
<td>$10,653,793</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Latrobe to US-50/Silva Valley Parkway</td>
<td>$11,700,235</td>
<td>-</td>
<td>$11,700,235</td>
</tr>
</tbody>
</table>

Exhibit 4-1: Total Costs By Phase

Project Phasing

Exhibit 4-1, as well as in Section 2, illustrates the overall two-phase strategy for project delivery proposed by the JPA for the Connector Project. The phasing approach is based on the desire to complete a backbone Connector Project that will provide an acceptable level of service throughout the entire length of the corridor as part of a first phase of improvements. These improvements consist of the following “backbone” improvements that include the following:

- 4 continuous travel lanes
- Expanded at grade intersections at all designated major access points
- Continuous multi-modal path
- Right-of-way reservation for the ultimate project including future interchanges
- Project level environmental mitigation (as necessary)
- Utility relocation (as required)
- Selected non-essential features (based on funding availability)

Completion of the first phase of the project should provide capacity for between five to fifteen years depending on the location and growth rate of the adjacent area.
Phase two of the overall program will finish the project by proving the remaining features and additional capacity to allow for full build-out of the land uses analyzed in the programmatic environmental document. While not all of these improvements will be required at the same time, analysis indicates that they can be grouped for delivery based on geographic and/or chronological need into several large contracts. It is expected that the entire program can be divided into five to seven contracts over a 10 to 20 year time frame. Exhibit 4-3 in the “Project Schedule” section illustrates an example of what an overall program delivery might look like.

The anticipated capital cost of Phase 1 will likely require sub-phases of work within the overall Phase 1 program to allow the necessary revenues to be achieved. While additional detail on this aspect of the Plan of Finance is covered under Chapter 4, Project Financing and Revenues, the plan also provides a look into some of the distinctive features and needs of each of the project segments in a comparative matrix shown in Exhibit 4-2.

**Summary of Rankings for Segments**

In order to better understand and inform the relative sequencing of the project segments for construction, a number of critical elements in each of the sub-segments were preliminarily studied. The seven elements analyzed were based on existing and future travel management needs as well as technical, environmental, and fiscal factors relative to each other.

<table>
<thead>
<tr>
<th>Element</th>
<th>Segment A</th>
<th>Segment B</th>
<th>Segment C</th>
<th>Segment D</th>
<th>Segment E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>SR 99 to Bond</td>
<td>Bond to Calvine</td>
<td>D1</td>
</tr>
<tr>
<td>I-5 to Bruceville</td>
<td>A1</td>
<td>A2</td>
<td>SR 99 to Bond</td>
<td>Bond to Calvine</td>
<td>D1</td>
</tr>
<tr>
<td>Bruceville to SR 99</td>
<td>I-5 to</td>
<td>Bruceville to SR 99</td>
<td>SR 99 to Bond</td>
<td>Bond to Calvine</td>
<td>D1</td>
</tr>
<tr>
<td></td>
<td>Bruceville to SR 99</td>
<td>SR 99 to Bond</td>
<td>Bond to Calvine</td>
<td>D1</td>
<td>D2</td>
</tr>
<tr>
<td></td>
<td>I-5 to</td>
<td>Bruceville to SR 99</td>
<td>SR 99 to Bond</td>
<td>Bond to Calvine</td>
<td>D1</td>
</tr>
<tr>
<td>Existing Traffic</td>
<td>N/A</td>
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<tr>
<td>Future Traffic</td>
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<tr>
<td>Environmental / Permitting</td>
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<tr>
<td>Construction Costs</td>
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<tr>
<td>Safety/Accident Considerations</td>
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<tr>
<td>Fair Share Contributions</td>
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<tr>
<td>Ease of Construction</td>
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</tbody>
</table>

**Exhibit 4-2: Comparative Matrix for Ranking Segments**

Legend: 
- **High**
- **Medium**
- **Low**
- **Very Low**
Full descriptions of the elements that make up the matrix are shown in Appendix B.

As the matrix indicates, there are several sub-segments of the entire project that may be easier to deliver than others, depending on what particular element is given priority. Safety and level of service considerations would likely take precedence over others unless there are interim measures/improvements that could be applied to remedy a specific issue without committing to the full delivery of that sub-segment. Environmental considerations and ease of construction would also provide additional information regarding both anticipated initiation and duration of construction. The remaining elements regarding construction costs and available fair share contributions will provide a relative perspective on the fiscal deliverability of a sub-section.

It should be noted that the relative order of construction that could result from the application of the matrix may be more suggestive than required since allowing the private partner in a design-build contract some interpretive flexibility could result in substantial capital cost reductions depending on the perspective of a specific design-builder. While a design-build contract could require a precise order of construction it is likely that allowing some flexibility to customize their proposal would likely result in a sequence which would favor the particular abilities, needs, and style of the eventual design-builder.

Given this is the initial release of the Connector Plan of Finance, details and recommendations beyond the basic two-phase delivery approach will not be presented at this time but is being presented for future consideration and use.

**Project Schedule**

Exhibit 4-3, the summary schedule for the Connector Project, illustrates the project’s tasks by overarching project activities as well as by contract for both Phase 1 and Phase 2 projects. This schedule depicts Phase 1 improvements beginning in 2018 with an anticipated completion date by the end of 2023, allowing the backbone of the project to be constructed to provide the needed capacity with an acceptable Level of Service. Once phase 1 is completed, the phase 2 contracts will be completed as funding becomes available (see Chapter 6) and the improvements are warranted based on capacity and development of the surrounding area. This approach will allow the needed flexibility to prioritize the phase 2 improvements as they are needed along the corridor.

Preliminary activities (design, environmental clearance, utility relocation, right-of-way acquisition) are somewhat dependent on the delivery method (i.e. design-
build, design-build finance, Pre-Development Agreement). Since design-build is anticipated to be the delivery method due to cost savings and schedule acceleration, the schedule below is exemplary of the design-build procurement allowing final design to be somewhat concurrent with construction. With the many options available for the design-build procurement, as discussed in Appendix A, there is some schedule flexibility on when the preliminary activities can occur, although it is preferred to complete many of these activities (such as environmental, utility relocation, and right of way acquisition) as early as possible to minimize risk to both the JPA and the contractor.

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<tbody>
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<td>Phase 1 Project</td>
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<td>Environmental</td>
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<tr>
<td>Right of Way Acquisition</td>
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<td>Utility Relocation</td>
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<td>Advertise and Award Construction</td>
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<tr>
<td>Utility Relocation</td>
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<td>Permitting</td>
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<tr>
<td>Construction</td>
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</tr>
</tbody>
</table>

Exhibit - 4-3 - Sample Contract Schedules (See Appendix B)
State Legislative Requirements

Under California state law, there is currently authorization for the use of design/build transportation project delivery on five projects on city or county roads, and ten projects on the state highway system. The projects must be applied for through the California Transportation Commission (CTC) for approval based on a very basic set of information considering project purpose, description, funding and reasoning for using a design/build approach for this particular project.

There are two issues for the JPA that need to be addressed in order to comply with this authorizing legislation. The first is that the JPA is only authorized under current law to pursue a design/build as a P3 in any case, with the consent of a transportation planning agency or a county transportation commission for the jurisdiction in which the transportation project will be developed. In the case of the Connector Project, that entity is SACOG. The second issue is that the current authority requires the project in question to have been approved by the CTC no later than December 31, 2016. This deadline could potentially be an issue, depending on availability of funding to the Connector Road Project and the structure of the design-build arrangement. In any event, it is likely that the introduction of state legislation clarifying the JPA’s authority to use design/build for the Connector Road Project and with more flexibility regarding the timing, could be pursued in 2013 or 2014. Such legislation should not be controversial or difficult to pass and signed by the Governor into law.

<table>
<thead>
<tr>
<th>Contract</th>
<th>Segment(s)</th>
<th>Notice to Proceed</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>Phase 1 Project (Base Project) in 3 Contracts</td>
<td>Jan-18</td>
<td>Dec-19</td>
</tr>
<tr>
<td>2</td>
<td>Phase 2 Contract 4: Interchanges and mainline widening</td>
<td>Jan-27</td>
<td>Dec-28</td>
</tr>
<tr>
<td>3</td>
<td>Phase 2 Contract 5: Interchanges and mainline widening</td>
<td>Jan-32</td>
<td>Dec-33</td>
</tr>
<tr>
<td>4</td>
<td>Phase 2 Contract 6: Interchanges and mainline widening</td>
<td>Jan-38</td>
<td>Dec-39</td>
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</tbody>
</table>

Exhibit 4-4: Contract Milestones
After all necessary project approvals are obtained, the first major construction activity is anticipated to commence in January, 2018. Exhibit 4-4 summarizes when each contract is proposed to be advertised for purposes of Federal and State funding concurrence, when the Notice to Proceed (NTP) will be given, and the estimated completion date. These scheduled milestones, as well as the other scheduled activities noted in Exhibit 4-3, serve as the basis for the year of expenditure cost estimate calculations (as discussed in Chapter 2) as well as the expenditure forecast (discussed further below). This schedule is based primarily on either of two significant assumptions:

- A design-build contract/P3 relationship will be developed that will provide some element of short-term private equity capital to supplement available public funds that will allow the entire Phase One Project to be delivered without significant interruption over a period of five years. No tolling will be considered in this scenario.

- A design-build contract will be developed using all existing and potential public funds with the primary goal of constructing the entire length of the corridor as a base facility that will provide the level of service elements identified in the PEIR. This construction is expected over a five to seven year period. No tolling will be considered in this scenario.

With the use of these two assumptions in the approach to a Design-Build/P3 relationship, the JPA can maintain maximum flexibility and leverage to choose the best option at the time of contract execution for one or both phases of the project.

Based on these estimated milestones and start of construction date, the baseline project completion for the Connector Project is no later than December, 2025 but could be as early as December, 2022.

**Actual & Forecasted Annual Expenditures**

**Actual Expenditures**

As noted in the latter portion of Chapter 2 (Exhibit 3-6), the project has expended $8.77M from the start of the project planning in 2007 to the end of September, 2012.

**Forecast Expenditures**

Given the unique aspects of implementing a design-build contract, where engineering and construction tasks occur in parallel and typically start
simultaneously with Notice to Proceed, (NTP) this Financial Plan incorporated design-build expenditure profiles as summarized in the following exhibit.

Prior to the actual start of construction, planning and project development for the Connector must continue beyond the current fiscal year of FY 2012-13, which is the last year in the five-year administrative budget adopted by the JPA Board in February, 2009. Although there are several forms of Design-Build delivery that may be suitable to the JPA, this Plan of Finance represents a more conservative form that integrates the private partner into the delivery process subsequent to Project Environmental, Right-of-Way acquisition, and Utility Relocation. This assumption was made to allow the JPA and member jurisdictions to retain optimal control over sensitive aspects of the project planning. While this model reduces the potential overall cost benefits of the Design-Build concept, it still allows enough flexibility within the contract to significantly reduce cost and delivery scheduling. Accordingly the proposed planning and project development budget for the JPA leading to the initial delivery phase of the project is shown in Exhibit 4-3.

Right-of-way expenditure forecasts were developed based on estimated right of way acquisition schedules developed by the JPA. The schedule of the expenditures for the remaining cost categories related to JPA Project Planning, Preliminary Engineering, and Environmental Stewardship were estimated on a straight-line basis by using the start and end dates identified in the project schedule.

The resulting cash flow summary needed to achieve this schedule is provided in Appendix D.

**Total Expenditure Forecast**

Exhibit 4-5 provides a summary of the combined actual and forecast expenditures for the Capital SouthEast Connector through project completion (as detailed in Appendix D).
Exhibit 4-5: Annual Actual and Projected Expenditures by State Fiscal Year (PV)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Expended to Date</th>
<th>Projected Expenditures</th>
<th>Total Expenditures Forecast</th>
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</table>

Exhibit 4-6 provides a graphical summary of the annual actual and forecasted expenditures for the Connector Project as presented above.
Impact of Other Future Cost Changes

The Connector JPA acknowledges the potential for significant changes in expenditure that could occur as the project plan is further developed. These changes are expected and there is flexibility built into this stage of the plan to accommodate the necessary adjustments that may be required. Some of the more significant changes may be the result of the following:

- The actual delivery method chosen within the suite of Design-Build (DB) options. The particular DB model chosen for this Plan of Finance is conservative with regard to applied discounts in engineering, unit pricing, and overall cost escalation.
- The need to fund interim site specific improvements along the corridor in advance of segment construction.
- The phasing of the project based on available revenues. A more compressed delivery window would reduce costs further.
- Changes in the government permitting process that could delay environmental clearance and contract initiation.
- Significant changes in the California economy.
- Unforeseen site condition changes.
- Adjustments in overall project scope.
- Litigation.
**Comparative Value of Proposed Project vs. “Do Nothing” or General Plan Build-out**

It is important to note that completing the project from a regional perspective, with larger contracts, has significant financial advantages over the individual jurisdictions constructing individual, smaller projects along the corridor. These financial advantages include delivering a more cost-effective and higher performing project, and reducing the overall cost to the public, individual jurisdictions, and potential private sector partners along the corridor.

This section focuses on two comparative values: 1) a comparison of the proposed project vs. the “Do Nothing Alternative” or General Plan Build-out, and 2) a comparison of the project's scope and costs that are currently in the Metropolitan Transportation Improvement Program (MTIP) and Metropolitan Transpiration Program.

**Comparative Cost and Schedule Value - Current and Year of Expenditure $**

The capital construction costs of the entire project (i.e., the upfront capital required to deliver the project) were analyzed for both the Do Nothing Alternative and the Proposed Project on an accelerated Design-Build Project. Those costs are represented in Exhibit 4-7 as two separate capital cost estimates in both 2011 and YOE (year of expenditure) dollars.

![Exhibit 4-7: Cost of Do Nothing vs. Proposed Project](image)

As proposed in this Plan of Finance, Phase One (the base infrastructure for the entire corridor length) of the accelerated Design-Build Project is anticipated to be completed by December 2022 to December 2025.
Comparatively, Exhibit 4-8 outlines the likely delivery schedule and funding gap for projects proposed by the member jurisdictions to complete their current general plan build-outs of the Connector alignment for the “Do Nothing” delivery option.

While the total present value of these funds covers the majority of the total 2012 construction cost estimate of $550M, the funding gap for the project segments over the 23-year delivery window widens considerably toward the end of that construction period and does not provide the adequate funds necessary to complete the entire project. This shortfall is attributable to the inefficiency of the delivery process as well as the expected escalation of project related materials and labor disproportionate to the increase value of revenue over a corresponding time period. While this figure does not represent the exact number or timing of those projects, it does represent the approximate total time required to build out the corridor as represented in the SACOG MTP. Other likely consequences of this approach to project delivery are:

- Significantly reduced Levels of Service (LOS) along project segments
Significantly reduced opportunity to leverage Federal or State funds for projects of Regional Importance
- Loss of potential economic opportunity available to a completed project corridor
- Nearly constant construction delays and quality of life impacts along the corridor for an extended period
- Lost opportunity for accelerated conservation and environmental preservation
- Increased potential for project creep and regulatory interference
- Piecemeal project aesthetics and functionality

**Comparative Economic Value**

In addition to the cost savings inherent to accelerating the construction schedule, there are also significant economic benefits to completing the project earlier than the general plan build-out. The economic benefits of accelerating the construction of the corridor should be noted and includes much earlier realized revenues spread across all of the jurisdictions, significant Vehicle Miles Traveled (VMT) and time savings for the public through a more efficient corridor, etc…

**Comparative Value of Project as derived from the MTIP**

Exhibit 4-9 summarizes the primary funding and scope differences between the Connector Project and the projects that are currently funded in the MTP and the MTIP.

In assessing the Comparative Values, the Connector Project, compared to the projects listed in the MTP/MTIP is more of a “state of the art” corridor that incorporates the community needs using a balanced effort to allow each segment to demonstrate its uniqueness while providing a continuous corridor throughout the project area.

As can be seen from the scope and cost comparisons, the Connector Project includes significant increased value over and above the individual project implementation:

- Enhanced vehicular, pedestrian, bicyclists, and transit corridor mobility.
  - Includes 10 interchanges and much fewer signalized intersections for a significantly increased Level of Service throughout the corridor
  - Sidewalks along the corridor
  - Dedicated funding for Class 1 and Multi-use paths
- Increased structural sections resulting in additional longevity of the facility and less future maintenance costs
- Dedicate funds to Sustainability elements, including constructing an “aesthetic theme” for the corridor
- Dedicated funds to landscaping, irrigational and lighting
- Environmental mitigation costs, included in the Phase 1 improvements
- Additional frontage road improvements

<table>
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<th>Segment</th>
<th>Cost Comparison</th>
<th>Scope Comparison</th>
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Exhibit 4-9: Project and MTIP Comparison

In conclusion, the cost estimates shown in the MTIP/MTIP for the connector related projects are too low as they do not represent the appropriate scope needed for construction of the Connector Project. In addition, very little revenue has been identified for construction of the majority of these projects.
Chapter 5 – PROJECT FINANCING AND REVENUES

Overall Financing Plan

The variety of funding sources to be used is intended to provide a greater degree of flexibility and stability than would result from a single-sourced funding plan. These funds are described individually below as well as shown in Exhibit 5-1 and Appendix D.

Committed Funding Sources - $118.0 Million

Connector JPA Measure A funds - $118.0 M - These local sales tax funds were allocated specifically to the project on the 2004 ballot measure. Funds are currently indicated for distribution across the entire 30 years of the tax and accompanying developer fee, with the majority of the funds being deferred to the last 5 years of the Measure’s expenditure plan but are largely consistent with the 2012 MTP/SCS.

Anticipated Revenue Sources - $360.0M

Federal and State Regional Funds – $136.9 – These are Federal and State funds that are derived from annual apportionments to SACOG for funding of transportation projects. They include federal Regional Surface Transportation Program (RSTP) funds, federal Congestion Management Air Quality (CMAQ) funds, and other federal discretionary funds. State funds include STIP funding. Both sets of funds are modestly escalated based on historical rates but are largely consistent with projection in 2012 MTP.

Member Jurisdiction Development Impact Fees – $197.0M - These are funds collected from new development on a per unit basis by the member jurisdictions and applied to projects identified in their respective Capital Improvement Plans. Only funds that are currently identified as located on the Connector alignment have been included under this revenue category. Revenues from these fees will depend on development activity because the fee revenue is generated at the issuance of building permits. An average annual level of growth has been assumed throughout the planning period. Growth in the early years of the revenue plan is likely to be less than average. Over time, fee revenues will be variable. The JPA will need to reach an agreement with each jurisdiction regarding the amount and timing of these development fees. There are funds that member jurisdictions have included in their Capital Improvements Programs to fund road projects along the Connector alignment in addition to development impact fees. Jurisdictions are not permitted to include the cost to cure existing deficiencies in their road system in their
calculation of development impacts, so these funds are provided through other sources.

Other Contributions - $23.8M - These are funds that are anticipated to be collected by the member jurisdictions as a result of mitigation fees for either development projects or other projects such as the Stonebridge and Teichert Quarry projects. These funds are collected specifically to mitigate direct impacts along the Connector alignment above and beyond what is collected as part of a development impact fees. All of these mitigation programs include some modest inflationary cost increases to account for unit cost and other increases.

Member Jurisdiction Direct Contributions - $2.3M - These are the funds expected to be made available directly from the member jurisdictions as to match funding from other areas. These funds could also include possible in-kind contributions right-of-way, utility relocation, and staffing.

Potential Revenue Sources - $80.0M

While it is not possible to anticipate the future of transportation funding over the life of the Plan of Finance, historical trending since the year 2000 have shown that revenue supplements have become available from a variety of sources, such as the recent stimulus funding. For this Plan of Finance, it is not possible to quantify the exact amount that may be available to the project, but it is also not practical to assume the status quo and thus limit our capital sources to Committed and Anticipated sources. Using a conservative assumption for funding from Potential sources, the plan estimates additional revenues for capital construction through the below list of sources:

Supplemental Local Sales Tax - This “Measure B” ½ cent sales tax is a 20-year tax that is tentatively planned for approval by Sacramento County voters in 2014 and would be available for use in 2019. It is represented as a lump sum allocation in the plan assuming that bonds were issued and repaid by the sales tax in future years.

State Vehicle License Fee (VLF) - This is the reinstatement of the original VLF fees applied through annual vehicle registrations. The funds would be distributed to the jurisdictions by the Metropolitan Planning Organization (MPO) and redistributed to the project on an annual basis.

Federal Stimulus Funds - This represents another round of federal stimulus to assist in economic recovery and is considered a conservative estimate with regard to the funds available to the region from the previous stimulus.
Federal Transportation Grants - The current Federal Surface Transportation bill is a two-year bill that will expire in 2014. While it is unknown whether a completely new bill and accompanying revenue source will be developed, it is likely that additional revenues will be realized based on infrastructure needs and the association to the national economy. These revenues are not required to be realized early in the Plan of Finance but are assumed to be bondable such as a GARVEE bond would be.

User Fees – While not included as a Committed or Anticipated Revenue source, tolling and/or some form of mileage-based revenue source is very likely to emerge at the federal or state level as an alternative/substitute for the current gasoline tax.

Other Misc. Revenues - Supplementing revenue for a project of this size could materialize in a variety of forms and origins. Over the last decade both state and federal government have initiated transportation revenue funding from a variety of bonds, fees, surcharges, and levies. It is likely that over the next ten-year period, one or several of these funding sources can be applied to the Plan of Finance.
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Chapter 6 – PROJECT CASH FLOW

Revenue Timing by Source

Connector JPA Measure A funds - $118.0M

The FY 2013 Measure A Capital Allocation Plan released on October 1, 2012 by the Sacramento Transportation Authority (STA), indicates $118M available for the project over the 30 year life of the measure. Of this total, approximately $7.8M has been expended to date. The remaining $110M are available primarily towards the latter years of the plan, post FY 2030. One of the assumptions of this plan is that a majority of funds in an available year can be used as backup security against developer fee payments to advance a public or private loan to initiate construction much earlier than would otherwise be possible. By asking the STA to commit a portion of these allocated funds as collateral in the event that developer fees cannot exclusively cover the construction loan payments, the project can proceed without waiting for sufficient cash accruals to be realized. The remaining Measure A funds will be applied to the project on schedule to supplement future construction and or finance costs over the Phase 2 portion of the project build out. Measure A funds are based on present estimates (Oct 2012) provided by the Sacramento Transportation Authority.

Federal and State Regional Funds - $136.9M – Federal and State Funds typically equal 1/3 (33%) of the project costs and are available at the time the project expenditures occur. The finance plan assumes an annual “cap” of $7.5 million in any given year in an effort to limit the amount of state/federal discretionary dollars that would be allocated to the connector. These funds have been applied in a range of between 0 and 66% across the duration of the plan with the largest percentage concentrated in the period around the Phase 1 delivery.

Member Jurisdiction Developer Fees - $197.0M - Development Impact Fee revenues are assumed to be received at an average annual rate through the life of the project based on the identified level of development fees for Connector related projects in each member jurisdiction’s development impact fee program. Development fees are highly variable year by year and depend on the pace of development. Annual revenues from these fees are applied to the model at levels representative of the development projections used in the Programmatic EIR for the Connector Project.

Fair Share Contributions - $23.8 - Quarry Mitigation Fees for Connector related projects are assumed to be available on an average annual basis until the required amount of the mitigation fees are paid. However, these fees are actually tied to
funding specific Connector related projects. The flow of Quarry Mitigation Fee revenues are also highly correlated to the level of development activity in any year. Revenues from these projects are applied equally over a 15 year period beginning at the initiation of construction of the Phase 1 program.

**Member Jurisdiction Direct Contributions - $2.3M** - Local Funds provided by member jurisdictions, exclusive of developer fees, to match project expenditures have not been estimated. Local jurisdictions may provide funding during the construction of the Connector based on local priorities or mitigation requirements. These revenues are not represented in the model since they will be used to carry administrative and operation costs of the JPA which is not shown as a part of the construction costs. Some of this revenue could be applied in the model if required.

**Potential Revenue Sources - $80.0M** - Other potential revenues cannot be predicted with accuracy but are assumed to be available during various heavy construction periods. Revenue from this individual or combination of future funding sources has not been introduced into the model until 2019 but may be available earlier.

### Total Project Revenue Timing

Exhibit 6-1 represents an overall summary of the full cash flow model projection for the project.
Table 1 in Appendix D provides a detailed summary of the various revenue sources in the proposed phased delivery plan. The Cash Flow projections indicate that there should be adequate revenues to fund the construction of the Connector through build-out given the timing of the construction program and the assumptions about the various revenue sources.

Given these assumptions, it also indicates a revenue surplus at the end of the planned construction schedule. Overall, the revenue assumptions appear to be reasonable. In constant 2012 dollars, there is a potential surplus of identified revenues if all the sources are actually realized. However, it is likely that not all of the revenues will be received at the level indicated. Even with an inflation factor for revenues at 3.0% and a factor 4.7% for expenditure, there is a surplus of revenues over project expenditures if all revenue are realized.

Although the overall revenue assumptions appear reasonable, the timing of the receipt of the revenues matching the timing of construction is less certain. As previously mentioned in Chapter 4, the JPA has two key strategies for managing cash flow issues:

1. Modification to the Expenditure Plan - Should anticipated revenues be delayed, especially due to a sluggish economy and low levels of development fees, then the construction program can be reprogrammed.

2. Bridge Loans - If there are short-term cash flow shortages with good prospects for repayment, the JPA could take out construction loans and repay the loans with the receipt of the expected revenues.

**Bridge Loan Concepts**

In order to resolve short cash flow shortages during the life of the Plan of Finance, the Connector Project may need to borrow funds and repay them with the permanent revenues sources. There are at least 3 key possibilities for these loans.

**Sacramento Transportation Authority Measure A Funds** - Most of the Measure A Funds for the Connector Project are received in the last years of the construction program. In order to facilitate construction of the Connector, STA could provide a short-term loan backed by a small set-a-side of the annual Measure A sales tax. The loan would be paid off as quickly as possible, with interest, through the receipt of the other programmed revenues sources, particularly the development impact fees. The Measure A sales taxes would only be necessary to pay debt service in years where the development fee revenues fell below projects. If the STA approved this
approach, there would be a slight delay in the construction of other Measure A projects.

**Member Jurisdictions** - Member jurisdictions may also provide funding advances from their development impact fee programs to help Connector Project’s cash flow. The funding advances would only be available to the extent that the member jurisdiction has prioritized the construction of Connector related improvements. Jurisdictions would be reimbursed for these funding advances and interest from the programmed funding sources.

**California Infrastructure and Economic Development Bank** - The California IBANK provides low interest 20 years to facilitate construction of major infrastructure projects that contribute to economic development. An IBANK loan would probably require a secure source of repayment to stand behind the loan, such as a pledge from the Measure A sales tax program. However, the primary source of repayment could be development impact fees or receipt of State or Federal funds.

**Development Project Advances** - A number of development projects along the Connector Alignment may be another source funding short-term financing. Developers may also be willing to provide advances of their development fees to assist the Connector construction program and receive fee credits against future fees. Some development projects could also provide advance funding to satisfy specific environment mitigation requirements beyond their fair share of funding identified through their development impact fees.

As previously mentioned in this chapter and as shown in the cash flow model represented in Table 1 of Appendix D, adequate surplus revenue exists at the end of the program to allow for some borrowing during peak construction activity periods of Phase 1. Additional analysis work will be performed in support of this Plan of Finance to further define the specifics of this loan.
Chapter 7 - OTHER FACTORS

Special Cost Containment Strategies

Throughout the planning phase of the Connector Project and development of this Plan of Finance, the project sponsors have employed value engineering studies to review the cost effectiveness of the design alternatives. During the discussion of tolling/user fees earlier in the development of the plan, life-cycle and maintenance costs were included in the analysis to maximize the value of the project within the identified project budget. That aspect of future project costs are not included in the non-tolled analysis but will be introduced for additional discussion once the capital cost aspects of the plan are completed. In addition, JPA is committed to ensure the proper use of capital funds through a comprehensive and aggressive financial and construction contract compliance audit program to be developed.

Over the course of the project, cost estimates will be updated to reflect current preliminary engineering including construction, right-of-way, utility relocations, mitigation, appropriate contingencies, and other factors. Likewise, the project financial plan, including cash flow analysis, will be updated collaboratively, based upon input from SACOG, the member jurisdictions and other relevant sources. Project and contract scheduling will be used to monitor progress and keep the project on track once a specific delivery method is selected and executed.

Major Responsibilities of All Parties Involved

All aspects of this report assume the Connector construction will be managed by the JPA, acting as the member jurisdiction’s agent on the project. The JPA is responsible for assuring the necessary coordination among the firms contracted to complete design and construction work for the five sections of the project and provide a project wide perspective.

The Plan of Finance was developed to demonstrate what is considered the most viable approach to the timely completion of the entire Connector Project as defined in the PEIR. The analysis relies on cost estimates, timing, and processes that must be executed by a single project representative in order to make those assumptions valid. It is recognized that additional coordination and policy development between the JPA, SACOG, the member jurisdictions, and others will be required to execute this plan. It is also recognized that involvement from the state legislature, Caltrans, and the California Transportation Commission may be required. This plan is a necessary first step to initiate and advance these discussions. Shortly, after the adoption of this plan by the JPA Board, the Authority will begin
discussions on a Memorandum of Understanding (MOU) with the member jurisdictions and possibly others, which establishes the intent and responsibilities of the parties involved.

In conjunction with General Plan and other regulatory approvals, the Authority and the member jurisdictions will expand on the existing MOU and enter into a subsequent financing and operating agreement, addressing in more detail project funding, ownership, operation and maintenance responsibilities, including the JPA’s responsibilities for planning, development, design, right-of-way acquisition, and construction of the project. This document will delineate contract approval processes, land transfer issues, inter-jurisdictional policies and relationships, revenue sharing, and accounting audit procedures.

**Schedule for Future Annual Updates**

Adjustments to the cost estimate will be computed in a manner consistent with the methodology established in this Initial Plan of Finance. For future updates, the Connector Project will maintain its fiscal year (July 1 – June 30) as the project’s fiscal year. Using the JPA and member jurisdiction’s fiscal year as the benchmark for future annual updates is particularly appropriate given that the majority of the funding for the project is coming from local funds, state agencies, or agents of the State. This timing will facilitate the development of compatible subsequent six-year capital program updates.

Therefore, annual updates to the Plan of Finance will be submitted to the necessary parties within 60 days following the end of Connector Authority’s fiscal year, which will be September 1st of each year.
APPENDIX A - DESIGN BUILD PROCUREMENT

Summary of the Various Contract Options

In order to deliver the project as efficiently as possible, several delivery options have been considered for the SouthEast Connector Project. These delivery options include both traditional design-build and Public-Private Partnerships (P3) as described below:

Delivery Options

- **Design-Bid-Build (DBB):** the public authority completes separate procurements for the design and construction of the project. Long term operations and maintenance remain the responsibility of the public authority
- **Design-Build (DB):** a private contractor designs and builds the project, while the public authority operates, maintains, and finances
- **Design-Build-Finance (DBF):** a private contractor designs, builds and finances the project while the public authority operates and maintains
- **Design-Build-Finance-Operate-Maintain (DBFOM):** a private contractor designs, builds, finances, operates and maintains the project
- **Concession:** a private contractor designs, builds, finances, operates and maintains the project and also collects the revenue from users of the project
- **Availability Payments:** A means of compensating a private concessionaire for its responsibility to design, construct, operate, and/or maintain a tolled or non-tolled roadway for a set period of time. For a tolled facility the project sponsor retains the underlying revenue risk associated with the toll facility rather than the private partner

Public-Private Partnership (P3)

A P3 is a contractual arrangement between a public agency and a private sector entity structured to meet the need of the public by:

- Optimizing the skills and assets of each sector (public and private) in delivering a service or facility for the use of the general public; and
- Allocating the risks in the delivery of the service and/or facility to the parties best able to manage them.
Note that in all P3 business models, the full ownership reverts back to the public at the end of the term. Control of the asset is maintained by the public through the partnering approach and project agreement.

These delivery methods are summarized in Figure 1 along with an assessment of the risk transfer from the public sector to the private sector and visa versa.

<table>
<thead>
<tr>
<th>Description</th>
<th>Design</th>
<th>Construction</th>
<th>Operations/maintenance</th>
<th>Finance</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design-bid-build</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Design-build</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Design-build-finance</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Design-build-finance (operate/maintain)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Design-build-finance (toll concession)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Key: □ Risk retained by Public Sector
     □ Risk transferred to Private Sector

**Figure 1 - Risk Transfer variation by delivery option**

**Preferred Delivery Option**

As presented in the October 2012 Board of Directors Meeting, while several of the above described delivery methods could still be utilized, based on cost and delivery efficiencies design-build procurement will be pursued as the primary delivery method.

**Figure 2 - Sequence of Project Delivery Activities by Contract Approach**

3 Source: Dr. Keith Molenaar, University of Colorado at Boulder
As demonstrated in figure 2, the Design-Build delivery method offers significant time savings over the traditional Design-Bid-Build by consolidating various upfront activities and overlapping a portion of the design process with the actual construction of the project. In the case of the Connector Project, this time saving could be as much as 12 to 18 months per contract.

## Design-Build Contracting Issues: Risk Assessment

Within the general classification of design-build, there are variations on that delivery method that offer further flexibility with regard to risk transfer. For the most part, risk transfer is synonymous with exposure to contract areas of work that are out of control of the design-builder. More exposure relates to greater risk and less opportunity for cost savings.

Below is a brief summary of some of the major issues relating to the use of design-build contracting that will directly impact the risk and associated cost for both the contractor and owner:

- **Appropriate Level of Preliminary Design:**
  While the majority of design-build contracts complete the design to a 30% level, survey results indicate that the level of contracting agency satisfaction reported for design-build projects was higher for lower levels of preliminary design completed before design-build contract award. This can be directly attributed to the design-builder's ability to influence the project design earlier in the process to promote its constructability and cost effectiveness.

- **Project Phasing related to Environmental Clearance, Utility Relocations, and Right of Way Acquisition:**
  In areas of delivery process that are legislatively controlled such as right-of-way control and utility rights, completing these processes outside of the contract provides security to the design-builder that the construction process can proceed expeditiously once it is started. This can result in lower overall exposure to delay and reduce cost. The same is true for the environmental process which is heavily regulated and subject to delays associated with public interaction and lawsuits. Conversely, should any of these processes be viewed more procedurally as part of a contract, the incentive to take advantage of additional areas of savings could reduce overall contract costs further.

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4 Design-Build Effectiveness Study - As Required by TEA-21 Section 1307(f) Final Report, January 2006
• **Pre Development Agreements**
  By asking the design-builder to advance the majority of up-front costs associated with the design process, the owner realizes a significant cost savings and allows the design-builder to participate more exclusively in the details of the preliminary design and construction sequencing process. The risk to the owner is the requirement to compensate the design-builder for their participation in the process should the project not advance to construction.
APPENDIX B - MATRIX DETAIL

Plan of Finance Matrix

Criteria Descriptions

In order to proceed decisively with a phasing plan for the Connector Plan of Finance, each segment was evaluated on a number of criteria that were considered significant factors that could influence the relative order of delivery. The selected factors are as follows:

A) **Existing Traffic** - Are there any current unacceptable delays on a segment that could be reduced or eliminated through the construction of planned improvements. Are these delays related to an emerging pattern of future growth or created by demand from cross streets and/or off corridor influences?

B) **Future Traffic** - Which segments are more susceptible to unacceptable delays during the anticipated delivery of the initial phases of the project starting around 2018? What growth areas around the project are more likely to accelerate quicker than others?

C) **Environmental Considerations** - Are there any segments which have less environmental impacts or complications that could require additional permits and/or complicating design considerations? Are there segments that are significantly less complex from this perspective? NOTE: Any additional costs related to this criteria are reflected exclusively though the Construction Cost factor noted below.

D) **Construction Costs** - Are the total capital costs of any of the segments significantly less on a unit cost basis or more expensive based on unique features, i.e. bridges, overcrossings, mitigation requirements, than the others to improve deliverability?

E) **Safety/Accident Considerations** - Is there an outstanding safety improvement consideration outstanding on any of the segments that can be improved by the planned improvements that cannot be remedied by interim improvements at a specific location along the segment?
F) **Fair Share Contributions** - Are there significant fair share revenues available from land entitlements, specific plans, or other accrued public funds that are dedicated specifically to a segment? Are those funds available in a timeframe that gives a segment a better opportunity to be completed in a specified time frame?

G) **Ease of Construction** - Do any of the segments require less traffic control, phasing, permitting, or geographic constraints that would extend the overall duration of construction? Will any of the phases be more “shovel ready” than others to take advantage of any grants or discretionary funding?

The following is a discussion of the methodology used to rank each of the segments based on the criteria outlined above.

**Existing Traffic**

A primary consideration for measuring the existing operational effectiveness through a segment is to compare the volume/capacity ratios, which is a ratio of the existing daily traffic volume divided by the traffic capacity of the segment based on a number of factors such as number of lanes, geometry, grades and traffic signals or stop signs through a segment.

The following table lists the average volume to capacity ratios through each segment:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th>Volume to Capacity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>NA</td>
</tr>
<tr>
<td>A2</td>
<td>Bruceville Road to SR 99</td>
<td>0.15</td>
</tr>
<tr>
<td>B</td>
<td>SR 99 to Bond Road</td>
<td>0.52</td>
</tr>
<tr>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>0.77</td>
</tr>
<tr>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>0.59</td>
</tr>
<tr>
<td>D2</td>
<td>Jackson Road to White Rock Road</td>
<td>0.46</td>
</tr>
<tr>
<td>D3</td>
<td>White Rock Road to El Dorado County Line</td>
<td>0.47</td>
</tr>
<tr>
<td>E1</td>
<td>El Dorado County Line to Latrobe Road</td>
<td>0.36</td>
</tr>
<tr>
<td>E2</td>
<td>Latrobe Road to US 50</td>
<td>0.61</td>
</tr>
</tbody>
</table>
The evaluation scale for Existing Traffic is as follows:

<table>
<thead>
<tr>
<th>Volume to Capacity Ratio</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.61+</td>
<td>● – High Benefit from Project</td>
</tr>
<tr>
<td>0.41 – 0.60</td>
<td>▫</td>
</tr>
<tr>
<td>0.31 – 0.40</td>
<td>○</td>
</tr>
<tr>
<td>0.21 – 0.30</td>
<td>△</td>
</tr>
<tr>
<td>0 – 0.20</td>
<td>● – Low Benefit from Project</td>
</tr>
</tbody>
</table>

**Future Traffic**

Future traffic was based on the 2035 traffic projections analyzed in the Connector Programmatic EIR. The volume to capacity ratio was also used to evaluate which connector segments would have the most traffic operational benefit from the project in comparison to build-out of the route based on the 2035 Metropolitan Transportation Plan (MTP).

The following table lists the average traffic volume to capacity ratios through each segment based on the traffic projections in the 2035 MTP:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th>Volume to Capacity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>0.62</td>
</tr>
<tr>
<td>A2</td>
<td>Bruceville Road to SR 99</td>
<td>0.55</td>
</tr>
<tr>
<td>B</td>
<td>SR 99 to Bond Road</td>
<td>0.65</td>
</tr>
<tr>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>0.84</td>
</tr>
<tr>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>0.79</td>
</tr>
<tr>
<td>D2</td>
<td>Jackson Road to White Rock Road</td>
<td>1.06</td>
</tr>
<tr>
<td>D3</td>
<td>White Rock Road to El Dorado County Line</td>
<td>0.77</td>
</tr>
<tr>
<td>E1</td>
<td>El Dorado County Line to Latrobe Road</td>
<td>0.60</td>
</tr>
<tr>
<td>E2</td>
<td>Latrobe Road to US 50</td>
<td>0.41</td>
</tr>
</tbody>
</table>

The evaluation scale for Future Traffic is as follows:

<table>
<thead>
<tr>
<th>Volume to Capacity Ratio</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.91+</td>
<td>● – High Benefit from Project</td>
</tr>
<tr>
<td>0.81 – 0.90</td>
<td>▫</td>
</tr>
<tr>
<td>0.71 – 0.80</td>
<td>○</td>
</tr>
<tr>
<td>0.61 – 0.70</td>
<td>△</td>
</tr>
<tr>
<td>0 – 0.60</td>
<td>● – Low Benefit from Project</td>
</tr>
</tbody>
</table>
**Construction Costs**

Construction costs for each segment were estimated independently and then compared to either the existing estimates in the 2035 MTP or each jurisdiction’s estimates. Estimates were then adjusted to split each segment into two phases. The first phase of the project would construct all elements of the Connector except for the interchanges. Interchanges would be built in the second phase when the projected traffic volumes would necessitate the operational improvements.

The following table compares the first phase unit cost per lane mile for each segment:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th>Lane Miles</th>
<th>Unit Cost/Lane Mile (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>12.2</td>
<td>$3.85</td>
</tr>
<tr>
<td>A2</td>
<td>Bruceville Road to SR 99</td>
<td>13.0</td>
<td>$2.18</td>
</tr>
<tr>
<td>B</td>
<td>SR 99 to Bond Road</td>
<td>18.2</td>
<td>$2.61</td>
</tr>
<tr>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>10.9</td>
<td>$2.39</td>
</tr>
<tr>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>17.9</td>
<td>$2.18</td>
</tr>
<tr>
<td>D2</td>
<td>Jackson Road to White Rock Road</td>
<td>28.9</td>
<td>$1.73</td>
</tr>
<tr>
<td>D3</td>
<td>White Rock Road to El Dorado County Line</td>
<td>25.5</td>
<td>$2.94</td>
</tr>
<tr>
<td>E1</td>
<td>El Dorado County Line to Latrobe Road</td>
<td>4.4</td>
<td>$2.46</td>
</tr>
<tr>
<td>E2</td>
<td>Latrobe Road to US 50</td>
<td>4.4</td>
<td>$2.73</td>
</tr>
</tbody>
</table>

The evaluation scale for Construction Costs is as follows:

<table>
<thead>
<tr>
<th>Unit Cost/Lane Mile (in millions)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>$&gt;2.2</td>
<td>🗓 – High Cost Effectiveness</td>
</tr>
<tr>
<td>$2.21 - $2.40</td>
<td>📅</td>
</tr>
<tr>
<td>$2.41 - $2.60</td>
<td>🕑</td>
</tr>
<tr>
<td>$2.61 - $2.80</td>
<td>⚜️</td>
</tr>
<tr>
<td>$2.81+</td>
<td>🌟 – Low Cost Effectiveness</td>
</tr>
</tbody>
</table>

**Safety/Accident Considerations**

Accident data for the past 5 years that were available was collected and compiled for each segment. For the purpose of this report, it was assumed that the percentage of correctable accidents in each segment is the same and that the project would reduce the number and severity of accidents in each segment proportionately.
The following table lists the total number of accidents in each segment from 2006 to 2011:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th># of Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>NA</td>
</tr>
<tr>
<td>A2</td>
<td>Bruceville Road to SR 99</td>
<td>43</td>
</tr>
<tr>
<td>B</td>
<td>SR 99 to Bond Road</td>
<td>90</td>
</tr>
<tr>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>56</td>
</tr>
<tr>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>54</td>
</tr>
<tr>
<td>D2</td>
<td>Jackson Road to White Rock Road</td>
<td>84</td>
</tr>
<tr>
<td>D3</td>
<td>White Rock Road to El Dorado County Line</td>
<td>140</td>
</tr>
<tr>
<td>E1</td>
<td>El Dorado County Line to Latrobe Road</td>
<td>47</td>
</tr>
<tr>
<td>E2</td>
<td>Latrobe Road to US 50</td>
<td>22</td>
</tr>
</tbody>
</table>

The evaluation scale for Safety/Accidents is as follows:

<table>
<thead>
<tr>
<th>Volume to Capacity Ratio</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>80+</td>
<td>● – High Benefit from Project</td>
</tr>
<tr>
<td>61 - 80</td>
<td>○</td>
</tr>
<tr>
<td>41 - 60</td>
<td>○</td>
</tr>
<tr>
<td>21 - 40</td>
<td>○</td>
</tr>
<tr>
<td>0 – 20</td>
<td>● – Low Benefit from Project</td>
</tr>
</tbody>
</table>

**Fair Share Contributions**

Future fair share contributions/developer fees that have been earmarked for Connector segments were compiled for each jurisdiction. The anticipated fees were then compared to the estimated cost of each Connector segment and ranked in the following table based on the percentage of the dedicated future fees to the estimated cost.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th>Dedicated Fees/Estimated Cost (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I-5 to Bruceville Road</td>
<td>71%</td>
</tr>
<tr>
<td>A2</td>
<td>Bruceville Road to SR 99</td>
<td>0%</td>
</tr>
<tr>
<td>B</td>
<td>SR 99 to Bond Road</td>
<td>46%</td>
</tr>
<tr>
<td>C</td>
<td>Bond Road to Calvine Road</td>
<td>73%</td>
</tr>
<tr>
<td>D1</td>
<td>Calvine Road to Jackson Road</td>
<td>44%</td>
</tr>
<tr>
<td>D2</td>
<td>Jackson Road to White Rock Road</td>
<td>83%</td>
</tr>
<tr>
<td>D3</td>
<td>White Rock Road to El Dorado County Line</td>
<td>0%</td>
</tr>
<tr>
<td>E1</td>
<td>El Dorado County Line to Latrobe Road</td>
<td>146%</td>
</tr>
<tr>
<td>E2</td>
<td>Latrobe Road to US 50</td>
<td>93%</td>
</tr>
</tbody>
</table>
The evaluation scale for Fair Share Contributions is as follows:

<table>
<thead>
<tr>
<th>Unit Cost/Lane Mile (in millions)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>91%+</td>
<td>- High Cost Effectiveness</td>
</tr>
<tr>
<td>71%-90%</td>
<td></td>
</tr>
<tr>
<td>51%-70%</td>
<td></td>
</tr>
<tr>
<td>31%-50%</td>
<td></td>
</tr>
<tr>
<td>0%-30%</td>
<td>- Low Cost Effectiveness</td>
</tr>
</tbody>
</table>

**Ease of Construction**

A number of factors were considered in ranking the segments on Ease of Construction or “shovel readiness”. These factors included evaluating the complexity of the construction staging/traffic handling, right-of-way acquisitions and potential relocations, external coordination with utilities, railroad and Caltrans and environmental permitting factors. These factors were ranked and scored in the table below on a 1 to 3 scale with 1 being relatively easy and 3 indicating there are complexities with that particular item.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Limits</th>
<th>Staging Traffic Handling</th>
<th>Right-of-Way</th>
<th>Utilities Caltrans</th>
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**Notes:**
1) Design-Build Agreement/ Pre Development Agreement are one of several procurement options (Reference Appendix A for additional information).
2) Phase 2 Contracts Timing and Schedule is Dependent on Funding and Need for Improvements.
### Table 1: Capital Southeast Connector JPA

#### Cash Flow Summary – 2035 Development

**Avail. & Potential Funding - 2012S**

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#### Project Costs - 2012 Dollars

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<td>28.6</td>
<td>28.3</td>
<td>29.3</td>
<td>38.7</td>
<td>53.8</td>
<td>46.7</td>
<td>48.3</td>
<td>34.7</td>
<td>41.6</td>
<td>32.1</td>
<td>14.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Project Costs</strong></td>
<td>$820.8</td>
<td>-2.0</td>
<td>5.9</td>
<td>8.2</td>
<td>10.3</td>
<td>13.0</td>
<td>24.2</td>
<td>36.3</td>
<td>40.8</td>
<td>36.8</td>
<td>61.1</td>
<td>54.1</td>
<td>73.2</td>
<td>81.6</td>
<td>-</td>
<td>-</td>
<td>8.2</td>
<td>9.6</td>
<td>30.7</td>
<td>41.6</td>
<td>-</td>
<td>-</td>
<td>12.7</td>
<td>13.3</td>
<td>62.7</td>
<td>65.6</td>
<td>-</td>
<td>-</td>
<td>13.8</td>
<td>14.3</td>
</tr>
</tbody>
</table>

### Notes

1. Costs prior to 2013 are not shown here and assumed to fund project management expenses.
2. Funding gap not adjusted by interest expense payments.
APPENDIX E - PROJECT COMPARISONS

Scope Differences between MTP & Connector Projects

Kammerer Road (I-5 to Bruceville Road) - Segment A1

For the Kammerer Road extension from I-5 to Bruceville Road, the primary scope differences between the MTP project and the Connector project are with the proposed structural sections (thickness of asphalt and aggregate base sections) and the overall pavement width based on the facility type.

The cost listed in the MTP for the I-5 to Bruceville extension of Kammerer Road is based on a Project Study Report (PSR) that was prepared for this project in 2009. The PSR cost used in the MTP assumed a standard City 4-lane arterial cross section for Kammerer Road that included four 12-foot wide lanes, a 12-foot wide raised center median, 6-foot bike lanes, 3-foot graded shoulders with roadside ditches and no streetlights. Based on the preliminary quantities used in the PSR estimate, the structural section assumed for the 3-mile Kammerer Road extension corresponds to a structural section of approximately 4.5 inches of asphalt over 18 inches of aggregate base.

The Connector project assumes the same Kammerer Road section will be a divided 4-lane expressway segment which based on Caltrans Highway Design Manual standards corresponds to four 12-foot wide travel lanes, 5-foot wide paved inside shoulders, 10-foot wide paved outside shoulders, 36-foot wide center median, and a 12-foot wide multi-use trail with landscaping and lighting. The pavement section of the expressway segment has been designed using Caltrans standards for pavement design and preliminary geotechnical information about the relatively poor existing soil conditions in the area which show that a larger structural section would be required to handle the projected vehicle and truck traffic through this segment. Based on this preliminary information and Caltrans standard pavement design, the Connector project assumes a structural section of 2 inches of rubberized asphalt over 8 inches of asphalt over 25 inches of aggregate base. The Connector project estimate also includes an additional $2.8 million in sustainability elements and $2.9 million in Class 1 path, landscaping and lighting improvements that are not included in the MTP scope.
## Cost Comparison

<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
</table>
| A1      | $45,998,000 | $32,950,000 | ● 4 Lane Expressway  
● 2" RAC/8"HMA /25" AB  
● Includes 4-lane grade separation over UPRR.  
● $2.8M Sustainability  
● $2.9M Multi-Use Path, landscape, & lighting  
● Frontage Road improvements | ● 4-lanes  
● Based on PSR quantities, the 3 mile section corresponds to 4.5" HMA/18" AB  
● Includes 4-lane grade separation over UPRR  
● no streetlights  
● Project shown being completed by 2020 in MTP/SCS  
● $11.6M of funding from Developer/Impact Fees and other Public sources has been identified for this segment. |

### Kammerer Road (Bruceville Road to SR 99) - Segment A2

The primary differences between the project scoped in the MTP and the Connector project through this segment are with the proposed structural sections and the assumptions of widening the existing roadway versus full replacement.

The scope and corresponding cost listed in the MTP assumes that existing Kammerer Road will be widened from the existing 2-lane facility to ultimately a 6-lane City standard thoroughfare section. Based on the MTP cost estimate, it is assumed that the structural section for the widened portion of Kammerer Road will match the I-5 to Bruceville section of Kammerer Road of 4.5 inches of asphalt over 18 inches of aggregate base. The MTP breaks this into two phases, an initial widening from 2 to 4 lanes and an ultimate project which widens from 4 to 6 lanes. There will be challenges to implementing the project as scoped in the MTP as the existing structural section of Kammerer Road is not adequate to handle the anticipated future traffic and would likely need to be rebuilt.

The Connector project assumes building this segment in two phases with the initial phase reconstructing Kammerer Road to provide a 4-lane thoroughfare segment. The second phase would utilize the median to widen and provide the ultimate 6-lane thoroughfare segment. Based on the preliminary geotechnical information and Caltrans standard pavement design, the Connector project assumes a structural section of 2 inches of rubberized asphalt over 8 inches of asphalt over 25 inches of aggregate base. The Connector project estimate also includes an
additional $1.6 million in sustainability elements and $2.3 million in path, landscaping and lighting improvements that are not included in the MTP scope.

<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
</table>
| A2      | $30,200,000 | $17,000,000 | • 6 Lane Thoroughfare  
• 2" RAC/6"HMA /25" AB  
• $1.6M Sustainability  
• $2.3M Path, landscape, & lighting  
• Frontage Road improvements | • 4-lanes  
• Based on the PSR quantities, the 3 mile section corresponds to a section of 4.5" HMA/18" AB  
• no streetlights  
• Project shown being completed by 2020 in MTP/SCS  
• $1.5M of funding has been identified for right of way; no funding identified for construction. |

**Grant Line Road (SR 99 to Bradshaw Road) - Portion of Segments B**

Similarly to the Kammerer Road segments, the primary scope differences between the MTP project and the Connector project are with the assumptions of number of lanes, required structural section and the widening or replacement of existing Grant Line Road.

The MTP project scope assumes utilizing the existing Grant Line Road and widening to provide the interim 4-lane project. A project to widen Grant Line Road to 6-lanes is not currently included in the MTP.

The Connector project assumes building this segment in two phases with the initial phase reconstructing Grant Line Road to provide a 4-lane thoroughfare segment. The second phase would utilize the median area to widen and provide the 6-lane thoroughfare segment as defined in the Connector PEIR. Based on the preliminary geotechnical information and Caltrans standard pavement design, the Connector project assumes a structural section of 2 inches of rubberized asphalt over 8 inches of asphalt over 25 inches of aggregate base. The Connector project estimate also includes an additional $2.1 million in sustainability elements that are not included in the MTP scope.
Grant Line Road (Bradshaw Road to Calvine Road)

For the segment from Bradshaw Road to Calvine Road, the primary scope differences between the MTP project and the Connector project are with the assumptions of the required structural section and the widening or replacement of the existing Grant Line Road and the consolidation of access points with the Connector project.

The MTP project scope assumes utilizing the existing Grant Line Road and widening to provide 4-lanes through this segment. A project to widen Grant Line Road to 6-lanes is not currently included in the MTP.

The Connector project proposes to reconstruct Grant Line Road to provide a 4-lane thoroughfare segment between E. Stockton Blvd and Bradshaw Road and a 4-lane rural arterial between Bradshaw Road and Calvine Road. Based on the preliminary geotechnical information and Caltrans standard pavement design, the Connector project assumes a structural section of 2 inches of rubberized asphalt over 8 inches of asphalt over 25 inches of aggregate base. The Connector project estimate also includes an additional $1.3 million in sustainability elements that are not included in the MTP scope.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Cost Comparison</th>
<th>Scope Comparison</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>JPA Costs</td>
<td>MTP Costs</td>
</tr>
<tr>
<td>B &amp; C</td>
<td>$82,217,000</td>
<td>$58,312,000</td>
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Grant Line Road (Calvine Road to Jackson Road) - Segment D1

For the segment from Calvine Road to Jackson Road, the primary scope differences between the MTP project and the Connector project are with the assumptions of the required structural section, the widening or replacement of the existing Grant
Line Road and the construction of an interchange at Sunrise Boulevard/Grant Line Road with the Connector project.

The MTP project scope assumes utilizing the existing Grant Line Road and widening to provide 6-lanes through this segment.

The Connector project proposes to reconstruct Grant Line Road to provide a 4-lane expressway segment. Based on the preliminary geotechnical information and Caltrans standard pavement design, the Connector project assumes a structural section of 2 inches of rubberized asphalt over 8 inches of asphalt over 25 inches of aggregate base. The Connector project estimate also includes an additional $2.4 million in sustainability elements and $4.1 million in path, landscaping and lighting improvements that are not included in the MTP scope.

<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
</table>
| D1      | $50,721,000 | $21,610,000 | • 4 Lane Expressway  
• $2.4M Sustainability  
• $4.1 Path, landscape/lighting  
• Interchange at Sunrise/GLR and construction of multi-use trail | • Assumes full cost of widening GLR from 2-lanes to 6-lanes.  
• Project shown being completed by 2035 in MTP/SCS  
• $32.8M of funding from Developer/Impact Fees and other Public sources has been identified for these segments. |

**Grant Line Road (Jackson Road to White Rock Road) - Segment D2**

For the segment from Jackson Road to White Rock Road, in addition to the scope differences listed in the previous segments (structural section, widening versus full replacement), the primary scope difference between the MTP project and the Connector project is with the proposed connector interchanges at Jackson Road, Kiefer Road, Chrysanthy Road, University Road and Douglas Boulevard.

The Connector Project estimate also includes an additional $3.0 million in sustainability elements and $5.4 million in path, landscaping and lighting improvements that are not included in the MTP scope.
<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>$106,590,000</td>
<td>$86,201,000</td>
<td>• 4 Lane Expressway</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• $3M Sustainability</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• $5.4 Path, landscape/lighting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Interchanges at Jackson, Kiefer, Chrysanthy, University &amp; Douglas</td>
<td></td>
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<td></td>
<td>• Assumes full cost of widening GLR from 2-lanes to 4-lanes.</td>
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<td></td>
<td></td>
<td></td>
<td>• Project shown being completed by 2035 in MTP/SCS</td>
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<td></td>
<td>• $15.8M of funding from Developer/Impact Fees and other Public sources</td>
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<td></td>
<td></td>
<td></td>
<td>has been identified for these segments.</td>
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</table>

### White Rock Road (Grant Line Road to El Dorado County Line) – Segment D3

For the segment from White Rock Road to the El Dorado County Line, in addition to the scope differences listed in the previous segments (structural section, widening versus full replacement), the primary scope difference between the MTP project and the Connector project is with the proposed connector interchanges at Grant Line Road, Scott Road and Empire Ranch Road. Also major widening and/or signalized intersections will be constructed at Grant Line Road, Aerojet Road, Prairie City Road, Oak Avenue and Scott Road North.

The Connector project estimate also includes an additional $4.5 million in sustainability elements and $7.3 million in path, landscaping and lighting improvements that are not included in the MTP scope.

<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3</td>
<td>$118,324,000</td>
<td>$73,104,000</td>
<td>• 4 Lane Expressway</td>
<td></td>
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<td></td>
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<td>• $4.5M Sustainability</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• $7.3 Path, landscape/lighting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Interchanges at Prairie City, Grant Line Road, Scott Road &amp; Empire Ranch Road.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Widening and/or Signalization of Grant Line Road, Aerojet Road, Prairie City Road, Oak Avenue &amp; Scott Road North.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Sacramento County is widening/realigning WRR from 2-lanes to 4-lanes from Grant Line Road to Prairie City Road.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Full cost of widening WRR from 2-lanes to 4-lanes.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Widening from 4 to 6-lanes from GLR to Prairie City Road, &amp; from 2 to 6-lanes from Prairie City Road to Scott Road.</td>
<td></td>
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<td></td>
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<td></td>
<td>• Project shown being completed by 2020 in MTP/SCS</td>
<td></td>
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<td></td>
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<td>• $38.9M of funding from Developer/Impact Fees and other Public sources.</td>
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<td></td>
<td></td>
<td></td>
<td>has been identified for these segments.</td>
<td></td>
</tr>
</tbody>
</table>
**White Rock Road (El Dorado County Line to Silva Valley Parkway Interchange) - Segment E**

For the segment from the El Dorado County Line to Silva Valley Parkway, the Connector scope and MTP scope are similar except that the MTP project scope widens White Rock Road to 6 lanes, while the Connector project limits the widening of White Rock Road to 4 lanes. The Connector project also includes $1.1 million in sustainability elements that are not part of the MTP project scope.

<table>
<thead>
<tr>
<th>Segment</th>
<th>JPA Costs</th>
<th>MTP Costs</th>
<th>JPA Scope</th>
<th>MTP Scope</th>
</tr>
</thead>
</table>
| E1 & E2 | $22,354,000 | $26,400,000 | • 4 Lane Thoroughfare  
• $1.1M Sustainability  
• Overlay only: Latrobe to Manchester | • Assumes full cost of widening WRR from 2-lanes to 6-lanes.  
• Project shown being completed by 2035 in MTP/SCS  
• $14.1M of funding from Developer/Impact Fees and other Public sources has been identified for these segments. |
The Capital SouthEast Connector Project
RESOLUTION NO. 2013-06

RESOLUTION OF THE
CAPITAL SOUTHEAST CONNECTOR JOINT POWERS AUTHORITY
APPROVING THE INITIAL PLAN OF FINANCE FOR THE CONNECTOR PROJECT

WHEREAS, pursuant to California Government Code, section 6500 et seq., the Capital SouthEast Connector Joint Powers Authority (Connector JPA) was formed by the cities of Rancho Cordova, Elk Grove, and Folsom, and the counties of Sacramento and El Dorado, to provide for the coordinated designation, acquisition, planning, designing, financing, construction, operation, and maintenance of a multi-modal transportation corridor to connect the City of Elk Grove, the County of Sacramento, the City of Rancho Cordova, the City of Folsom, and the County of El Dorado, known as the “Connector Project”; and

WHEREAS, planning for the Connector Project, which is a regional transportation beltway/expressway to connect Interstate 5, State Route 99, and U.S. Highway 50, has been in process for more than two decades;

WHEREAS, the joint powers agreement which formed the Connector JPA requires the adoption of a Funding Plan specifying a plan or formula for funding the Connector JPA’s operations and any project phases for which the Connector JPA is responsible;

WHEREAS, on February 27, 2009, the Connector JPA approved an initial five year Funding/Finance Plan, that focused on the initial planning and project development phase of the Connector Project and described anticipated revenues and expenditures for the initial phase through the end of fiscal year 2012-13. This initial Funding/Finance Plan reflected that sufficient funding from Measure A was available to fund the planning and project development expenses, but did not address construction financing;

WHEREAS, on February 27, 2009, when the Connector JPA considered the initial Funding/Financing Plan, El Dorado County expressed concern regarding the potential of a funding contribution from El Dorado County, other than the nominal participation contribution provided annually, to the overall project development costs since El Dorado County was already engaged in the planning and development of the Silva Valley Parkway Interchange and White Rock Road widening, and El Dorado County did not have a dedicated local funding source available such as the Measure A tax dollars earmarked by the other participating jurisdictions;

WHEREAS, the Connector JPA has developed and refined a Plan of Finance for the Connector Project and has met with staff from each member jurisdiction to review the proposed Plan of Finance and to solicit input on the assumptions made by the Connector JPA staff and financial consultants;

WHEREAS, El Dorado County has requested an amendment to the Connector JPA to address concerns outlined in its letter dated November 29, 2012;

WHEREAS, the Connector JPA adopted Resolution 2012-25 on December 14, 2012, to work cooperatively with its members to address the concerns raised by El Dorado County;
NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE CAPITAL SOUTHEAST CONNECTOR JPA RESOLVES AS FOLLOWS:

1. The recitals set forth above are true and correct and incorporated herein by this reference.

2. The Board of Directors hereby approves the Initial Plan of Finance, dated March 2013, attached hereto and incorporated herein by this reference, and as described in the February 8, 2013, and March 8, 2013, staff reports and presentations.

3. Notwithstanding anything contained therein to the contrary, the Plan of Finance does not obligate any of its members, including El Dorado County, to any financial contribution or funding whatsoever, and does not impose any financial obligation on its members under section 5(d) of the Connector JPA joint powers agreement.


5. Connector JPA staff is directed to work cooperatively with El Dorado County and with any other member jurisdiction to address their concerns and develop an amendment to the JPA agreement, and any other appropriate agreement, within 90 days from this action for the respective county’s, or city’s, consideration.

6. It is anticipated that the Plan of Finance will be updated each fiscal year to reflect changes in the anticipated funding and financing opportunities.

This Resolution shall take effect from and after the date of its passage and adoption.

* * * *

PASSED AND ADOPTED this 8th day of March, 2013, by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chairperson

ATTEST:

______________________________
Secretary