

PROJECT DESCRIPTION

Project Background

In 1988, the voters of Sacramento County passed Measure A, a countywide one-half percent 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 text of Measure A, 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.

The proposed project, commonly known as the Capital SouthEast Connector (Connector Project), is overseen by a joint powers authority (JPA) made up of the cities of Elk Grove, Rancho Cordova, and Folsom, as well as the counties of Sacramento and El Dorado. The JPA is funded by Regional Surface Transportation Program (RSTP) funds, JPA member contributions, and Measure A funds.

Section 1 of the Authority’s Joint Powers Agreement sets forth nine planning principles that all projects must be consistent with if they are anticipated to become part of the Connector Project once a route is identified. The planning principles set forth are as follows:

- a. Improve access to, and connections between, residential and employment areas within and outside of the Connector Project corridor;
- b. Acknowledge that the Connector Project is in the Metropolitan Transportation Plan and further support the transportation and land use principles in the general plans of the local jurisdictions and the Metropolitan Transportation Plan;
- c. Relieve demand on (i) local streets and roads, and (ii) regional freeway facilities (US-50, SR-99, and I-5);
- d. Strategically apply access control and capacity characteristics to preserve and enhance regional functionality while discouraging growth in areas not designated for growth as determined by the local jurisdiction’s general plan;
- e. Enhance regional mobility and preserve the livability of communities;
- f. Provide efficient and safe facilities for automobile, transit, bicycle, and pedestrian options for multi-modal travel;
- g. Minimize direct and indirect physical impacts on the natural and built environments;
- h. Preserve open space to reinforce and support approved land use plans; and

i. Permit phased implementation with respect to (i) funding, (ii) location, and (iii) design characteristics.

The Connector Project supports regional planning efforts, as reflected in the following documents:

- MTP 2035, adopted by the Sacramento Area Council of Governments (SACOG) on March 20, 2008
- Folsom General Plan, update in progress, and Folsom South of U.S. Highway 50 Specific Plan, in progress
- Rancho Cordova General Plan, adopted July 26, 2006
- Elk Grove General Plan 2003, as amended May 1, 2007
- County of El Dorado General Plan, as amended July 1, 2008
- County of Sacramento General Plan, adopted December 15, 1993

Conceptual level (Phase 1) studies of the project were initiated by SACOG during preparation of the Metropolitan Transportation Plan for 2025 (MTP 2025). The Phase 1 studies identified two general needs in the project corridor between the communities of Elk Grove, Rancho Cordova, and Folsom/El Dorado Hills:

1. Mobility: To improve access to, and connections between, residential and employment areas lost or compromised due to increasing congestion; and
2. Land Use: To assist in preservation of open space and habitat that may be threatened as the region develops.

To address these needs and meet the intent of the voters in passing Measure A, SACOG developed concept-level alternatives to link residential areas and employment centers in the corridor, serve both local and regional travel, and relieve congestion on the heavily congested existing two-lane roadways serving the corridor, while preserving open space and habitat. In addition, new options were developed at the concept level for bicycle, pedestrian, transit, and automobile mobility throughout the corridor to address increased travel demand. Through an extensive public outreach process, these alternatives have been refined and are being evaluated by the JPA at a program level as part of a corridor program to preserve right of way and develop a set of functional guidelines that will guide development of specific projects along the corridor.

PURPOSE AND NEED

INTRODUCTION

A statement of a project's purpose and need provides a basis for defining the range of alternatives to be evaluated in a future environmental review process in accordance with the National Environmental Policy Act (NEPA). The project purpose and need drives the process for alternatives consideration, in-depth analysis, and ultimate selection. A statement of purpose and need permits consideration of a reasonable range of alternatives and evolves as input is received from stakeholders and federal, state, and local resource agencies. The purpose and need is also consistent with the California Environmental Quality Act (CEQA), which requires analysis of a range of reasonable alternatives to a proposed project that would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects.

The overall need and purpose for the Connector Project is to improve mobility, access, and connections between residential and nonresidential land uses, which have been compromised by increasing congestion, and to assist in preservation of open space and threatened habitats. The project will:

- Improve options for goods freight movement
- Reduce cut-through traffic on local streets
- Improve safety during catastrophic floods or other public safety emergencies
- Improve safety on existing facilities that are degraded by increasing traffic
- Ensure that growth proceeds along planned patterns
- Support sustainable planned growth and development patterns
- Improve livability of communities along the corridor
- Aid economic vitality by improving accessibility for jobs and commerce by facilitating goods movement
- Provide transportation options for short and long trips, as well as for alternative modes
- Preserve and protect open space, wildlife habitat, and agricultural uses

NEED FOR PROJECT

The proposed project is intended to respond to regional and local deficiencies not currently met by existing facilities in the corridor:

- **There are insufficient transportation options for personal and goods/freight movement to, from, and within the corridor.**

The Connector Project corridor is principally served by a partial grid system of arterial roadways. This grid system has gaps on its northern end due to Mather Field and the Aerojet facility, has substantial levels of congestion in some areas that are projected to grow, such as Elk Grove and Folsom, and does not provide adequate mobility for longer distance trips due to a growing number of traffic signals, access points and inconsistent operational characteristics.

The freeways serving the corridor connect the City of Elk Grove to downtown Sacramento via I-5 and SR-99, and also connect El Dorado County and the cities of Folsom and Rancho Cordova to downtown Sacramento via US-50. Use of the freeway system, however, requires out-of-direction travel between Elk Grove, Rancho Cordova, and the Folsom/El Dorado Hills area. In addition, because only limited improvements are feasible on I-5, SR-99 and US-50, the duration of congested conditions along these freeways is expected to increase significantly over the next 20 years.

Like the freeway system, the current transit system provides connections to downtown Sacramento from the other communities, but provides only indirect service between Elk Grove, Rancho Cordova, and the Folsom/El Dorado Hills area, which are major employment centers in the region. Employees commute to Rancho Cordova from residential areas throughout the Sacramento region and improved access to these jobs is needed from growing residential areas in the southern portion of the Corridor (Elk Grove, Laguna, and Vineyards) and the eastern portion of the Corridor (Folsom and El Dorado Hills). Educational facilities, including the planned Los Rios Community College satellite campus in Rancho Cordova, are also destination points for residents throughout the region. As employment centers throughout the region continue to develop and grow, two-way commute trips between Elk Grove/Laguna/Vineyard and Rancho Cordova are expected to quadruple between 2005 and 2032 and two-way commute trips between Folsom/El Dorado Hills and Rancho Cordova are expected to increase by more than 40 percent between 2005 and 2032.

Availability of alternative travel modes is important to commuters and recreationists; however, most of the arterial roadways in the Connector Project corridor do not have sidewalks or shoulders and thus do not accommodate pedestrian and bicycle travel.

- **Local streets are increasingly subject to congestion and use by non-local traffic.**

Increasing development in the Connector Project corridor, coupled with an increased demand on the limited transportation capacity of the area is resulting in growing congestion on local streets. In addition, much of the local roadway system was developed for residential use, with little to no shoulders, and is not equipped to handle anticipated increases in use as a result of future planned growth.

About one-fourth of vehicle miles of travel (VMT) in the study area is under Level-of-Service (LOS) “F” (congested) conditions during all weekday peak periods. Furthermore, the growth in households and employment projected in general plans for the study area is expected to far outpace roadway and transit improvements, which means congestion will worsen as newly constructed dwellings become occupied and as new jobs are filled in the study area and the greater Sacramento region.

Tables 2.1 and 2.2 provide estimates of the number and percent of VMT on congested roadways in the traffic study area during commute hours in 2005. The traffic study area consists of portions of I-5, SR 99, and US 50, as well as a number of arterial roadways. Table 2.3 shows estimates of the vehicle hours of delay that occurred during commute hours in 2005.

**Table 2.1 – Vehicle-Miles of Travel 2005:
Weekday AM & PM Peak Periods (6 Hours)**

Level of Service (LOS)	Freeway & HOVs	Arterials & Collectors	Total
A	300,051	637,976	938,027
B	75,264	161,891	237,155
C	138,505	116,095	254,600
D	97,589	100,782	198,371
E	128,692	85,333	214,025
F1	253,589	95,941	349,530
F2	87,078	49,337	136,415
F3	56,581	83,953	140,534
Total	1,137,349	1,331,308	2,468,657

**Table 2.2 – Percent of Total Vehicle-Miles of Travel 2005:
Weekday AM & PM Peak Periods (6 Hours)**

Level of Service (LOS)	Freeways & HOVs	Arterials & Collectors	Total
A	12.2%	25.8%	38.0%
B	3.0%	6.6%	9.6%
C	5.6%	4.7%	10.3%
D	4.0%	4.1%	8.0%
E	5.2%	3.5%	8.7%
F1	10.3%	3.9%	14.2%
F2	3.5%	2.0%	5.5%
F3	2.3%	3.4%	5.7%
Total	46.1%	53.9%	100.0%

**Table 2.3 – Vehicle-Hours of Delay Under LOS E & F 2005:
Weekday AM & PM Peak Periods (6 Hours)**

Facility Group	2005 Existing Conditions
Freeways & HOVs	3,374
Arterials & Collectors	5,154
All Roadways	8,528

Sections of US-50 and SR-99 are very congested during the peak periods today, motivating travelers to seek alternate routes on arterials and local streets. Over the next 25 years, this tendency to avoid overly crowded freeways is anticipated to intensify congestion on the local street system. The Travel Demand Analysis Report prepared for Phase 1 of the proposed project indicated that if only the 2006 MTP transportation improvements are constructed by 2032, LOS F conditions would occur on portions of Grant Line Road, White Rock Road, and Bradshaw Road, in addition to SR-99 and US-50.

The existing roadways in the study area are primarily configured north-south and east-west, and the proposed alternatives would provide a diagonal connection between important job and

housing centers. The existing arterial grid system in the Connector Project corridor currently provides only limited capacity for diagonal trips across the region. This lack of diagonal capacity and the escalating congestion on the arterial and local roadways suggest that adding capacity in the corridor can aid in serving both diagonally-aligned trips and intermediate-length trips throughout the study area. Common diagonal trips consist of trips between Elk Grove and Rancho Cordova, and between El Dorado Hills/Folsom and the Elk Grove and Rancho Cordova areas. The direct routing and diagonal configuration of the proposed corridor connection also decreases hours of delay compared to the existing grid system, with resulting decreases in fuel consumption and vehicle emissions.

- **The project study area is susceptible to flooding and needs an all-weather transportation facility to enable normal mobility, as well as emergency vehicle access, in the event of a catastrophic flood or other emergency.**

Portions of the Connector Project corridor lie within the FEMA-designated 100-year flood zone, and thus some sections of older arterials are impassable during high water conditions. The two-lane rural design of many roads in the corridor also creates problems for emergency vehicles responding to residential, workplace, and roadside emergencies. Faster and safer access for emergency vehicles and residents is needed in cases of emergency, during both flood conditions and normal conditions.

- **Increasing vehicle traffic is degrading the safety of existing facilities; improvements are needed to ensure the safety and security of travel by all modes in the corridor (automobile, transit, bicycle, and pedestrian).**

Goods movement along the Connector Project corridor currently must cope with multiple access points from driveways, local streets, and other residential and commercial development along the corridor. This mixed flow of heavy vehicles on long trips and local traffic with short trip destinations creates safety hazards and impedes traffic flow. There are numerous schools within the existing grid street system, some of which are directly adjacent to principal travel routes. Safer routing for goods movement is needed.

Research from the Transportation Research Board (TRB) and the Texas Transportation Institute (TTI) suggests a number of benefits from improving rural roads:

1. Accidents are reduced 40 to 60 percent when a typical two-lane roadway is converted to a four-lane divided roadway.
2. Accidents are reduced 12 percent by widening a lane by one foot (e.g., from 10 feet to 11 feet). Widening lanes by two feet, three feet, and four feet will reduce related accidents by 23 percent, 32 percent, and 40 percent, respectively.
3. Addition of a left-turn lane can result in crash reductions of 7 to 48 percent.
4. Left-turn lanes, lighting, and wider right shoulders/right-turn lanes all contribute to reduced accident rates.
5. Studies consistently show that the more access points per mile, the higher the accident rate. Access controls dramatically reduce fatalities, injuries, and property damage.

- **Increasing development encroaches upon open space and wildlife habitat; planning is needed to preserve these resources and ensure access to open space.**

Much of the Connector Project corridor runs through areas containing valuable open space resources, particularly in the areas east and south of Grant Line Road. Many of these areas are designated in local general plans for open space, recreation, or agricultural uses, which would normally preclude them from development. Yet, the study area is under tremendous development pressure, resulting in degradation of biological resources and open space values, as well as travel congestion.

Cooperative planning involving all stakeholders is necessary to ensure that valuable open space and habitat resources are preserved and protected. The Connector Project includes a set-aside of \$15 million to be invested in ways designed to inhibit undesired development activity, support open space preservation, and habitat conservation.

- **Well planned transportation improvements need to accompany and support housing and job growth to ensure that growth proceeds along planned patterns.**

All five jurisdictions along the Connector Project corridor are engaged in dynamic land use and transportation planning processes that include preparation and refinement of general plans, review and approval of specific development plans, and programming and execution of capital improvements. Much of this planning focuses on the Connector Project corridor, which includes vast areas of open land. This open land historically has been precluded from development because of the presence of natural constraints (e.g., floodplains, habitat areas) and man-made constraints (e.g., Mather AFB, Aerojet). While the natural constraints will persist, the man-made constraints have diminished or been eliminated, thus altering the plans for future development in the study area, as well as affecting the planned regional development pattern. The most pronounced effects are manifest in the City of Rancho Cordova's adopted General Plan and in changes being considered in the Sacramento County General Plan, particularly in the area between US-50 and the Jackson Highway.

SACOG's approved MTP is based on the following seven principles by which to measure progress at all levels of land use and transportation decision-making:

1. Transportation Choices
2. Mixed-Use Development
3. Compact Development
4. Housing Choice and Diversity
5. Use of Existing Assets
6. Quality Design
7. Natural Resources Conservation

The approved MTP emphasizes the concentration of new and intensified development in already-developed areas and the contiguous expansion of the metropolitan area's developed edge.

PROJECT PURPOSE

The Connector Project would link employment centers and residential areas in the corridor and contribute to the remedy for current and future deficiencies in transportation capacity, safety, and land use compatibility. The project would serve both regional and local travel needs, and would relieve congestion on heavily used local roadways that currently serve the corridor.

During Phase 1, extensive comments by project sponsors and other stakeholders identified the following four purposes of the proposed project:

- **Enhance mobility options within the Connector Project corridor (and the greater Sacramento region) to serve and support sustainable planned growth and development patterns and principles from the approved General Plans and MTP, while minimizing impacts to the livability of residences and communities along the Connector Project corridor.**

The communities in the Connector Project corridor reflect a range of development types, historical attributes, and local activities. The Connector Project should not detract from the quality of life established by these communities and expected by their residents. Several defined communities exist along the corridor, including the small unincorporated community of Franklin, the Sheldon area of Elk Grove, the former military housing community on the Mather Air Force Base site, and the El Dorado Hills area of unincorporated El Dorado County.

- Franklin. The unincorporated community of Franklin is located approximately two miles south of Elk Grove and is centered on Franklin Boulevard. The community consists of several stores, a few scattered residences, and a California Historical Landmark cemetery.
- Sheldon. The Sheldon community is a largely “exurban,” rural area within the city of Elk Grove that straddles Grant Line Road, with mostly large lot residential uses and a small cluster of commercial uses centered near the intersection of Grant Line and Wilton Roads. The historical two-lane configuration of Grant Line and the relative isolation of the area have fostered a sense of community that long-time residents passionately embrace.
- Mather. The site of the former Mather Air Force Base includes approximately 1,300 single family housing units in the central portion of the base. When the base was active, this housing supported a community of approximately 4,000 people, including military personnel and their families. The units were vacated in 1993 when the base closed. The on-base housing area has been redeveloped. The residential subdivision “Independence at Mather” opened in 1999 and has been well received by the community. The area accommodates new homes, schools, several parks, mature vegetation, and open space on all four sides. Mature vegetation is embedded within the development. Mather Commerce Center, a 250-acre commercial office complex, is located in close proximity to the residential housing site and provides opportunities for employment within a short distance from the homes.

- El Dorado Hills. The community of El Dorado Hills is located in the lower Sierra Nevada foothills in western El Dorado County, about 25 miles east of Sacramento. US-50 is the primary route through the community. The community, which sits immediately inside the El Dorado County line, has developed steadily over the past three decades. In the last few years, it has seen tremendous growth in both facilities and activities available to residents and businesses in the area. Most recently, development has focused south of US-50 on both the two- and four-lane segments of the White Rock Road alignment, with residential development (e.g., Four Seasons, Stonebriar, Cresleigh, A Fuller Sunset, and Valley View), and commercial development (Town Center) directly abutting the roadway.

In addition to the incorporated areas and established communities present in the Connector Project corridor, several single residences and residential communities are located in the project corridor. The main residential communities include:

- **The Sunridge Specific Plan area of Rancho Cordova**, which includes the existing Anatolia development as well as other approved residential projects.
- **The Vineyard Area**, which includes the Vineyard Specific Plan Area and the North Vineyard Station Specific Plan Area
- **Elk Grove residential developments along Bradshaw Road**, which include the following subdivisions:
 - Fieldstone Subdivision
 - Clarke Farms Subdivision
 - Tributary Pointe Subdivision
 - Remington Estates Subdivision
 - Bishop Ranch Subdivision
 - Char-Lyn Acres Subdivision
 - Meadowlark Ranch Subdivision
 - Bradshaw Ranch Estates Subdivision

Under certain circumstances, improvements in mobility can result in making land more attractive for development. In such cases, transportation projects can contribute to inducement of growth which fosters “economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” (State CEQA Guidelines, 14 Cal. Code Regs. § 15126.2, subdivision (d).) This issue is of particular relevance in areas where local plans do not call for urban development, as is the case in several sections of the alternative corridors under consideration.

While implementation of the Connector Project would not involve any changes in land use plans, it could make some areas more attractive for development by improving access to those areas. Recognizing this effect, strategically applied access control and capacity characteristics would preserve the regional functionality of the Connector Project and, in part, relieve direct growth pressure on adjacent properties not designated for growth. Second, the project includes \$15 million in funds to serve as seed money for a larger program to preserve open space and critical

wildlife habitat. Strategically programmed, these funds could effectively inhibit development in areas that are not planned for urban growth.

- **Aid economic vitality by improving accessibility to existing and planned job centers and commercial areas, facilitating goods movement, and enhancing the attractiveness of existing and planned employment and commercial areas.**

Rancho Cordova is the largest employment center in the corridor, with about 77,000 jobs in 2007. By 2045, employment in Rancho Cordova is expected to more than double, when its job total will be more than the current employment in the Sacramento Central City. The El Dorado Hills Business Park will also become a major employment center, growing from 9,000 jobs in 2007 to more than 33,000 jobs in 2045. Additionally, Elk Grove is expected to grow as an employment center in the region, with an estimated increase in jobs from 25,000 in 2007 to more than 84,000 jobs in 2045.

The Connector Project is a part of the overall regional transportation system, and its ability to improve access and provide connectivity among these communities and throughout the region complements other new and/or improved roadways identified in MTP 2035 as strategies to serve this focused residential and employment growth. The project would facilitate diversified employment opportunities for residents of the region and provide a larger reservoir of skilled workers to businesses in the corridor by creating a more direct connection between residential areas and employment centers.

- **Provide a multi-modal facility that limits access to the extent possible to afford efficient transportation options within the corridor that balance transportation needs between local access and shorter trips and regional needs for longer trips; enable flexibility among automobile, transit service, bicycle, and pedestrian uses, while incorporating ITS elements where possible.**

The Connector Project is being proposed to achieve the following improvements in transportation operations:

- Reduced total vehicle-hours traveled (VHT) during morning and evening peak commute periods on Corridor roadways, especially time spent in congested conditions;
- Reduced travel times between key origins and destinations (e.g., between the Elk Grove and Rancho Cordova, Elk Grove and El Dorado County, and Rancho Cordova and El Dorado County);
- Evidence of fewer short trips on I-5, SR-99, and US-50, and fewer long trips on local/residential streets; and
- Reduced transit travel times and improved service frequencies in the corridor – evidence of viable options to automobile travel.

To achieve these improvements in transportation operations, the Connector Project will need to be designed for higher travel speeds, have a higher capacity, and have less delay at intersections than a typical arterial or thoroughfare facility. The Connector Project will need to be designed

primarily to an expressway standard, which will have more limited access than a thoroughfare and will include grade-separated interchanges instead of at-grade intersections at locations where level of service C or better conditions cannot be provided. To achieve the desired transportation operations, the portions of the Connector Project with intersection spacing of less than ½ mile will be minimized.

- **Preserve open space, wildlife habitat, and productive agricultural uses in the corridor and minimize growth inducement via sound transportation facility improvements and implementation.**

Among the key features of the Connector Project is a \$15 million (minimum) allocation to preserve open space, wildlife habitat, and valuable agricultural lands in the project corridor already secured through the current primary funding source. The preservation would be supported by an active, funded program for open space protection in conjunction with the transportation improvements. The program would also strategically target those areas that are most susceptible to growth-inducement pressures associated with enhanced access.

The manner in which this program will be administered is dependent on the adoption of JPA policies and procedures that will accompany the development of the overall administration of the Connector Project. The new funding likely would augment existing programs rather than support new efforts or initiatives, although this has not yet been determined. In this respect, an important function of the program would be to coordinate and support the efforts of the participants to secure outside funding from grants and private donations for their overall efforts. The Connector Project's open space program could provide a significant source of local matching funds, providing leverage for securing competitive grant funding. Program participants could submit joint multi-purpose applications that would enhance chances for securing grants. The combined transportation/ land use/habitat protection/recreation features of the overall project would provide a greater range of potential grant sources, as well.

In addition to the open space preservation program, the Connector Project will include design features that are intended to relieve potential impacts on sensitive natural resources. This will include access management techniques to minimize direct exposure of natural resources to increased activity. It will also include a commitment to alternative modes of transportation, including enhanced transit services and non-motorized facilities. In addition to preserving open space and habitat, the corridor should continue to accommodate agricultural uses through the consideration of the regional need to transport agricultural products to market and to move agricultural equipment. In general, the project should support the overall region's growth and sustainability objectives (including economic and environmental) from a rural perspective.

Sustainable "green highways" design principles also will be incorporated into the project design. These may include preservation strategies for wetlands, farmland, and other ecologically sensitive areas affected by the alignment of the corridor; recycling and reuse of construction materials to reduce energy consumption and construction costs; source controls and other best management practices to decrease the rate of discharge caused by any increase in impervious surfaces, and to capture and reduce pollutant loads generated primarily from roadway usage; and innovative design to reduce noise pollution and light pollution.