

3.3 Farmlands/Agricultural Lands

This section presents the methods and results of an analysis of the effects of the project on farmlands in the corridor. This information is summarized from the Community Impact Assessment (CIA) prepared for the project. The CIA is incorporated by reference and is available for public review at the Solano Transportation Authority's (STA's) and Caltrans offices. There are no timberlands in the corridor; therefore, timberlands are not discussed in this section.

3.3.1 Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 USC 4201-4209; and its regulations, 7 CFR Ch. VI Part 658) require federal agencies, such as the Department, as assigned by FHWA, to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

If work is being done on federal land (e.g., Bureau of Land Management or U.S. Forest Service lands), those agencies' regulations and policies regarding protection of timberlands are followed.

3.3.2 Affected Environment

Agricultural Land Use and Production

Solano County produces a variety of agricultural commodities, generating approximately \$1.5 billion in annual sales.¹ Agriculture accounts for 65 percent of the land use in Solano County, with about half of the agricultural acreage in irrigated crops and the remaining acreage in dryland farming and grazing lands. The top agricultural products of the County are tomatoes for processing, nursery stock, alfalfa hay, cattle and calves, wine grapes, sugar beets, field corn, feeder lambs,² wheat, and milk.³

Lands adjacent to much of the northern and middle portions of the corridor are in active agricultural production. These lands include properties in intensive agricultural use (primarily field crops, including wheat, corn, and alfalfa) on the east side of Leisure Town Road from Maple Road south to New Alamo Creek, and along both sides of Leisure Town Road from New Alamo Creek to Vanden Road. Much of the land on both sides of Vanden Road, south to the urban areas northeast of Peabody Road, is in extensive agricultural use (primarily livestock grazing). Similarly, land along both sides of Peabody

¹ Solano Economic Development Corporation. 2002. City economic profiles for Fairfield, Suisun City, and Vacaville. Available: <<http://www.sedcorp.org/>>. Accessed: February 2, 2002.

² A feeder lamb is a lamb that is weaned at 5 to 8 months of age, weighing 60 - 90 lbs., to be sold to a feedlot for further fattening.

³ Solano Economic Development Corporation. 2002. City economic profiles for Fairfield, Suisun City, and Vacaville. Available: <<http://www.sedcorp.org/>>. Accessed: February 2, 2002.

Road between Vacaville and Fairfield is primarily used for livestock grazing, although winter wheat and hay crops may be grown on some properties.⁴

Important Farmland

The FMMP is used to map and analyze impacts to California's agricultural resources. The FMMP rates agricultural land on soil quality and irrigation status; the best quality land is called prime farmland. "Important Farmland" includes prime farmland, farmland of statewide importance, unique farmland, and farmland of local importance. In addition to these important farmland types, the FMMP categorizes the remaining land as grazing land, urban land, other land,⁵ or water.

The mapped portion of Solano County contained approximately 143,211 acres of prime farmland, 7,584 acres of farmland of statewide importance, 13,735 acres of unique farmland, and 201,388 acres of grazing land in 2002.⁶ The corridor traverses both urban and agricultural land uses. Sensitive farmland resources include prime farmlands and other farmlands that are able to support the production of high-value crops. The locations of these farmlands relative to the corridor are shown in Figure 3.3-1.

Williamson Act Contract Lands

In the portion of the corridor that could be affected by property acquisitions, six properties are under active Williamson Act contracts. As shown in Figure 3.3-2, two of the contracts (34 and 36) are southeast of the intersection of Air Base Parkway and Walters Road. The other four active contracts (46, 55, 56, and 508) are adjacent to Peabody Road between Vacaville and the point where Peabody Road is crossed by the Putah South Canal (south of California State Prison, Solano).⁷

⁴ USDA Natural Resources Conservation Service. 2004. Walt Cheechov, District Conservationist. Dixon, CA. February 11, 2004—telephone conversation.

⁵ Other land includes low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres.

⁶ California Department of Conservation. 2004. Solano County important farmland map 2002. Sacramento, CA.

⁷ Solano County. 2001. Solano County land use and circulation element: a part of the Solano County general plan. December 1980 as amended through June 2001. Fairfield, CA: Planning Department.

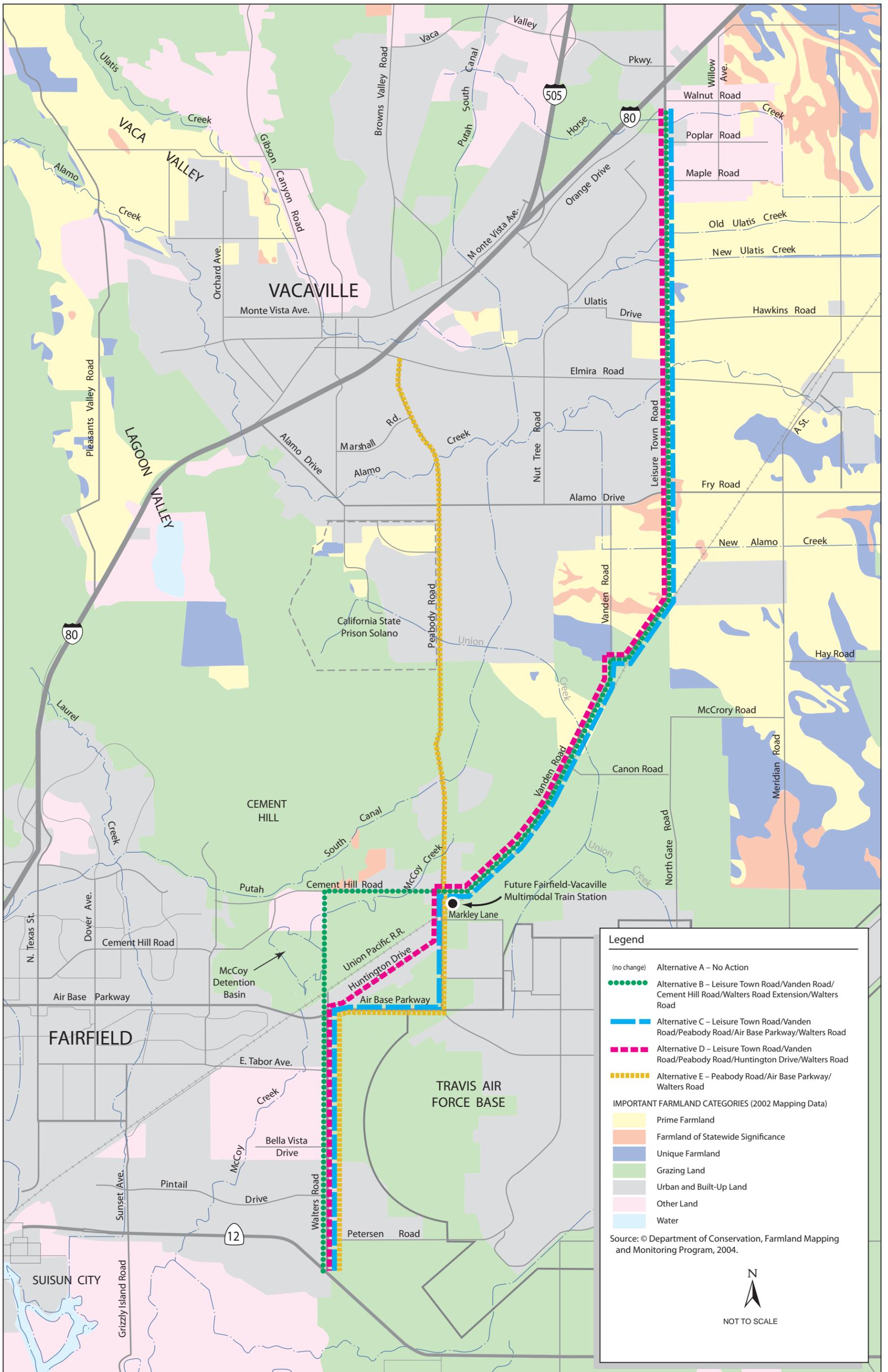


Figure 3.3-1
Important Farmlands Adjacent to the
Alternative Jepson Parkway Alignments

3.3.3 Impacts (including Permanent, Temporary, Direct, Indirect, and Cumulative)

Methodology

The analysis of effects related to farmlands and agricultural lands was based on the CIA prepared for the project. Direct effects to farmlands include conversion of farmlands to roadways as a result of right-of-way acquisitions. This analysis focuses on direct impacts because this project would not result in any indirect conversion of important farmlands.

The FPPA requires federal agencies to apply Land Evaluation and Site Assessment (LESA) criteria for activities or responsibilities of the federal government that involve the financing or construction of improvement projects. The LESA system is implemented by completing the Farmland Conversion Impact Rating Form (Form AD-1006). Form AD-1006 was completed for the build alternatives with assistance from the NRCS (see Appendix F). Based on the information provided on the form, a project receives an impact rating, which indicates what kind of consideration (i.e. minimum or maximum) should be given to the protection of agricultural lands being converted as a result of the project. Under the LESA system, project sites receive scores based on various criteria including soil quality and land use. The rating also assesses non-soil related criteria, such as the potential for impact to the local agricultural economy and compatibility with existing agricultural use. The highest score for a site is 260 points. Sites receiving a total score of less than 160 points are given a minimal level of consideration for protection and no alternative sites need to be evaluated for conversions of these lands. Sites with a LESA rating of 160 points or more are to be protected.

Summary of Impacts to Farmlands

Table 3.3-1 summarizes the potential for each alternative to impact farmlands. As shown, Alternative E would convert the least farmland, while Alternative B would convert the most. Conversely, Alternative E would conflict with five Williamson Act contracts, in comparison to one conflict for each of the other build alternatives. A detailed description of farmland impacts for each alternative is presented below.

**Table 3.3-1
Summary of Impacts to Farmlands**

| Impact | Alternative A | Alternative B | Alternative C | Alternative D | Alternative E |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Conversion of Farmlands (acres) | 0 | 75.4 | 68.6 | 64.5 | 29.6 |
| FPPA LESA Conversion Rating | N/A | 97.8 | 103.9 | 104.6 | 72.8 |
| Percent of Farmland in County (%) | N/A | 0.02 | 0.02 | 0.02 | <0.01 |
| Williamson Act Contract Conflict (number of parcels) | No | Yes (1) | Yes (2) | Yes (1) | Yes (6) |

Note: N/A = Not applicable

Impact FA-1: Would the Alternatives Directly Convert Important Farmlands?

Alternative A. Under Alternative A, the proposed roadway improvements would not be constructed. Therefore, no important farmlands would be converted.

Alternative B. Alternative B would result in the conversion of an estimated 75.4 acres of farmland used primarily for field crops, irrigated pasture, and nonirrigated grazing adjacent to Leisure Town Road, Vanden Road, Cement Hill Road, and Walters Road. This total represents 0.02 percent of both the total farmlands and prime farmlands inventoried in Solano County in 2000.

The acreage of prime farmland, farmland of statewide importance, unique farmland, and grazing land required for implementation of Alternative B is listed in Table 3.3-2. The acquisitions would be in the form of narrow strips of right-of-way along existing roadways. Please refer to the CIA for a breakdown of direct use for each segment of the alternative. In general, most of the prime farmland conversion would occur along the east side of Leisure Town Road (from Maple Road south to Alamo Drive) and on the west side of Leisure Town Road (from Alamo Drive southwest to Vanden Road). Grazing lands would be converted in several areas along the corridor, but conversions would be concentrated in a swath west of Vanden Road between Leisure Town Road and Peabody Road and in the area between Cement Hill Road and Huntington Drive that would be crossed by the Walters Road extension.

The LESA impact rating for Alternative B is 97.8. Since the impact rating is below 160 points, the agricultural land proposed for right-of-way acquisition does not require further consideration. Alternative B would not adversely affect farmlands.

**Table 3.3-2
Estimated Farmland Conversion Impacts of the Build Alternatives**

| Alternative | Farmland Converted by the Alternative (acres) | | | | Total |
|---------------|---|----------------------------------|-----------------|--------------|-------------|
| | Prime Farmland | Farmland of Statewide Importance | Unique Farmland | Grazing Land | |
| Alternative B | 31.0 | 2.1 | 0.2 | 42.1 | 75.4 |
| Alternative C | 31.0 | 2.1 | 0.2 | 35.3 | 68.6 |
| Alternative D | 31.0 | 2.1 | 0.2 | 31.2 | 64.5 |
| Alternative E | 0.0 | 0.0 | 0.0 | 29.6 | 29.6 |

Source: Estimated based on California Department of Conservation (1999) Important Farmland Map for Solano County and project alignment mapping information.

Alternative C. Farmland conversion under Alternative C would total 68.6 acres, slightly less than Alternative B (Table 3.3-2). This acreage would represent 0.02 percent of both the total farmland and prime farmland in Solano County.

Farmland conversions along Leisure Town Road, Vanden Road, and Walters Road would be the same as under Alternative B, totaling an estimated 31.0 acres of prime farmland, 2.1 acres of farmland of statewide importance, 0.2 acres of unique farmland, and 28.6 acres of grazing land. Additionally, acquiring right-of-way for Alternative C would result in the estimated conversion of 6.7 acres of grazing land west of Peabody Road south of Huntington Drive, and south of Air Base Parkway between Peabody Road and Walters Road. These conversions would be in narrow strips ranging in width from 25 feet to 70 feet along the existing roadways.

The LESA impact rating for Alternative C is 103.9. Since the impact rating is below 160 points, the agricultural land proposed for right-of-way acquisition does not require further consideration. Alternative C would not adversely affect farmlands.

Alternative D. Farmland conversion under Alternative D would total 64.5 acres, slightly less than under Alternatives B and C (Table 3.3-2). This acreage would represent 0.02 percent of both the total farmland and prime farmland inventoried in Solano County in 2000.

Farmland conversions along Leisure Town Road, Vanden Road, and Walters Road would be the same as under Alternatives B and C. Additionally, acquiring right-of-way for Alternative D would result in the estimated conversion of 2.6 acres of land mapped as grazing land south of Huntington Drive. This conversion would be in narrow strips, ranging in width from an estimated 30 feet to 50 feet, along the existing roadway.

The LESA impact rating for Alternative D is 104.6. Since the impact rating is below 160 points, the agricultural land proposed for right-of-way acquisition does not require further consideration. Alternative D would not adversely affect farmlands.

Alternative E. Farmland conversion under Alternative E would total 29.6 acres; unlike conversions required for Alternatives B, C, and D, Alternative E would not convert any prime farmland (Table 3.3-2). The acreage converted under Alternative E would represent less than 0.01 percent of the total farmland inventoried in Solano County in 2000.

Farmland conversions would include lands along Walters Road south of Air Base Parkway, along Peabody Road between Huntington Drive and Air Base Parkway, and along Air Base Parkway between Peabody Road and Walters Road. These conversions, which include only farmlands mapped as grazing land, would total an estimated 16.0 acres. Additionally, acquiring right-of-way for Alternative E would result in the estimated conversion of 13.6 acres of grazing land along both sides of Peabody Road between Vacaville and Fairfield. These conversions would be in narrow strips, ranging in width up to an estimated 70 feet, along the existing roadway.

The LESA impact rating for Alternative E is 72.8. Since the impact rating is below 160 points, the agricultural land proposed for right-of-way acquisition does not require further consideration. Alternative E would not adversely affect farmlands.

Impact FA-2: Would the Alternatives Conflict with Williamson Act Contract Lands?

Alternative A. Under Alternative A, the proposed roadway improvements would not be constructed. Therefore, Williamson Act contract lands would not be affected.

Alternative B. Within the portion of the corridor adjacent to the Alternative B route, one property (Contract 36) is currently under an active Williamson Act contract. As shown in Figure 3.3-2, this property is southeast of the intersection of Air Base Parkway and Walters Road. Construction of Alternative B, including right-of-way acquisition, would conflict with the contract governing this property.

Acquiring the contracted land could not be avoided under this Alternative, because widening Walters Road to the west, to avoid displacing the land under contract, would displace mixed commercial uses and the Dover Mobile Home Park located across the road, resulting in substantial relocation impacts. This alternative would require the termination of Williamson Act contract protections for the contracted land acquired; however, contract protections would remain in place for the remainder of the parcel. Under Alternative B, a 30-foot-wide strip along the Walters Road side of the parcel would be acquired, resulting in the termination of the contract governing an estimated 0.45 acres of the 65-acre property. This acquisition would not substantially reduce the agricultural viability of the property, which is used for livestock grazing. The project sponsor would comply with the requirements of the Williamson Act in acquiring the strip of contracted land.

Alternative C. The Alternative C alignment is adjacent to two parcels enrolled in Williamson Act contracts (Contract 34 and Contract 36). Impacts to Contract 36 would be similar to those identified above for Alternative B. However, impacts to Contract 36 would also include the acquisition of a 15-foot wide strip of land along Air Base Parkway resulting in the termination of the contract governing an estimated 0.32 acres for a total of 0.77 acres from Contract 36. This additional acquisition would not substantially reduce the agricultural viability of the property. The project sponsor would comply with the requirements of the Williamson Act in acquiring both strips of contracted land.

Impacts to Contract 34 would consist of the acquisition of a 12-foot wide strip of land adjacent to Air Base Parkway. The total area to be acquired from Contract 34 would be approximately 0.16 acres from the 39.4-acre site. This acquisition would not substantially reduce the agricultural viability of the property. The project sponsor would comply with the requirements of the Williamson Act in acquiring the strip of contracted land.

Alternative D. The only active Williamson Act contract adjacent to the Alternative D alignment is Contract 36, described above under Alternative B. Impacts for Alternative D would be identical to those identified above under Alternative B; 0.45 acres of the contract would be terminated. However, this acquisition would not affect the continued viability of the parcel.

Alternative E. The alignment for Alternative E is adjacent to six Williamson Act contracts. Under Alternative E, right-of-way would be needed from six properties under active Williamson Act

contracts. These properties, shown in Figure 3.3-2, include the property under Contract 36, as described previously for Alternatives B, C, and D. The remaining four properties are adjacent to Peabody Road south of Vacaville. Construction of Alternative E, including right-of-way acquisition, would conflict with the contracts governing these properties.

Under Alternative E, acquisition of property under Williamson Act contracts, requiring contract termination for acquired portions, would include the following:

- An estimated 0.77-acres strip of grazing land from the 65-acre parcel under Contract 36 (Walters Road).
- Approximately 0.16 acres from the 39.4-acre parcel under Contract 34 (Air Base Parkway).
- An estimated 4.2-acre strip of grazing land from the 304.3-acre property under Contract 46 (Peabody Road).
- An estimated 2.1-acre strip of grazing land from the 68.2-acre property under Contract 55 (Peabody Road).
- An estimated 8.1-ac strip of grazing land from the 147.2-acre property under Contract 56 (Peabody Road).
- An estimated 4.2-acre strip of grazing land from the 58.5-acre property under Contract 508 (Peabody Road).

Acquisition of right-of-way from these properties and construction of project improvements would be incompatible with the Williamson Act. Conversion to right-of-way would require the contracts to be terminated for the portions of the contracted lands acquired for the alignment; however, the contracts would remain in effect for the remainder of the affected parcels. Under Alternative E, acquiring contracted land cannot be easily avoided along Peabody Road because contracted lands are adjacent to both sides of Peabody Road (Figure 3.3-2). Therefore, shifting the corridor in either direction would still result in conversions of lands under Williamson Act contracts.

The acquisitions from these properties are not expected to substantially reduce the agricultural viability of the properties, all of which are used for livestock grazing. The project sponsor would comply with the requirements of the Williamson Act in acquiring the strip of contracted land.

Impact FA-3: Would the Alternatives, in Combination with Other Development, Result in the Cumulative Conversion of Farmland?

Several transportation projects included in this cumulative analysis would convert farmland in Solano County. Specifically, roadway widening and interchange improvement projects would convert farmland adjacent to existing facilities. As described above, the growth potentially encouraged by the improved roadway would be limited by the annexation process of each jurisdiction. Within the Vacaville, Fairfield, and Suisun City area, various development projects would also convert farmland. Large-scale development projects either under construction, approved, proposed, or planned include, but are not limited to, the future 800-acre technology park planned along Vanden Road in Fairfield; the Fairfield-Vacaville multimodal train station planned for the intersection of Peabody Road and Vanden Road in

Fairfield; the planned Travis AFB expansion; Vacaville's large mixed-use Southtown, Lagoon Valley, and North Valley projects; and Fairfield's Goldridge subdivision project.

Based on a review of the Important Farmland Map for Solano County (2004), much of the farmland converted by these projects would consist of lower-quality grazing lands; however, prime farmlands would also be converted in several locations. These conversions would add to the relatively small amounts of farmland that would be converted by the project. Cumulatively, farmland converted in Solano County by these projects would be unavoidable and could be substantial. However, the project's contribution to the conversion of farmland (less than 0.02 percent of farmland in the County) is not considered substantial. Therefore, the cumulative impact to farmland would not be adverse.

3.3.4 Avoidance, Minimization, and/or Mitigation Measures

Based on the LESA evaluation criteria, the project's impacts to agricultural land are considered minor, as relatively small amounts of farmland would be acquired. Therefore, no mitigation measures are required.