

California High-Speed Rail Authority

Fresno to Bakersfield *Section*

**Draft Supplemental
Environmental Impact
Report/Environmental
Impact Statement**

**Appendix 3.14-A
Results and Findings of Land
Evaluation and
Site Assessment Pursuant to the
Farmland Protection Policy Act**

November 2017



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APPENDIX 3.14-A: RESULTS AND FINDINGS OF LAND EVALUATION AND SITE ASSESSMENT

3.14-A.1 Introduction

This memorandum summarizes the results of the farmland land evaluation and site assessment (LESA) for the Fresno to Bakersfield Locally Generated Alternative (F-B LGA) and the corresponding section of the May 2014 Project of the California High-Speed Rail (HSR) Project. The LESA analysis was performed in compliance with Farmland Protection Policy Act (FPPA) requirements. The purpose of FPPA is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses (7 United States Code 4201). Specifically, the FPPA requires that federal agencies complete the following:

- Use criteria (described in this memorandum) to identify and take into account the adverse effects of their programs on the preservation of farmland
- Consider alternative actions, as appropriate, that could lessen adverse effects
- Ensure that their programs, to the extent practicable, are compatible with state and units of local government and private programs and policies to protect farmland

3.14-A.2 Land Evaluation and Site Assessment

As required by the FPPA implementing regulations (7 Code of Federal Regulations [C.F.R.] Part 658), LESA calculations were performed using the NRCS-CPA-106 form (for corridor-type projects) to determine an overall farmland conversion score. Using alignment information provided by a Geographic Information System, the relative value of the individual corridors were calculated as farmland. The NRCS land evaluation calculations and the Farmland Mapping and Monitoring Program (FMMP) site assessment criteria are presented in Attachment 1. When land evaluation scores were received from NRCS, site assessment scores for the two corridors were calculated using the instructions provided in the FPPA Manual and guidance from NRCS (Davis 2015, Rolfes 2015, USDA NRCS 2013, 2015). The total LESA rating for both the May 2014 Project and the F-B LGA was determined by adding the land evaluation score (up to 100 points) and site assessment scores (up to 160 points). Results were compared to significance thresholds established in the FPPA implementing regulations. Once total LESA scores were determined, farmland effects were evaluated and relative suitability of sites for farmland protection was assessed. The U.S. Department of Agriculture (USDA) recommends the following:

1. Sites with the highest combined scores are to be regarded as most suitable for protection and the sites with the lowest scores as least suitable for protection
2. Sites receiving a total score of less than 160 need not be given further consideration for protection and no additional sites need to be evaluated
3. Sites receiving scores totaling 160 or more are to be given increasingly higher levels of consideration for protection
4. Decisions on proposed actions for sites receiving scores totaling 160 or more should include the following:
 - a. Non-farmland use or existing structure use
 - b. Alternative sites, locations, and designs that would serve the proposed purpose, but would convert either fewer acres of farmland or other farmland with a lower relative value
 - c. Special siting requirements of the proposed project and the extent to which an alternative site fails to satisfy the special siting requirements as well as the originally selected site

3.14-A.3 Farmland Conversion Impacts Results

Land evaluation and site assessment scores, and total LESA scores are provided in Table 3.14.A-1. Both the F-B LGA and the May 2014 Project had a total LESA score below 160, with the F-B LGA scoring slightly lower than the May 2014 Project.

Table 3.14.A-1 Land Evaluation and Site Assessment LESA Scores by Alternative

Kern County	Land Evaluation Score	Site Assessment Score	Total LESA Score
F-B LGA	74	66	140
May 2014 Project	79	65	144

3.14-A.4 Findings

The FPPA does not mandate that a specific decision be made by a federal agency based on LESA ratings, but provides suitability guidance for protection of farmland from conversion to nonagricultural uses.

1. The Central Valley is primarily devoted to agricultural land uses and is dominated by soils that are well suited for crop production. Impacts on agricultural lands in the Fresno to Bakersfield Section of the HSR Project and specifically the F-B LGA, therefore, cannot be completely avoided. Nevertheless, impacts have been avoided and minimized to the extent feasible. Mitigation measures were approved in the *Fresno to Bakersfield Section Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS)* to reduce unavoidable impacts and these would apply to the F-B LGA as well.
2. Programmatic environmental reviews have been performed previously, in coordination with the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, and other federal and state agencies. These concluded that an HSR System connecting cities in southern California with the Bay Area via the Central Valley would be most likely to meet legislative mandates in the least environmentally damaging manner (Authority and FRA 2005, 2010a, 2010b). The programmatic documents established that the HSR project would most effectively be developed in discrete sections. The *Fresno to Bakersfield Section Final EIR/EIS* provides a project-level review of the alternatives, including the May 2014 Project, previously proposed to meet the overall HSR purpose and describes in detail the need for the Fresno to Bakersfield section. This Supplemental EIR/EIS includes a project-level review of the F-B LGA. Recognizing the need to protect important agricultural resources to the extent possible, the May 2014 Project evaluated in the *Fresno to Bakersfield Section Final EIR/EIS* and the F-B LGA evaluated in this Supplemental EIR/EIS would follow existing road and railway alignments to the extent feasible.

Following the completion of the decision-making process, the NRCS requested that the decision-making agency return a copy of the farmland conversion calculations to the NRCS for record keeping purposes (see Figure 3.14.A-1 below). The FRA, as the decision-making agency for the F-B LGA, is expected to complete the FPPA reporting process, following the posting of the Record of Decision for the project.

U.S. DEPARTMENT OF AGRICULTURE Natural Resources Conservation Service		NRCS-CPA-106 (Rev. 1-91)	
FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS			
PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 11/22/16	4. Sheet 1 of 1
1. Name of Project Fresno-Bakersfield Locally Generated Alt.		5. Federal Agency Involved Federal Railroad Administration	
2. Type of Project High Speed Rail		6. County and State Kern County, California	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 11/22/16	2. Person Completing Form SW Davis
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated 729,956	Average Farm Size 1,202
5. Major Crop(s) Grapes, Almonds, Citrus	6. Farmable Land in Government Jurisdiction Acres: 899,395 % 17	7. Amount of Farmland As Defined in FPPA Acres: 2,120,267 % 40	
8. Name Of Land Evaluation System Used Revised Storie Index	9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 11/28/16	
PART III (To be completed by Federal Agency)		Alternative Corridor For Segment <small>May 2014 Project (Corr. B)</small>	
		Corridor A	Corridor B
A. Total Acres To Be Converted Directly	819	977	
B. Total Acres To Be Converted Indirectly, Or To Receive Services	89	36	
C. Total Acres In Corridor	908	1,013	
PART IV (To be completed by NRCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland	681	849	
B. Total Acres Statewide And Local Important Farmland	0	0	
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0001	0.03	
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	34	30	
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative Value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)	74	79	
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points	
1. Area in Nonurban Use	15	7	5
2. Perimeter in Nonurban Use	10	4	4
3. Percent Of Corridor Being Farmed	20	6	7
4. Protection Provided By State And Local Government	20	20	20
5. Size of Present Farm Unit Compared To Average	10	0	0
6. Creation Of Nonfarmable Farmland	25	0	0
7. Availability Of Farm Support Services	5	5	5
8. On-Farm Investments	20	17	17
9. Effects Of Conversion On Farm Support Services	25	5	5
10. Compatibility With Existing Agricultural Use	10	2	2
TOTAL CORRIDOR ASSESSMENT POINTS	160	66	65
			0
			0
PART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)	100	74	79
Total Corridor Assessment (From Part VI above or a local site assessment)	160	66	65
			0
			0
TOTAL POINTS (Total of above 2 lines)	260	140	144
			0
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
5. Reason For Selection:			
Signature of Person Completing this Part:			DATE
NOTE: Complete a form for each segment with more than one Alternate Corridor			

Clear Form

Figure 3.14.A-1 NRCS Farmland Conversion Impact Rating for Corridor-Type Projects Assessment
(Sheet 1 of 2)

NRCS-CPA-106 (Reverse)

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points
- (2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points
- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points
- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points
- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?
(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points
- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points
- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points
- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points
- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points
- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Figure 3.14.A-1 NRCS Farmland Conversion Impact Rating for Corridor-Type Projects Assessment

(Sheet 2 of 2)

3.14-A.5 References

- California High-Speed Rail Authority (Authority) and USDOT Federal Railroad Administration (FRA). 2005. Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Rail Train System. Available at: http://www.hsr.ca.gov/Programs/Environmental_Planning/EIR_EIS/index.html. Sacramento, CA, and Washington DC. August 2005.
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