

APPENDIX 3.14-A

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

High-Speed Train – Merced to Fresno Section Results and Findings of Land Evaluation and Site Assessment Pursuant to the Farmland Protection Policy Act

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Date: April 2, 2012

Introduction

This memorandum summarizes the results of the farmland land evaluation and site assessment (LESA) for the Merced to Fresno Section of the California High-Speed Train (HST) Project alternatives, which 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:

- 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; and
- 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.

Merced to Fresno Section HST Alternatives

Thirteen alternative corridors were evaluated, and are identified in Table 1. Portions of all alternatives lie within three counties: Merced, Madera and Fresno.

Table 1
Merced to Fresno Section HST Alternatives and Heavy Maintenance Facilities

Alternative/Heavy Maintenance Facility	Design Options
UPRR/SR 99 Alternative	With Ave 21 Wye
	East Chowchilla with Ave 24 Wye
	West Chowchilla with Ave 24 Wye
BNSF Alternative	Mission Avenue Le Grand with Ave 21 Wye
	Mission Avenue Le Grand with Ave 24 Wye

Alternative/Heavy Maintenance Facility	Design Options
	Mission Avenue East of Le Grand with Ave 21 Wye
	Mission Avenue East of Le Grand with Ave 24 Wye
	Mariposa Way Le Grand with Ave 21 Wye
	Mariposa Way Le Grand with Ave 24 Wye
	Mariposa Way East of Le Grand with Ave 21 Wye
	Mariposa Way East of Le Grand with Ave 24 Wye
Hybrid Alternative	With Ave 21 Wye
	With Ave 24 Wye
Heavy Maintenance Facilities	Castle Commerce Center
	Harris-DeJager
	Fagundes
	Gordon-Shaw
	Kojima Development

Land Evaluation and Site Assessment

As required by the FPPA implementing regulations (7 Code of Federal Regulations Part 658), staff from the Natural Resources Conservation Service (NRCS) and HST Project analysts performed land evaluation and site assessment calculations using the CPA-106 form (for corridor-type projects) to determine an overall farmland conversion score. Using alignment information provided by a Geographic Information System, the NRCS calculated the relative value of each of the alternative corridors as farmland; the NRCS land evaluation calculations and the Farmland Mapping and Monitoring Program (FMMP) site assessment criteria are presented in Attachments 1 and 2, respectively. The NRCS provided separate scores for each county within which the alternatives were located (for example, the Hybrid Alternative with Ave 21 Wye was assigned separate scores for Merced, Madera, and Fresno counties). They also provided land evaluation ratings for the heavy maintenance facilities (HMFs). When land evaluation scores were received from NRCS, project staff calculated site assessment scores for each of the alternative corridors and HMF sites. The total LESA rating for each alternative was determined by adding the land evaluation score (up to 100 points) and site assessment scores (up to 160 points) for each county, and weighting scores based on the percentage of the alignment lying within each county (total possible score of 260). 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 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 be given increasingly higher levels of consideration for protection.

4. When making decisions on proposed actions for sites receiving scores totaling 160 or more, the following should be considered:
 - a. Use of land that is not farmland or use of existing structures;
 - b. Alternative sites, locations, and designs that would serve the proposed purpose, but would convert either fewer acres of farmland or other farmland that has a lower relative value; and
 - 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.

Farmland Conversion Impacts Results

Land evaluation and site assessment scores, and total LESA scores, for each of the 13 alternative corridors and HMFs are provided in Table 2. All alternative corridors had total LESA scores equal to or greater than 160, with the exception of the UPRR/SR 99 Alternative with the Ave 21 Wye and the UPRR/SR 99 Alternative with the East Chowchilla design option and Ave 24 Wye, which had scores of 158 and 155, respectively. The lowest LESA scores were associated with the UPRR/SR 99 Alternative, and the highest LESA scores were associated with BNSF Alternative. The Hybrid Alternative had LESA scores intermediate between the UPRR/SR 99 and BNSF alternatives. The five HMFs received scores that ranged from 126 for the Castle Commerce Center HMF site to 203 for the Harris-DeJager HMF site, with the rest of the scores falling between the two but in excess of 160.

Table 2
 Land Evaluation and Site Assessment Scores for the
 Merced to Fresno Section HST Alternatives and HMFs

Alternative	Land Evaluation Score	Site Assessment Score	Total LESA Score	Percent Alignment within County	Weighted LESA Score
UPRR/SR 99 Alternative					
Ave 21 Wye					
Merced	40	94	134	30	40
Madera	81	96	177	63	111.5
Fresno	81	13	94	7	6.6
Total Score					158
Ave 24 Wye - East of Chowchilla Design Option					
Merced	40	96	136	30	40.8
Madera	74	96	170	63	107.1
Fresno	81	13	94	7	6.6
Total Score					155
Ave 24 Wye - West of Chowchilla Design Option					
Merced	54	96	150	30	45.0
Madera	74	98	172	63	108.4
Fresno	81	13	94	7	6.6

Alternative	Land Evaluation Score	Site Assessment Score	Total LESA Score	Percent Alignment within County	Weighted LESA Score
Total Score					160
BNSF Alternative					
Ave 21 Wye - Mission Avenue Design Option					
Merced	53	102	155	30	46.5
Madera	71	120	191	63	120.3
Fresno	81	13	94	7	6.6
Total Score					173
Ave 24 Wye - Mission Avenue Design Option					
Merced	53	102	155	30	46.5
Madera	83	120	203	63	127.9
Fresno	81	13	94	7	6.6
Total Score					181
Ave 21 Wye - Mission Avenue East of Le Grand Design Option					
Merced	52	107	159	30	47.7
Madera	71	120	191	63	120.3
Fresno	81	13	94	7	6.6
Total Score					175
Ave 24 Wye - Mission Avenue East of Le Grand Design Option					
Merced	52	107	159	30	47.7
Madera	83	120	203	63	127.9
Fresno	81	13	94	7	6.6
Total Score					182
Ave 21 Wye - Mariposa Way Design Option					
Merced	71	102	173	30	51.9
Madera	71	120	191	63	120.3
Fresno	81	13	94	7	6.6
Total Score					179
Ave 24 Wye - Mariposa Way Design Option					
Merced	71	102	173	30	51.9
Madera	83	120	203	63	127.9
Fresno	81	13	94	7	6.6

Alternative	Land Evaluation Score	Site Assessment Score	Total LESA Score	Percent Alignment within County	Weighted LESA Score
Total Score					186
Ave 21 Wye - Mariposa Way East of Le Grand Design Option					
Merced	75	107	182	30	54.6
Madera	71	120	191	63	120.3
Fresno	81	13	94	7	6.6
Total Score					182
Ave 24 Wye - Mariposa Way East of Le Grand Design Option					
Merced	75	107	182	30	54.6
Madera	83	120	203	63	127.9
Fresno	81	13	94	7	6.6
Total Score					190
Hybrid Alternative					
Ave 21 Wye					
Merced	40	96	136	30	40.8
Madera	89	120	209	63	131.7
Fresno	81	13	94	7	6.6
Total Score					179
Ave 24 Wye					
Merced	54	96	150	30	45.0
Madera	76	120	196	63	123.5
Fresno	81	13	94	7	6.6
Total Score					175
HMF					
Castle Commerce Center	--	--	--	--	126
Harris-DeJager	--	--	--	--	203
Fagundes	--	--	--	--	187
Gordon-Shaw	--	--	--	--	181
Kojima Development	--	--	--	--	198
Note: Total LESA Score is weighted based on percent of each corridor within Merced, Madera and Fresno counties.					

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. Based on FPPA guidance and USDA recommendations, the BNSF Alternative corridors are considered most suitable for protection of agricultural resources, compared to the other alternatives. Each of the alternatives had a total LESA score equal to or greater than 160, and USDA recommendations are addressed in the following paragraphs.

1. The Central Valley is primarily devoted to agricultural land uses and is dominated by soils that are well suited for crop production. Therefore, impacts on agriculture lands in the Merced to Fresno Section of the HST Project cannot be completely avoided, although impacts have been avoided and minimized to the extent feasible. Mitigation measures have been proposed in the Merced to Fresno Section Environmental Impact Report/Environmental Impact Statement (EIR/EIS) to reduce unavoidable impacts.
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, and concluded that an HST 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 (California High-Speed Rail Authority [Authority] and Federal Railroad Administration [FRA] 2005, 2008, 2010); and the programmatic documents established that the HST would most effectively be developed in discrete sections. The Merced to Fresno Section EIR/EIS provides a project-level review of the alternatives that have been proposed to meet the overall HST purpose and need for this segment. The programmatic EIR/EIS recognized that impacts on agricultural resources could be substantial, and some potential alternatives were rejected during the programmatic review because of their effects on agriculture (Authority and FRA 2008). Recognizing the need to protect important agricultural resources to the extent possible, alternatives evaluated in the Merced to Fresno Section would follow existing road and railway alignments to the extent feasible (e.g., the UPRR/SR 99 Alternative).
3. Siting requirements for the HST System established in the final programmatic EIR/EIS included a segment traveling between Merced and Fresno (Authority and FRA 2010). The FRA, as federal lead agency, has considered the environmental effects that would result from each of the proposed project alternatives and has determined that the Hybrid Alternative is the preferred alternative. The Hybrid Alternative has total LESA scores that are greater than the UPRR/SR 99 Alternative, but less than the BNSF Alternative.

Following the completion of the decision-making process, the decision-making agency is requested to return a copy of the farmland conversion calculations to the NRCS for recordkeeping purposes. The FRA, as the decision-making agency for the Merced to Fresno Section of the California HST Project, is expected to complete the FPPA reporting process in May 2012, following posting of the Record of Decision for the project.

References

California High-Speed Rail Authority and Federal Railroad Administration (Authority and FRA). 2005. *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System*. Available at http://www.cahighspeedrail.ca.gov/Statewide_Program_Environmental_Reports_EIR_EIS.aspx. Sacramento, CA, and Washington, DC. August 2005.

California High-Speed Rail Authority and Federal Railroad Administration (Authority and FRA). 2008, Revised 2010. *Final Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)*. Available at http://www.cahighspeedrail.ca.gov/ba_cv_program_eir.aspx. Sacramento, CA, and Washington, DC. May 2008, Revised 2010.

California High-Speed Rail Authority and Federal Railroad Administration (Authority and FRA). 2010a. *Bay Area to Central Valley High-Speed Train (HST) Revised Final Program Environmental Impact Report (EIR)*. Available at http://www.cahighspeedrail.ca.gov/ba_cv_program_eir.aspx. Sacramento, CA, and Washington, DC. August 2010.

ATTACHMENT 1

NRCS Land Evaluation Calculations



Natural Resources Conservation Service
California State Office
430 G Street, # 4164
Davis, CA 95618
(530) 792-5600
(530) 792-5790 (Fax)

October 21, 2010

Hi Kathy,

I am sorry this took so long, it was a very involved and complicated project. GIS did much of the work but in the end there was about 2 weeks of just plain old calculating. Weighted averages were used for the Storie Index and they are time consuming!

The soils data is based on the construction footprint that Fawn sent me. I used the FPPA rules using our definitions of Prime and Statewide Important farmlands. We have not designated any unique farmland or locally important farmland in any of these counties. There is plenty of prime there! I examined the routes and excluded the soil polygons in major urban areas such as Merced and Madera, they will be Urban-Soil complexes when the mapping is updated and that seemed appropriate.

On the attached sheet for each county, I added the Chowchilla options on the bottom. All the options are given letters to match on the main form. Numbers C and D of part IV will probably be of little value to you, they are not of much value to me. Part V is the Storie Index, I used the historical Storie Index values stored in the National Soil Information System, they can also be obtained in the Web Soil Survey.

Part VI will undoubtedly drive you crazy, you might find the District Conservationists in our NRCS offices of some assistance with some of that information.

A handwritten signature in cursive script that reads "Bill".

William Reed
CA State Resources Inventory Coordinator
Davis, CA
530-792-5660



**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request	08/06/10	4. Sheet 1 of 2
1. Name of Project		5. Federal Agency Involved		
CA High-Speed Train Merced to Fresno		USDOT Federal Railroad Administration		
2. Type of Project		6. County and State		
Transportation - Rail		Merced County, CA		
PART II (To be completed by NRCS)		1. Date Request Received by NRCS	2. Person Completing Form	
Merced County		08/09/2010		
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.)			4. Acres Irrigated Average Farm Size	
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			514,162 399	
5. Major Crop(s)	6. Farmable Land In Government Jurisdiction Acres: 46		7. Amount of Farmland As Defined In FPPA Acres: 537,716 %40	
Almond - sweet potato - tomato	None			
8. Name Of Land Evaluation System Used		9. Name of Local Site Assessment System		10. Date Land Evaluation Returned by NRCS
California Storie Endox		None		

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	Attached			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	Attached			
C. Total Acres In Corridor	Attached	0	0	0

PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	Attached			
B. Total Acres Statewide And Local Important Farmland	Attached			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.0002	0.0002	0.0001	0.0003
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	42	42	28	28
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)	40	40	54	53

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				
2. Perimeter In Nonurban Use	10				
3. Percent Of Corridor Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Size of Present Farm Unit Compared To Average	10				
6. Creation Of Nonfarmable Farmland	25				
7. Availability Of Farm Support Services	5				
8. On-Farm Investments	20				
9. Effects Of Conversion On Farm Support Services	25				
10. Compatibility With Existing Agricultural Use	10				
TOTAL CORRIDOR ASSESSMENT POINTS	160	0	0	0	0

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	0	0	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 type="checkbox"/>
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5. Reason For Selection:

Signature of Person Completing this Part: _____ DATE _____

NOTE: Complete a form for each segment with more than one Alternate Corridor

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency) 3. Date of Land Evaluation Request **08/06/10** 4. Sheet 1 of **2**

1. Name of Project **CA High-Speed Train Merced to Fresno** 5. Federal Agency Involved **USDOT Federal Railroad Administration**

2. Type of Project **Transportation - Rail** 6. County and State **Merced County, CA**

PART II (To be completed by NRCS) Merced County 1. Date Request Received by NRCS **08/04/2010** 2. Person Completing Form

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 NO 4. Acres Irrigated | Average Farm Size **514,162 | 399**

5. Major Crop(s) **Almond - sweet potato - tomato** 6. Farmable Land in Government Jurisdiction Acres: **550,000 available 46** 7. Amount of Farmland As Defined in FPPA Acres: **537,716 %40**

8. Name Of Land Evaluation System Used **California State Index** 9. Name of Local Site Assessment System **None** 10. Date Land Evaluation Returned by NRCS

PART III (To be completed by Federal Agency) Alternative Corridor For Segment

	Corridor EF	Corridor FF	Corridor GG	Corridor DD
A. Total Acres To Be Converted Directly	Attached			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	Attached			
C. Total Acres In Corridor	Attached	0	0	0

PART IV (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland	Attached			
B. Total Acres Statewide And Local Important Farmland	Attached			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.0002	0.0002	0.0003	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	23	15	12	

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)

	52	71	75	
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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			
2. Perimeter in Nonurban Use	10			
3. Percent Of Corridor Being Farmed	20			
4. Protection Provided By State And Local Government	20			
5. Size of Present Farm Unit Compared To Average	10			
6. Creation Of Nonfarmable Farmland	25			
7. Availability Of Farm Support Services	5			
8. On-Farm Investments	20			
9. Effects Of Conversion On Farm Support Services	25			
10. Compatibility With Existing Agricultural Use	10			

TOTAL CORRIDOR ASSESSMENT POINTS 160 0 0 0 0

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	0	0	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 NO

5. Reason For Selection:

Signature of Person Completing this Part: DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Attachment to CPA-106 Form
Farmland Conversion for CHST Project Alternatives in Merced County

Alternative	Part III			Part IV			
	A. Total Acres To Be Converted Directly	B. Total Acres To Be Converted Indirectly, Or To Receive Services	C. Total Acres In Corridor	Important Farmland			Farmland of Local Importance
				Prime Farmland	Farmland of Statewide Importance	Unique Farmland	
UPRR/SR99 Alternatives							
UPRR/SR99 Ave 21 Wye Alternative	190.4	19.0	215.8	41 55.9	116 56.6	0 37.0	0 40.9
UPRR/SR99 Ave 24 Wye Alternative	257.4	25.7	282.8	65.1	75.2	0 75.1	0 42.0
BNSF Alternatives							
BNSF Mission Avenue (through LeGrand) Alternative	221.0	22.1	302.4	142 84.3	45 35.6	0 42.5	0 68.5
BNSF Mission Avenue (East of LeGrand) Alternative	198.2	19.8	267.8	167 106.7	53 34.0	0 45.4	0 42.2
BNSF Mission Avenue (through LeGrand) Alternative	212.2	21.2	287.0	99 102.1	29 28.9	0 36.5	0 50.0
BNSF Mariposa Way (East of LeGrand) Alternative	197.4	19.7	245.1	162 111.2	32 18.9	0 42.7	0 24.6
Heavy Maintenance Facility Alternatives							
Castle Commerce Center (UPRR/SR99 and BSNF Alternatives)	91.1	9.1	299.4	70 44.4	11 8.4	0 8.4	0 38.3
Harris/Delager (UPRR/SR99 Alternative)	341.9	34.2	341.9	54 48.5	0 8.1	0 28.5	0 8.0

41 116 0 0
54 43 0 0

→ EAST CHOWCHILLA option
WEST CHOWCHILLA option

Copy 0002

A

D E F G

B C

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request	08/06/10	4. Sheet 1 of 2
1. Name of Project	CA High-Speed Train Merced to Fresno	5. Federal Agency Involved	USDOT Federal Railroad Administration	
2. Type of Project	Transportation - Rail	6. County and State	Fresno County, CA	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS	2. Person Completing Form	
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).		8/16/10		
5. Major Crop(s) Grapes, Tomatoes, Almonds		6. Farmable Land in Government Jurisdiction Acres: 1,250,984 % 32.7	4. Acres Irrigated	Average Farm Size
8. Name of Land Evaluation System Used		9. Name of Local Site Assessment System	1,153,812	285
			7. Amount of Farmland As Defined in FPPA Acres: 597,055 % 15.6	
			10. Date Land Evaluation Returned by NRCS	

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	Attached			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	Attached			
C. Total Acres In Corridor	Attached	0	0	0
PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	Attached			
B. Total Acres Statewide And Local Important Farmland	Attached			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.00004			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	22%			
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)	81			

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				
2. Perimeter in Nonurban Use	10				
3. Percent Of Corridor Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Size of Present Farm Unit Compared To Average	10				
6. Creation Of Nonfarmable Farmland	25				
7. Availability Of Farm Support Services	5				
8. On-Farm Investments	20				
9. Effects Of Conversion On Farm Support Services	25				
10. Compatibility With Existing Agricultural Use	10				
TOTAL CORRIDOR ASSESSMENT POINTS	160	0	0	0	0

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	0	0	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 type="checkbox"/>
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5. Reason For Selection:

Signature of Person Completing this Part: _____ DATE _____

NOTE: Complete a form for each segment with more than one Alternate Corridor

**Attachment to CPA-106 Form
Farmland Conversion for CHST Project Alternatives in Fresno County^a**

Alternative	Part III			Part IV			
	A. Total Acres To Be Converted Directly	B. Total Acres To Be Converted Indirectly, Or To Receive Services	C. Total Acres In Corridor	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance
UPRR/SR99 Alternatives							
UPRR/SR99 Alternative	5.1	0.5	425.7	0.0	6.0 6.0	0.0	0.0 0.0
BNSF Alternatives							
BNSF Alternative	5.1	0.5	425.7	0.0	6.0 6.0	0.0	0.0 0.0

^a Zero acres of Important Farmland are affected by the Fresno Design Options (West of Fresno Station Design Option, East of Fresno Station Design Option, Hybrid Fresno Station Design Option) and total acres in corridor (Part III, Item C) are the same regardless of which Fresno Design is selected, and therefore, the alternatives are not differentiated by the Fresno Design Options.

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 3/30/12	4. Sheet 1 of 2
1. Name of Project CA High Speed Train Merced To Fresno		5. Federal Agency Involved USDOT Federal Railroad Administration	
2. Type of Project Transportation-Rail		6. County and State Madera County, CA	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 3/25/12	2. Person Completing Form William Reed
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 281,658	Average Farm Size 398
5. Major Crop(s) Grapes, Milk, Almonds	6. Farmable Land in Government Jurisdiction Acres: 290,683 % 33.7	7. Amount of Farmland As Defined in FPPA Acres: 365,435 % 42	
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS	

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				

PART IV (To be completed by NRCS) Land Evaluation Information	
A. Total Acres Prime And Unique Farmland	see attached
B. Total Acres Statewide And Local Important Farmland	see attached
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	see attached
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	see attached

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)	see attached

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			
2. Perimeter in Nonurban Use	10			
3. Percent Of Corridor Being Farmed	20			
4. Protection Provided By State And Local Government	20			
5. Size of Present Farm Unit Compared To Average	10			
6. Creation Of Nonfarmable Farmland	25			
7. Availability Of Farm Support Services	5			
8. On-Farm Investments	20			
9. Effects Of Conversion On Farm Support Services	25			
10. Compatibility With Existing Agricultural Use	10			
TOTAL CORRIDOR ASSESSMENT POINTS	160			

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160			
TOTAL POINTS (Total of above 2 lines)	260			

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 type="checkbox"/>
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5. Reason For Selection:

Signature of Person Completing this Part: _____ DATE _____

NOTE: Complete a form for each segment with more than one Alternate Corridor

California High Speed Rail Route Changes Madera County

ROUTE SEGMENT	PRIME ACRES	STATEWIDE IMPORTANT ACRES	PERCENT OF COUNTY FARMLAND	AVG. STORIE INDEX	PERCENT OF GOV. JURISDICTION FARMLAND OF HIGHER VALUE
UPRR E21 WYE	150	101	0.0006	81	13
UPRR E24 WYE	140	169	0.0008	74	16
UPRR W24 WYE	55	153	0.0005	73	19
HYBRID 21	169	166	0.0009	89	8
HYBRID 24	183	273	0.0012	76	18
BNSF 21	159	148	0.0008	71	24
BNSF 24	158	145	0.0008	83	12

ATTACHMENT 2

FMMP Site Assessment Criteria

FMMP Site Assessment Criteria for Corridor Projects (7 CFR Part 658.5[b])

Federal agencies are to use the following criteria to assess the suitability of each proposed site or design alternative for protection as farmland.

- 1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
 - a) More than 90 percent – 15 points.
 - b) 90 to 20 percent – 14 to 1 point(s).
 - c) Less than 20 percent – 0 points.
- 2) How much of the perimeter of the site borders on land in nonurban use?
 - a) More than 90 percent – 10 points.
 - b) 90 to 20 percent – 9 to 1 point(s).
 - c) Less than 20 percent – 0 points.
- 3) How much of the site has been farmed (managed for scheduled harvest or timber activity) more than 5 of the last 10 years?
 - a) More than 90 percent – 20 points.
 - b) 90 to 20 percent – 19 to 1 point(s).
 - c) 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?
 - a) Site is protected – 20 points.
 - b) Site is not protected – 0 points.
- 5) *Not applicable to corridor projects.*
- 6) *Not applicable to corridor projects.*
- 7) Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county?
 - a) As large or larger – 10 points.
 - b) 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.
- 8) If this 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? *Point value increased to 25 points for corridor projects.*
 - a) Acreage equal to more than 25 percent of acres directly converted by the project – 25 points.
 - b) Acreage equal to between 25 and 5 percent of acres directly converted by the project – 24 to 1 point(s).
 - c) Acreage equal to less than 5 percent of acres directly converted by the project – 0 points.
- 9) 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?
 - a) All required services are available – 5 points.
 - b) Some required services are available – 4 to 1 point(s).
 - c) No required services are available – 0 points.
- 10) Does the site have substantial and well-maintained on-farm investments such as barns, fruit trees and vines, field terraces, drainage, irrigation, waterways, and other soil and water conservation measures?
 - a) High amount of on-farm investment – 20 points.
 - b) Moderate amount of on-farm investment – 19 to 1 point(s).
 - c) No on-farm investment – 0 points.
- 11) 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? *Point value increased to 25 points for corridor projects.*
 - a) Substantial reduction in demand for support services if the site is converted – 25 points.
 - b) Some reduction in demand for support services if the site is converted – 24 to 1 point(s).
 - c) No significant reduction in demand for support services if the site is converted – 0 points.
- 12) 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?
 - a) Proposed project is incompatible with existing agricultural use of surrounding farmland – 10 points.
 - b) Proposed project is tolerable to existing agricultural use of surrounding farmland – 9 to 1 point(s).
 - c) Proposed project is fully compatible with existing agricultural use of surrounding farmland – 0 points.

FMMP Site Assessment Criteria for Sites (7 CFR Part 658.5[b])

Federal agencies are to use the following criteria to assess the suitability of each proposed site or design alternative for protection as farmland.

- 1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
 - a) More than 90 percent – 15 points.
 - b) 90 to 20 percent – 14 to 1 point(s).
 - c) Less than 20 percent – 0 points.
- 2) How much of the perimeter of the site borders on land in nonurban use?
 - a) More than 90 percent – 10 points.
 - b) 90 to 20 percent – 9 to 1 point(s).
 - c) Less than 20 percent – 0 points.
- 3) How much of the site has been farmed (managed for scheduled harvest or timber activity) more than 5 of the last 10 years?
 - a) More than 90 percent – 20 points.
 - b) 90 to 20 percent – 19 to 1 point(s).
 - c) 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?
 - a) Site is protected – 20 points.
 - b) Site is not protected – 0 points.
- 5) How close is the site to an urban built-up area?
 - a) The site is 2 miles or more from an urban built-up area – 15 points.
 - b) The site is more than 1 mile but less than 2 miles from an urban built-up area – 10 points.
 - c) The site is less than 1 mile from, but is not adjacent to, an urban built-up area – 5 points.
 - d) The site is adjacent to an urban built-up area – 0 points.
- 6) How close is the site to water lines, sewer lines, and/or other local facilities and services whose capacities and design would promote non-agricultural use?
 - a) None of the services exist nearer than 3 miles from the site – 15 points.
 - b) Some of the services exist more than 1 but less than 3 miles from the site – 10 points.
 - c) All of the services exist within ½ mile of the site – 0 points.
- 7) Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county?
 - a) As large or larger – 10 points.
 - b) 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.
- 8) If this 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? *Point value decreased to 10 points for site projects.*
 - a) Acreage equal to more than 25 percent of acres directly converted by the project – 10 points.
 - b) Acreage equal to between 25 and 5 percent of acres directly converted by the project – 10 to 1 point(s).
 - c) Acreage equal to less than 5 percent of acres directly converted by the project – 0 points.
- 9) 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?
 - a) All required services are available – 5 points.
 - b) Some required services are available – 4 to 1 point(s).
 - c) No required services are available – 0 points.
- 10) Does the site have substantial and well-maintained on-farm investments such as barns, fruit trees and vines, field terraces, drainage, irrigation, waterways, and other soil and water conservation measures?
 - a) High amount of on-farm investment – 20 points.
 - b) Moderate amount of on-farm investment – 19 to 1 point(s).
 - c) No on-farm investment – 0 points.
- 11) 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? *Point value decreased to 10 points for site projects.*
 - a) Substantial reduction in demand for support services if the site is converted – 10 points.
 - b) Some reduction in demand for support services if the site is converted – 10 to 1 point(s).
 - c) No significant reduction in demand for support services if the site is converted – 0 points.
- 12) 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?
 - a) Proposed project is incompatible with existing agricultural use of surrounding farmland – 10 points.
 - b) Proposed project is tolerable to existing agricultural use of surrounding farmland – 9 to 1 point(s).
 - c) Proposed project is fully compatible with existing agricultural use of surrounding farmland – 0 points.

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
