California High-Speed Rail Authority Bakersfield to Palmdale Project Section



Appendix 3.14-B: Parcel Severance Methodology and Results





The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.



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APPENDIX 3.14-B: PARCEL SEVERANCE METHODOLOGY AND RESULTS

3.14-B-1 INTRODUCTION

California High-Speed Rail (HSR) Project right-of-way acquisition or construction could sever parcels of Important Farmland. Severed parcels (referred to as remnant parcels) may or may not remain in agricultural production for reasons such as insufficient size, irregular shape, loss of essential infrastructure, or detachment from adjacent farmland. Analysts used a two-step process to identify remnant parcels of Important Farmland that are likely to remain in agricultural use and those that are likely to be converted to a nonagricultural use. Important farmland that is classified as unusable remnant parcels is reported as acreage of Important Farmland converted to nonagricultural use and included as permanent indirect impacts to Important Farmland.

The purpose of this appendix is to outline the methodology used for calculating permanent indirect impacts to Important Farmland from parcel severance.

3.14-B-2 BACKGROUND

The four Build Alternatives are being designed to follow existing transportation corridors as much as possible. However, in some areas, the Build Alternatives deviate from these transportation corridors and may bisect agricultural parcels, potentially severing parcels actively being cultivated. Parcel severance can result in the following scenarios:

- 1. A parcel is severed and the remnant parcel is still economically viable as agricultural land.
- 2. A parcel is severed but can be consolidated with an adjacent agricultural parcel and, therefore, can continue to be used as agricultural land.
- 3. A parcel is severed and creates a remnant parcel that would not remain economically viable as agricultural land for reasons such as shape and location (as presented below) and cannot be consolidated with an adjacent agricultural parcel.

The third parcel severance scenario results in what the California High-Speed Rail Authority (Authority) refers to as a "noneconomic remnant parcel." Because the remnant parcel is not a direct conversion of Important Farmland based on the location of the project footprint, but rather is outside of the project footprint, the conversion of agricultural land from parcel severance is classified as an indirect impact.

The Authority has committed to implementing a Farmland Consolidation Program as part of construction of the Bakersfield to Palmdale Project Section, through which it will attempt to transfer these noneconomic remnant parcels to neighboring landowners and/or consolidate with adjacent parcels that are in agricultural use wherever possible. However, if efforts to transfer and consolidate agricultural land are not feasible, the Authority has committed to purchasing noneconomic remnant parcels. The acreage of noneconomic remnant parcels is included in the total acres of agricultural land converted to nonagricultural use.

3.14-B-3 METHODOLOGY AND RESULTS

The following two-step process was implemented to identify remnant parcels and determine whether the remnant parcel could be maintained as farmland or whether it would become a noneconomic remnant parcel.

3.14-B-3-1 Step 1: Identify Remnant Parcels of Important Farmland

Remnant parcels of Important Farmland (including parcels under Williamson Act contracts) that were greater than 20 acres after construction of the HSR permanent project footprint were considered economically viable and were assumed to remain in agricultural use. Remnant parcels of Important Farmland that are or would be reduced to 20 acres or less after construction of the HSR permanent project footprint were considered a noneconomic remnant and were assumed to be converted to a nonagricultural use. Geographic information system (GIS) software was used in this step to identify parcels of Important Farmland that appear to be in active



agricultural use and that are or would be reduced to less than 20 acres in size following severance due to construction of the Bakersfield to Palmdale Project Section.

Under all four Build Alternatives, 22 remnant parcels with Important Farmland that appear to be in active agricultural use are or would be reduced to less than 20 acres in size following severance due to construction of the Bakersfield to Palmdale Project Section. Table 3.14-B-1 provides the total acres of Important Farmland calculated in Step 1 within the remnant parcels that fall below 20 acres in size after parcel severance.

Land Mapping Category	Alternative 1	Alternative 2	Alternative 3	Alternative 5			
Parcel Severance Acreage – Step 1							
Prime Farmland	117	98	117	117			
Unique Farmland	1	1	1	1			
Farmland of Statewide Importance	0 ¹	0 ¹	0 ¹	0 ¹			
Total	118	99	118	118			

Table 3.14-B-1 Permanent Impacts to Important Farmland from Parcel Severance—Step 1

¹ Denotes a number that is greater than 0 but smaller than 0.5.

3.14-B-3-2 Step 2: Determine Acreage of Important Farmland Converted to Nonagricultural Use and Add to Direct Impact Calculation

In Step 2, an analyst licensed by the California Department of Consumer Affairs, Bureau of Real Estate Appraisers, with experience in appraising agricultural real estate, reviewed the characteristics of the remnant parcels identified in Step 1 on a parcel-by-parcel basis.

The licensed analyst determined the viability of continued agricultural use of remnant parcels or likely conversion to a nonagricultural use on the basis of the following considerations:

- Access: Would the HSR project restrict or eliminate access to the remnant parcel such that it can no longer continue in agricultural use (e.g., proposed roadway closure or severance, or permanent HSR fencing around tracks, electrical stations, or maintenance roads)?
- **Size and Shape:** Would the HSR project create a parcel too small or oddly shaped to be viable for agriculture, even if combined with adjacent agricultural parcels?
- Location: Would the HSR project create a parcel that could not be consolidated with adjacent agricultural parcels because of location?
- **Hardship:** Would the HSR project create a severance that causes an overall hardship in maintaining economic activity on what might otherwise appear to be an economically viable remnant parcel?

The Step 2 results presented in this appendix include:

- 1. Total parcels and acreage assumed to remain in agricultural use and, therefore, not included in the total of permanent indirect impacts on Important Farmland
- 2. Total parcels and acreage classified as unusable remnant parcels and, therefore, reported as acreage of Important Farmland permanently and indirectly converted to nonagricultural use

Under all Build Alternatives, 15 of the 22 remnant parcels with Important Farmland identified in Step 1 were identified as parcels that would remain viable agricultural land after parcel severance. Table 3.14-B-2 provides the total acres of Important Farmland within the remnant parcels identified in Step 2 that would remain in agricultural use after parcel severance.



Table 3.14-B-2 Important Farmland to Remain in Agricultural Use After Parcel Severance—Step 2

Land Mapping Category	Alternative 1	Alternative 2	Alternative 3	Alternative 5			
Parcel Severance Acreage – Step 2							
Prime Farmland	63	55	63	63			
Unique Farmland	1	1	1	1			
Farmland of Statewide Importance	0 ¹	0 ¹	0 ¹	0 ¹			
Total	64	56	64	64			

¹ Denotes a number that is greater than 0 but smaller than 0.5.

Under all Build Alternatives, seven remnant parcels with Important Farmland were identified as noneconomic remnant parcels.² Table 3.14-B-3 provides the total acres of Important Farmland within noneconomic remnant parcels identified in Step 2, which represents the total acreage of Important Farmland that would be indirectly converted to nonagricultural use by each Build Alternative.

Table 3.14-B-3 Permanent Indirect Impacts to Important Farmland from Parcel Severance—Step 2

Land Mapping Category	Alternative 1	Alternative 2	Alternative 3	Alternative 5			
Parcel Severance Acreage – Step 1							
Prime Farmland	54	43	54	54			
Unique Farmland	0	0	0	0			
Farmland of Statewide Importance	0	0	0	0			
Total	54	43	54	54			

3.14-B-4 CONCLUSIONS

Overall, all Build Alternatives would permanently convert approximately 54 acres (7 parcels) of Important Farmland to a nonagricultural use from parcel severance, while 64 acres (22 parcels) of severed Important Farmland would remain viable agricultural land. The indirect conversion of Important Farmland to nonagricultural use would occur in addition to Important Farmland converted from direct impacts (Section 3.14).

The majority of the impacted Important Farmland is located within the San Joaquin Valley. Considering that farmland in the San Joaquin Valley is among the most valuable farmland in the U.S., it is anticipated that while parcel ownership may change due to severance, the larger remnant parcels from parcel severance would remain in agricultural use.

The Authority's Farmland Consolidation Program provides additional opportunities to reduce farmland conversion caused by parcel severance. As part of the Farmland Consolidation Program, the Authority's Right-of-Way agents will work with each affected property owner to address issues of concern such as access, as discussed in the Outreach Materials prepared by the Authority (California High Speed Rail 2010). Agents would attempt to resolve conflicts (e.g., by arranging additional property transfers to consolidate ownership through the Farmland Consolidation Program). For large properties, agencies may be able to arrange for additional grade-separated crossings (e.g., underpasses or small overpasses). In the event the agents are

² A parcel is defined as a single parcel with an assigned assessor parcel number. In many instances, a parcel that would be severed by the Build Alternatives is part of an agricultural operation (identified by common ownership) consisting of at least two parcels.



not able to resolve all issues, compensation may be offered to landowners who are affected by parcel severance. For additional information on the right-of-way acquisition process, see Section 3.12, Socioeconomics, Communities, and Environmental Justice.