

4.16 FARMLANDS

Summary

Prime and unique farmlands fall under the jurisdiction of the U.S. Department of Agriculture (USDA) by the Farmland Protection Policy Act of 1981 (FPPA). The Natural Resources Conservation Service (NRCS) administers the regulations and provides guidance for the completion of USDA Form AD 1006 for impacts to prime and unique farmlands.

Prime Farmland is defined as land that has the best combination of physical and chemical characteristics for producing food and other agricultural crops.

Unique Farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops as determined by the Secretary of Agriculture.

Farmland of Statewide or Local Importance is land used for, or with the potential for, production of food or other agricultural crops, and such land has not been identified as Prime or Unique by the USDA.

Consultation with the USDA resulted in the following methodology:

- NRCS soils data were used to define Prime and Unique Farmlands and Farmlands of Statewide or Local Importance within the project area. The definitions of these farmlands are listed in 7 United States Code (USC) 4201(c)(1). The FPPA (7 USC 4201–4209 and 7 Code of Federal Regulations [CFR] 658) requires completion of the AD 1006 form to determine the level of impact that will occur from conversion of farmland to another use (“farmland conversion impact rating”). There are two primary criteria used to determine the impact rating on the AD 1006 form: land evaluation criteria, which evaluate the impacted farmland in terms of its uniqueness or importance; and site assessment criteria, which evaluate the site characteristics of the project study area. These are discussed in 7 CFR 658.5.
- As defined in 7 CFR 658.2, farmland does not include land already in or committed to urban development or water storage. Developed land was removed from the analysis based on 2000 United States Census data that defined areas as urban census blocks, and developed land use information gathered for this Final Environmental Impact Statement (FEIS). This information was used as a replacement for “Urban Built-Up Land” as identified on USDA Important Farmland Maps, because this information is more current.
- For purposes of this analysis, Prime and Unique Farmland and Farmlands of Statewide and Local Importance are described as “important” farmlands.
- The United States Highway 36 (US 36) project team completed the AD 1006 form and found that the site assessment criteria score was less than 60 points for all packages. As stated in 7 CFR 658.4(c)(2), “Sites receiving a total score of less than 160 (on AD 1006 form) need not be given further consideration for protection and no additional sites need to be evaluated.” The *Supplemental Guidance for Implementation of Farmland Protection Policy Act* (FWHA 1985) provides additional direction, stating that AD 1006 form “need not be submitted to the Soil Conservation Service in cases where the site assessment criteria score is less than 60 points for each project alternative.”

This analysis indicated that there are no important farmlands remaining in the Denver, Adams, or Westminster segments of the project area. To the northwest in the project area, the amount of important farmland increases in the Broomfield and Superior/Louisville segments and up to the City of Boulder boundaries. Construction of Packages 2 and 4 and the Combined Alternative Package

There are no important farmlands remaining in the Denver, Adams, or Westminster segments.

Important farmland increases in the Broomfield and Superior/Louisville segments, and up to the City of Boulder boundaries.

Preferred Alternative) would directly affect 20.8, 16.4, and 13.6 acres of important farmland, respectively, due to right-of-way (ROW) acquisition.

A summary of the direct impacts appears in Table 4.16-1, Summary of Direct Impacts to Important Farmlands by Build Package.

Table 4.16-1: Summary of Direct Impacts to Important Farmlands by Build Package

Impacted Farmlands	Package 2 ¹ (acres)	Package 4 ¹ (acres)	Combined Alternative Package (Preferred Alternative) (acres)
Prime and Unique Farmlands	19.9	14.5	12.0
Farmlands of Statewide and Local Importance	0.8	1.9	1.5
Total Important Farmlands	20.8²	16.4	13.6²

Source: NRCS, 2002-2004; US 36 Mobility Partnership, 2009.

Notes:

¹There would be no difference in impacts between Options A and B at the Boulder terminus; therefore, these options have not been displayed in this table.

²The total does not equal the sum of the subtotals due to rounding.

Indirect impacts are anticipated with all of the build packages, and are associated with minor development generated around three existing park-n-Rides which would be modified by this project to facilitate transit station improvements. These impacts are most certain to occur within 0.5 mile of these stations and less certain to occur out to 1.0 mile from the stations. All of the build packages are anticipated to indirectly affect 10.0 acres of important farmlands within 0.5 mile of the transit station improvements.

Affected Environment

All Segments

The FPPA was developed based on concerns that millions of acres of farmland were being converted in the United States each year. This problem was identified in *The National Agricultural Land Study of 1980-81* (USDA 1981). The land study resulted in a congressional report that identified the need for Congress to implement policies and programs to protect farmlands and minimize urban sprawl.

As a result, Prime and Unique Farmlands are protected by the FPPA of 1981. Section 1540(b) of the Act, 7 USC 4201(b), states that the purpose of the Act “is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmlands to non-agricultural uses.” Currently, farmlands subject to FPPA requirements do not have to be used for cropland, but can instead be forestland, pastureland, or other land. Farmlands do not include land already in or committed to urban development or water storage.

If a project has the potential to convert important farmlands to non-farm use, the project sponsors are required to contact the local NRCS office or USDA Service Center. The NRCS uses a land evaluation and site assessment system to establish a farmland’s conversion impact rating score of the proposed sites. This score indicates whether or not adverse impacts to farmlands would exceed the recommended allowable level.

Much of the important farmland has been protected as open space.

Within the US 36 project area, much of the important farmland has been protected as open space. This protection resulted from the transfer of development rights, purchase of conservation easements, purchase/leaseback agreements, and other funding mechanisms by local municipalities. Within the region surrounding US 36, there are at least 70,000 acres of open space, of which 24,000 acres are preserved as ranch and farmlands.

Due to land use changes over the past 50 years, there are no important farmlands in the Denver, Adams, or Westminster segments of the project area. There are 39 acres, 19 acres, and 106 acres of important farmlands in the Broomfield, Superior/Louisville, and Boulder segments, respectively, within 1,000 feet of US 36. These farmlands are depicted in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact.

Impact Evaluation

Methodology

Direct impacts to important farmlands result where the construction limits of a package go outside of the existing US 36 ROW. Acres of important farmlands lost due to implementation of one of the build packages were calculated through the use of geographic information system, and the limits of construction as defined in the engineering drawings prepared for this FEIS.

Indirect impacts result from the conversion of important farmland to urban land uses due to minor development that would be generated in the vicinity of the modified transit stations over the planning period. The greatest opportunity for minor development is likely within 0.5 mile of a transit station. Important farmland that is farther than 0.5 mile but within 1.0 mile of a transit station is assumed to have less probability of being developed. Although bus rapid transit (BRT) service would extend to all transit stations in the US 36 corridor, the BRT service on its own would not be anticipated to induce growth around a transit station. Therefore, only those transit stations that would be physically modified by each package are discussed in the analysis of that package.

Package 1: No Action

Direct Impacts

All Segments

Package 1 would impact farmlands present in areas where transit stations would be improved or constructed as part of the FasTracks improvements, as well as other areas affected by Package 1 improvements.

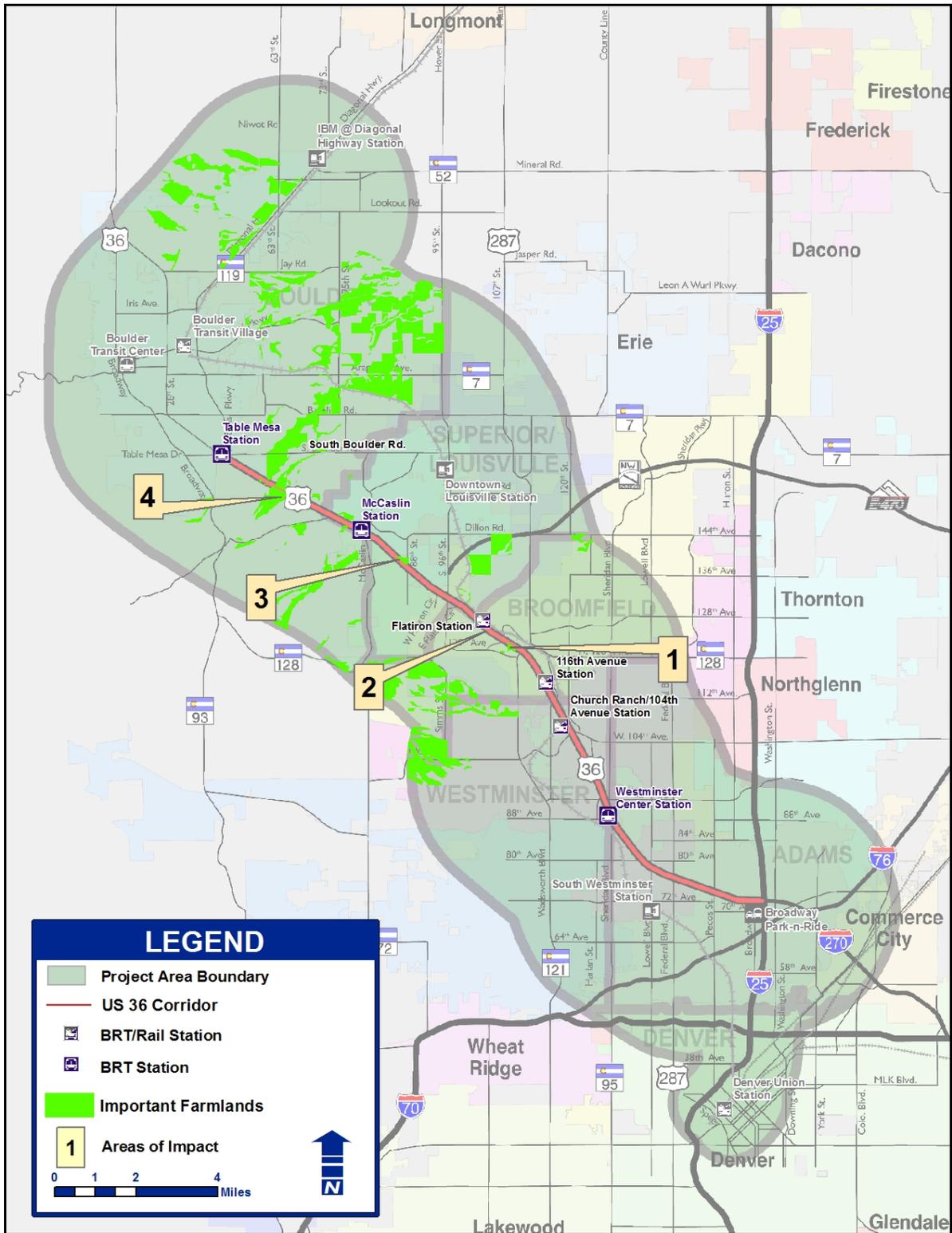
Indirect Impacts

All Segments

Under Package 1, important farmlands that are not dedicated open space would continue to be converted to urban uses as the population in the US 36 project area increases by 28 percent between 2005 and 2035.¹ Package 1 would not impact areas of important farmlands designated as open space as long as local policies do not change. Development around transit stations would indirectly impact farmlands within 0.5 mile of the transit stations, and may impact farmland farther than 0.5 mile but within 1.0 mile of transit stations.

¹ Analysis based on geographic area covered by Denver Regional Council of Governments (DRCOG) transportation analysis zones (TAZs) abutting US 36.

Figure 4.16-1: Important Farmlands in the US 36 Corridor and Estimated Areas of Impact



Source: US 36 Mobility Partnership, 2009.

Note: The 116th Avenue Rail Station is not a part of the 2004 FasTracks Program. Additional stations were added in the early planning stages of the US 36 Environmental Impact Statement. Exact rail station locations and additional stations may be reconsidered in the U.S. Army Corps of Engineers/Regional Transportation District Northwest Rail Environmental Assessment/Environmental Evaluation.

Package 2: Managed Lanes/Bus Rapid Transit

Direct Impacts

Package 2 would not directly affect important farmlands in the Denver, Adams, or Westminster segments because there are no important farmlands adjacent to US 36 in these segments.

Broomfield Segment

There are two areas of direct impacts in the Broomfield Segment (see 1 and 2 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). The first area, consisting of 10.3 impacted acres, is coincident with Broomfield open space and would be affected by the interchange modifications at Wadsworth Parkway. The second area, consisting of 7.6 impacted acres, is located just west of Rock Creek Farm and would need to be acquired for the drop-ramp design at Midway Boulevard and a proposed water quality pond.

Superior/Louisville Segment

One area of farmland would be impacted in the Superior/Louisville Segment (see 3 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). This area, consisting of 0.8 impacted acre, is coincident with Louisville open space and would be impacted by additional lanes allowing vehicles to enter and exit the managed lanes east of McCaslin Boulevard.

There are areas of direct impacts in the Broomfield, Superior/Louisville, and Boulder segments.

Boulder Segment

There are important farmlands in the Boulder Segment located both north and south of the US 36 corridor and east and west of Cherryvale Road (see 4 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). The City of Boulder owns these farmlands, which are also open space. Direct impacts to approximately 2.0 acres are anticipated due to widening of US 36, improvements to Cherryvale Road, and a proposed water quality pond.

Of these sites, only those north of US 36, both east and west of Cherryvale Road, currently engage in active agricultural activities; these sites are coincident with Boulder open space. The activities on these sites consist of horse and cattle grazing. The impacts to these properties would not eliminate, nor substantially reduce, the opportunity for continued use of the properties for agricultural purposes.

Indirect Impacts

All Segments

Indirect impacts to all segments would result from future growth. Minor development would be generated within 0.5 mile of the transit stations improved to serve as BRT stations under Packages 2 and 4. Modifications to the transit stations would result in the probable (or likely) conversion of approximately 10.0 acres of important farmlands to urban uses during the planning period. Under Package 2 and Package 4, planned growth between 0.5 and 1.0 mile from these transit stations is anticipated to result in possible (or less likely) conversion of 3.0 additional acres of important farmlands during the same period of time, while the Combined Alternative Package (Preferred Alternative) would result in the conversion of 4.0 additional acres. Farmlands that are protected as open space were not included in these totals. Table 4.16-2, Indirect Impacts of Transit Stations on Important Farmlands for Packages 2 and 4 and the Combined Alternative Package (Preferred Alternative), presents the anticipated breakdown of acres that would be affected by transit stations improved under Package 2.

Table 4.16-2: Indirect Impacts of Transit Stations on Important Farmlands for Packages 2 and 4 and the Combined Alternative Package (Preferred Alternative)

Stations Modified to Serve BRT Operations	Acres Probably Converted to Urban Uses (within 0.5 mile of the transit station) ¹	Acres Possibly Converted to Urban Uses (between 0.5 and 1.0 mile from transit station) ¹	
	Packages 2 and 4 and the Combined Alternative Package (Preferred Alternative)	Packages 2 and 4	Combined Alternative Package (Preferred Alternative)
Westminster Center Station	None	None	None
116 th Avenue Station	None	2	2
McCaslin Station	10	1	2
Total	10	3	4

Source: US 36 Mobility Partnership, 2009.

Notes:

¹Farmlands protected as open space were removed from the calculations.

BRT = bus rapid transit

Package 4: General-Purpose Lanes, High-Occupancy Vehicle, and Bus Rapid Transit

Direct Impacts

Package 4 would not directly affect important farmlands in the Denver, Adams, or Westminster segments.

Package 4 would not directly affect important farmlands in the Denver, Adams, or Westminster segments because there are no important farmlands adjacent to US 36 in these segments.

Broomfield Segment

There are two areas of direct impacts in the Broomfield Segment (see 1 and 2 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). Impacts to the first area, coincident with Broomfield open space, would be similar to those described under Package 2; 10.0 acres would be affected by the interchange modifications at Wadsworth Parkway. The second area, located just west of Rock Creek Farm, would have fewer impacted acres under Package 4 because there would be no drop-ramps in this location; 1.8 acres would be impacted by a proposed water quality pond.

Superior/Louisville Segment

One area of farmland would be impacted in the Superior/Louisville Segment (see 3 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). This area is coincident with Louisville open space and would experience greater impacts under Package 4 than Package 2 due to additional auxiliary lanes in this location; 1.5 acres would be impacted.

Boulder Segment

There are important farmlands in the Boulder Segment located both north and south of the US 36 corridor and east and west of Cherryvale Road (see 4 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). The City of Boulder owns these farmlands, which are also open space. Direct impacts to approximately 3.1 acres are anticipated due to widening of US 36, improvements to Cherryvale Road, and a proposed water quality pond. Package 4 would have greater impacts than Package 2 because of additional auxiliary lanes in this location.

Of these sites, only those north of US 36, both east and west of Cherryvale Road, currently engage in active agricultural activities; these sites are coincident with Boulder open space. The activities on these sites consist of horse and cattle grazing. The impacts to these properties would not eliminate, nor substantially reduce, the opportunity for continued use of the properties for agricultural purposes.

Indirect Impacts

All Segments

Indirect impacts to important farmlands for Package 4 would be the same as those described above for Package 2. See Table 4.16-2, Indirect Impacts of Transit Stations on Important Farmlands for Packages 2 and 4 and the Combined Alternative Package (Preferred Alternative).

Combined Alternative Package (Preferred Alternative): Managed Lanes, Auxiliary Lanes, and Bus Rapid Transit

Direct Impacts

The Combined Alternative Package (Preferred Alternative) would not directly affect important farmlands in the Denver, Adams, or Westminster segments because there are no important farmlands adjacent to US 36 in these segments.

Broomfield Segment

There are two areas of direct impacts in the Broomfield Segment (see 1 and 2 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). Impacts to the first area, coincident with Broomfield open space, would be similar to those described under Package 2; approximately 8.5 acres would be affected by the interchange modifications at Wadsworth Parkway. The second area, located just west of Rock Creek Farm, would have fewer impacted acres under the Combined Alternative Package (Preferred Alternative) (1.9 acres), as compared to Package 2, and similar impacts to Package 4.

Superior/Louisville Segment

One area of farmland would be impacted in the Superior/Louisville Segment (see 3 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). This area is coincident with Louisville open space and would result in the impact of 1.2 acres; less than Package 4, but greater than Package 2.

Boulder Segment

There are important farmlands in the Boulder Segment located both north and south of the US 36 corridor, and east and west of Cherryvale Road (see 4 in Figure 4.16-1, Important Farmlands in the US 36 Corridor and Estimated Areas of Impact). The City of Boulder owns these farmlands, which are also open space. Direct impacts to approximately 2.0 acres are anticipated due to widening of US 36 and a proposed water quality pond. The Combined Alternative Package (Preferred Alternative) would have similar impacts to Package 2 and fewer impacts than Package 4.

Of these sites, only those north of US 36, both east and west of Cherryvale Road, currently engage in active agricultural activities; these sites are coincident with Boulder open space. The activities on these sites consist of horse and cattle grazing. The impacts to these properties would not eliminate, nor substantially reduce, the opportunity for continued use of the properties for agricultural purposes.

Indirect Impacts

All Segments

Indirect impacts to important farmlands for the Combined Alternative Package (Preferred Alternative) would be similar to those described for Packages 2 and 4 for areas within 0.5 mile of the transit stations. Planned growth between 0.5 and 1.0 mile from the transit stations would be slightly greater for the Combined Alternative Package (Preferred Alternative) as compared to Packages 2 or 4. See Table 4.16-2, Indirect Impacts of Transit Stations on Important Farmlands for Packages 2 and 4 and the Combined Alternative Package (Preferred Alternative).

Mitigation

All of the build packages were modified to avoid and minimize impacts to property acquisition wherever possible.

During the development of the alternatives, all of the build packages were modified to avoid and minimize impacts to property acquisition wherever possible. These modifications included:

- Extensive use of retaining walls to avoid acquisition of open space and farmlands in the Boulder Segment for Package 2 and Package 4. The amount of retaining walls has been reduced for the Combined Alternative Package (Preferred Alternative) to help minimize visual impacts to open space areas.
- The reconfiguration of the US 36/Table Mesa Drive interchange to avoid land use conflicts with open space.
- The relocation of several stormwater ponds along US 36 in the Boulder and Broomfield segments to avoid conflicts with open space.

Table 4.16-3, Mitigation Measures – Farmlands, summarizes the mitigation measures that will be implemented to offset direct impacts resulting from the construction or operation of the packages under consideration.

Table 4.16-3: Mitigation Measures — Farmlands

Impact	Impact Type	Mitigation Measures
Impacts to irrigation pipes and ditches	Construction	<ul style="list-style-type: none"> • All irrigation pipes and ditches will be replaced in-kind. • Irrigation will not be interrupted during construction.
New ROW required	Construction/ Operations	<ul style="list-style-type: none"> • Mitigation will be provided to agricultural properties, consistent with the ROW policies described in Section 4.4, Right-of-Way and Relocations.
Access to property	Construction/ Operations	<ul style="list-style-type: none"> • Existing, legal access to farm properties will remain available during and after construction. Typically, access rights are demonstrated by easements, license agreements, or other legal permits, etc.

Source: US 36 Mobility Partnership, 2009.

Note:

ROW = right-of-way

The prevention of the conversion of important farmlands to urban uses near the modified transit stations is under the control of the involved municipalities and would require the amendment of local comprehensive and zoning plans. Therefore, no mitigation measures are required for the indirect conversion of farmlands at transit station areas.