



# Midway Substation to Big Sandy Substation

Category Ranks	Alternative - Segments															
	62 - J1, J5, J6, J8, J9, J11, J12, J14	63 - J1, J5, J6, J8, J9, J11, J13, J14	64 - J1, J5, J6, J10, J11, J12, J14	65 - J1, J5, J6, J10, J11, J13, J14	66 - J1, J5, J7, J9, J11, J12, J14	67 - J1, J5, J7, J9, J11, J12, J14	68 - J2, J3, J5, J6, J8, J9, J11, J13, J14	69 - J2, J3, J5, J6, J8, J9, J11, J12, J14	70 - J2, J3, J5, J6, J10, J11, J13, J14	71 - J2, J3, J5, J6, J10, J11, J12, J14	72 - J2, J3, J5, J6, J10, J11, J13, J14	73 - J2, J3, J5, J7, J9, J11, J12, J14	74 - J2, J4, J8, J9, J11, J13, J14	75 - J2, J4, J8, J9, J11, J12, J14	76 - J2, J4, J10, J11, J13, J14	77 - J2, J4, J10, J11, J13, J14
Engineering	5	1	4	3	5	1	12	9	10	7	11	8	16	14	15	12
Geology and Soils	13	13	3	3	11	11	9	9	1	1	7	7	15	15	5	5
Water Resources	9	11	3	6	9	11	3	7	1	2	3	7	15	16	13	14
Vegetation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wildlife	11	13	15	16	11	13	1	3	5	6	1	3	7	8	9	10
Land Use	9	9	5	6	7	8	15	16	9	12	13	14	3	4	1	2
Cultural Resources	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Category Rank Total</b>	49	49	32	36	45	46	42	46	28	30	37	41	58	59	45	45
<b>Alternative Rank</b>	13	13	3	4	8	11	7	11	1	2	5	6	15	16	8	8

Proposed Route  
 Alternative Route  
 Other Route

Proposed, alternative, and other routes are subject to change.

## Description & Results

The Midway Substation to Big Sandy Substation transmission line would be approximately 88 miles in length. The transmission line would begin at the existing Midway Substation near Fountain, Colorado, cross Colorado Highway 94 near the town of Rush, Colorado, and end at the existing Big Sandy Substation near Limon, Colorado.

The area from Midway Substation to Big Sandy Substation posed substantial difficulties in siting this transmission line. Two areas of stewardship trust lands, Chico Basin and Bohart Ranch, occupy much of the area northeast of Midway. There are also large areas of rural residential development both north and south of Colorado State Highway 94.

Route refinement added a turn to Segment J4 to avoid a riparian wetland area. Segments J3, J5, J6, and J10 were re-aligned to avoid a radio tower and homes. Segments J7 through J9 were created on the recommendation of the Colorado State Land Board to avoid golden eagle habitat, cultural sites, and other natural resource effects. Segments J11 through J14 were adjusted to reduce effects to a private gun club.

Alternative 77 was identified as the proposed route because it avoids the high concentration of homes found along segments J3 and J5, while following an existing transmission line across the stewardship trust lands. To do this, it was routed well east of the most direct line from Midway Substation to Big Sandy Substation.

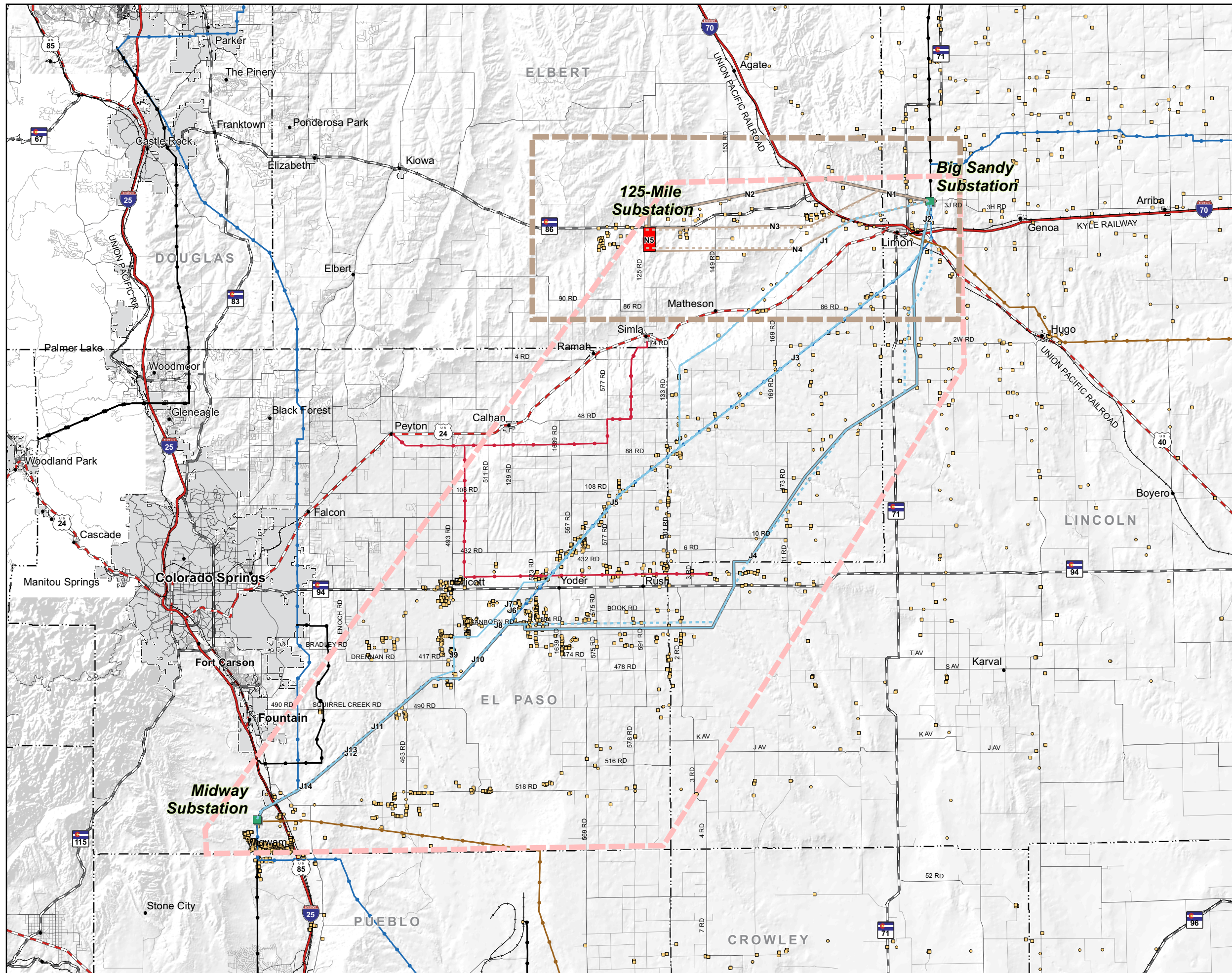
The alternative routes (64, 70, 71, and 76) were chosen because they had low overall levels of effects, despite higher effects to homes and landowners.

## Siting Considerations

The proposed and alternative routes respond to scoping comments and additional ground and aerial surveillance. Several of the routes between substations were re-labeled for the sake of organization and consistency. The segments between Midway Substation and Big Sandy Substation were re-labeled from "N" to "J".

Route-specific comments from scoping included the following:

- Prefers N4 or any route Northwest of N3 (minimize effects to property)
- Consider alternative route which runs east of I-70 in Arapahoe and Elbert counties
- Prefers N1 or N2
- Avoid N4 (line would cut through landowners property)
- Prefers N2 to N1
- Avoid N1
- Consolidate the new transmission line with existing Tri-State line
- Stay on the south side of existing line on N5 through Frontier Sportsman Club, or create new alternative that follows south and east boundary of club, away from existing line



**Base Map**  
Midway to Big Sandy  
and Big Sandy to 125-Mile

**Legend**

**Substations**

- Existing Substation
- Proposed Substation Siting Area

**Analysis Area**

- Midway to Big Sandy
- Big Sandy to 125-Mile

**Transportation**

- Interstate Highway
- State Highway
- U.S. Highway
- Minor Road
- Major Road
- Railroad

**Existing Transmission Lines**

- 115-kV Transmission Line
- 230-kV Transmission Line
- 345-kV Transmission Line
- 69-kV Transmission Line

**Routes**

**Big Sandy to 125-mile**

- Proposed (230-kV)
- Alternative (230-kV)
- Previous (230-kV)

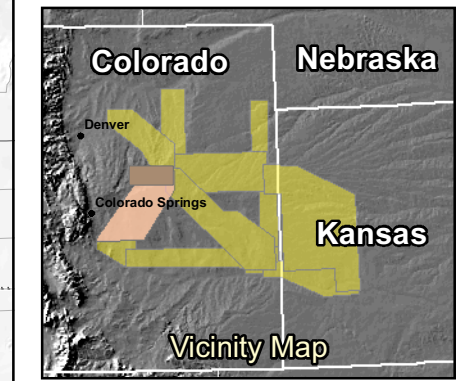
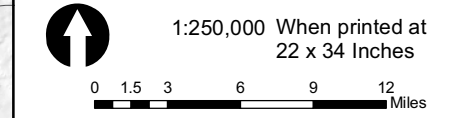
**Midway to Big Sandy**

- Proposed (500-kV)
- Alternative (500-kV)
- Previous (500-kV)

**Structures** (Digitized from aerial photography)

- Residence
- Other Structure

Source Data:  
ESRI (Cities), BTS (Highways, Airports),  
National Atlas (States, Counties),  
CDOT (CO Rail, Roads, Counties, City Boundaries),  
Tri-State and Xcel (Existing Transmission)



Last Revised:  
01/18/07

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