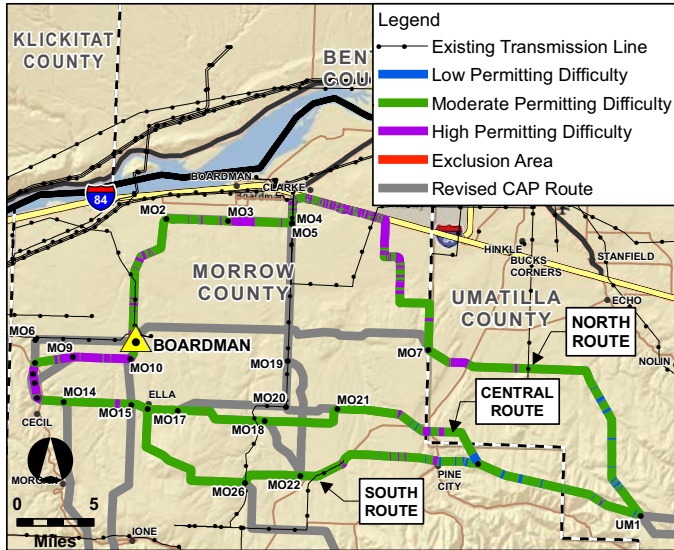
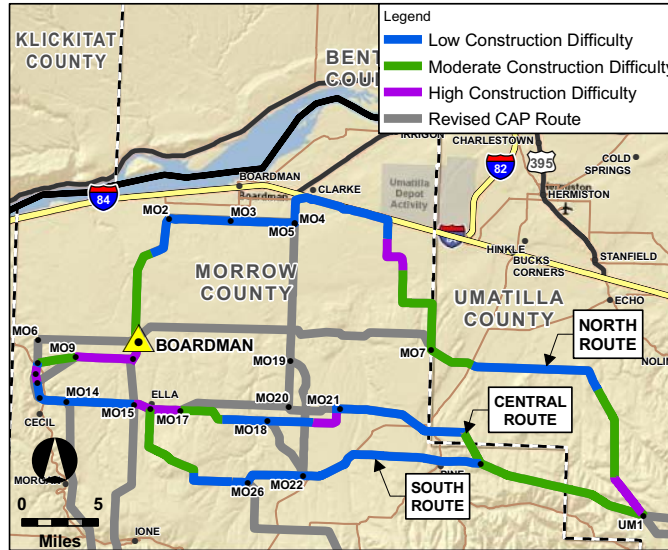


NORTH PAT - BOARDMAN

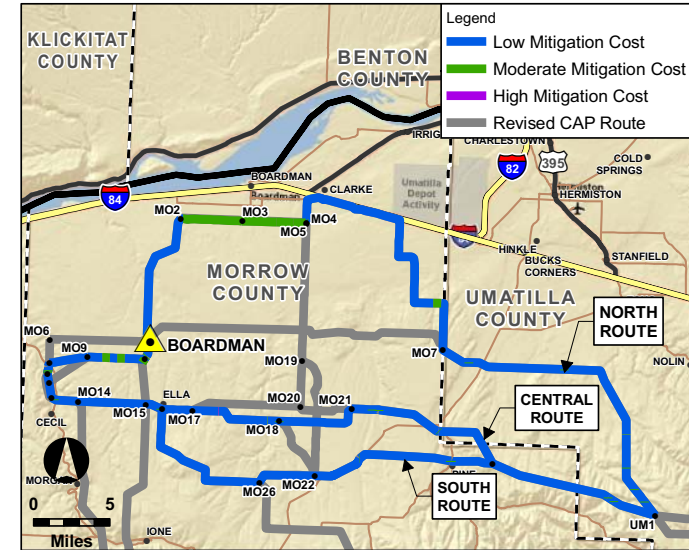
PERMITTING DIFFICULTY



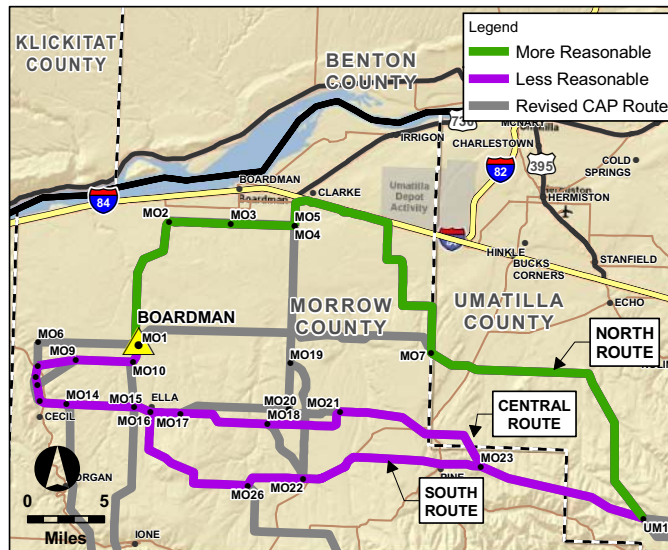
CONSTRUCTION DIFFICULTY



MITIGATION COST



SUMMARY



- 3 ROUTES WERE CONSIDERED:
NORTH, CENTRAL AND SOUTH

- THE NORTH ROUTE IS CONSIDERED
THE MOST REASONABLE

- THE CENTRAL ROUTE IS MORE
REASONABLE THAN THE SOUTH ROUTE

**- THE NORTH ROUTE IS MORE REASONABLE
THAN THE CENTRAL ROUTE BECAUSE IT:**

- Requires 13.9 fewer miles of 500kV line and about 400 fewer acres of ROW considering the Grassland to Hemingway (IPCO) and Grassland to Bethel (PGE) Transmission Line Projects
- Avoids crossing Intact Segments of the Oregon Trail
- Avoids the 1200ft buffer of a Nationally Designated Scenic Byway
- Crosses 3.5 fewer miles of Private Land
- Crosses 4.6 fewer miles of Landslide Hazard areas

BOARDMAN MILEAGE SUMMARY

	NORTH ROUTE (MO1-MO2-MO5-MO4-MO7-UM1)	CENTRAL ROUTE (MO1-MO10-MO9-MO8-MO11-MO12-MO13-MO14-MO15-MO16-MO17-MO18-MO21-MO23-UM1)	SOUTH ROUTE (MO1-MO10-MO9-MO8-MO11-MO12-MO13-MO14-MO15-MO16-MO26-MO22-MO23-UM1)
	LENGTH IN MILES		
PERMITTING DIFFICULTY			
LOW	1.3	1.9	1.8
MODERATE	42.5	42.1	44.4
HIGH	13.5	8.7	8.4
EXCLUSION	0.0	0.0	0.0
CONSTRUCTION DIFFICULTY			
LOW	29.1	21.9	27.5
MODERATE	22.2	19.0	19.8
HIGH	6.0	11.8	7.3
MITIGATION COST			
LOW	48.7	51.6	3.9
MODERATE	8.6	1.1	49.6
HIGH	0.0	0.0	1.1

BOARDMAN DATA TABLE

Resource Group	Regulatory Criteria Description	Permitting Difficulty	Community Criteria*	NORTH ROUTE	CENTER ROUTE	SOUTH ROUTE	
				(MO1-MO2-MO4-MO5-MO7-UM1)	(MO1-MO10-MO9-MO8-MO11-MO12-MO13-MO14-MO15-MO16-MO17-MO18-MO21-MO23-UM1)	(MO1-MO10-MO9-MO8-MO11-MO12-MO13-MO14-MO15-MO16-MO16-MO26-MO22-MO23-UM1)	
				LENGTH IN MILES			
TOTAL LENGTH				57.3	52.7	54.6	
1	Cultural Resources	Within 1200ft Historic Trail Buffer		Avoidance Mod	0.5	0.7	0.7
2	Cultural Resources	Intact Oregon Trail Segment (OR BLM)		Avoidance High	-	0.3	0.3
3	Visual Resources	Within 1200ft Nationally Designated Scenic Byway		Avoidance Mod	CC	1.0	1.0
4	Fish and Wildlife	ODFW Conservation Opportunity Area		Avoidance Low	13.1	20.7	16.2
5	Fish and Wildlife	Sage-grouse Core Area 1: Sagebrush Habitat (Oregon)		Avoidance Mod	0.5	0.2	0.2
6	Fish and Wildlife	Sage-grouse Core Area 2: Potential Habitat (Oregon)		Avoidance Low	31.8	18.6	17.9
7	Land Use	Cropland/Irrigated Agriculture		Avoidance High	14.6	8.3	7.8
8	Land Use	Exclusive Farm Use Zone/Multiple Use Range Zone		Avoidance High	57.3	52.7	54.6
9	Land Use	Naval Weapons System Training Facility		Avoidance Mod	CC	9.1	-
10	Land Use	The Nature Conservancy: Portfolio		Avoidance Mod	37.6	34.6	34.6
11	Land Use	Wind Farm Boundary		Avoidance High	-	1.3	1.3
12	Land Use	Wind Turbine 1200ft Buffer Zone		Avoidance High	-	0.3	0.3
13	Ownership	Military Land		Avoidance Low	CC	8.1	-
14	Ownership	Private		Avoidance Low	CC	49.2	52.7
15	Geological Resources	Erosion Hazard: High (NRCS Soil Data - Grant Co, OR data n/a)		Avoidance Mod	18.3	38.2	40.0
16	Geological Resources	Erosion Hazard: Moderate (NRCS Soil Data - Grant Co, OR data n/a)		Avoidance Mod	16.9	11.1	11.5
17	Geological Resources	Erosion Hazard: Low (NRCS Soil Data - Grant Co, OR data n/a)		Avoidance Low	22.1	3.2	3.0
18	Geological Resources	Within 500ft of Fault Line		Avoidance Low	0.2	-	0.2
19	Geological Resources	Prime Farmland/Arable Land: Soils Class 1-4		Avoidance Mod	CC	53.9	49.4
20	Geological Resources	Oregon Landslide Feature: Fan		Avoidance Mod	-	4.6	2.8
21	Slope	Slope 0-15%		Opportunity	55.1	47.6	49.5
22	Slope	Slope 15-25%		Avoidance Low	2.0	4.4	4.4
23	Slope	Slope 25-35%		Avoidance Mod	0.2	0.6	0.6
24	Slope	Slope >35%		Avoidance High	0.1	0.1	0.1
25	Water and Wetlands	Floodplain: Area Not Mapped		Avoidance Low	21.1	8.6	5.5
26	Water and Wetlands	Floodplain: Not in Flood Zone		Avoidance Low	28.1	43.1	48.1
27	Water and Wetlands	Floodplain: Zone A		Avoidance Mod	0.1	1.1	1.0
28	Water and Wetlands	Floodplain: Zone ANI		Avoidance Mod	8.1	-	-
29	Water and Wetlands	National Wetland Inventory		Avoidance Mod	CC	-	0.2
30	Other Features	Within 200ft of Existing Pipeline		Opportunity	CC	0.1	0.1
31	Other Features	Parallel to Existing Transmission Line		Opportunity	6.3	-	2.9

* Rows designated with "CC" indicate Community Criteria. These are the criteria the Project Advisory Teams wanted considered in the analysis.