

COLORADO'S POWER PATHWAY

Proposal delivers new energy economy benefits to rural Colorado, communities across the state

REAP

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WHAT WE'LL COVER TODAY

- 1. Project Overview
- 2. Project Need & Benefits
- 3. Routing and Siting

- 4. Website
- 5. Question & Answer



Colorado's Power Pathway

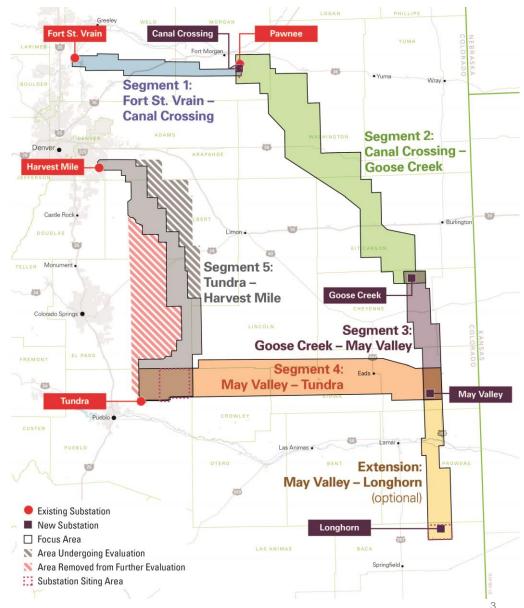
\$1.7 to \$2 billion dollar investment

New double-circuit 345-kilovolt electric transmission line About 560 miles divided into 5 segments

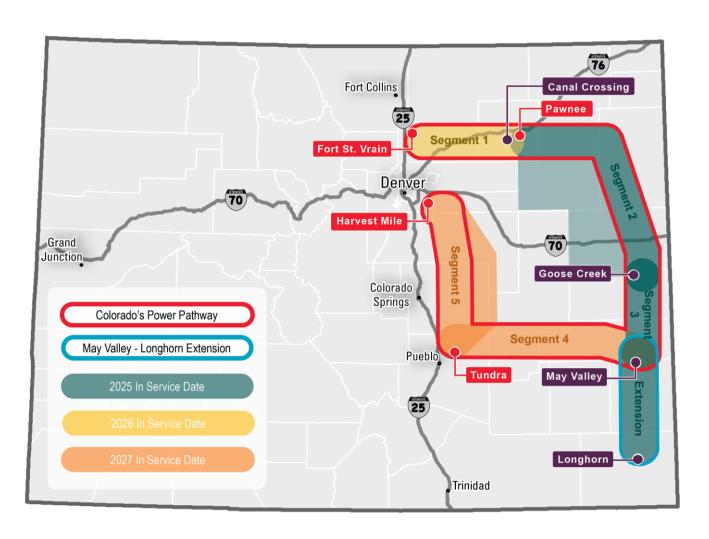
- Includes 3 new and 4 expanded substations
- Potential new substation near the existing Tundra Substation

Additional 90 miles with the May Valley - Longhorn Extension (MVLE) segment

- Includes 1 new substation
- Access renewables in SE corner of the state
- Reduces the number of generation tie lines that may be needed



Developing Colorado's Power Pathway



Creates a transmission loop

- Enhances system reliability can withstand loss of one transmission path without interrupting power flow
- Allows for wind/solar generation diversity on the system

Sequencing of construction

- First segments in-service in 2025 to take advantage of Production Tax Credits
- Other segments in service in 2026 and 2027 allows resource addition to the system in stages

Benefits

Electric System Benefits



New transmission lines encourage and support the development of renewable energy to bring more low-cost electricity to help meet the needs of our growing state



Colorado's Power Pathway supports our Clean Energy Plan that will add approximately 5,000 megawatts of new wind, solar and other resources through 2030 to enable the state's transition to clean energy



Existing transmission on the eastern plains primarily serves local needs and is nearly "full" and additional transmission capacity is needed to integrate more renewable generation



Colorado's Power Pathway provides high voltage "backbone" transmission. A grid supported by backbone transmission is better positioned to withstand outages.

Community Benefits



Short-term and long-term positive economic impact



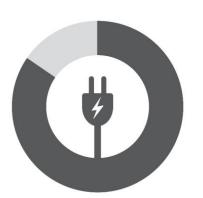
New temporary and permanent jobs, lease revenue and increased tax revenue



Increase reliability of the electric grid for all users and availability for new renewable energy projects

COLORADO'S POWER PATHWAY BY THE NUMBERS





80% Electric utility greenhouse gas emissions reduction required by 2030 per Colorado House Bill 19-1261

2016

Last major addition or upgrade to backbone transmission in eastern Colorado

The energy capacity provided by Colorado's Power Pathway is the equivalent of powering

2,500,000

Colorado homes annually















160,000+

Postcards mailed



4,000+

Newsletters emailed



700,000+

Facebook public meeting ad views



Meetings with agencies, cities and counties

62,000+

Website pageviews



18,000

Unique website visitors Colorados Power Pathway.com 39

Public meetings*

34 Open houses previously held

Virtual town halls

581

General project auestions and comments received 1,288 **Public** commentors





2,369

Public meeting attendees



146 Newspaper ads in

35 Local papers*



425 Radio ads on

2,000

30+

Miles of transmission route options shared with the public to solicit feedback

Resources evaluated to identify transmission line routes and substation sites

From Study Areas to Focus Areas to Routes



SUITABILITY ANALYSIS 2



Collect data on resources within and adjacent to study areas, categorize based on compatibility with development of transmission line or substation



20-miles-wide, developed based on segment end points (Substation A and Substation B)

PRELIMINARY LINKS



Based on suitability analysis, identify links that provide routing options between segment end points that minimize crossing of constrained areas and maximize use of more compatible locations

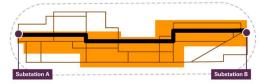
FOCUS AREAS 4



Smaller area within each segment study area where links have been identified, within which the preferred route is anticipated to be located

Areas with constraints or that are less suitable for transmission line development are removed from further consideration

REVISE LINKS & IDENTIFY PREFERRED ROUTE



Preliminary links are revised (removed, added, modified) based on public and stakeholder review and input

Comparative analysis to identify links to be removed from further consideration, evaluate end-to-end routes

Select preferred route

Segment 1: Fort St. Vrain – Canal Crossing



Major Routing/Siting Considerations:

- End points are fixed at Fort St. Vrain and Pawnee/Canal Crossing
- Platte River to the north
- Must cross I-76
- Dense development to west and oil & gas throughout most of study area
- Existing electric and gas lines

Focus Area Description:

Mainly in central portion of the study area, south of the river, north of most existing transmission and gas lines

Segment 2: Canal Crossing – Goose Creek



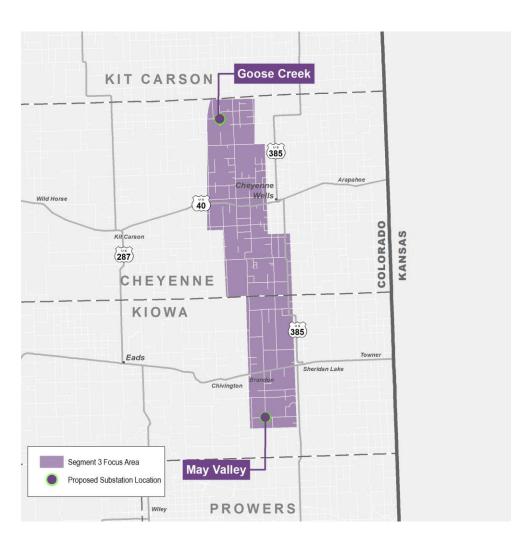
Major Routing/Siting Considerations:

- End point fixed at Pawnee/Canal Crossing and new Goose Creek substation location to be identified
- Longest segment
- Includes four counties of Morgan, Washington, Kit Carson and Cheyenne

Focus Area Description:

Broader in the north and narrower at I-70 due to limited options to cross the interstate

Segment 3: Goose Creek – May Valley



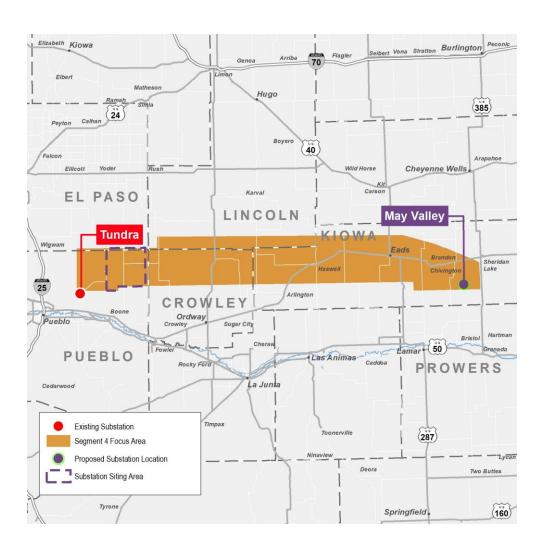
Major Routing/Siting Considerations:

- End points are Goose Creek and May Valley substations
- Existing wind generation
- Sand Creek Massacre National Historic site
- Queens State Wildlife Area
- Conservation easements
- Lesser prairie-chicken habitat
- Big Sandy Creek and associated sensitive resources

Focus Area Description:

Located in the western and central portion of the study area, primarily west of U.S. Highway 385 and east of the Sand Creek Massacre Site

Segment 4: May Valley – Tundra



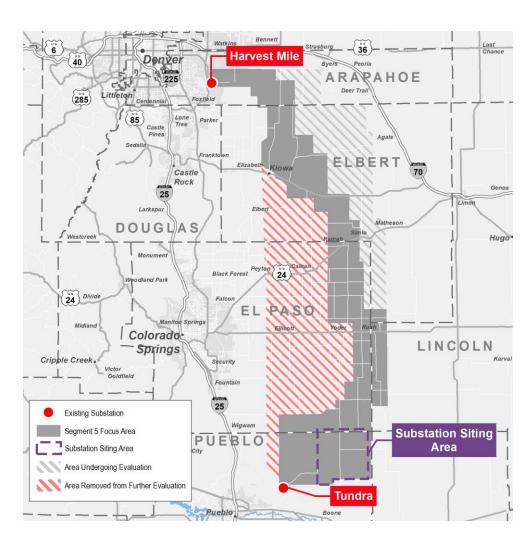
Major Routing/Siting Considerations:

- End point fixed at Tundra substation
- Formally designated and/or protected state and federal land
- Queens State Wildlife Area
- U.S. Army Pueblo Chemical Depot
- Transportation Technology Center
- Lesser prairie-chicken habitat
- Conservation easements
- Stewardship Trust land

Focus Area Description:

Broad area includes options to route into Tundra from the north or south

Segment 5: Tundra – Harvest Mile



Major Routing/Siting Considerations:

- End points are fixed at Tundra and Harvest Mile
- U.S. Army Pueblo Chemical Depot
- Black Forest
- Buckley and Schriever Space Force bases

- USAFA Bullseye Airfield & training areas
- Existing wind facilities
- Existing & planned residential
- Stewardship Trust land

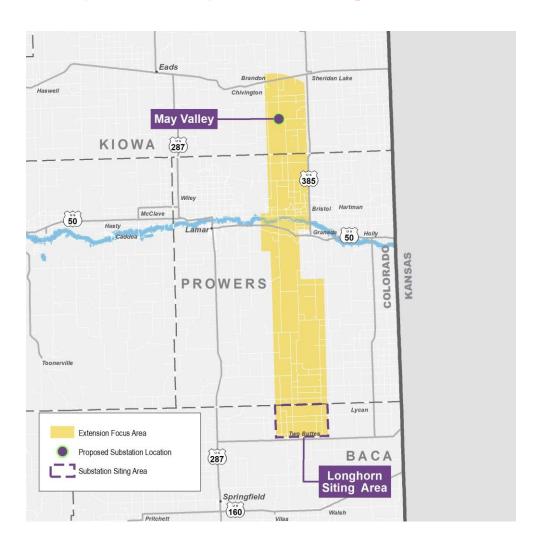
Expanded Study Area:

- Expanded east in El Paso, Lincoln and Elbert counties
- Avoid recently discovered constrained areas along the west side of study area

Focus Area Description:

Primarily located to the east due to constraints located in the west and central portion of the study area

May Valley – Longhorn Extension



Major Routing/Siting Considerations:

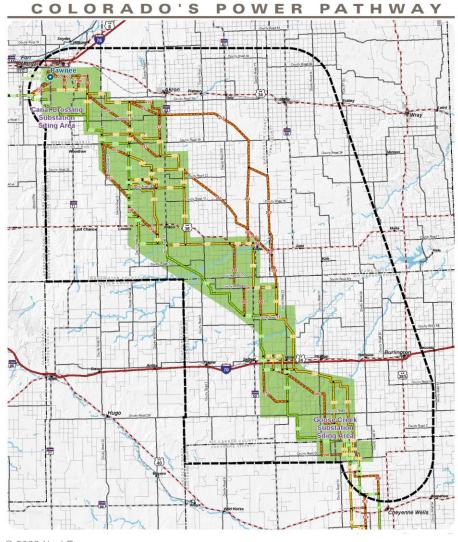
- Arkansas River crossing
- Conservation easements
- Two Buttes Reservoir State Wildlife Area
- Santa Fe Trail Scenic and Historic Byway

- Existing & planned wind farms
- Lesser prairie-chicken habitat
- Location of new Longhorn substation

Focus Area Description:

Located in the eastern portion of the study area based on possible Arkansas River crossing locations, existing transmission, wind and other development located to the west

Segment 2: Canal Crossing – Goose Creek



Major Routing/Siting Considerations:

- End point fixed at Pawnee/Canal Crossing and new Goose Creek substation location to be identified
- Must cross I-70
- Waterway crossings and associated resource sensitivities
- Existing wind generation
- High density of oil and gas wells and multiple large gas pipelines
- · Several municipal airports
- Brush Prairie Ponds State Wildlife Area
- Longest segment

Focus Area Description:

Broader in the north and narrower at I-70 due to limited options to cross the interstate



COLORADOSPOWERPATHWAY.COM



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Visit ColoradosPowerPathway.com to learn more.

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