

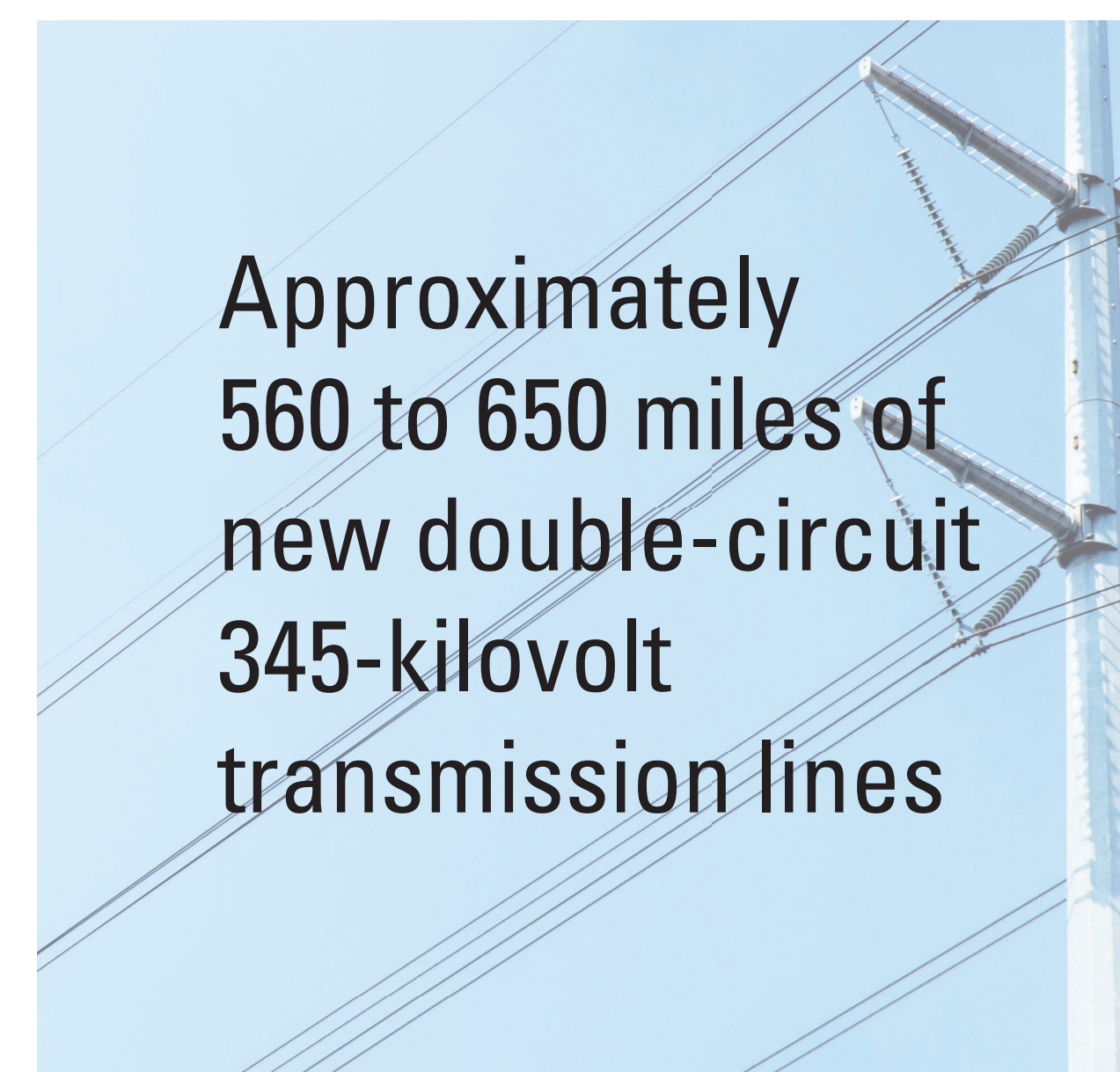
OVERVIEW

About

Colorado's Power Pathway is a proposed \$1.7 to \$2 billion investment to improve the state's electric grid, boost the regional economy, create jobs during construction and connect new energy resources in eastern Colorado.



Includes four new and four expanded substations



Approximately 560 to 650 miles of new double-circuit 345-kilovolt transmission lines

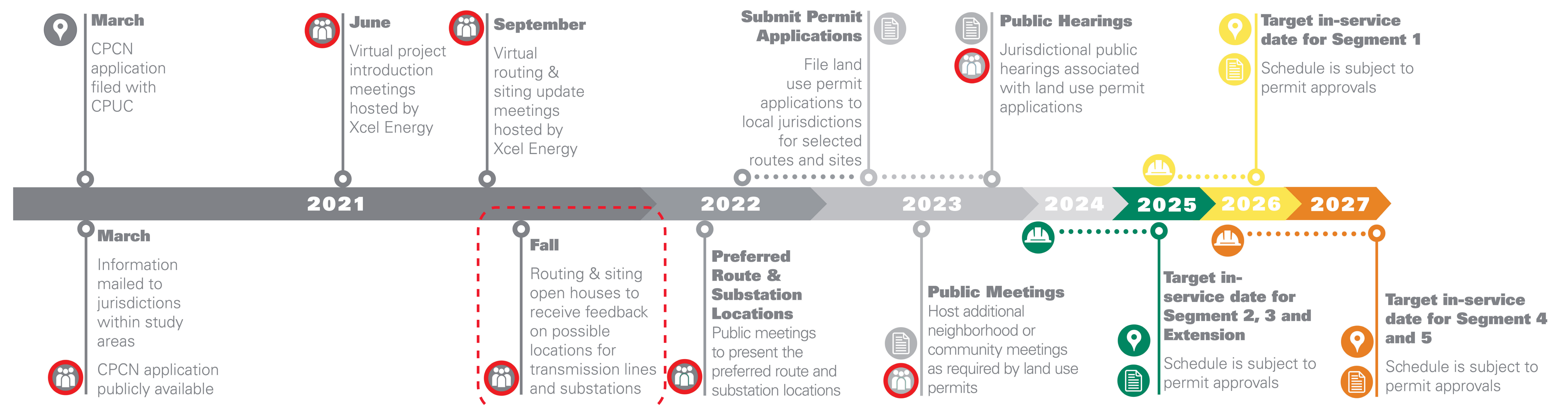


First segments in-service by 2025, with other segments complete in 2026 and 2027

Timeline

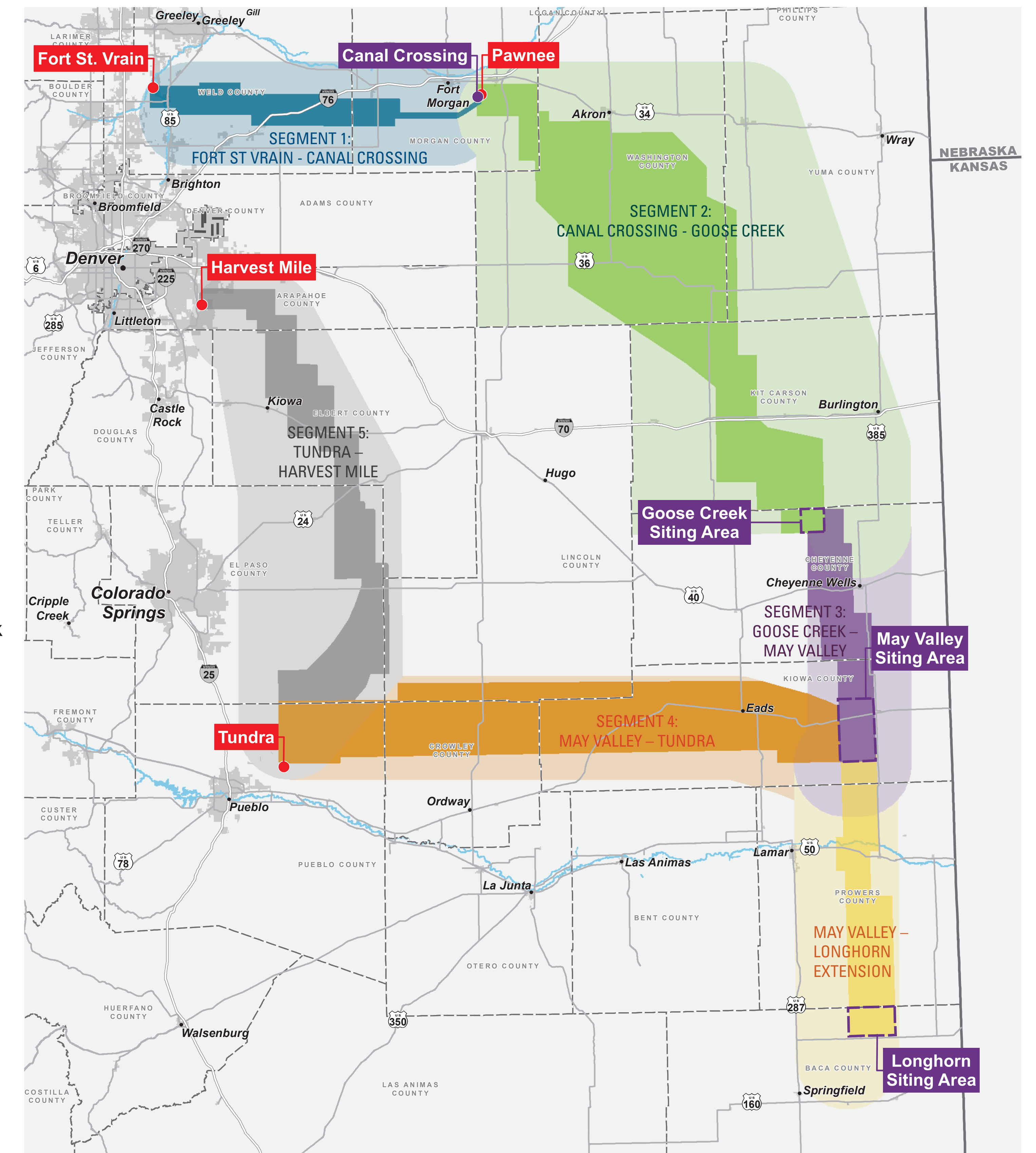
Public outreach opportunities will continue through energization of all segments and are shown as red circles along the timeline.

Segments 2, 3 and 6 are anticipated to be in-service by 2025, Segment 1 is anticipated to be in-service by 2026 and Segments 4 and 5 in 2027.



Map

- Existing Substation
- New Substation
- Substation Siting Area
- Study area
- Focus area
- Segment 1: Fort St Vrain - Canal Crossing
- Segment 2: Canal Crossing - Goose Creek
- Segment 3: Goose Creek - May Valley
- Segment 4: May Valley - Tundra
- Segment 5: Tundra - Harvest Mile
- May Valley - Longhorn Extension



BENEFITS

Community Benefits

Electric System Benefits



**POSITIVE
IMPACT**

Short-term and long-term positive economic impact



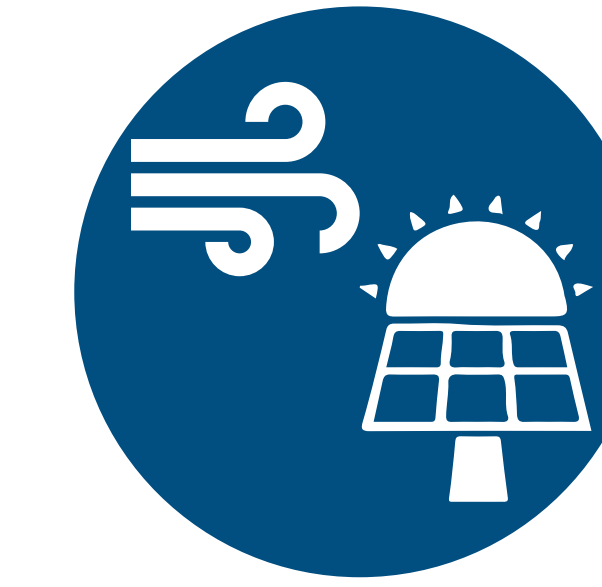
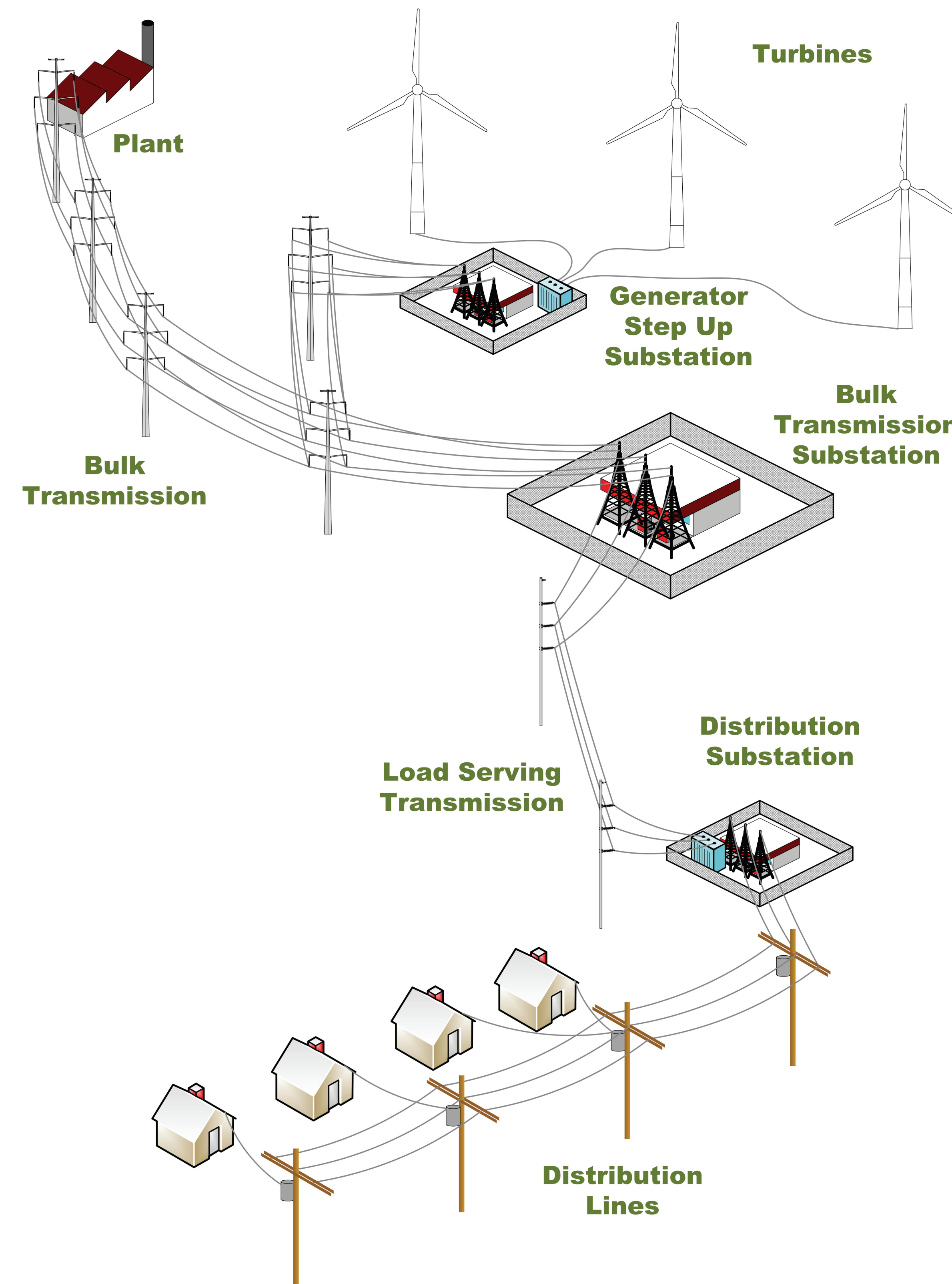
**JOBS AND
REVENUE**

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

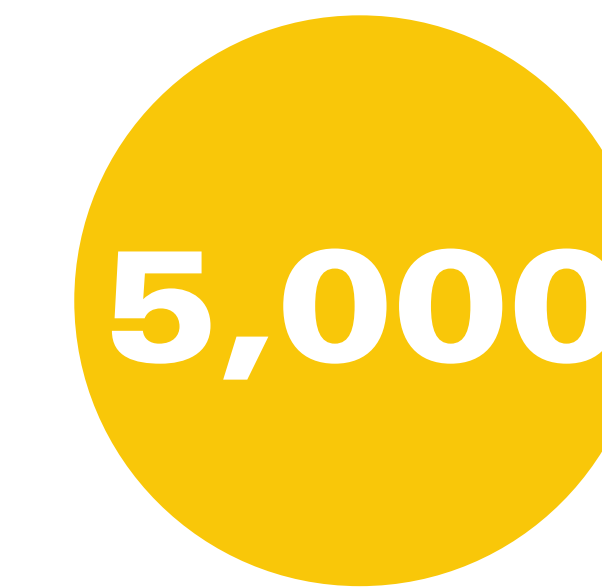


**AND
MORE...**

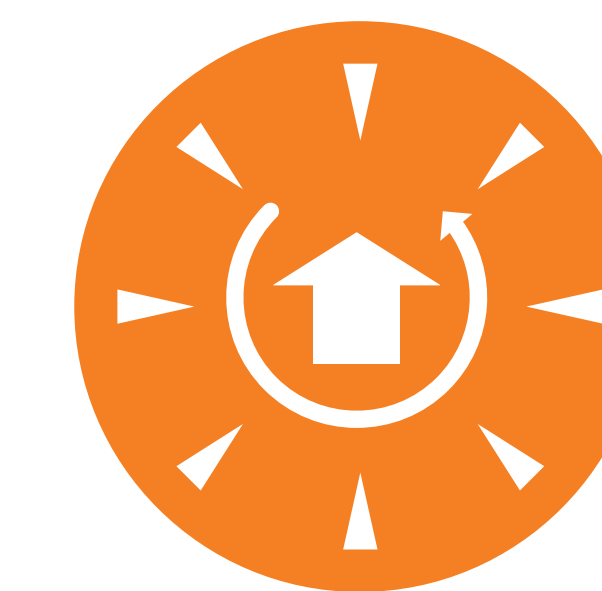
Increase reliability of the electric grid for all users and availability for new renewable energy projects



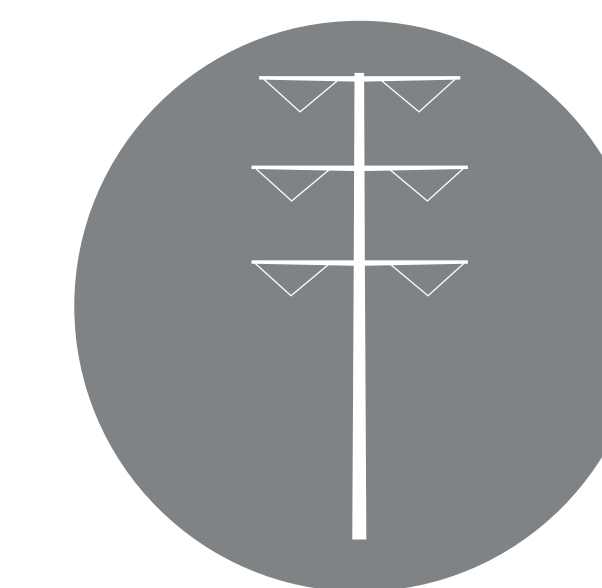
New transmission lines encourage and support the development of renewable energy to bring more low-cost electricity to help meet the needs of our growing state.



Colorado's Power Pathway supports Xcel Energy's 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

How do I learn more about the Pathway Approval Process?

March 2021: Application filed with Colorado Public Utilities Commission (CPUC)

Proceeding Number: 21A-0096E

If approved, the CPUC will issue a Certificate of Public Convenience and Necessity, certifying the need for the proposed facilities. View Xcel Energy's application at PUC.Colorado.Gov, navigate to E-Filings and enter the Proceeding No. in the Search field.

SUBSTATIONS

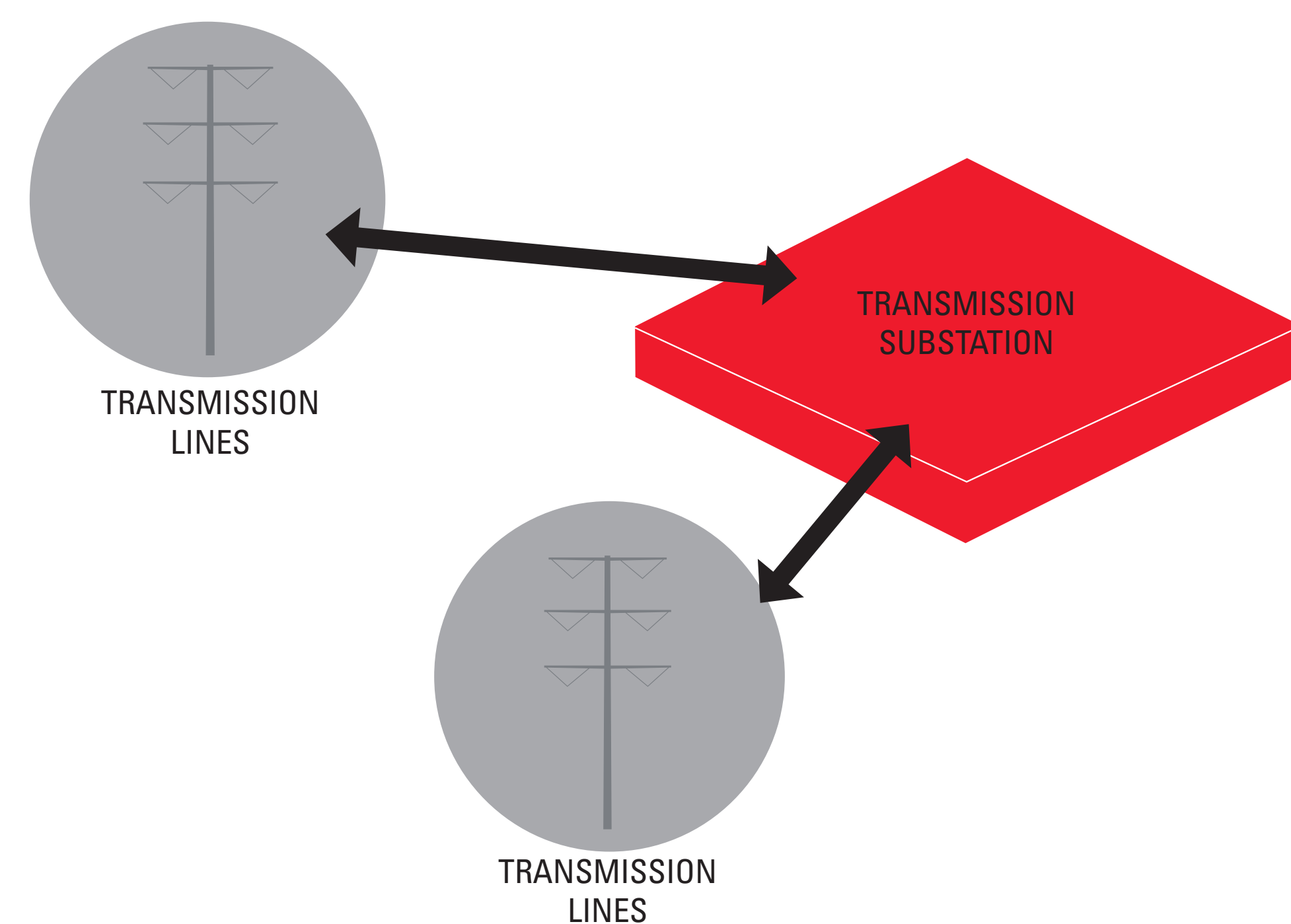
What are transmission substations?

Step-up or step-down voltages between the transmission lines

Include electrical equipment enclosed by security fence

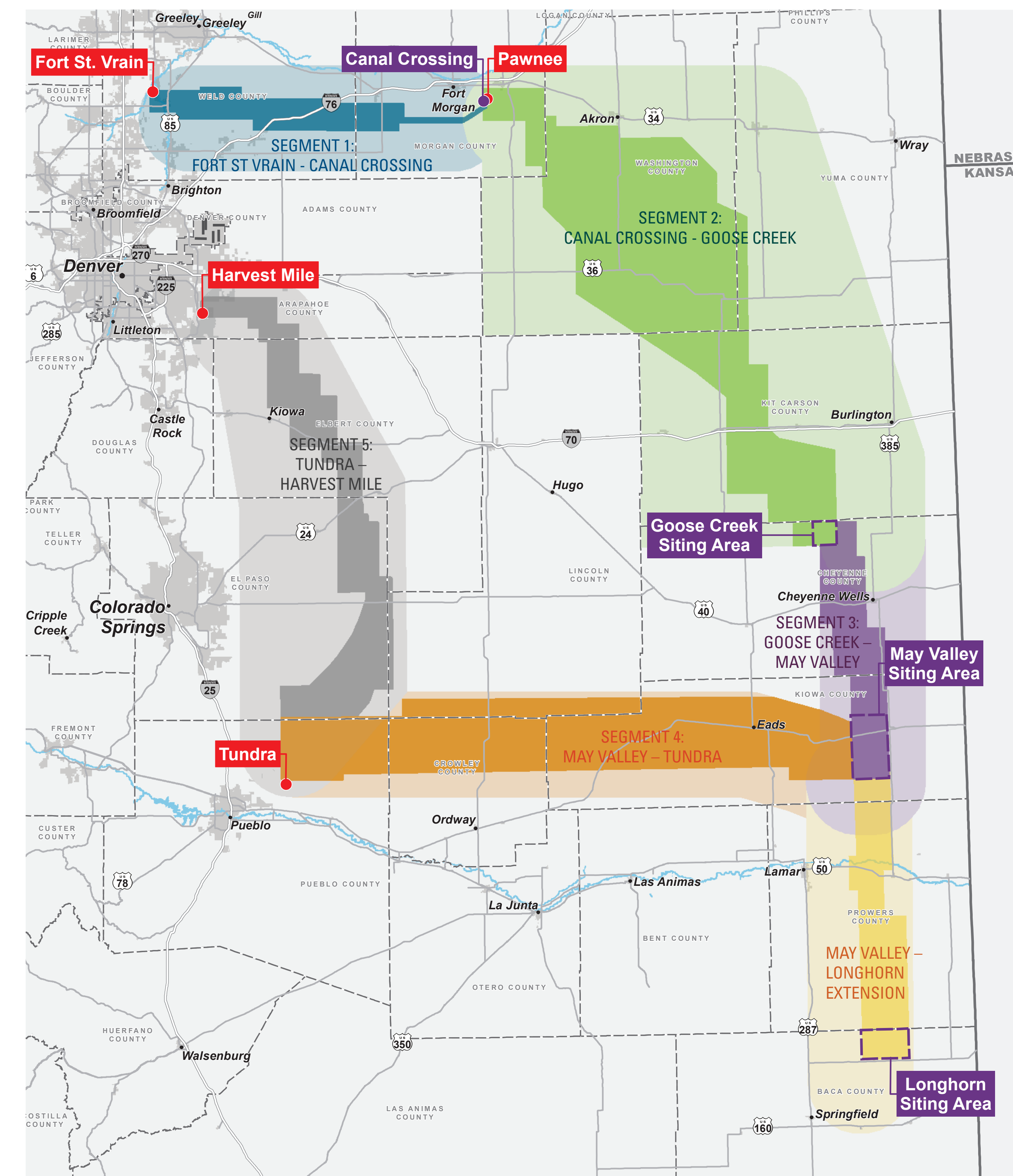
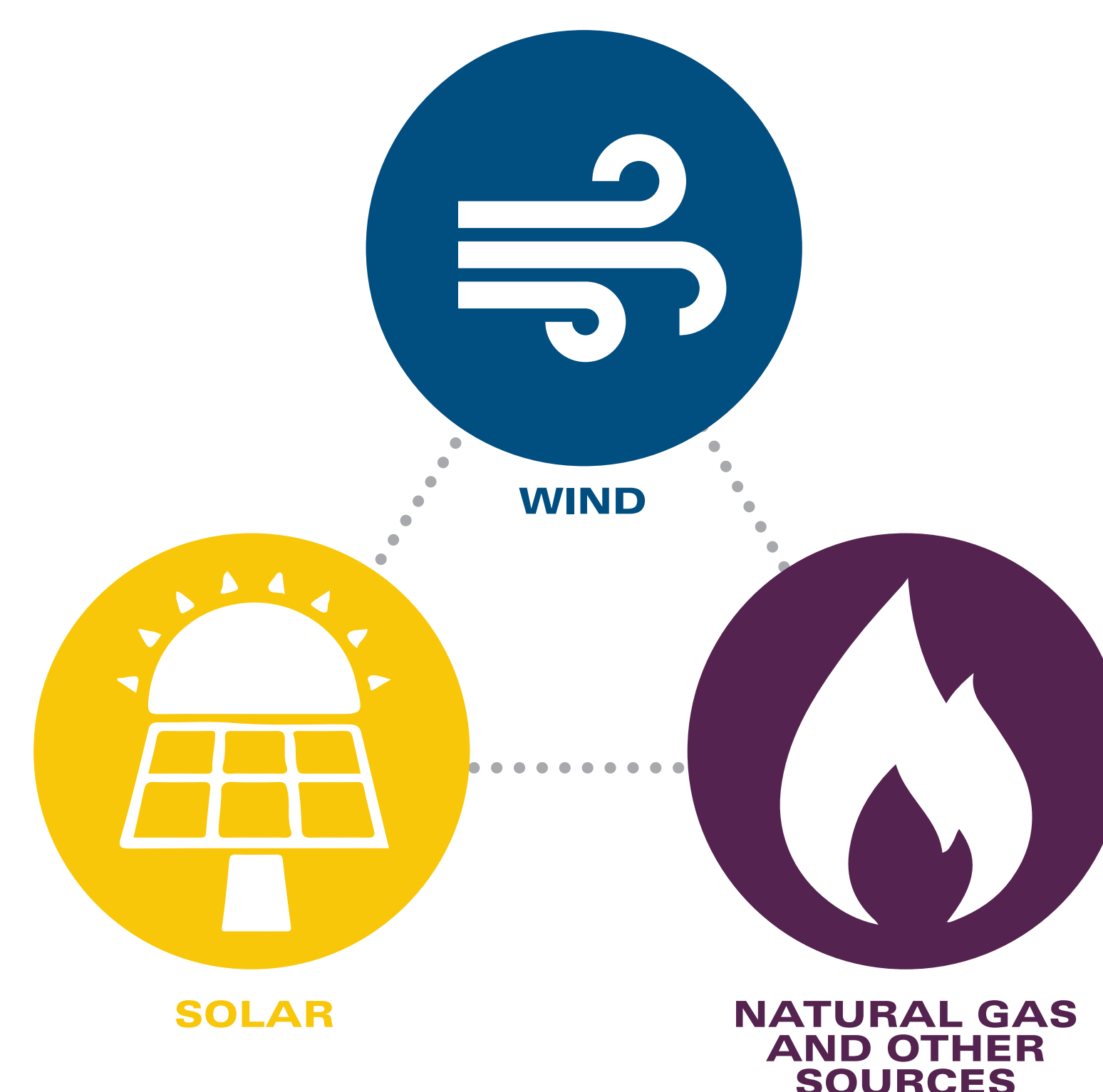
Require approximately 30 to 60 acres

The existing substations will be expanded to accommodate the new transmission lines and the associated equipment needed to operate the lines.



Connection points for two or more transmission lines

Generation interconnections for wind, solar, natural gas and other sources



- Existing Substation
- New Substation
- Substation Siting Area
- Segment 1: Fort St Vrain - Canal Crossing
- Segment 2: Canal Crossing - Goose Creek
- Segment 3: Goose Creek - May Valley
- Segment 4: May Valley - Tundra
- Segment 5: Tundra - Harvest Mile
- May Valley - Longhorn Extension

SUBSTATIONS

IN SERVICE 2025

Pawnee	Expansion
Canal Crossing	New
Goose Creek	New
May Valley	New
Longhorn	New

IN SERVICE 2026

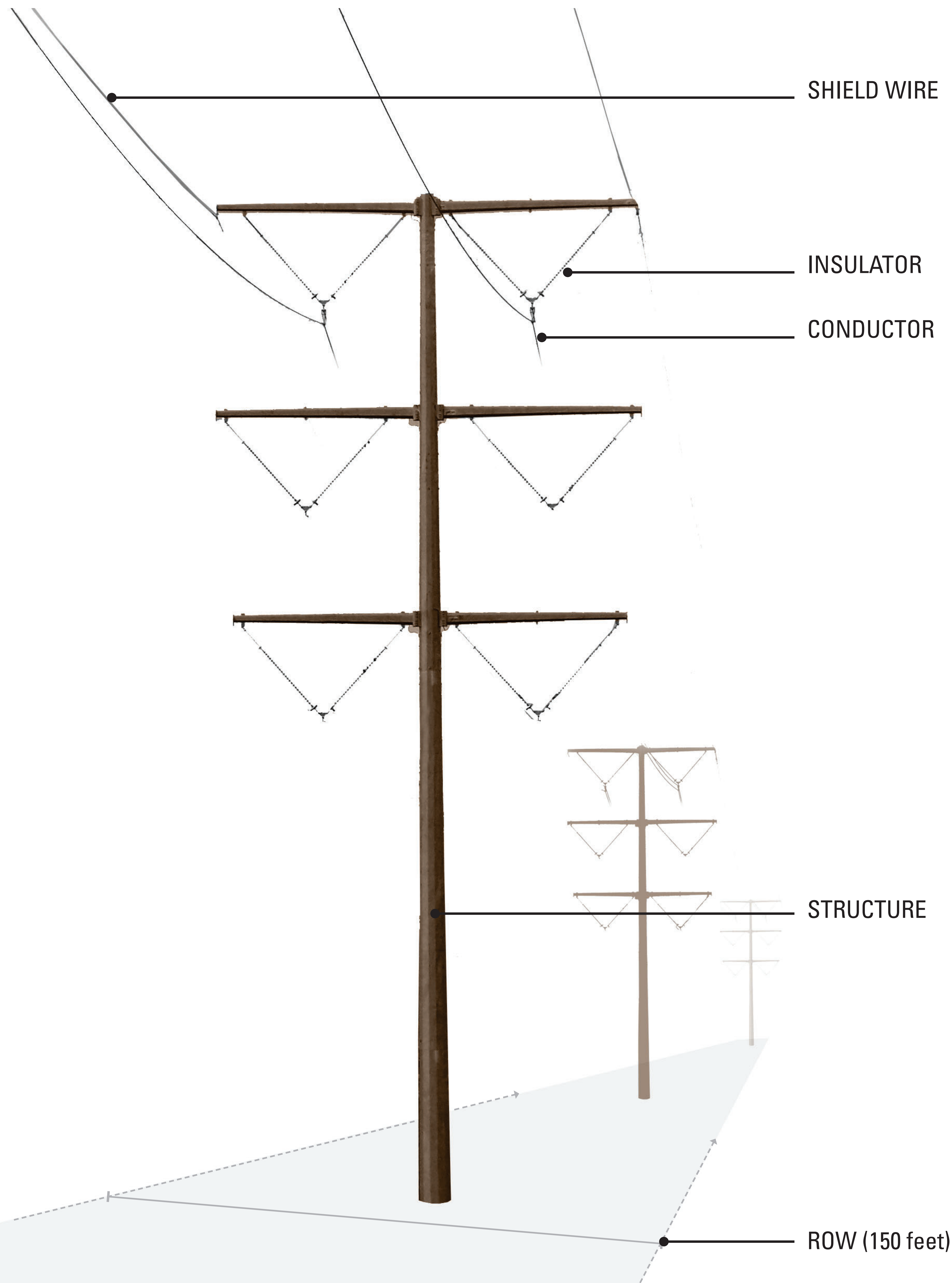
Fort St. Vrain	Expansion
----------------	-----------

IN SERVICE 2027

Tundra	Expansion
Harvest Mile	Expansion



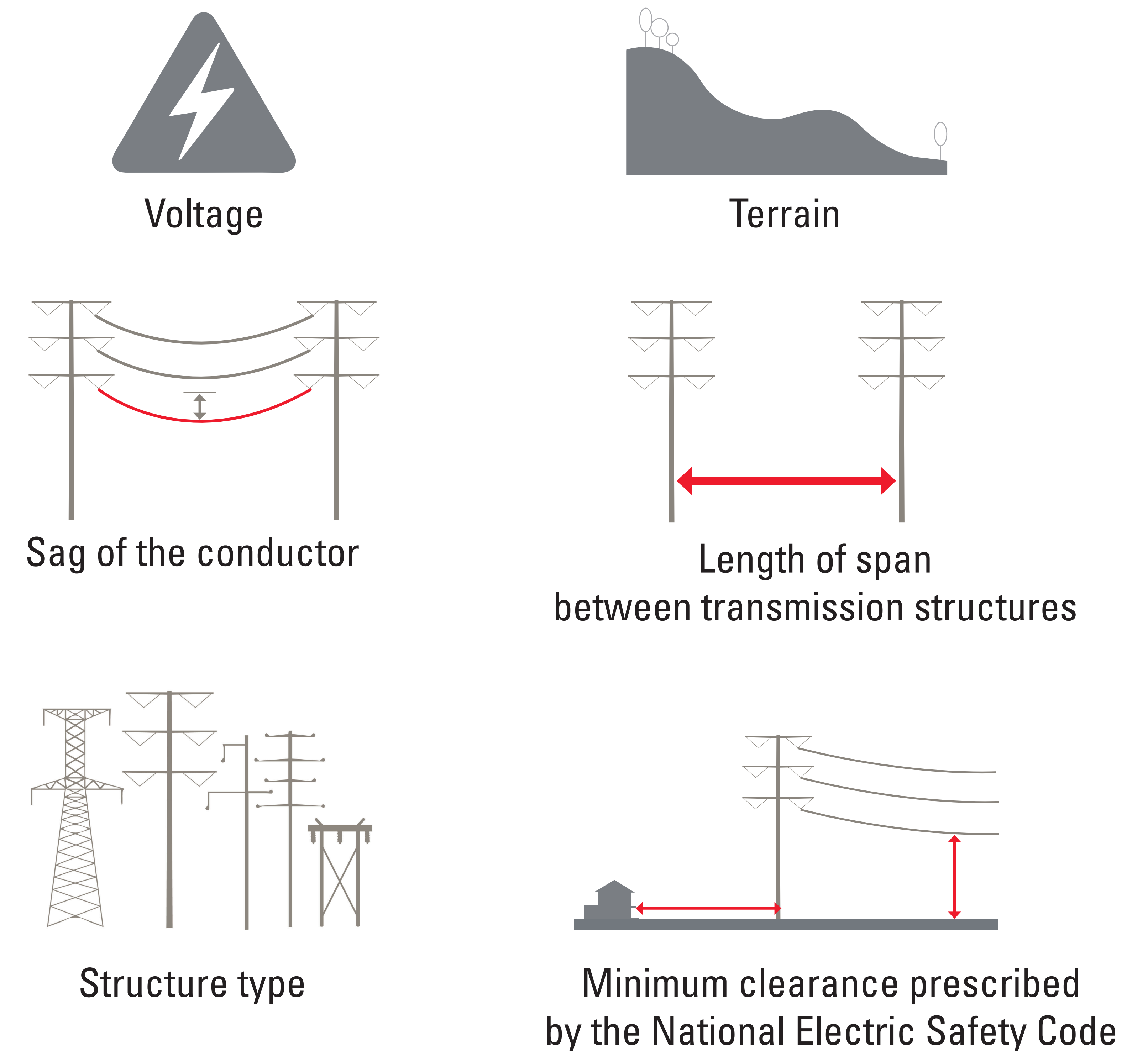
TRANSMISSION LINE



Anticipated Design

- Steel double-circuit transmission structure
- Single pole for most structures, two poles for certain high-loading structures
- Each pole will be on a concrete foundation
- Typical poles range 105 to 140 feet above ground
- 150-foot-wide Right-of-Way
- Typical span length of 950 feet between transmission structures
- Weathering steel or galvanized grey color

Transmission line structures vary in height depending on:



Xcel Energy shares the interest of our customers and the communities we serve in promoting clean energy and protecting the environment. Sensitive natural resources are considered in identifying the locations for the substations and transmission lines to minimize potential impacts.



Impacts to wetlands will be avoided or minimized by careful placement of the substations and transmission lines.

We attempt to site transmission structures in locations that will avoid conflicts with irrigation equipment and its operation to the extent possible.

Impacts to rivers and streams will be avoided or minimized by placing transmission structures outside the waterway and spanning where possible.



Locations of known habitat are mapped and avoided where possible.

Conservation easements, national wildlife refuges and state wildlife areas will be avoided to the extent possible.

Seasonal restrictions are implemented to avoid constructing near habitat during certain seasons (such as nesting) as recommended by Colorado Parks and Wildlife and U.S. Fish and Wildlife Service guidance.

Electrical components of the transmission lines and substations will be separated to minimize the risk of avian contact. Bird diversion devices will be installed where necessary.

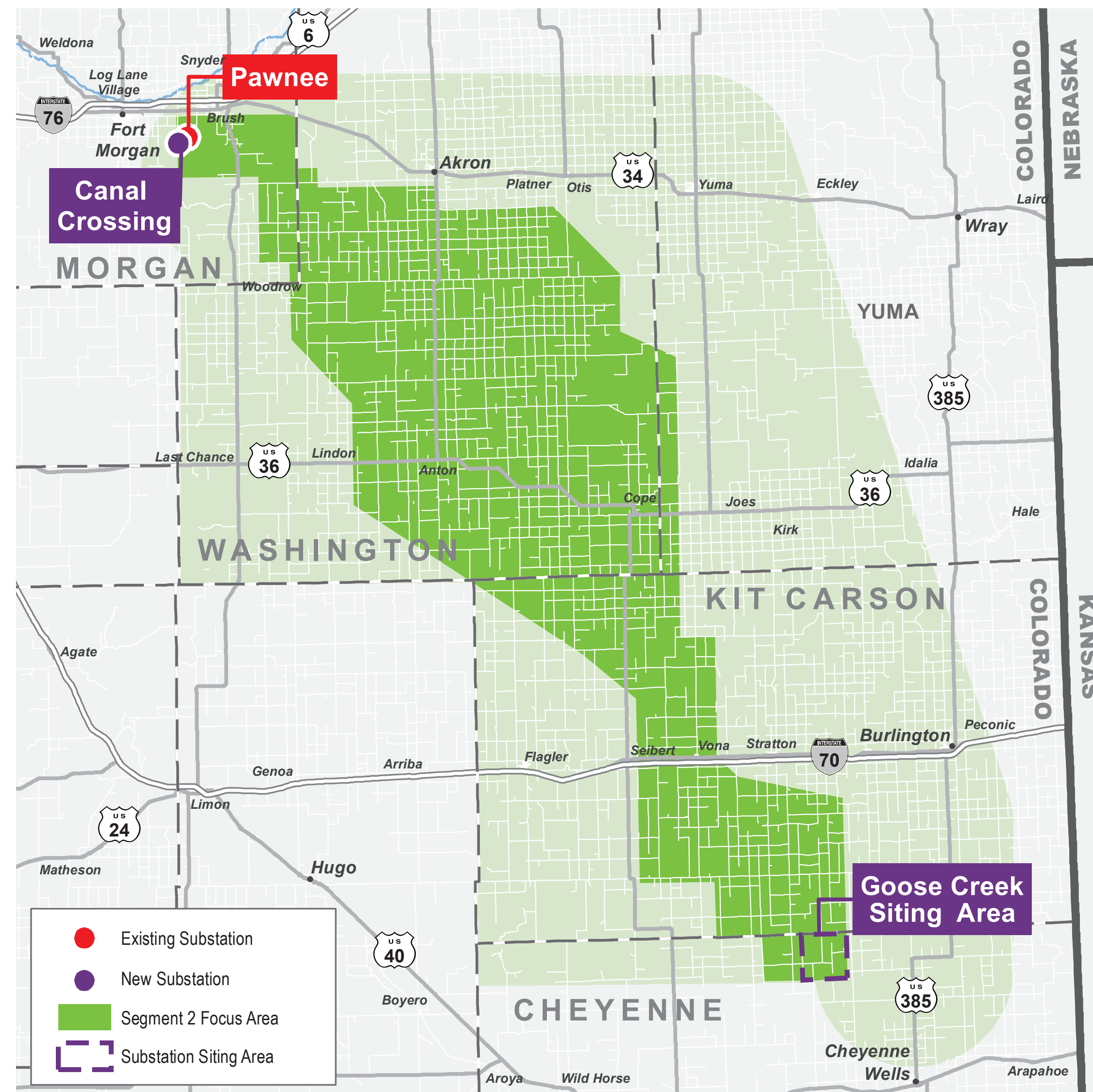


Xcel Energy will coordinate with wildlife agency representatives regarding the proposed project throughout planning, design and construction and will comply with all regulatory requirements.

Local land use and construction permits will be obtained in the jurisdictions crossed and include:

- 1041, Use by Review, Land Use Change, Special Use Review, Major Land Use Permits
- Right-of-Way Use, Road Use Agreements, Access, Transport, Grading, Stormwater

IN SERVICE 2025

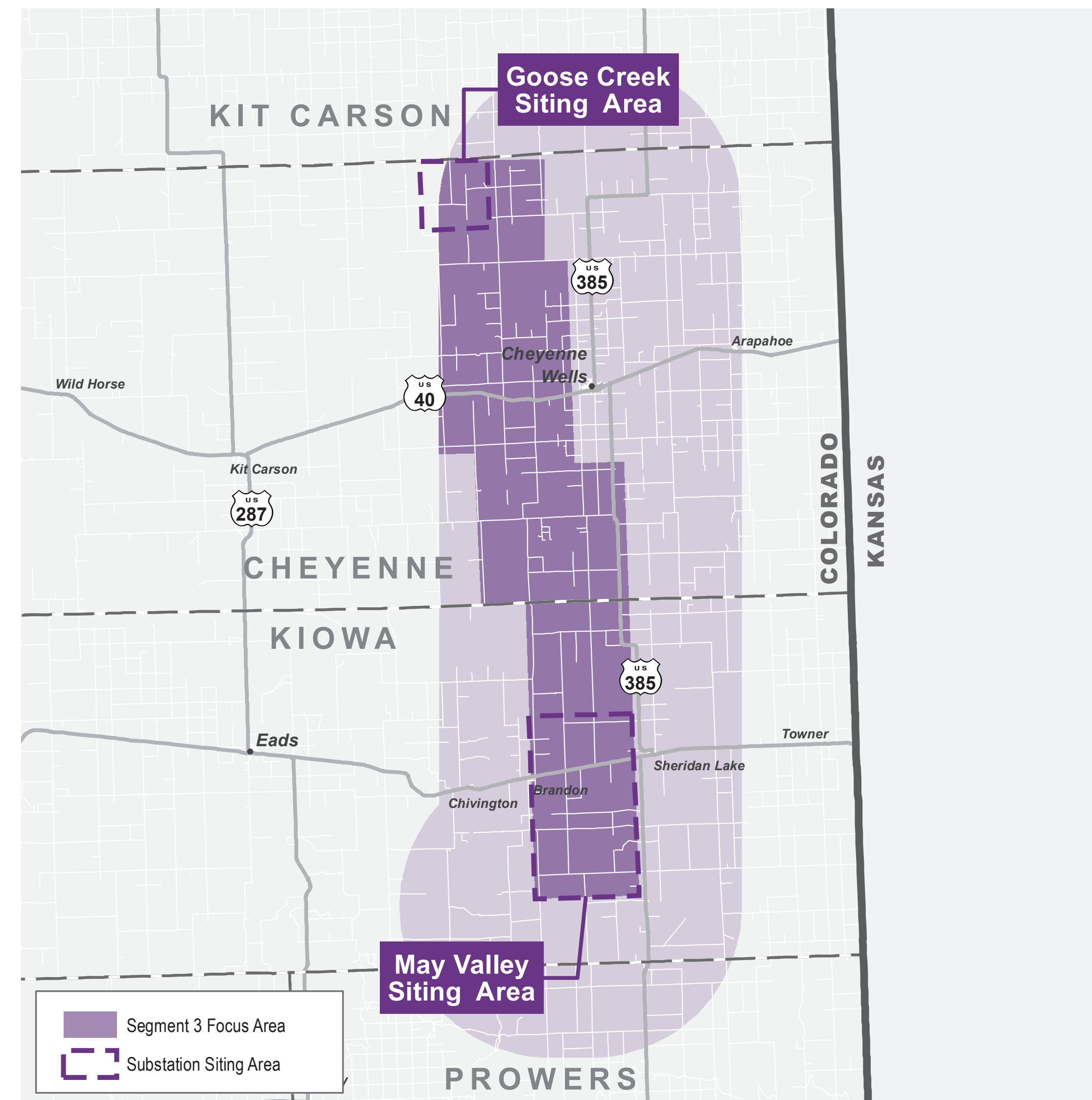


SEGMENT 2: CANAL CROSSING - GOOSE CREEK

Endpoints: Canal Crossing Substation,
Goose Creek Substation

Major routing and 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

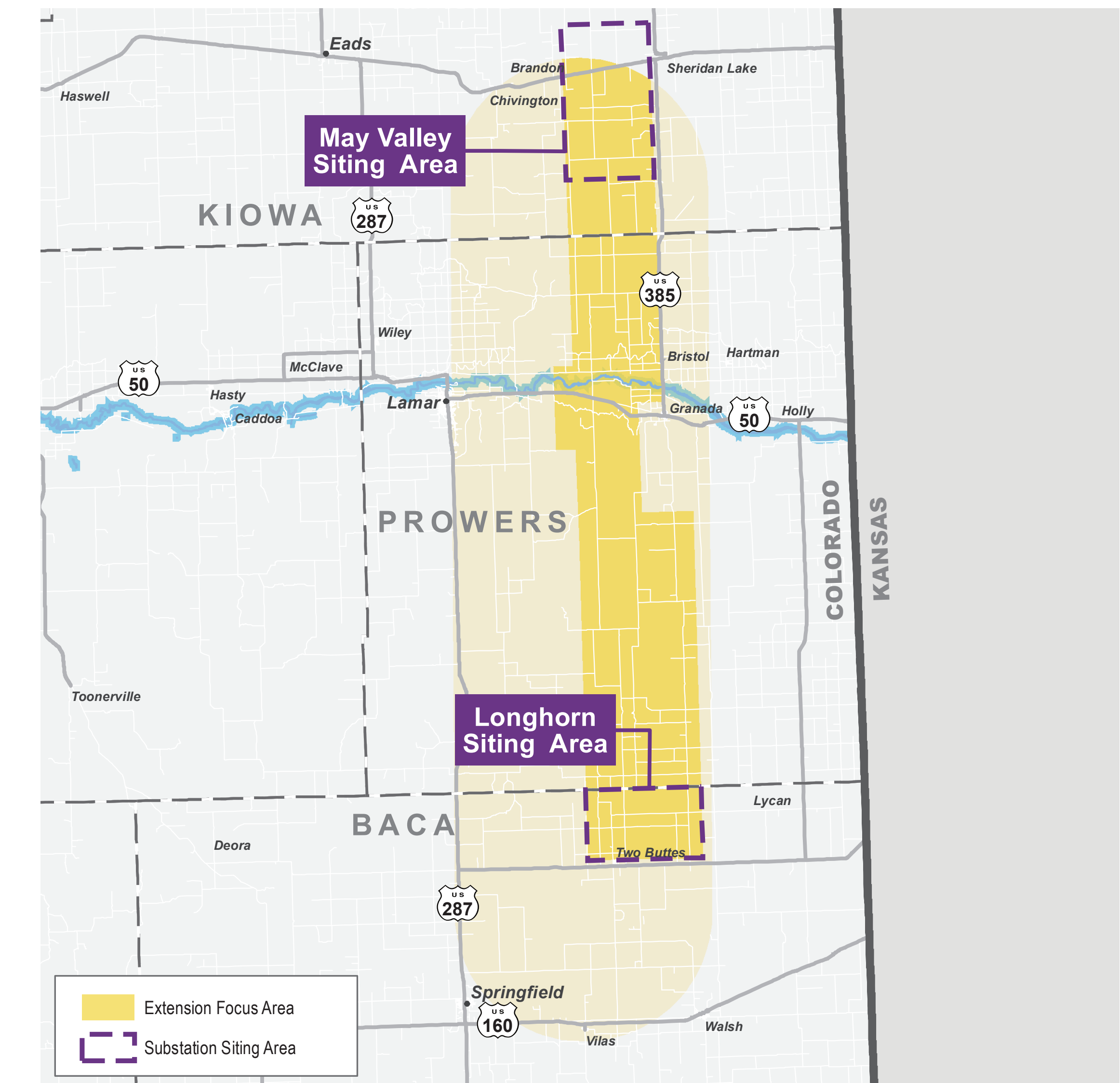


SEGMENT 3: GOOSE CREEK - MAY VALLEY

Endpoints: Goose Creek Substation,
May Valley Substation

Major routing and siting considerations:

- End points are Goose Creek and May Valley
- 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



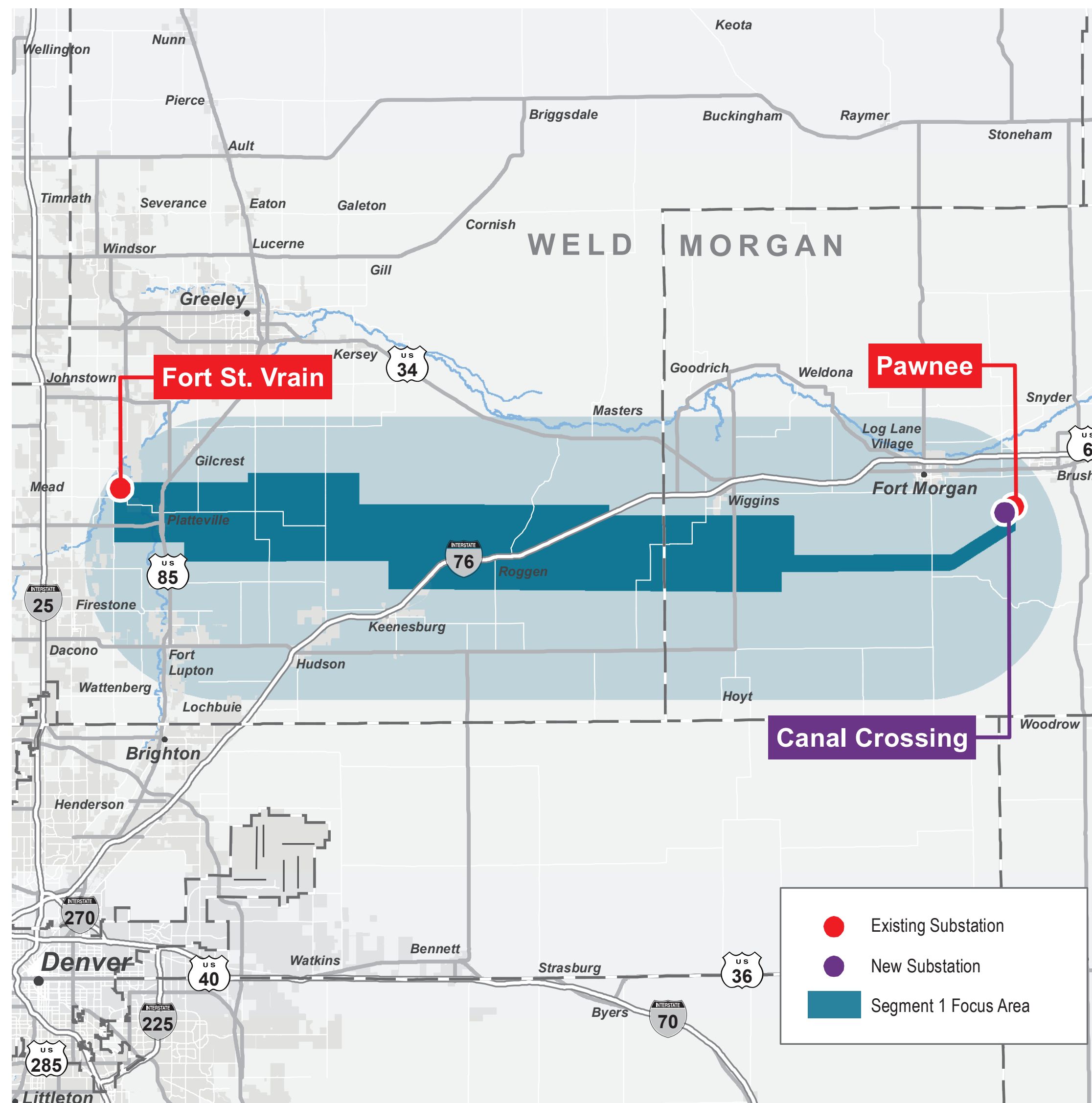
MAY VALLEY - LONGHORN EXTENSION

Endpoints: May Valley Substation,
Longhorn Substation

Major routing and siting considerations:

- Arkansas River crossing
- Two Buttes Reservoir State Wildlife Area
- Santa Fe Trail Scenic and Historic Byway
- Conservation easements
- Existing & planned wind farms
- Lesser prairie-chicken habitat

IN SERVICE 2026 - 2027



SEGMENT 1: FORT ST VRAIN - CANAL CROSSING

Endpoints: Fort St Vrain Substation,
Canal Crossing Substation
In Service: 2026

Major routing and 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

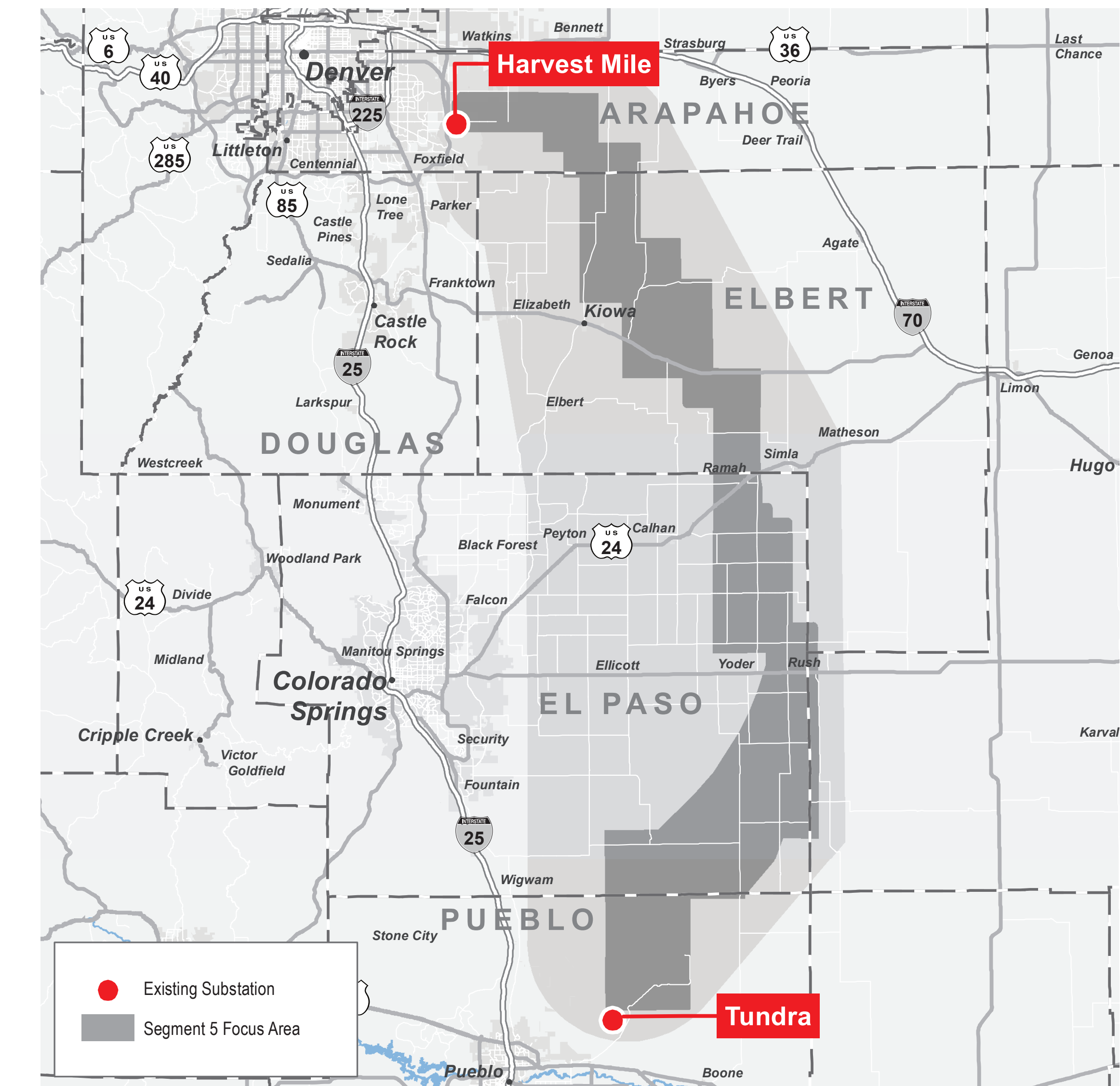


SEGMENT 4: MAY VALLEY - TUNDRA

Endpoints: May Valley Substation,
Tundra Substation
In Service: 2027

Major routing and 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



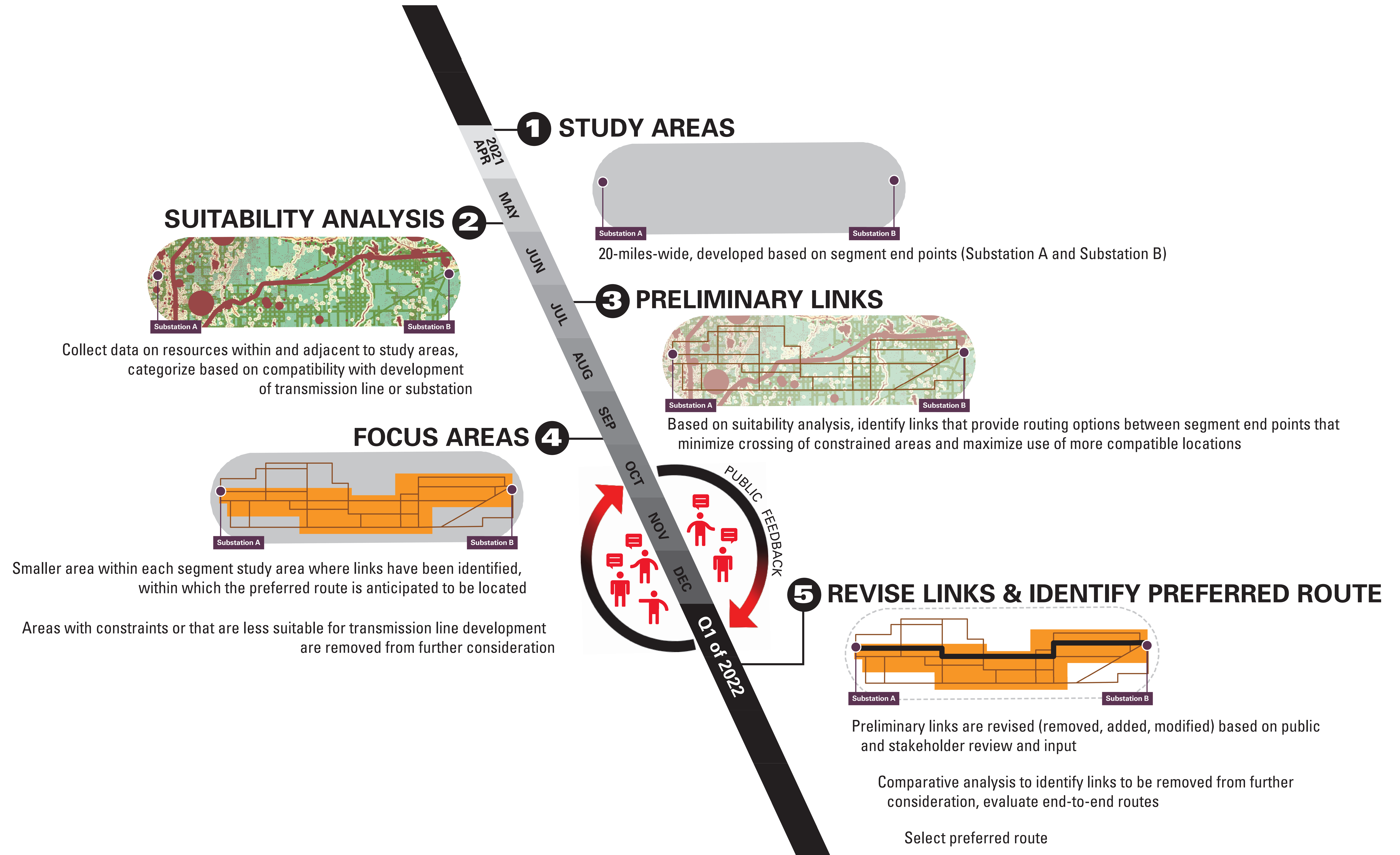
SEGMENT 5: TUNDRA - HARVEST MILE

Endpoints: Tundra Substation,
Harvest Mile Substation
In Service: 2027

Major routing and siting considerations:

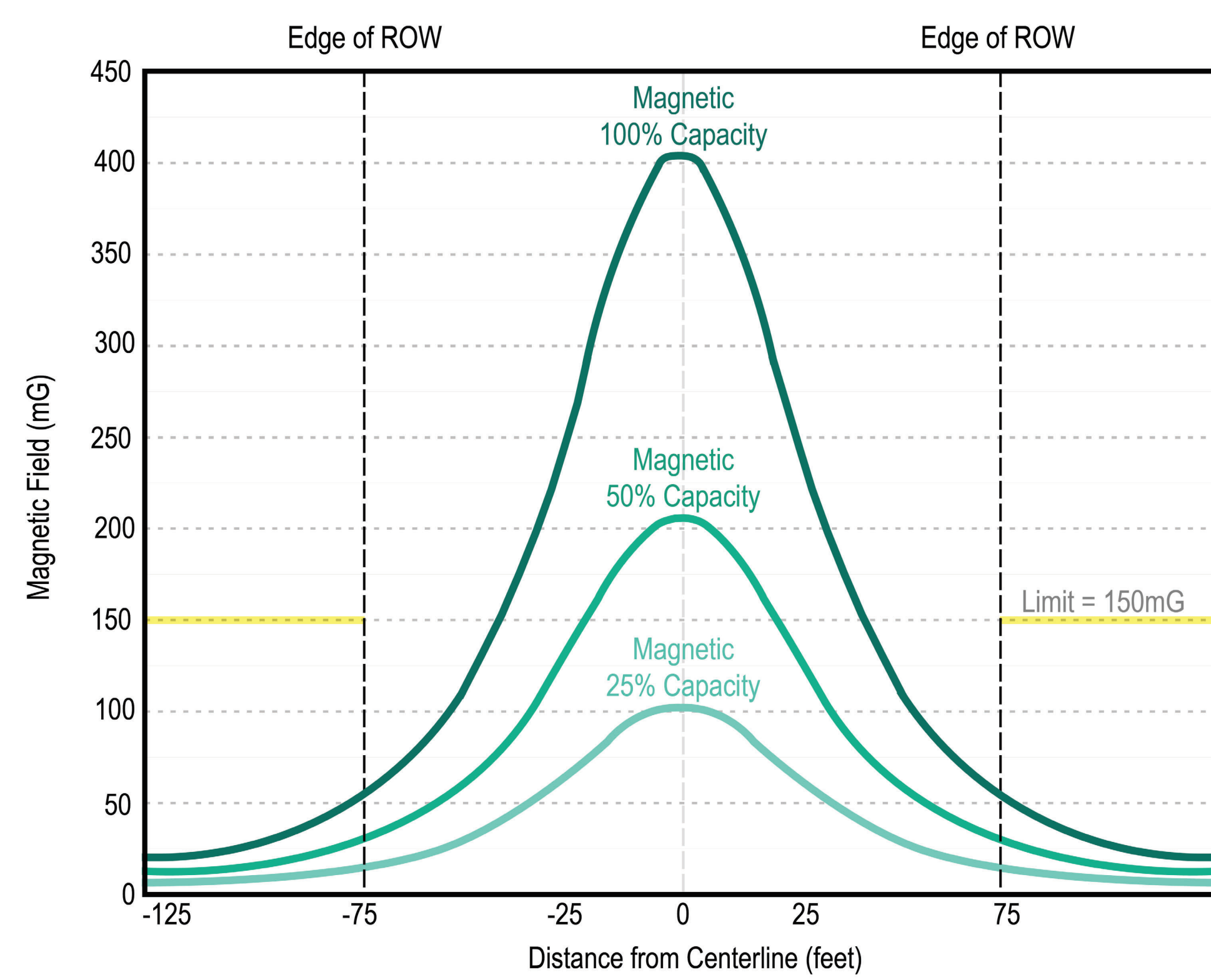
- End points are fixed at Tundra and Harvest Mile
- U.S. Army Pueblo Chemical Depot
- Black Forest
- Buckley and Schriever Space Force bases
- USAFA Bullseye Airfield & training areas
- Existing wind facilities
- Existing & planned residential
- Stewardship Trust land

SITING AND ROUTING



MAGNETIC FIELDS AND NOISE

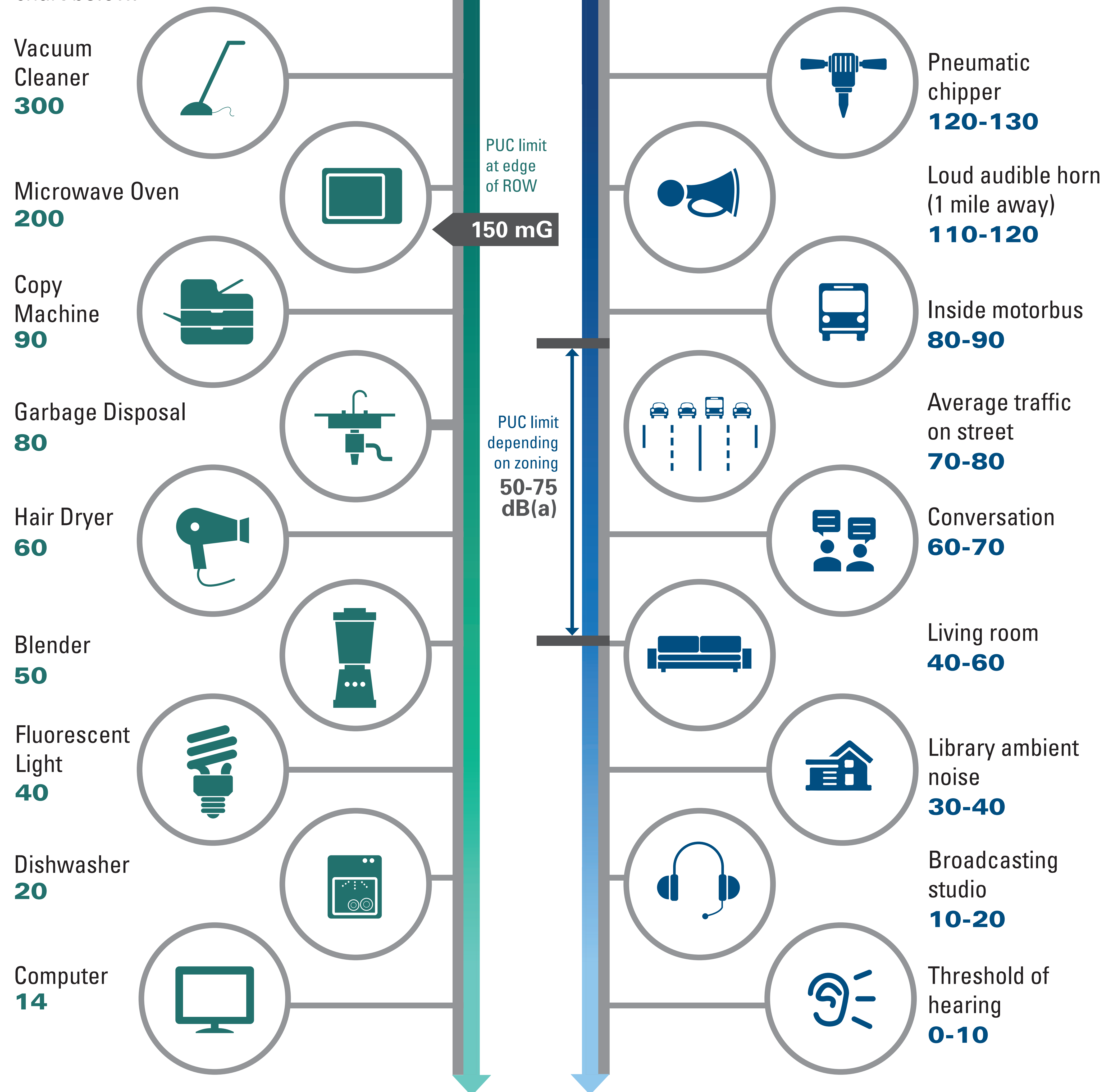
MAGNETIC FIELDS



MAGNETIC FIELDS, measured in milliGauss (mG), are produced by electric current and only exist when an electric appliance is turned on – the higher the current, the greater the magnetic field. As with electric fields, the strength of a magnetic field dissipates rapidly as you move away from its source.

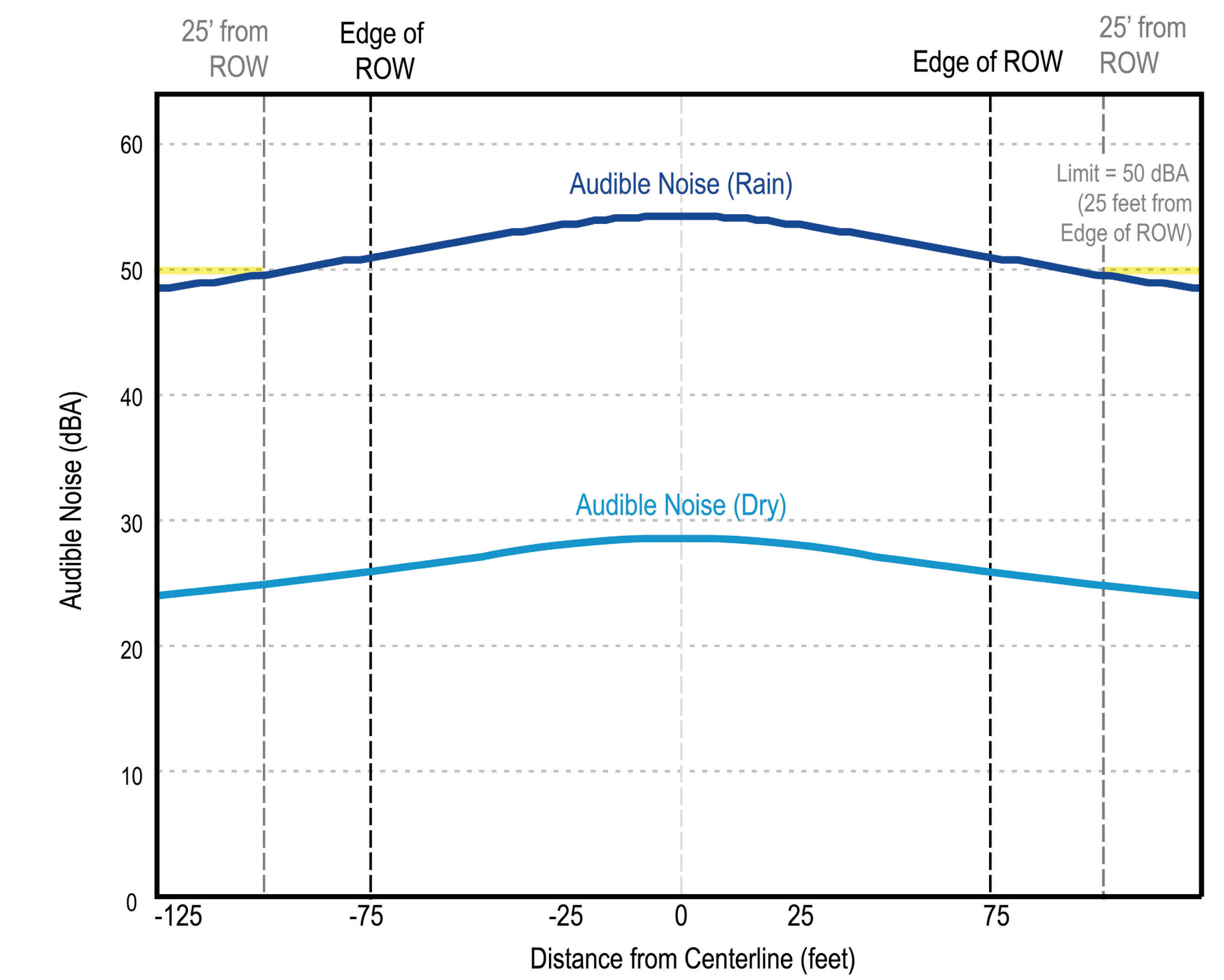
The power line serving your neighborhood produces EMF just like household appliances such as your toaster, hair dryer, lamps and washing machine. Business equipment, such as computers, copiers and fluorescent lights, also produce EMF.

Typical magnetic fields six inches from common home appliances measured in milliGauss (mG) are depicted in the chart below.



The chart below provides typical noise levels encountered in common settings measured in decibels [dB(a)]

AUDIBLE NOISE



CORONA is a phenomenon associated with all transmission lines. Corona is a small electrical discharge, not unlike the static electrical charge that a person may experience when touching a metal object when walking on carpet. Corona is what creates the hissing or crackling sound that often emanates from transmission lines. Corona increases substantially in wet weather, when water droplets form on a transmission line which increase the corona (and increase audible noise).

WORKING WITH LANDOWNERS

EASEMENTS are a permanent right authorizing a utility to use the Right-of-Way (ROW) to build and maintain a transmission line.

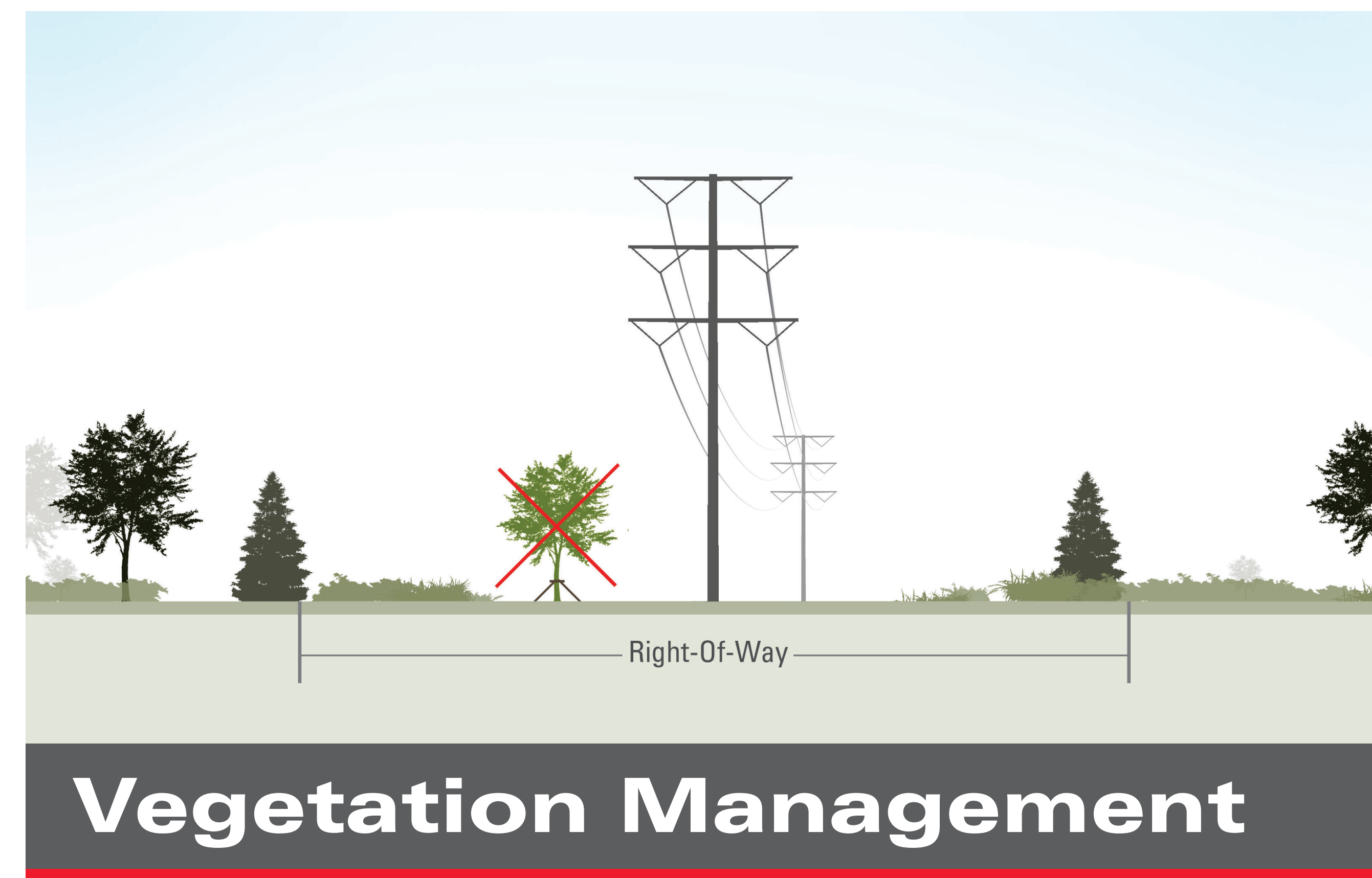
Landowners are paid a fair market value for the easement and can continue to use the land so long as their use does not interfere with the operation and maintenance of the transmission line.

RIGHTS-OF-WAY are the actual land areas acquired for a specific purpose such as a transmission line, roadway or other infrastructure.

Allowed Uses within Easements

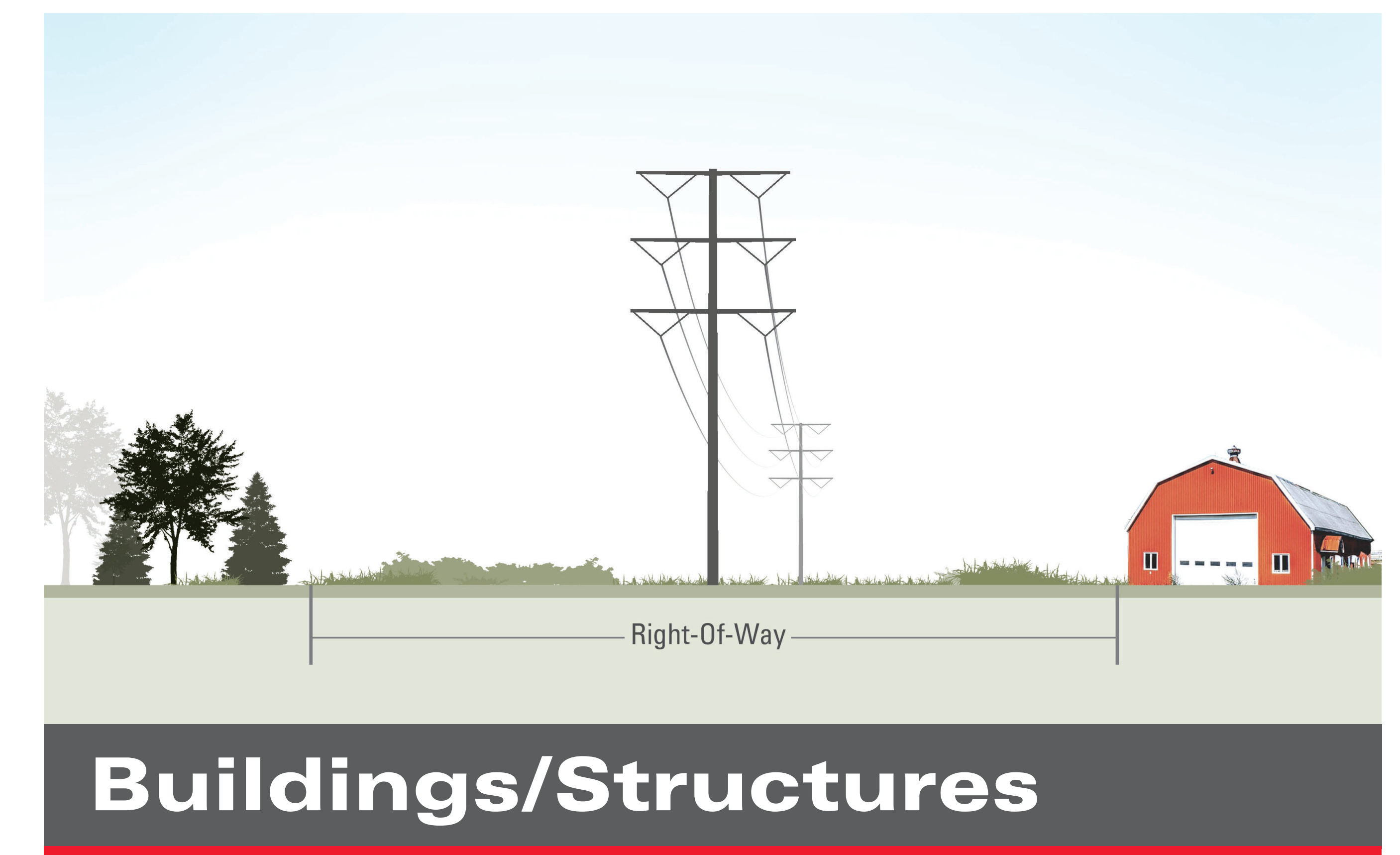


After initial construction of the utility infrastructure, agricultural activities can continue outside of the small area occupied by the transmission structures.



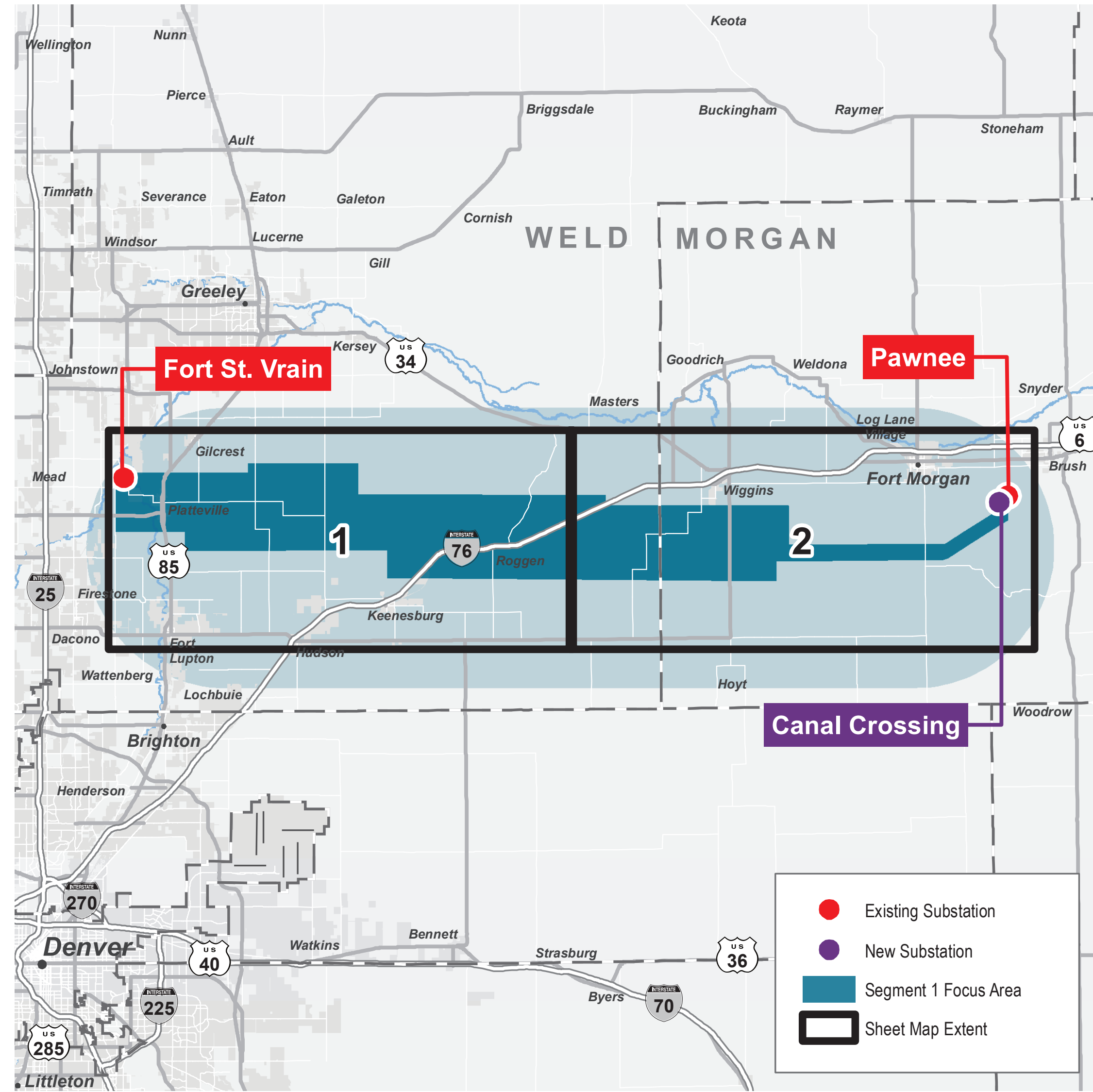
Trees growing near power lines can be a safety hazard and are a major contributor to electric service interruptions nationwide. There may be some areas where tree removal and pruning will be needed.

Tree pruning is the selective removal of branches that are not an adequate distance away from power lines, or that will grow too close to the power line before the next maintenance cycle. Our goal is to provide safe, reliable electric service while also taking the best possible care of one of your community's valuable natural resources.

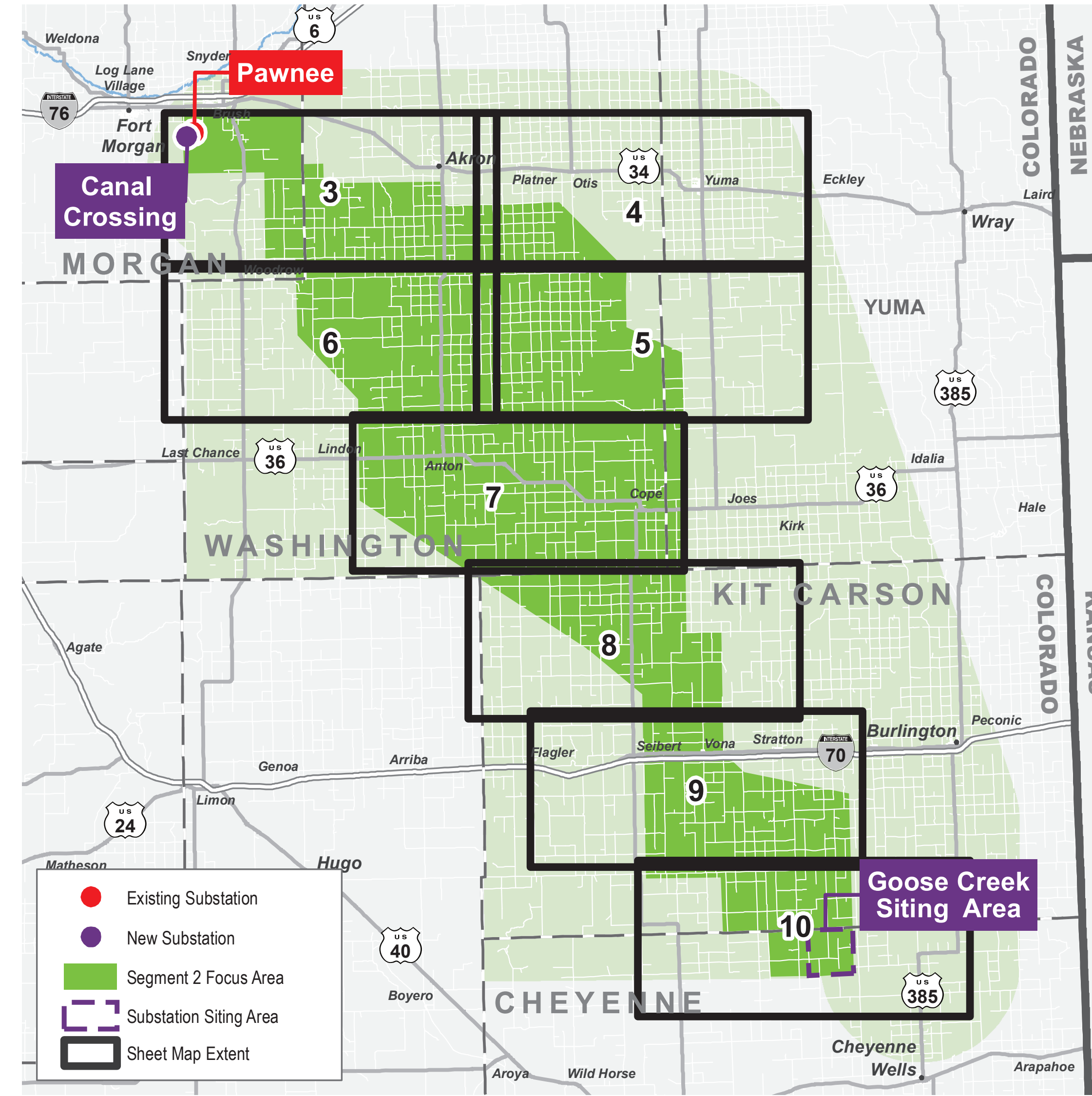


Generally, buildings or other structures are not allowed in the Right-of-Way/easement for transmission lines due to clearance and safety concerns. Landowners can only build structures under a power line after receiving written approval from the electric utility.

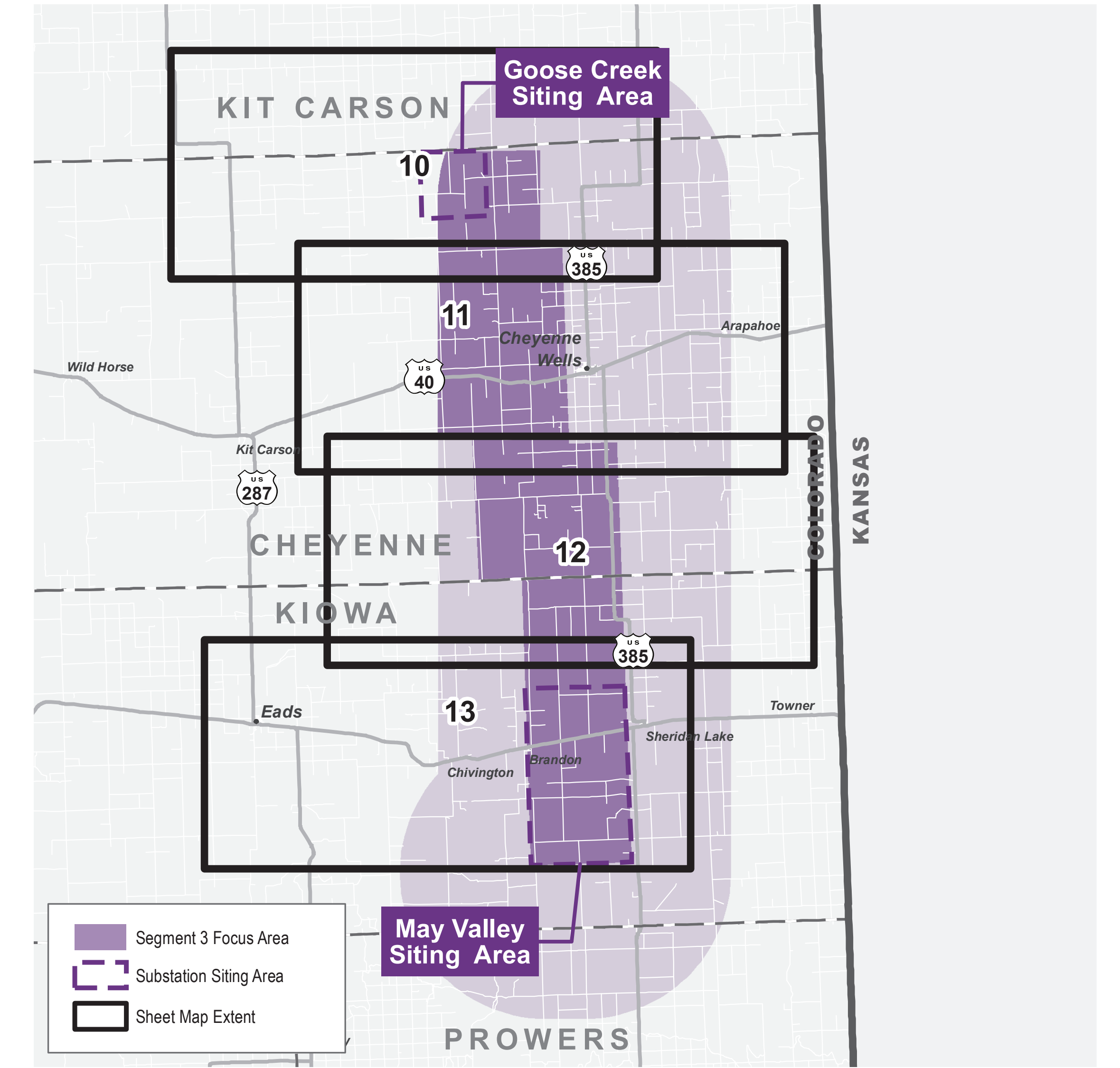
SHEET MAP INDEX



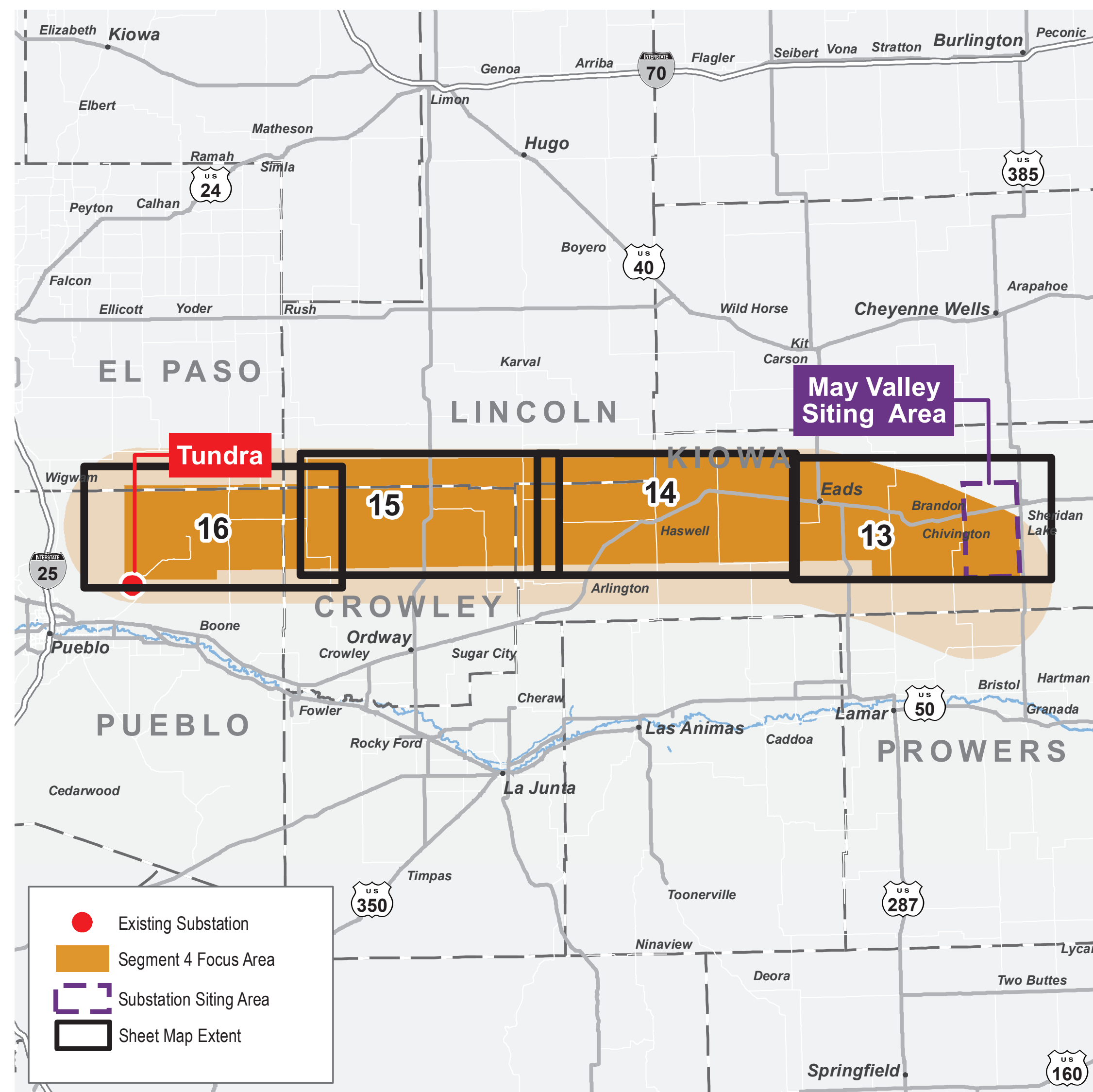
**SEGMENT 1:
FORT ST VRAIN -
CANAL CROSSING**



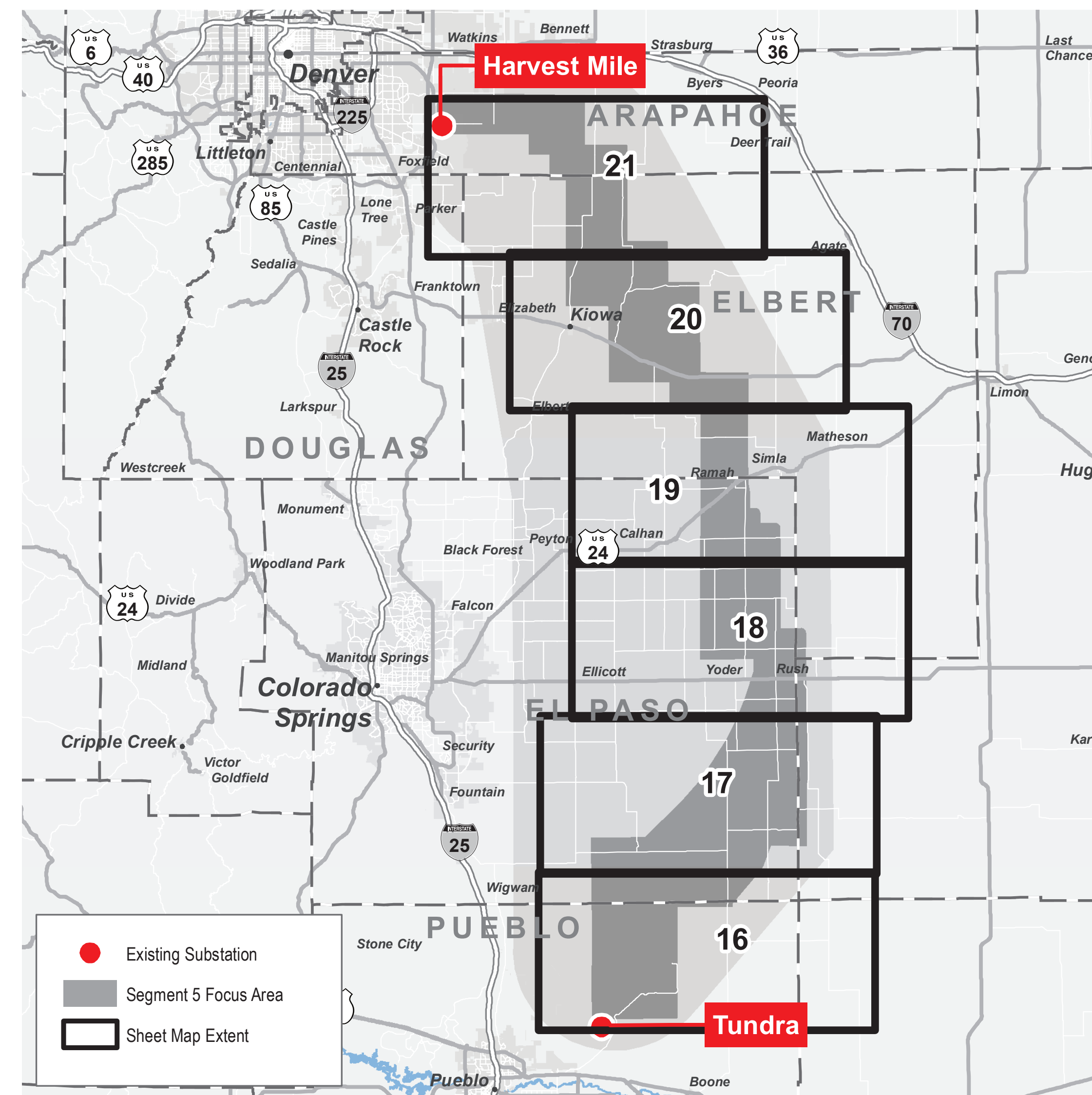
**SEGMENT 2:
CANAL CROSSING -
GOOSE CREEK**



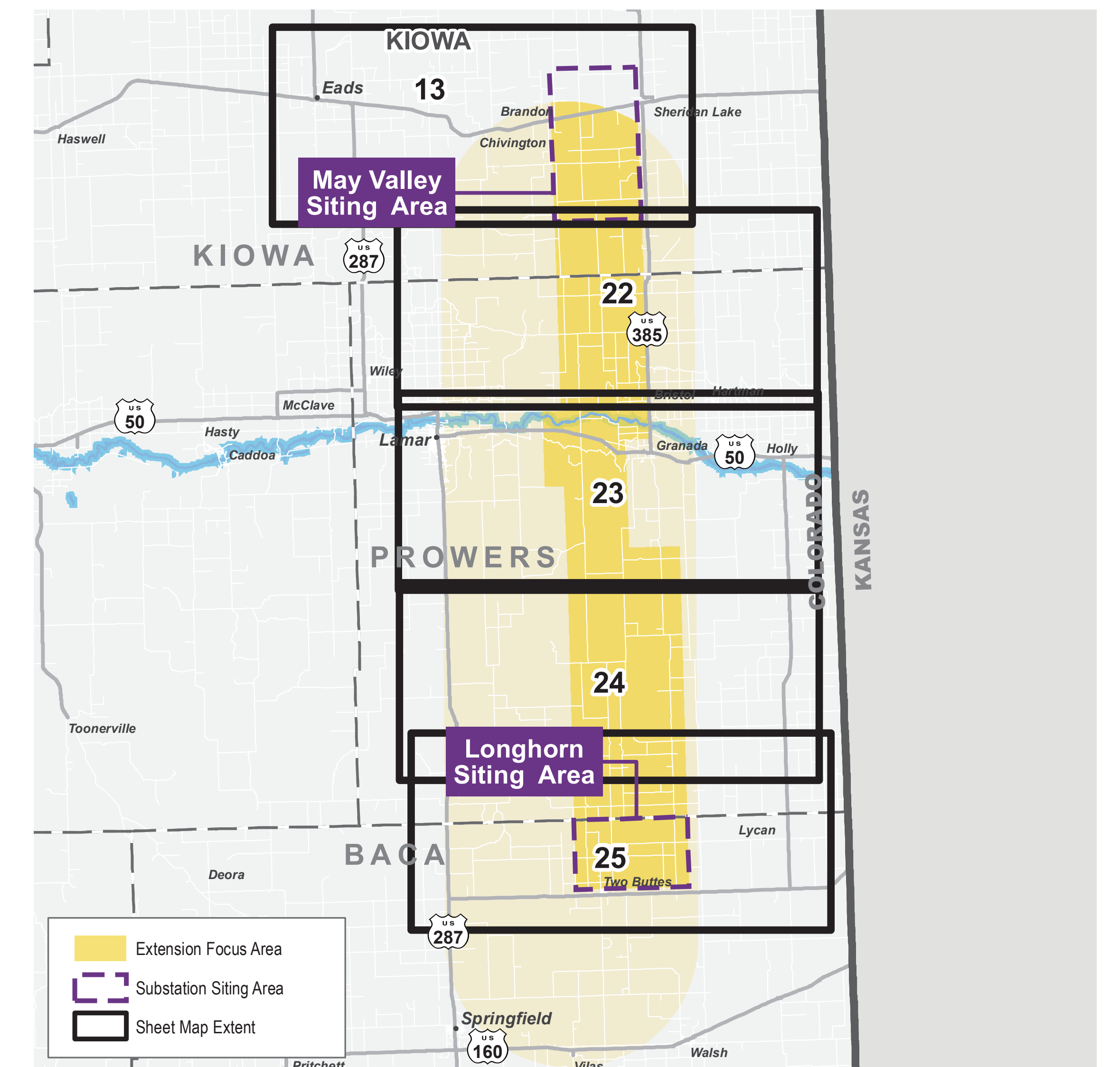
**SEGMENT 3:
GOOSE CREEK -
MAY VALLEY**



**SEGMENT 4:
MAY VALLEY -
TUNDRA**



**SEGMENT 5:
TUNDRA -
HARVEST MILE**



**MAY VALLEY -
LONGHORN
EXTENSION**