

Midtown Reliability Project



CLARK BRYNER – PRINCIPAL PROGRAM MANAGER, TRANSMISSION LINE SITING

AGENCY BRIEFING

August 10, 2023



Tucson Electric Power

INTRODUCTIONS

Please type into the chat:

- Name
- Organization
- Title/Role

Invited Representatives:

- Arizona Department of Transportation (ADOT)
 - Banner Health
 - Davis-Monthan Air Force Base
 - Kinder Morgan/El Paso Natural Gas
 - Metropolitan Pima Alliance
 - Pima Association of Governments
 - Southwest Gas
 - THRIVE in the 05
 - Tucson Airport Authority
 - Union Pacific Railroad
 - University of Arizona
- Pima County
 - County Administrator's Office
 - Department of Transportation
 - Development Services
 - Energy
 - Facilities
 - Natural Resources, Parks, and Recreation
 - Regional Wastewater Reclamation
 - Sustainability and Conservation
 - City of Tucson
 - City Manager
 - Climate and Sustainability
 - Department of Transportation
 - Energy
 - Historic Preservation
 - Parks and Recreation
 - Planning and Development Services
 - Public Information
 - Tucson Water



AGENDA

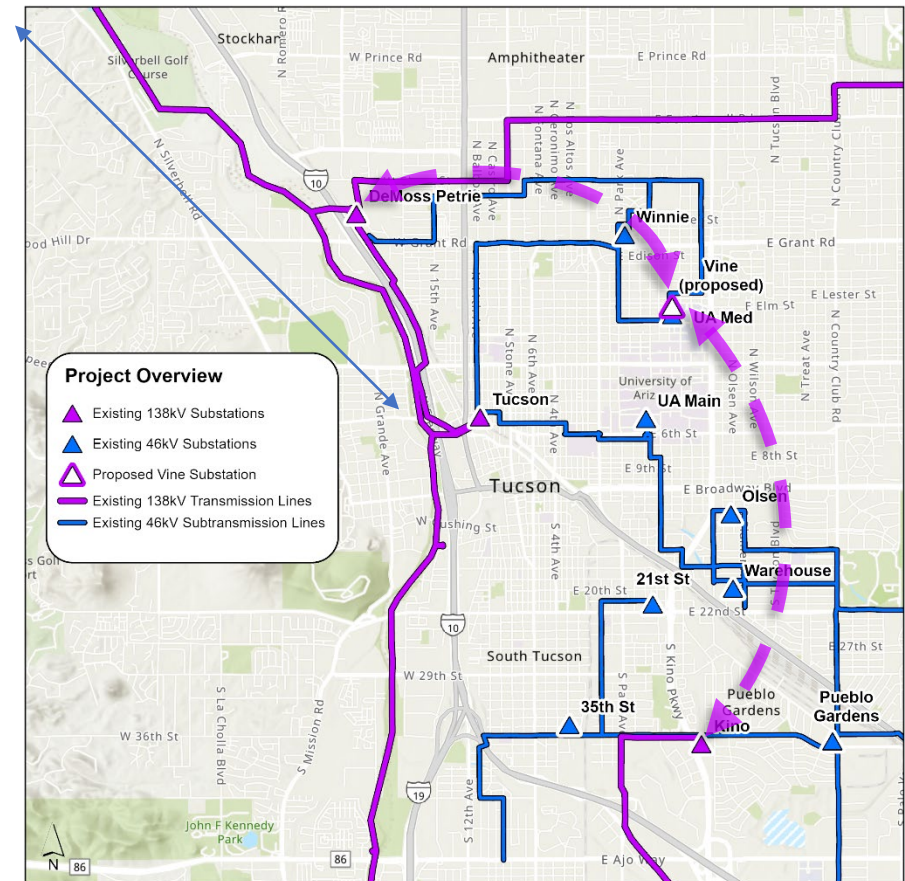
1. Project Overview
2. Project Need
3. Project Benefits
4. Required Approvals
5. Project Schedule
6. Planning and Siting Process and Timeline
7. Next Step
8. Questions and Answers

Project Overview



Components of the Midtown Reliability Project

- Vine Substation
- 138 kilovolt (kV) Transmission Line
- Distribution System Upgrades
- Retirement of Aging Assets

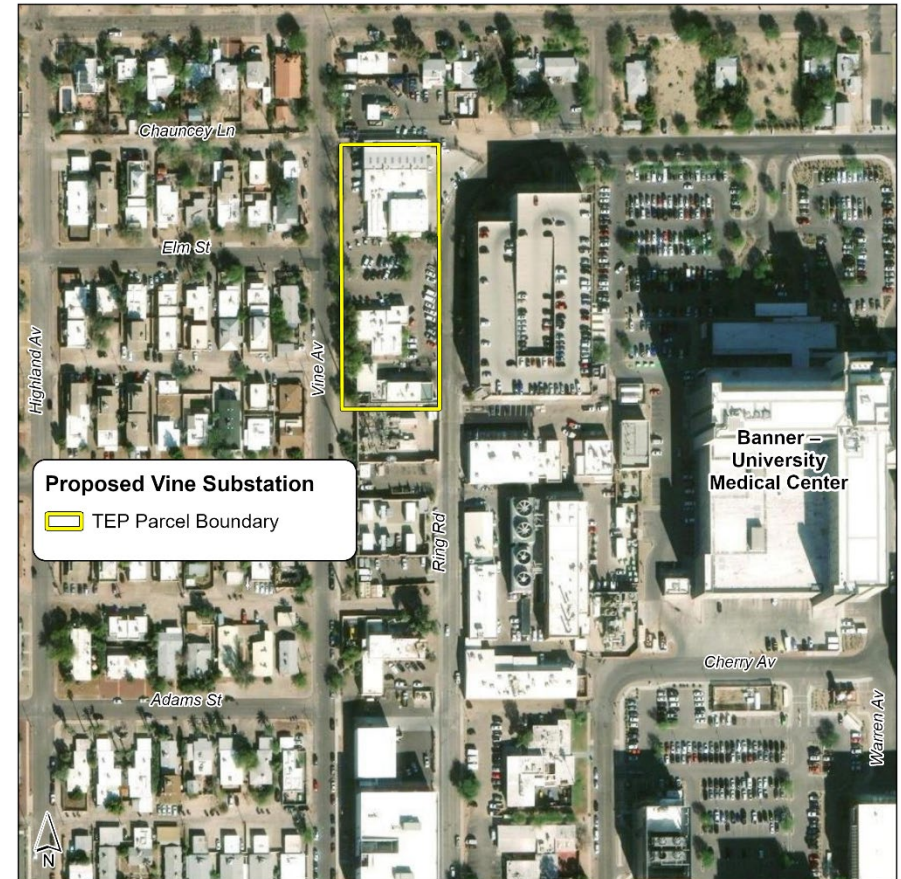


Vine Substation

- 1.6 acre site at Vine Avenue between Lee Street & Chauncey Lane
- Gas Insulated Substation (GIS)

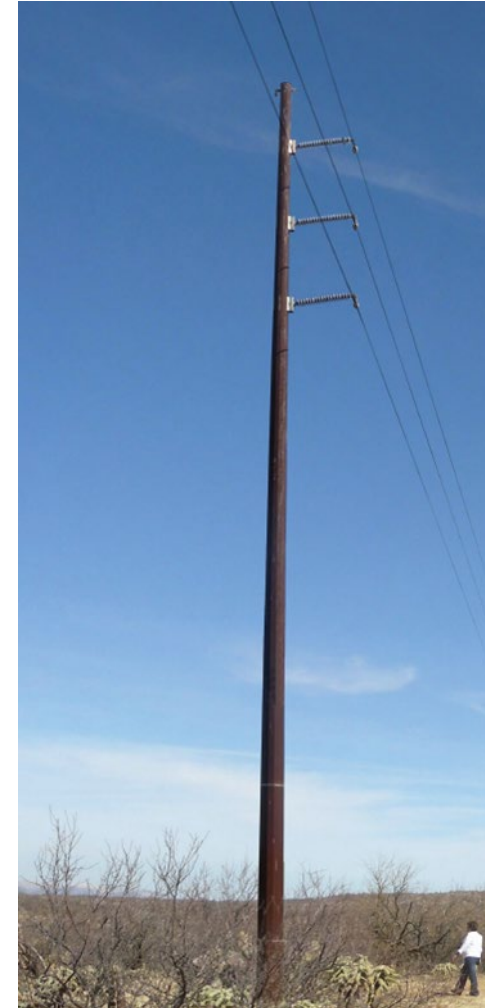


Tucson Substation, an existing GIS and Air Insulated Substation.



Transmission Line Specifications

- Single circuit 138kV
- Tubular steel monopole structures (weathering steel is standard)
- Typical structure heights ~75 feet
- Span length of ~600 feet (distance between poles)
- Aluminum conductor, with a non-specular finish ~1 inch in diameter



Distribution System Upgrades



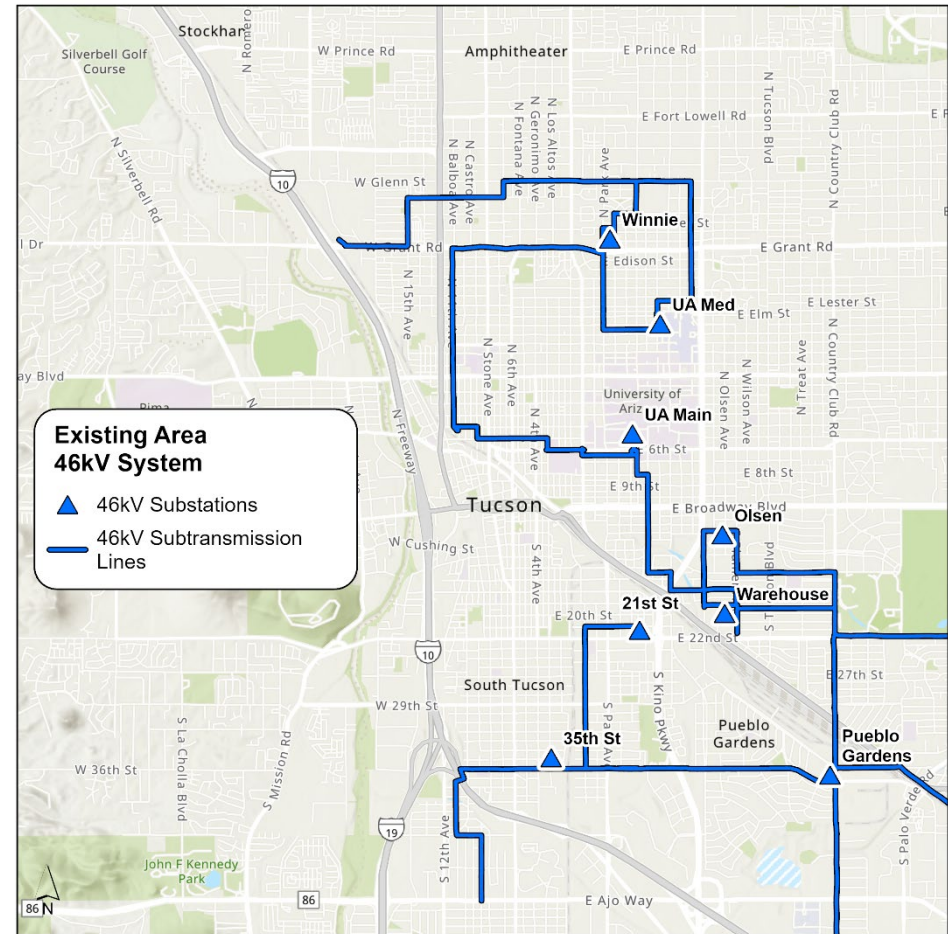
- Convert 4 kV distribution circuits to 13.8 kV circuits
- Replace and upgrade service transformers
- Replace existing poles, where merited



Existing 4kV distribution infrastructure at 4th St. and 9th Ave.

Retirement of Aging Assets

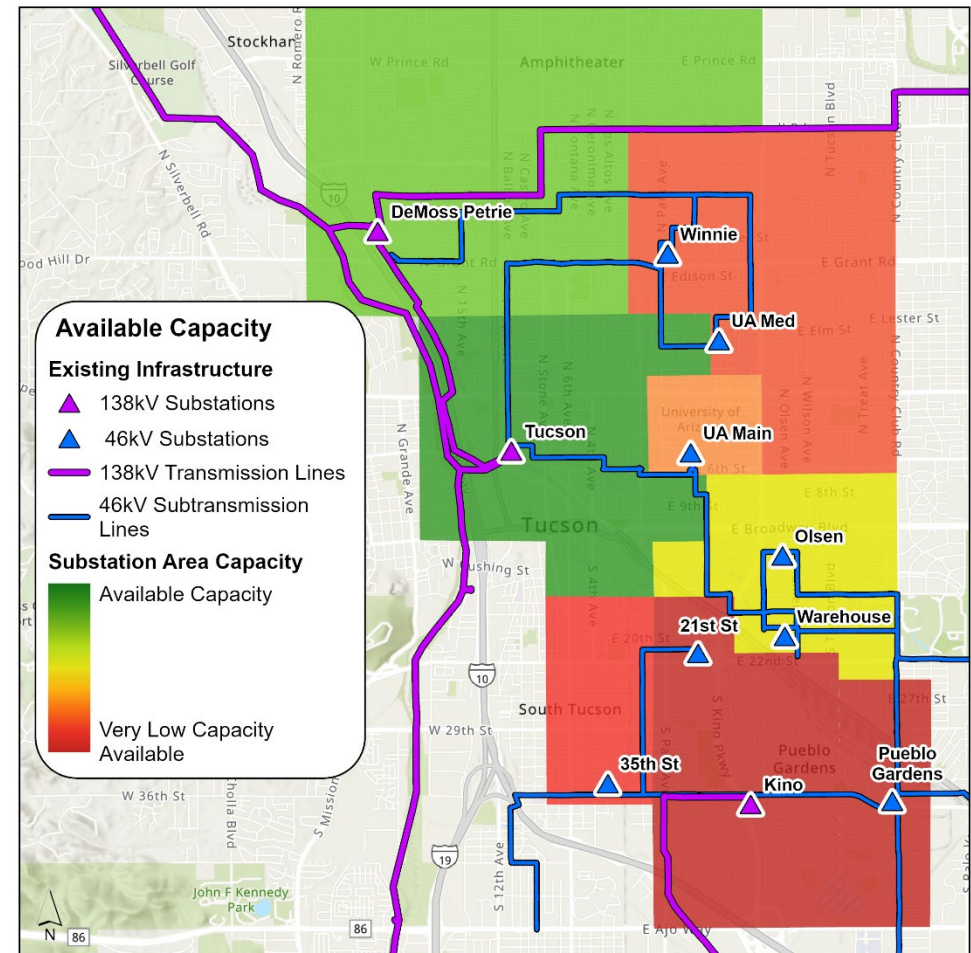
- Replace aging wood distribution poles and transformers
- Retire up to eight 46 kV Substations
- Retire approximately 19 miles of 46 kV sub-transmission lines



Existing area 46kV system.

Why is this project needed?

- Existing system was designed to serve yesterday's needs
- Increased energy demand
- Aging equipment



Available system capacity.

What are the benefits of the project?



- Improved electric reliability
- Greater capacity for growing energy needs
- Greater capacity for customer-owned energy systems
- Comparable cost, greater efficiency
- Improved service citywide
- Support for economic growth and a healthy community

Vine Substation

- Special Exception Land Use Permit
(City of Tucson)

138 kV Transmission Line

- Certificate of Environmental Compatibility
(Arizona Corporation Commission)

Distribution System Upgrades & Retirement of Aging Assets

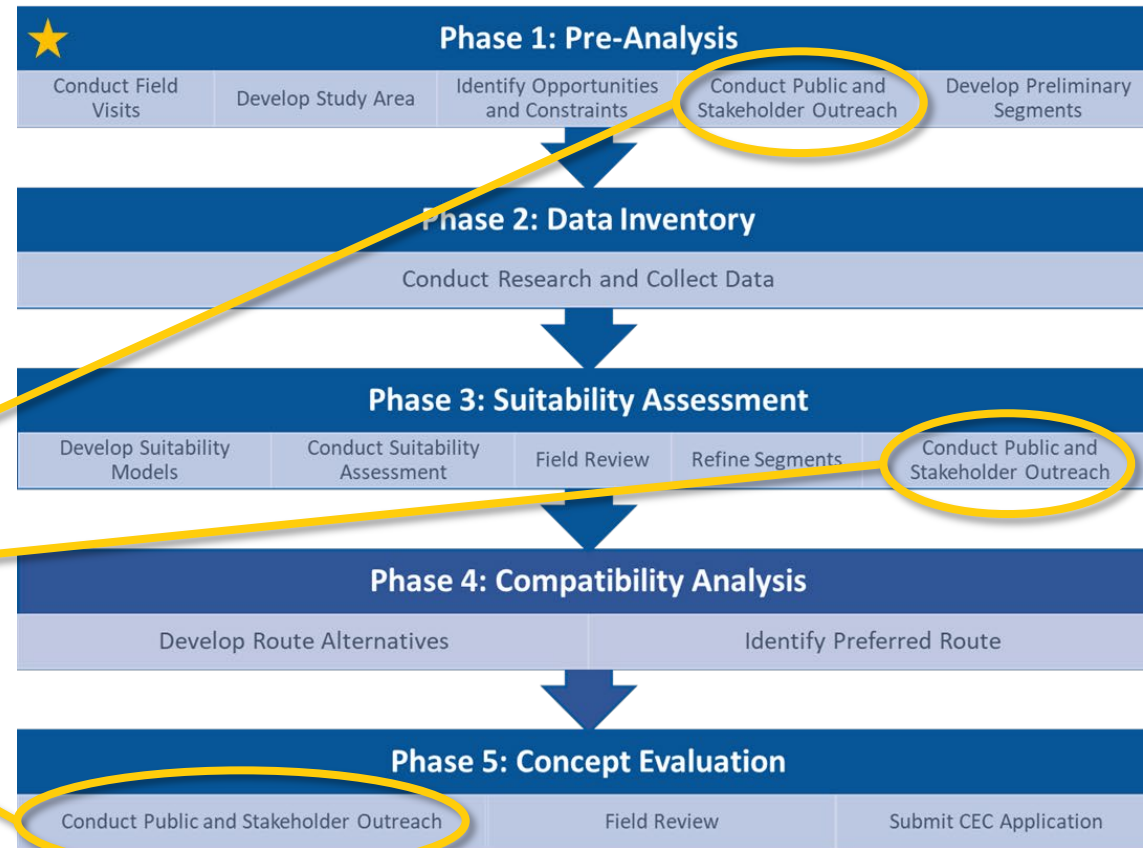
- No approvals, but dependent on new substation and transmission line

Project Schedule*



- Q3 '23-Q2 '24 – Transmission Line Planning and Siting
- Q2 2024 – CEC Application Submittal
- Q3 2024 – Line Siting Hearing
- Q3 2024 – ACC Open Meeting
- Q4 2024 – Vine Substation SELUP Application Submittal
- Q1 2025 – Zoning Examiner Hearing
- Q2 2027 – Transmission Line/Vine Substation In-Service
- 2027-2037 – Distribution System Upgrades and 46kV Retirements

Planning and Siting Process and Timeline



July – November 2023

July – November 2023

November 2023 – February 2024

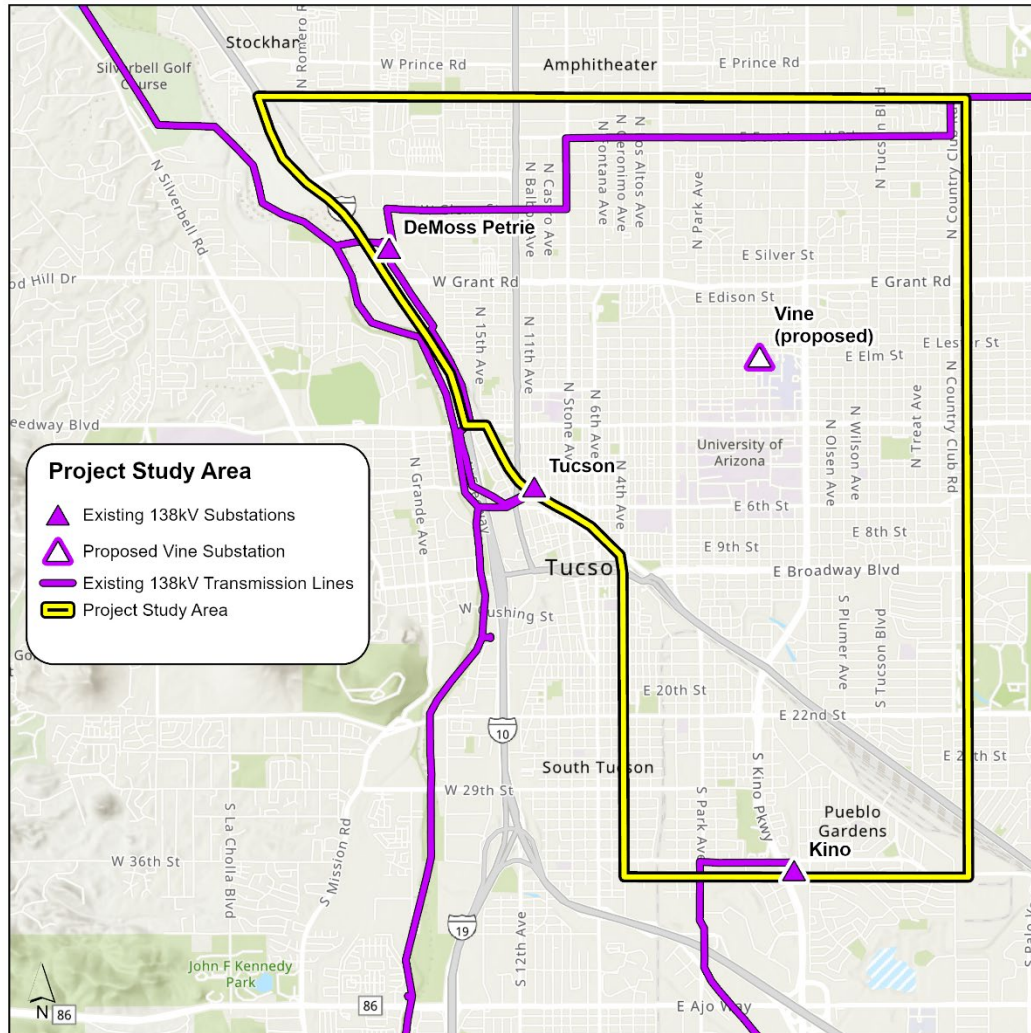
February – March 2024

March – July 2024

OUTREACH

- Neighborhood Listening Sessions
- Neighborhood Advisory Group
- Public Open House
- Elected Official Briefings
- Agency Briefings

Next Steps



Public Open House / Meeting

September 21, 2023

6:00 – 8:00pm

Doubletree – Reid Park

445 S Alvernon Way

Tucson, AZ 85711

More Project Information

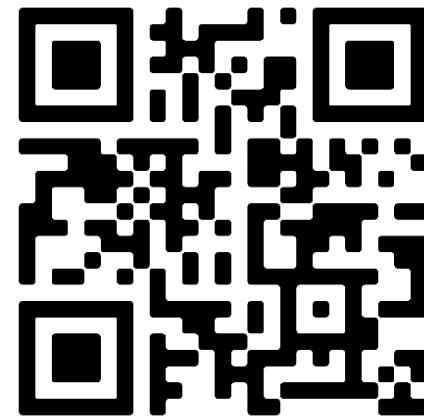


For more project information please visit the project webpage:

www.tep.com/midtown

Here, you will find:

- Project details
- A print copy of this presentation
- Frequently asked questions & answers



How to Comment



- Mail a comment form or a letter to:

P.O. Box 711

ATTN: Midtown Reliability

Mail Stop CB200

Tucson, AZ 85701-0711

- Send comments to midtownreliability@tep.com
- Visit the project webpage and fill out an online comment form
- Call 1-833-523-0887 and leave a voicemail message



Please use the raise hand feature in MS Teams

or

Type your question into the chat