

Midtown Reliability Project



CLARK BRYNER –MANAGER, TRANSMISSION LINE SITING

AGENCY BRIEFING

February 28, 2024



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
- Metropolitan Pima Alliance
- Pima Association of Governments
- Southern Arizona Home Builders Association
- Southwest Gas
- THRIVE in the 05
- Tucson Airport Authority
- Tucson Association of Realtors
- Tucson Hispanic Chamber of Commerce
- Tucson Metro Chamber of Commerce
- Tucson-Pima County Historical Commission
- 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's Office
 - Climate and Sustainability
 - Department of Transportation and Mobility
 - Energy
 - Historic Preservation
 - Parks and Recreation
 - Planning and Development Services
 - Public Information
 - Tucson Water



AGENDA

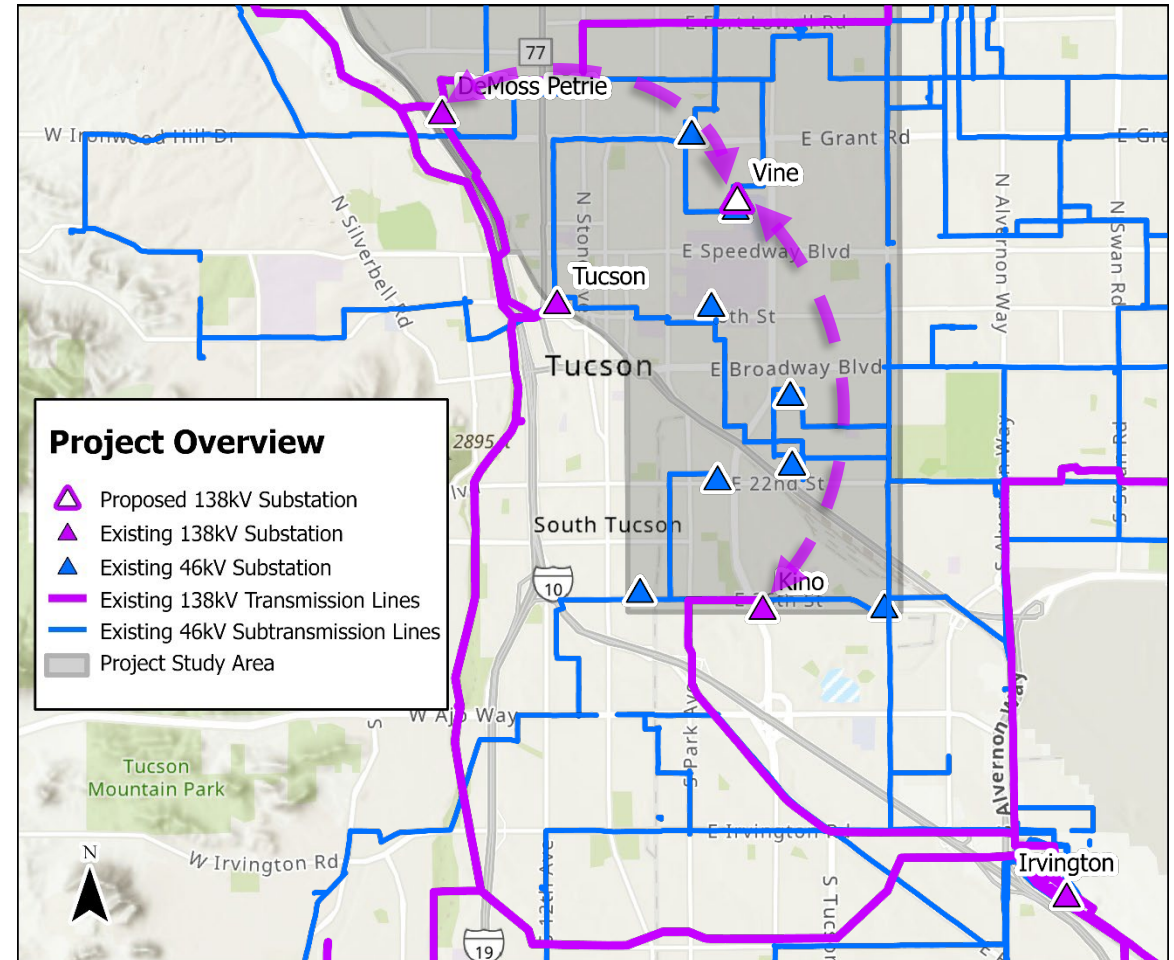
1. Project Overview
2. Required Approvals
3. Planning and Siting Process
4. Compatibility Analysis
5. Draft Route Alternatives
6. Next Steps
7. Project Schedule
8. Questions and Answers

Project Overview



Components of the Midtown Reliability Project

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



Required Approvals



138 kV Transmission Line

- Certificate of Environmental Compatibility (Arizona Corporation Commission)

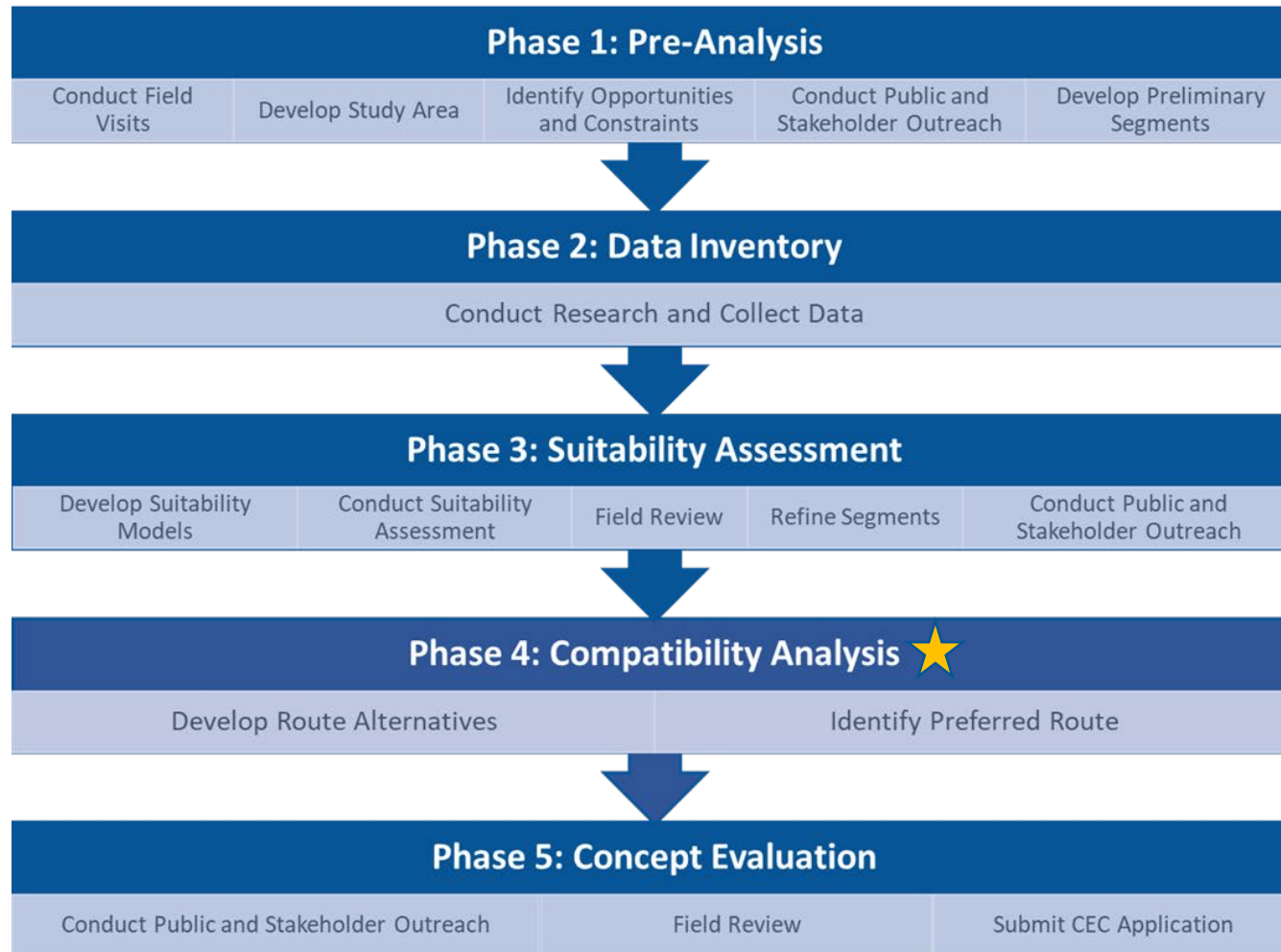
Vine Substation

- Special Exception Land Use Permit (City of Tucson)

Distribution System Upgrades & Retirement of Aging Assets

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

Planning and Siting Process



July – November 2023

July – November 2023

November 2023 – February 2024

February – March 2024

March – July 2024

Summary of Public Outreach



Meetings and Briefings	External Communication	Ways to Comment
<ul style="list-style-type: none">• Open Houses* (4)• Agency Briefings (4)• Public Officials (9)• Neighborhood Advisory Group (4)• Neighborhood Listening Sessions (11)• Miscellaneous	<ul style="list-style-type: none">• Newsletters*• Social Media*• Fliers*• Signage*• Webpage*• Email Updates• Newspaper*• News	<ul style="list-style-type: none">• Paper Comment Form*• Online Comment Form*• Project Phone Line*• Project Email*• Mail*• Survey

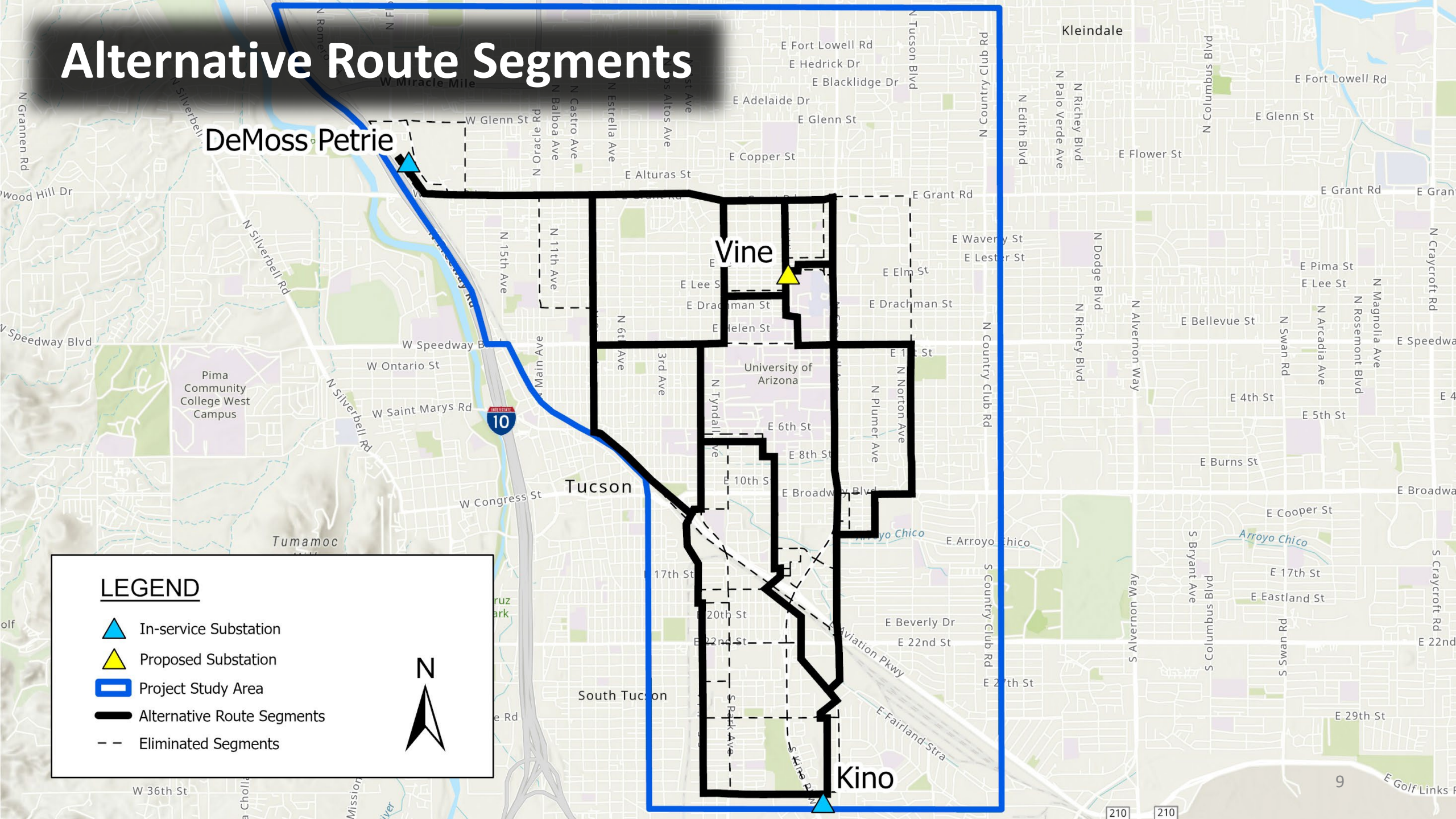
*Bilingual

Criteria – Compatibility Analysis



- Impact on low-income and/or disadvantaged communities
- Cost of transmission line construction, including relocation/undergrounding of distribution lines
- Sensitive plant and wildlife species and/or habitat within the transmission line corridor
- Residential properties adjacent to transmission lines
- Historic properties and districts adjacent to transmission lines
- Impact on views near transmission lines
- Impact on the total environment
- Noise
- Communication signal interference
- Existing development plans
- Engineering feasibility and challenges
- Right-of-way acquisition
- Compliance with applicable ordinances, master plans and regulations
- Health and safety impacts
- Transit Impacts (Pedestrian, Public Transit, Traffic)
- Use of existing utility corridors
- Impact on native lands
- Public/Stakeholder Feedback

Alternative Route Segments








DeMoss Petrie

Vine

Tucson

Kino

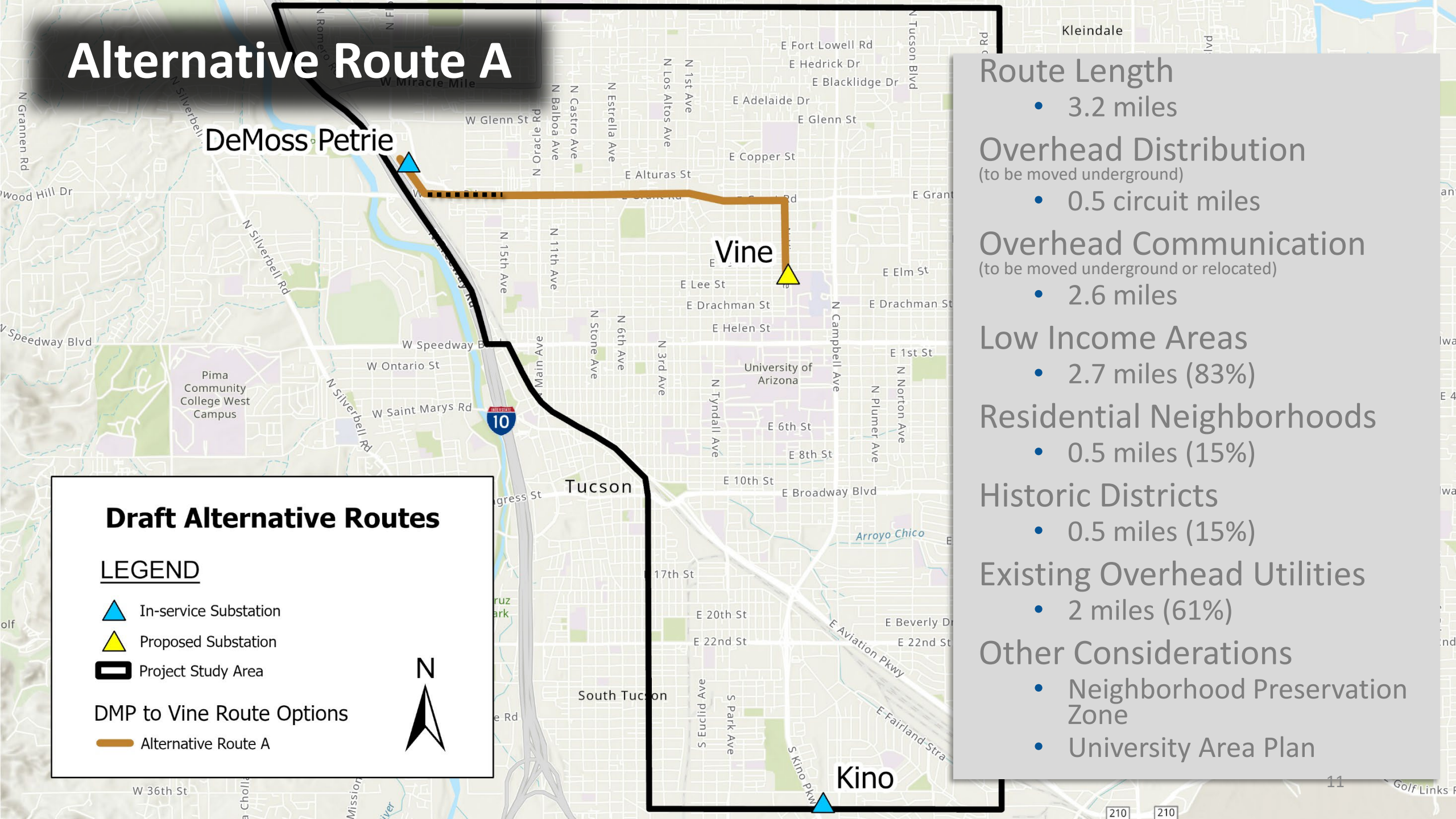
LEGEND

-  In-service Substation
-  Proposed Substation
-  Project Study Area
-  Alternative Route Segments
-  Eliminated Segments



DMP to Vine Route Alternatives

Alternative Route A



- Route Length
 - 3.2 miles
- Overhead Distribution (to be moved underground)
 - 0.5 circuit miles
- Overhead Communication (to be moved underground or relocated)
 - 2.6 miles
- Low Income Areas
 - 2.7 miles (83%)
- Residential Neighborhoods
 - 0.5 miles (15%)
- Historic Districts
 - 0.5 miles (15%)
- Existing Overhead Utilities
 - 2 miles (61%)
- Other Considerations
 - Neighborhood Preservation Zone
 - University Area Plan

Draft Alternative Routes

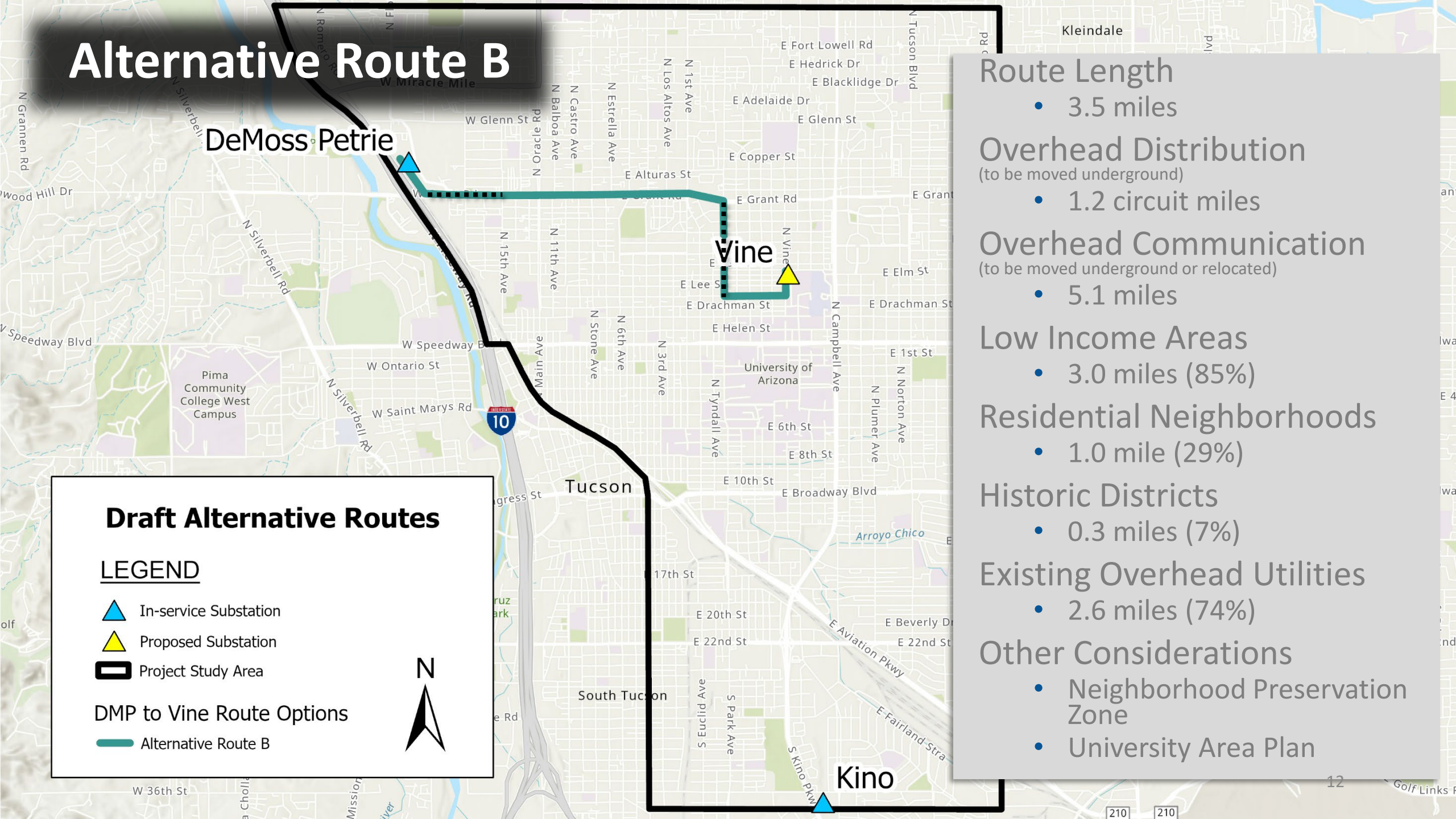
LEGEND

- In-service Substation
- Proposed Substation
- Project Study Area

DMP to Vine Route Options

- Alternative Route A

Alternative Route B



DeMoss Petrie

Vine

Tucson

Kino

Route Length

- 3.5 miles

Overhead Distribution

(to be moved underground)

- 1.2 circuit miles

Overhead Communication

(to be moved underground or relocated)

- 5.1 miles

Low Income Areas

- 3.0 miles (85%)

Residential Neighborhoods

- 1.0 mile (29%)

Historic Districts

- 0.3 miles (7%)

Existing Overhead Utilities




- 2.6 miles (74%)

Other Considerations

- Neighborhood Preservation Zone
- University Area Plan

Draft Alternative Routes

LEGEND

-  In-service Substation
-  Proposed Substation
-  Project Study Area

DMP to Vine Route Options

-  Alternative Route B



Alternative Route C

DeMoss Petrie

Vine

Kino

Route Length

- 4.2 miles

Overhead Distribution

(to be moved underground)

- 0.5 circuit miles

Overhead Communication

(to be moved underground or relocated)

- 2.6 miles

Low Income Areas

- 3.7 miles (87%)

Residential Neighborhoods

- 0.7 miles (16%)

Historic Districts

- 0.7 miles (17%)

Existing Overhead Utilities




- 1.3 miles (31%)

Other Considerations

- Miracle Mile
- University Area Plan

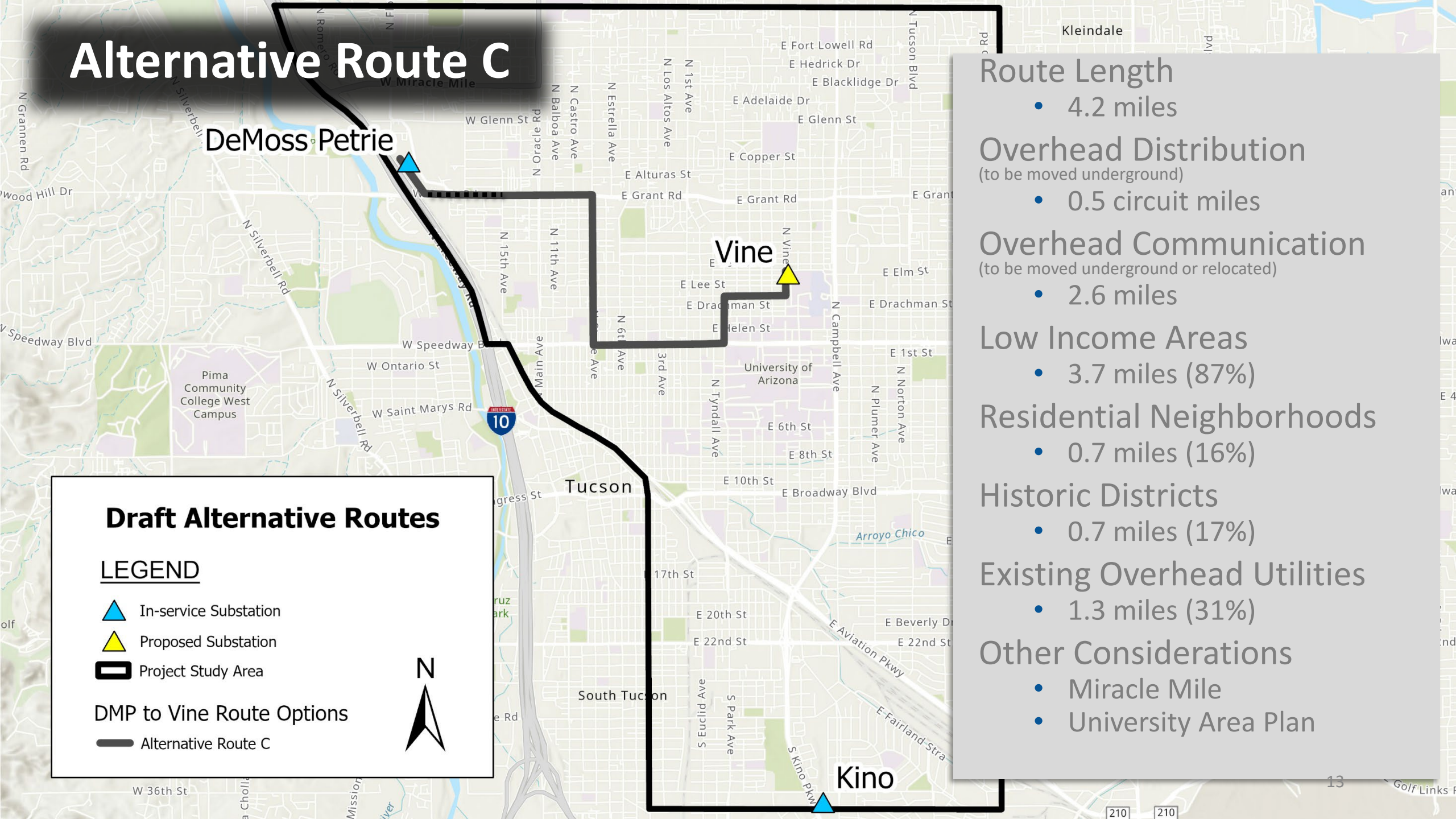
Draft Alternative Routes

LEGEND

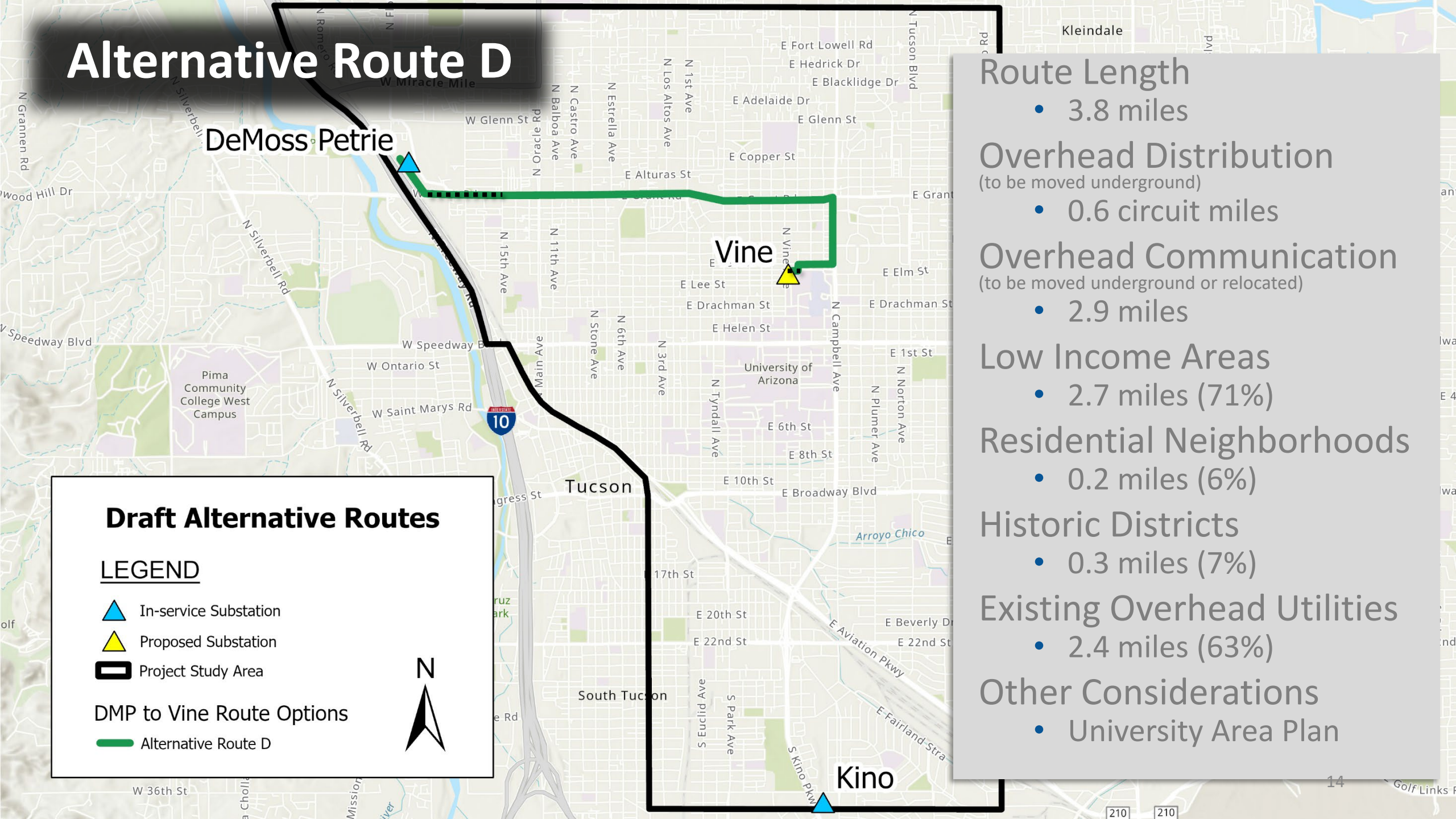
-  In-service Substation
-  Proposed Substation
-  Project Study Area

DMP to Vine Route Options

-  Alternative Route C



Alternative Route D



- Route Length
 - 3.8 miles
- Overhead Distribution (to be moved underground)
 - 0.6 circuit miles
- Overhead Communication (to be moved underground or relocated)
 - 2.9 miles
- Low Income Areas
 - 2.7 miles (71%)
- Residential Neighborhoods
 - 0.2 miles (6%)
- Historic Districts
 - 0.3 miles (7%)
- Existing Overhead Utilities
 - 2.4 miles (63%)
- Other Considerations
 - University Area Plan

Draft Alternative Routes

LEGEND

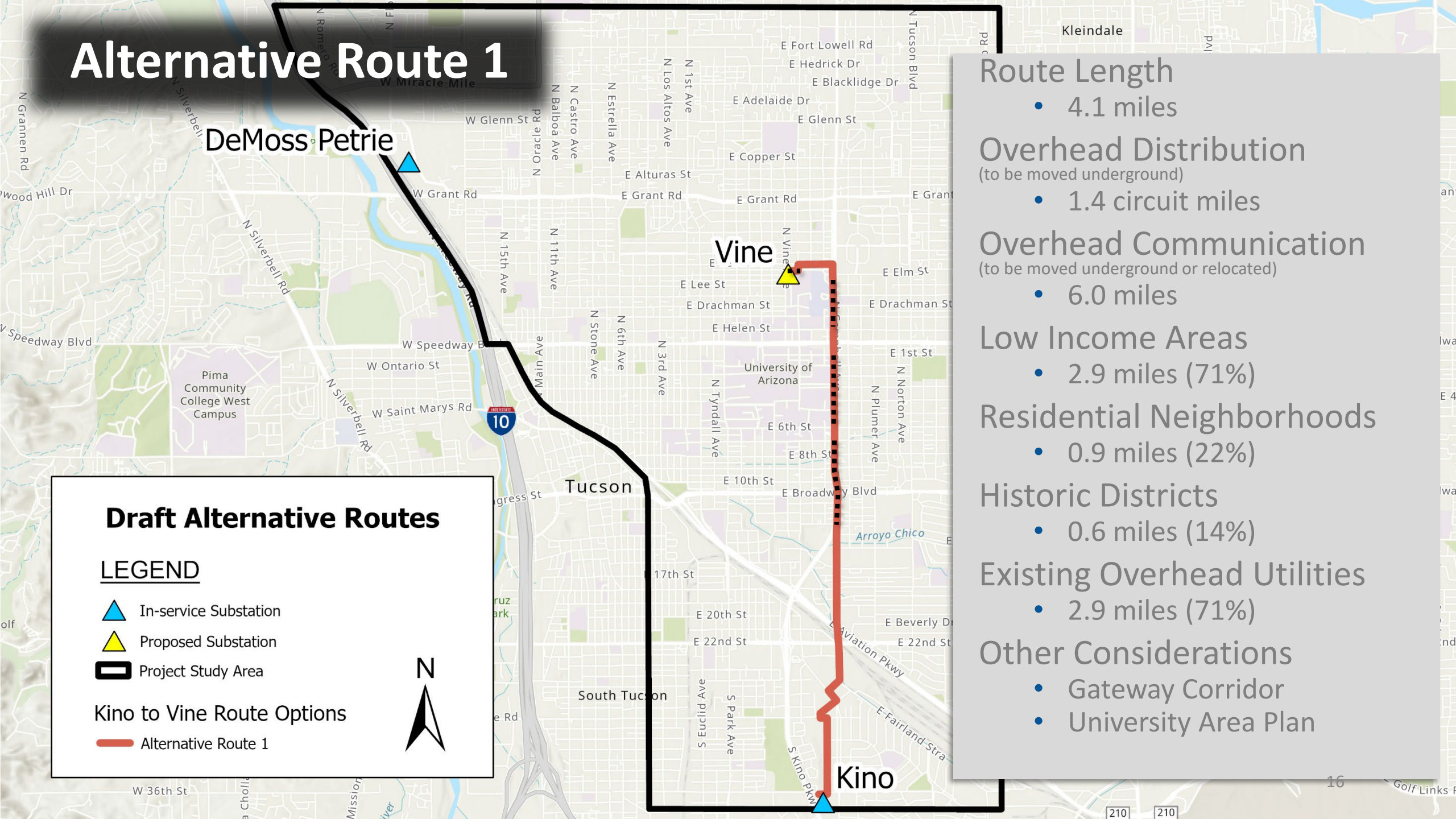
- In-service Substation
- Proposed Substation
- Project Study Area

DMP to Vine Route Options

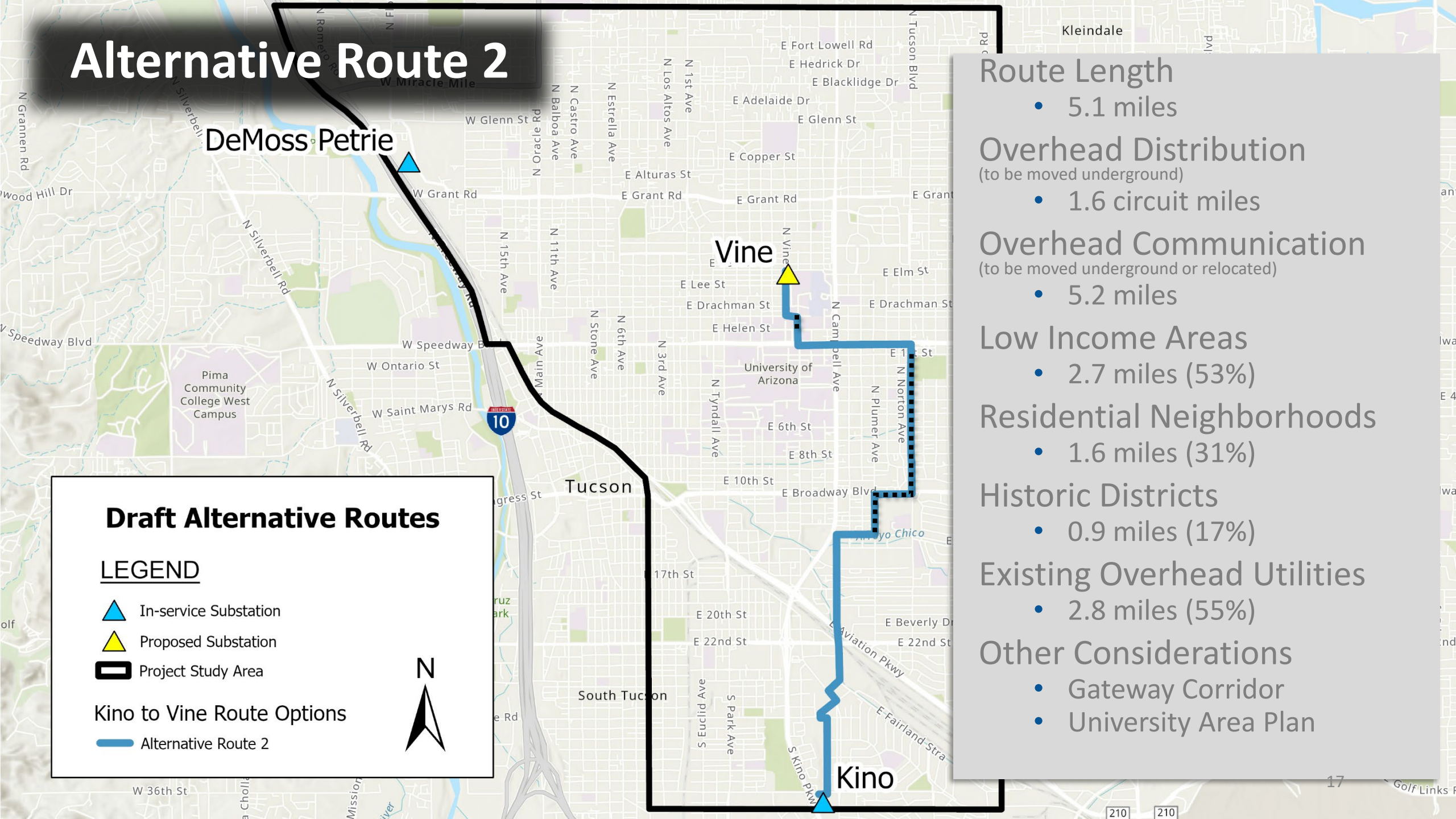
- Alternative Route D

Kino to Vine Route Alternatives

Alternative Route 1



Alternative Route 2



DeMoss Petrie

Vine




Tucson

Kino

Kleindale

Draft Alternative Routes

LEGEND

-  In-service Substation
-  Proposed Substation
-  Project Study Area

Kino to Vine Route Options

-  Alternative Route 2



Route Length

- 5.1 miles

Overhead Distribution

(to be moved underground)

- 1.6 circuit miles

Overhead Communication

(to be moved underground or relocated)

- 5.2 miles

Low Income Areas

- 2.7 miles (53%)

Residential Neighborhoods

- 1.6 miles (31%)

Historic Districts

- 0.9 miles (17%)

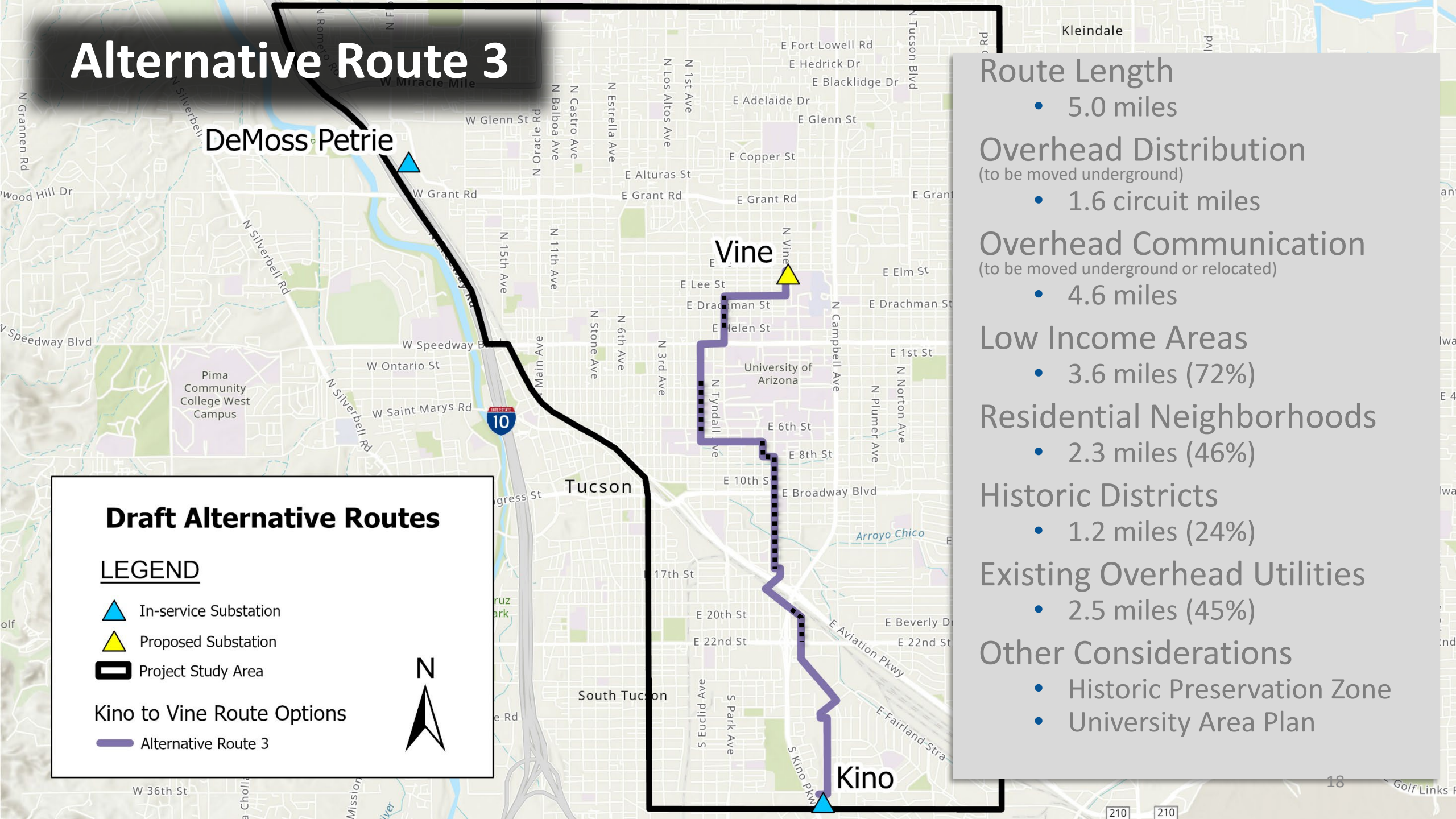
Existing Overhead Utilities

- 2.8 miles (55%)

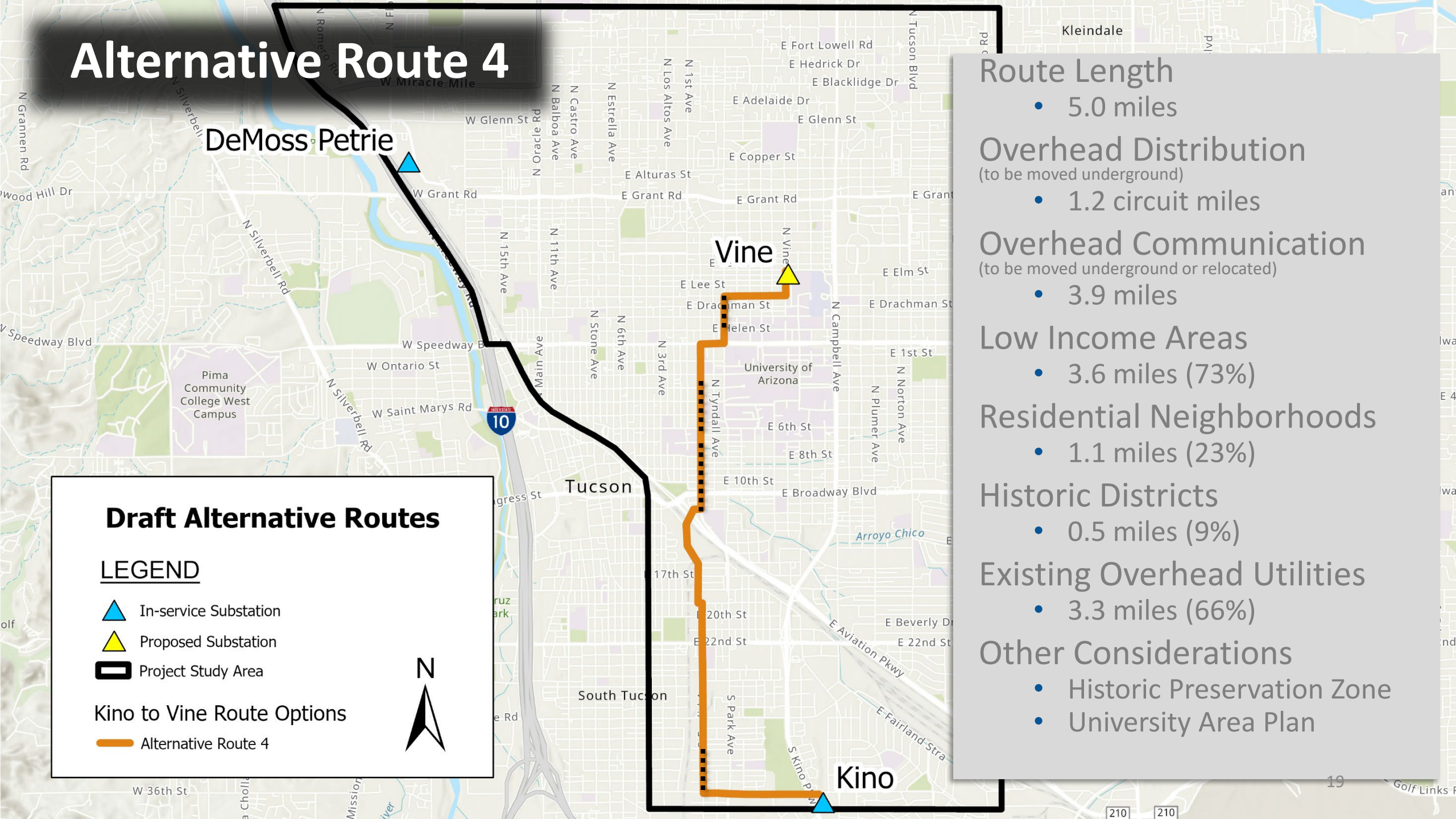
Other Considerations

- Gateway Corridor
- University Area Plan

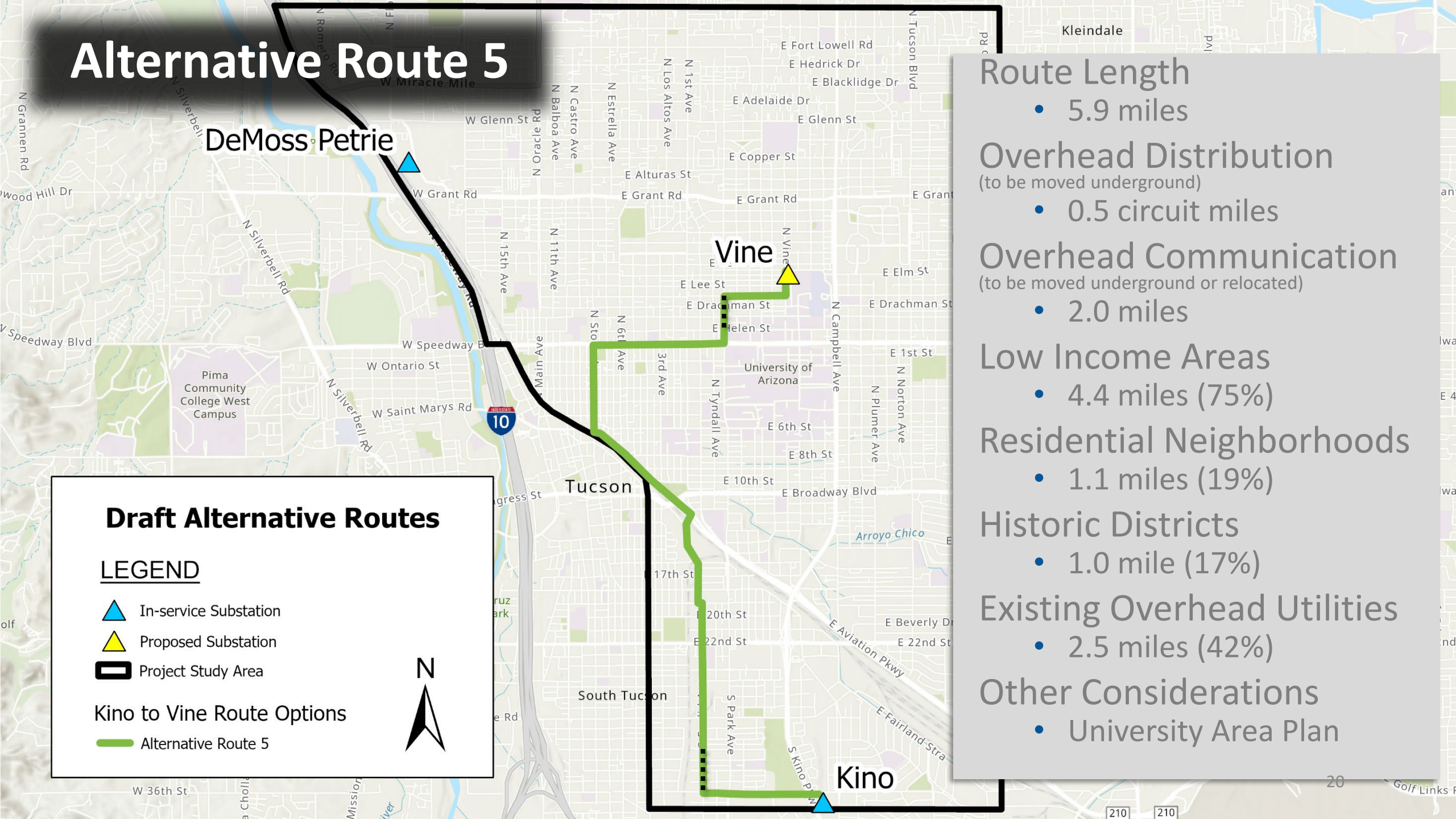
Alternative Route 3



Alternative Route 4



Alternative Route 5



Route Length

- 5.9 miles

Overhead Distribution
(to be moved underground)

- 0.5 circuit miles

Overhead Communication
(to be moved underground or relocated)

- 2.0 miles

Low Income Areas

- 4.4 miles (75%)

Residential Neighborhoods

- 1.1 miles (19%)

Historic Districts

- 1.0 mile (17%)

Existing Overhead Utilities

- 2.5 miles (42%)

Other Considerations

- University Area Plan

Draft Alternative Routes

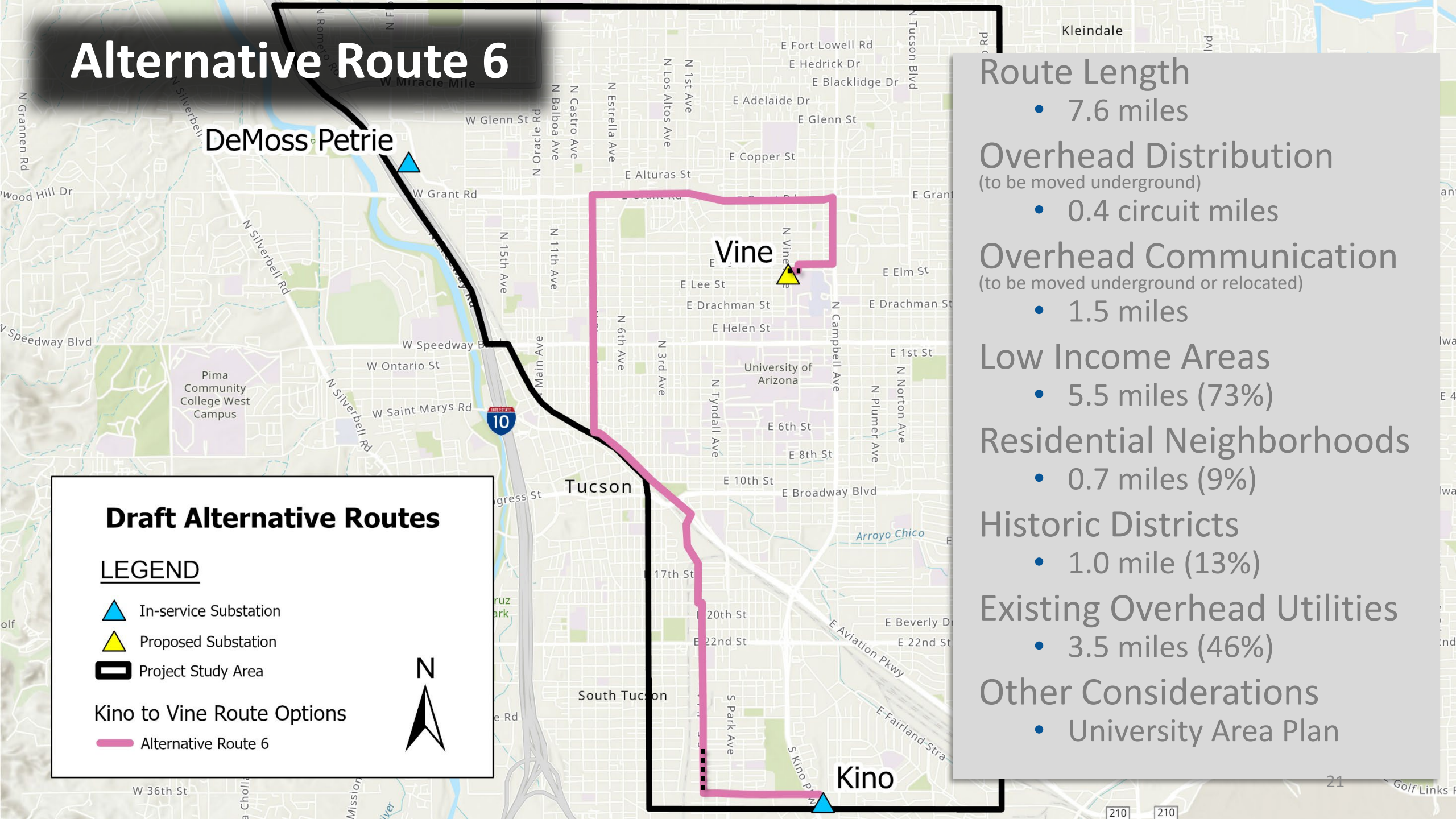
LEGEND

- In-service Substation
- Proposed Substation
- Project Study Area

Kino to Vine Route Options

- Alternative Route 5

Alternative Route 6



Route Length

- 7.6 miles

Overhead Distribution
(to be moved underground)

- 0.4 circuit miles

Overhead Communication
(to be moved underground or relocated)

- 1.5 miles

Low Income Areas

- 5.5 miles (73%)

Residential Neighborhoods

- 0.7 miles (9%)

Historic Districts

- 1.0 mile (13%)

Existing Overhead Utilities

- 3.5 miles (46%)

Other Considerations

- University Area Plan

Draft Alternative Routes

LEGEND

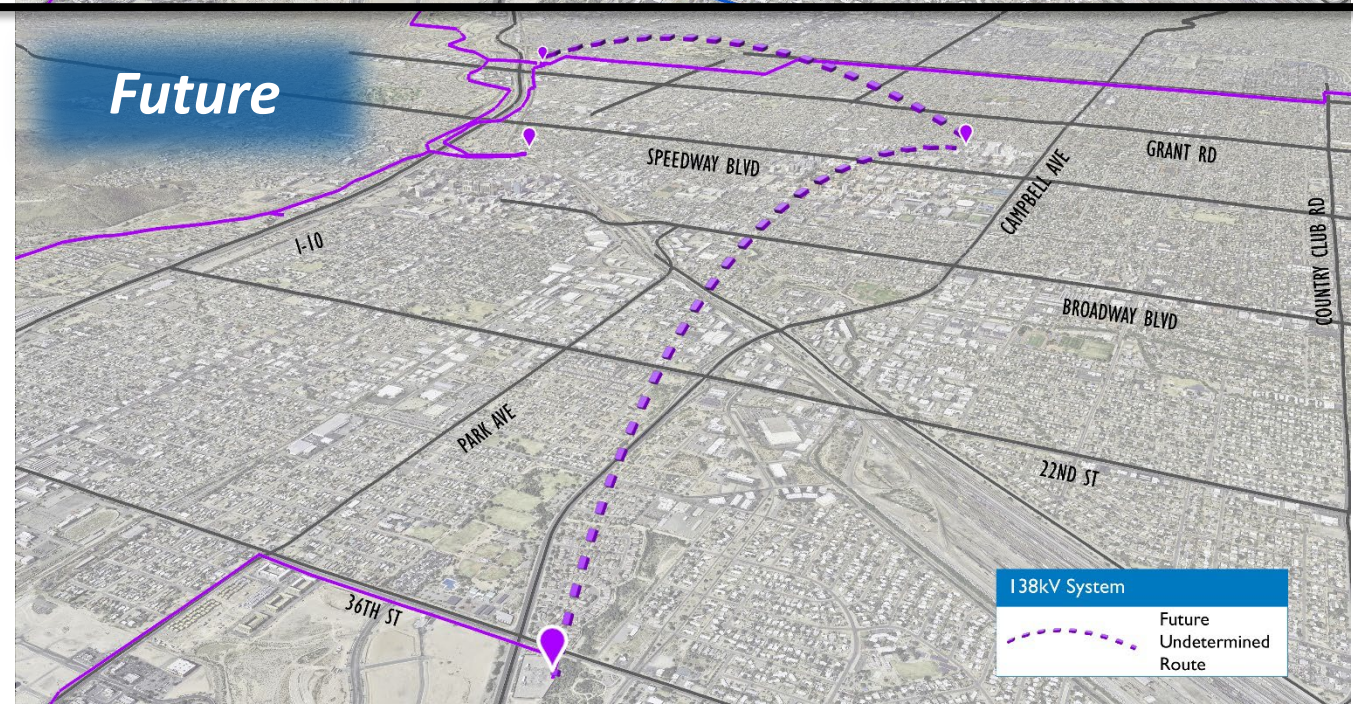
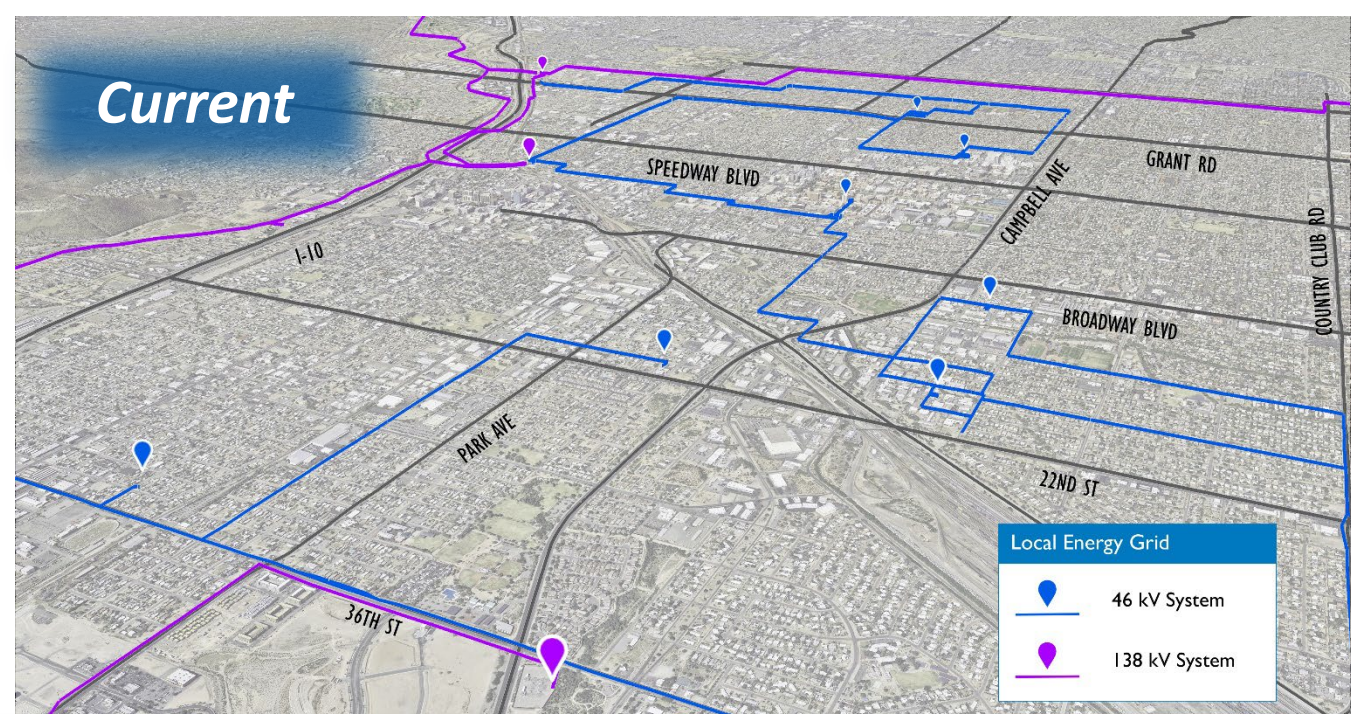
- In-service Substation
- Proposed Substation
- Project Study Area

Kino to Vine Route Options

- Alternative Route 6

Design Elements

- Fewer substations overall
- Fewer poles overall
- Single circuit structures where there are no existing 46 kV facilities
- Underground distribution and telecommunication cables along transmission line route
- Anti-graffiti finish on poles
- Thinner/shorter structures
- Pole finish options
- Right-of-way enhancement



Public/Stakeholder Input

- Results of compatibility analysis
- Design elements

Identify Preferred Route

Neighborhood Advisory Group Meeting

February 29, 2024
6:00 – 8:00pm

Public Open House / Meeting

March 28, 2024
6:00 – 8:00pm

Doubletree – Reid Park
445 S Alvernon Way
Tucson, AZ 85711

Project Schedule*



- Q3 '23-Q2 '24 – Transmission Line Planning and Siting
- May 2024 – CEC Application Submittal
- July 8-19, 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

More Project Information

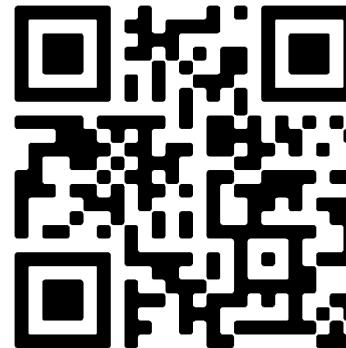


For more project information please visit the project webpage:

www.tep.com/midtown

Here, you will find:

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



Route Alternatives

Using input from midtown residents and other stakeholders, TEP has identified 10 draft alternative routes for a new overhead transmission line. These alternatives remain under consideration for inclusion in TEP's application for a certificate of environmental compatibility.

To view potential routes, check one letter and one number below. Four routes (A-D) connect the DeMoss-Petrie Substation to the proposed Vine Substation. Six routes (1-6) connect the Vine and Kino substations.

What's your favored route? Tell us why using our [online comment form](#). Please include the route letter and number.

Select one DeMoss-Petrie to Vine route:

A
 B
 C
 D

Select one Kino to Vine Route:

1
 2
 3
 4
 5
 6

Please include the route letter and number of the route you prefer (example: A1)

How to Comment



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

P.O. Box 711

ATTN: Midtown Reliability

Mail Stop CB200

Tucson, AZ 85701-0711



Please use the raise hand feature in MS Teams

or

Type your question into the chat

Supplemental Material

DMP to Vine Route Comparison Summary



	Route Length (miles)	Overhead Distribution (miles)	Overhead Communication (miles)	Low Income Areas (miles)	Residential Neighborhoods (miles)	Historic Districts (miles)	Existing Overhead Utilities (miles)	Other Considerations
Route A	3.2	0.5	2.6	2.7	0.5	0.5	2	NPZ, University Area Plan
Route B	3.5	1.2	5.1	3	1	0.3	2.6	NPZ, University Area Plan
Route C	4.2	0.5	2.6	3.7	0.7	0.7	1.3	Miracle Mile, University Area Plan
Route D	3.8	0.6	2.9	2.7	0.2	0.3	2.4	University Area Plan

NPZ - Neighborhood Preservation Zone

Kino to Vine Route Comparison Summary



	Route Length (miles)	Overhead Distribution (miles)	Overhead Communication (miles)	Low Income Areas (miles)	Residential Neighborhoods (miles)	Historic Districts (miles)	Existing Overhead Utilities (miles)	Other Considerations
Route 2	4.1	1.4	6	2.9	0.9	0.6	2.9	Gateway Corridor, University Area Plan
Route 3	5.1	1.6	5.2	2.7	1.6	0.9	2.8	Gateway Corridor, University Area Plan
Route 4	5	1.6	4.6	3.6	2.3	1.2	2.5	HPZ, University Area Plan
Route 5	5	1.2	3.9	3.6	1.1	0.5	3.3	HPZ, University Area Plan
Route 6	5.9	0.5	2	4.4	1.1	1	2.5	University Area Plan
Route 6	7.6	0.4	1.5	5.5	0.7	1	3.5	University Area Plan

HPZ - Historic Preservation Zone