

LANL Transit Service Options Analysis

NCRTD Board Meeting

6 January 2022



Attachment A

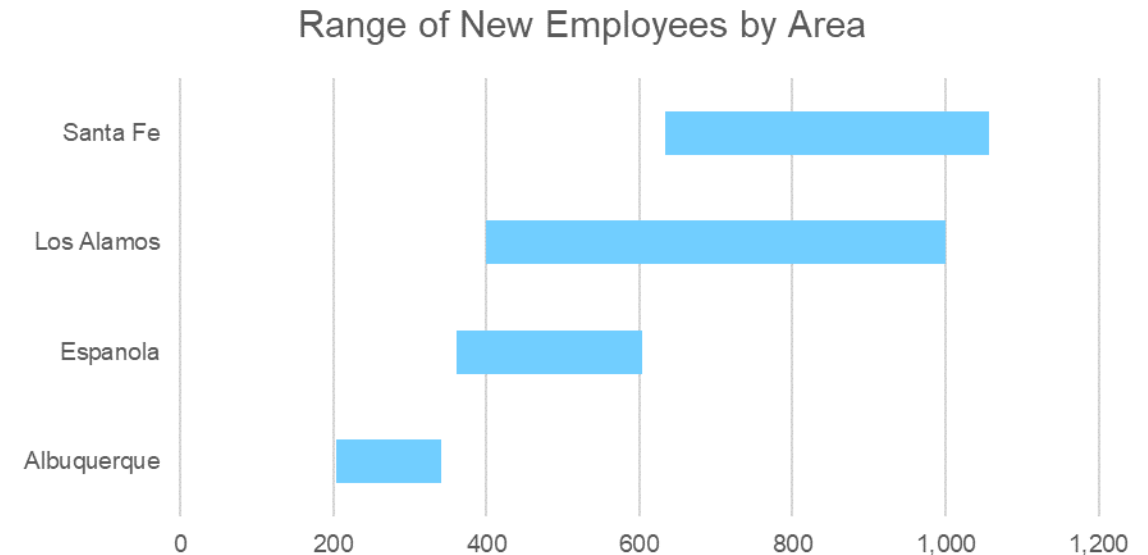
PURPOSE OF STUDY: LANL IS GROWING

- Expected to grow by 2,000 to 2,500 employees over the next 2 years
- Not expanding parking by the level of employee growth
- Most employees are expected to be on site 4-5 days per week
- Road capacities cannot accommodate new employees driving alone



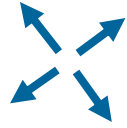
PURPOSE OF STUDY: LANL IS GROWING

- 60% of employees commute from outside of Los Alamos County
- Because of limited housing stock, 60-80% of new employees are assumed to come from outside the County
- Different strategies will focus on the transportation options for employees living in the four major areas





PROJECT OUTCOME



Understand current and future LANL employee commuting patterns and transportation related behavior



Identify a menu of transit options: projects, programs, and services that can improve regional public transit and increase the number of commuters using public transportation and other alternatives.

Expand on most influential options by exploring costs and benefits focusing on:

- ❖ Getting Employees to LANL
- ❖ Getting Employees Around LANL
- ❖ Programs and Incentives that Encourage Alternative Commuting



Identify future areas of study

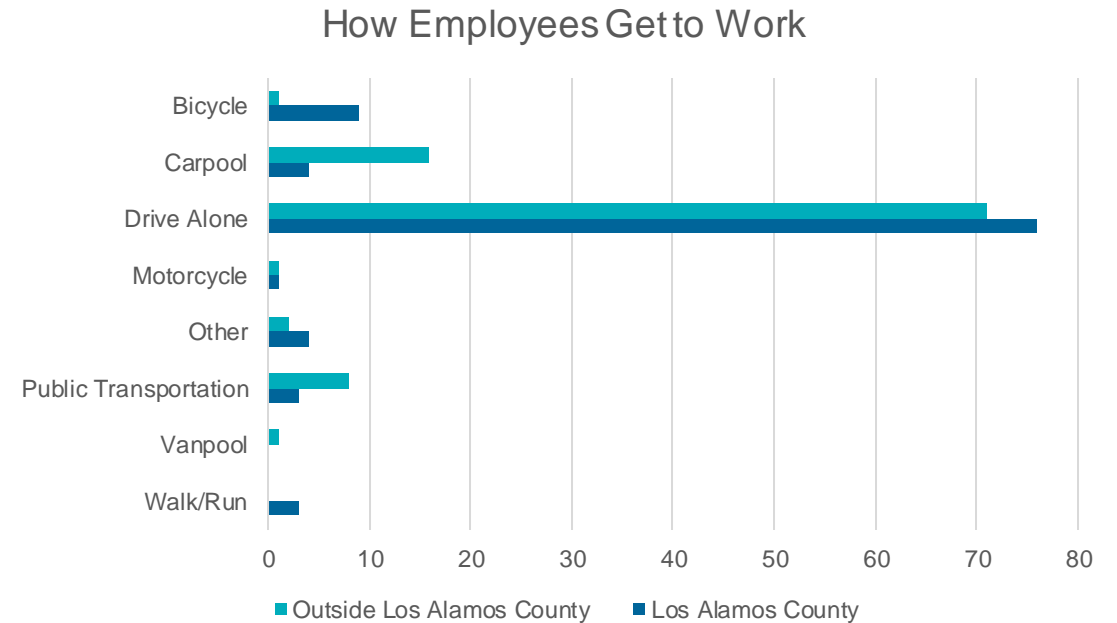
EXISTING CONDITIONS

- Review Past Plans
- Overview of Existing Services
 - Atomic City Transit, NM DOT Park and Ride, NCRTD service
 - On-site taxi service
 - Vanpool



EXISTING CONDITIONS

- Most LANL Employees drive alone both from within and outside the County
- Those living outside the County more likely to take alternative modes overall, but mostly public transit, carpooling, and vanpooling
- Those living inside are more likely to bike or walk



LANL Commuter Survey

UNDERSTANDING THE STUDY AREA

- LANL and Northern New Mexico are unique
 - Demographically and geographically diverse
 - Job growth with limited residential housing stock
 - Job site with unique characteristics



LIMITED ROAD NETWORK



Attachment A

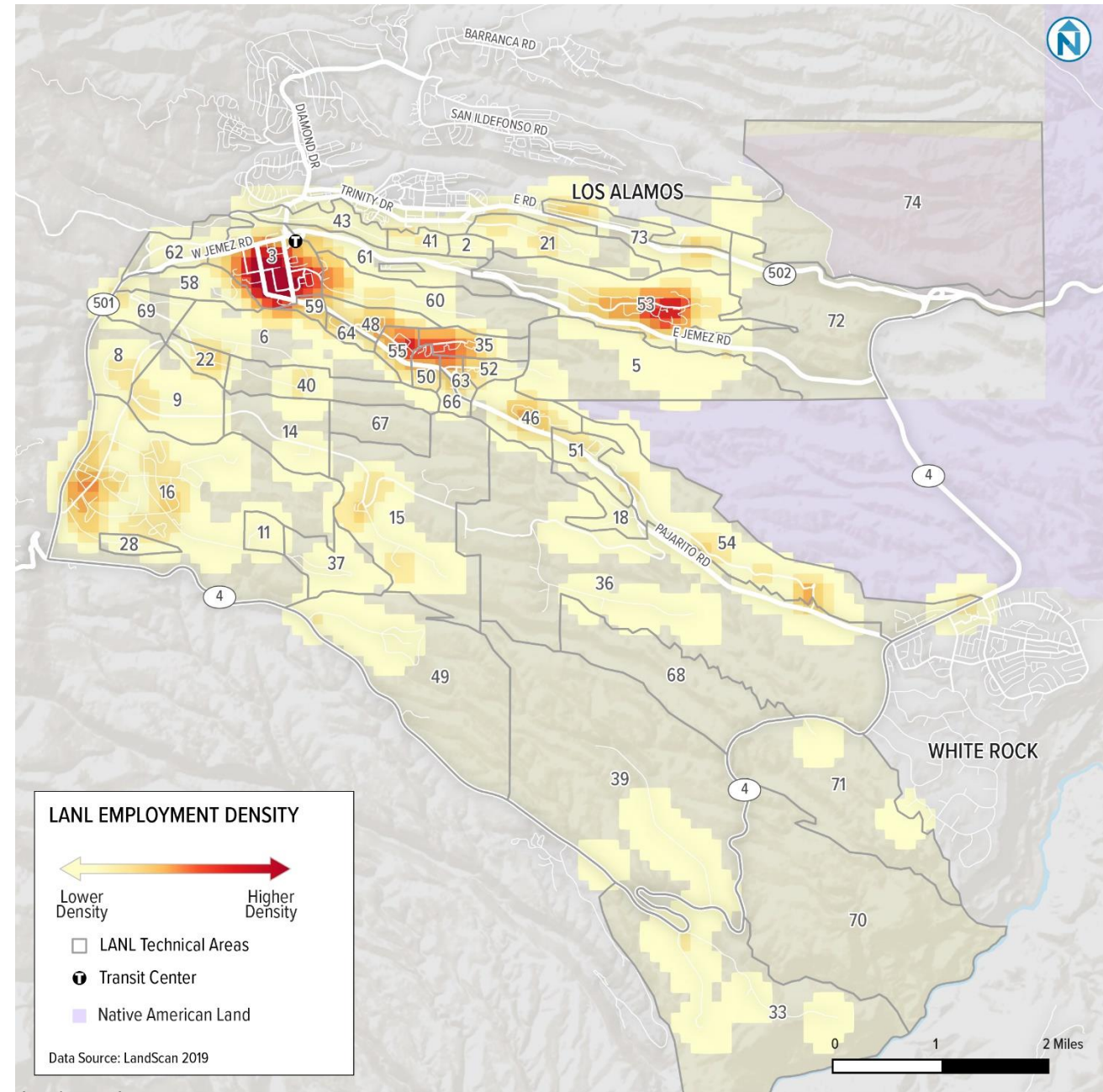
LIMITED ROAD NETWORK



Attachment A

MARKET ANALYSIS

- Characteristics of Employment Center
 - Where are the jobs?
 - LANL is 55% of total jobs in the County
 - LANL is 36 Sq Miles
 - 11,600 total badgeholders
 - Nearly half work at TA-3
 - **1/4 of jobs in Los Alamos County Workers are at TA-3, about 1 square mile**

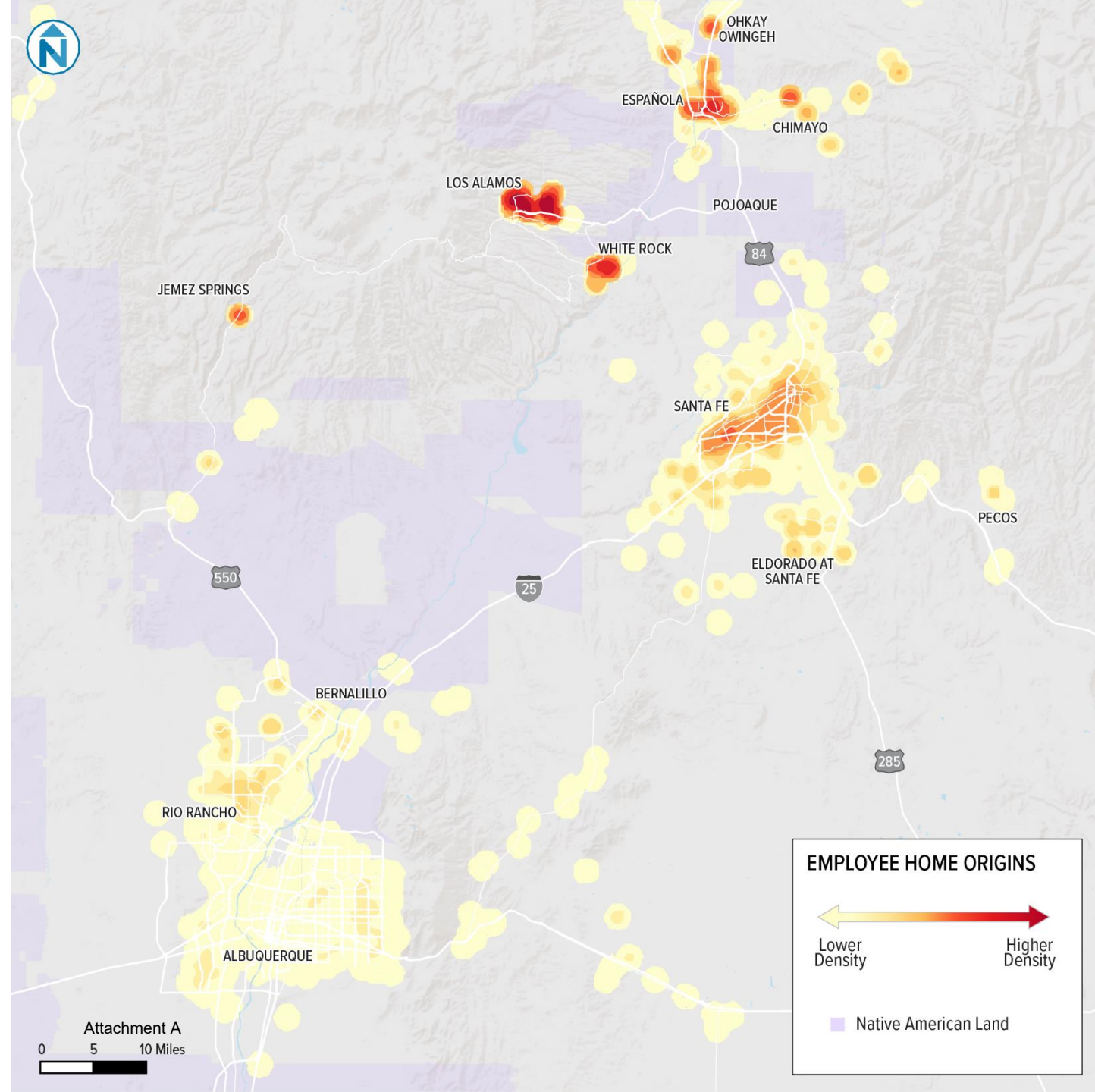


Attachment A

MARKET ANALYSIS

- Travel Flows
 - Home origins of LANL employees

Top Home Locations for Employees	Percentage of Total Employees Who Work at LANL	Percentage of Total Employees Who Work in Los Alamos
Los Alamos	33%	34%
Santa Fe	19%	10%
Española	9%	3%
White Rock	7%	13%
Albuquerque	4%	6%
Rio Rancho	2%	3%

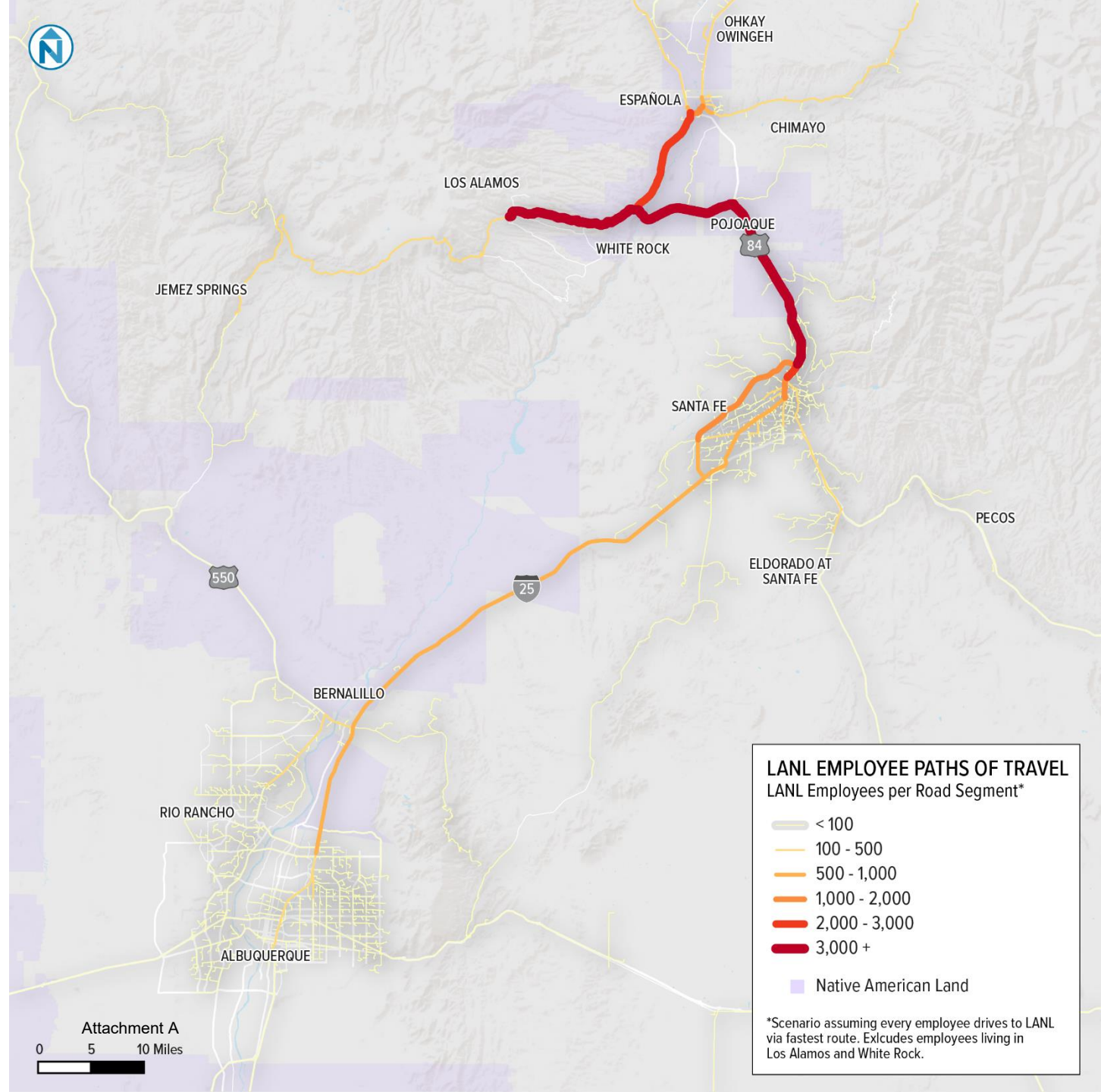


¹ Los Alamos National Laboratory Badgeholder Data 2020.

² Longitudinal Employer-Household Dynamics 2018.

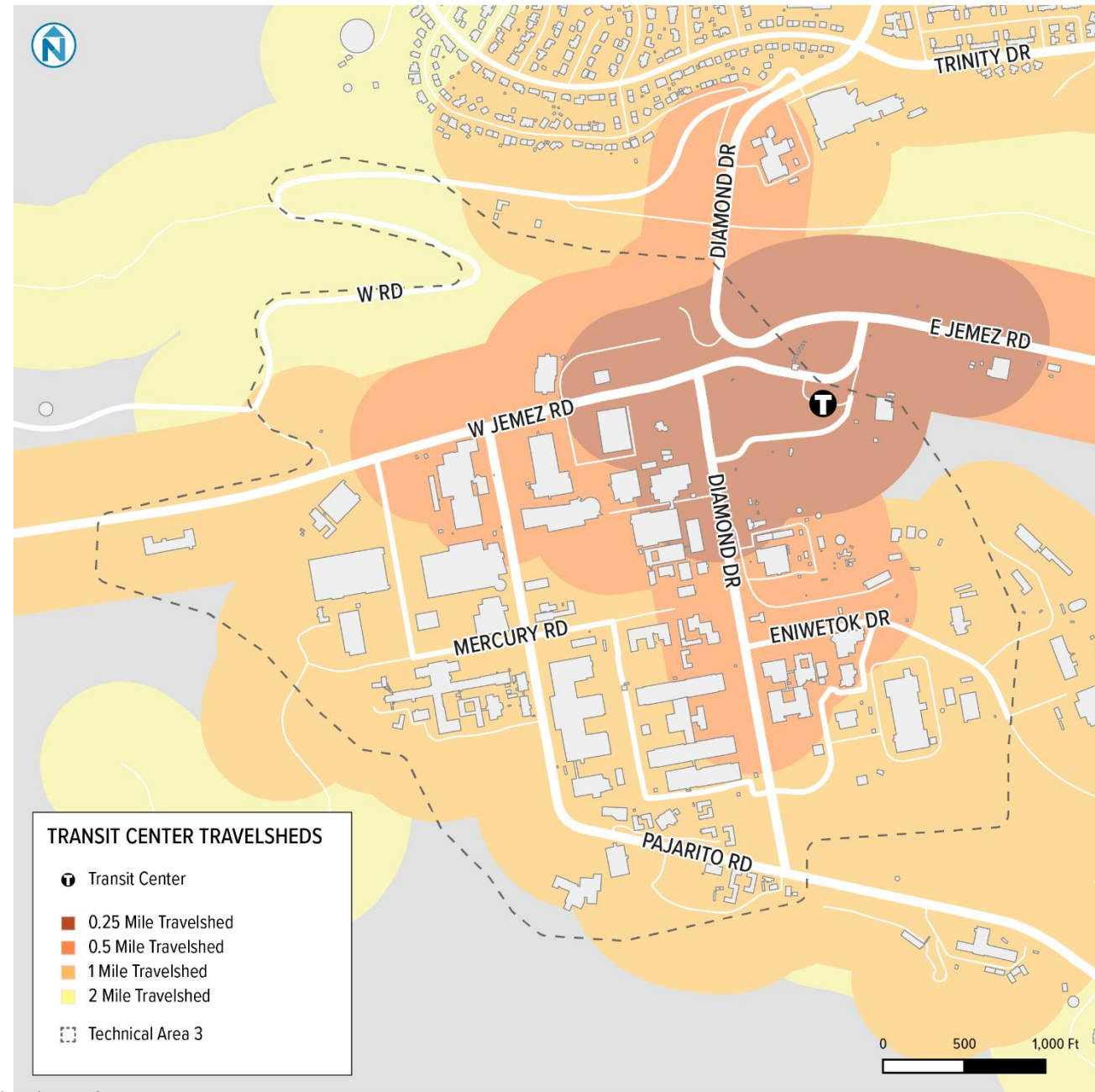
MARKET ANALYSIS

- Travel Flows
 - Path of Travel



ACCESSING DESTINATION

- Very few jobs within $\frac{1}{4}$ mile walk, some within $\frac{1}{2}$ mile walk
- Most of TA-3 within comfortable biking distance
- All other areas best served by shuttle/taxi
- Jobs outside LANL accessible by ACT



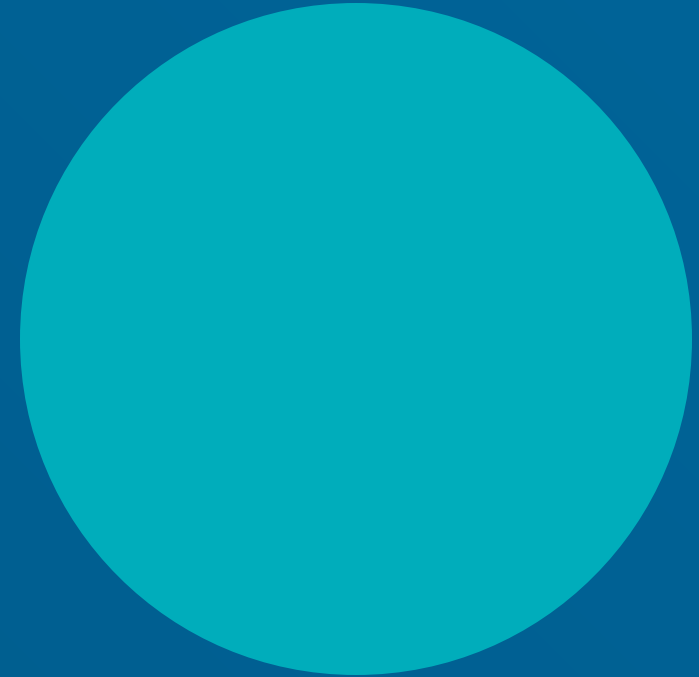
Attachment A

ISSUES AND OPPORTUNITIES

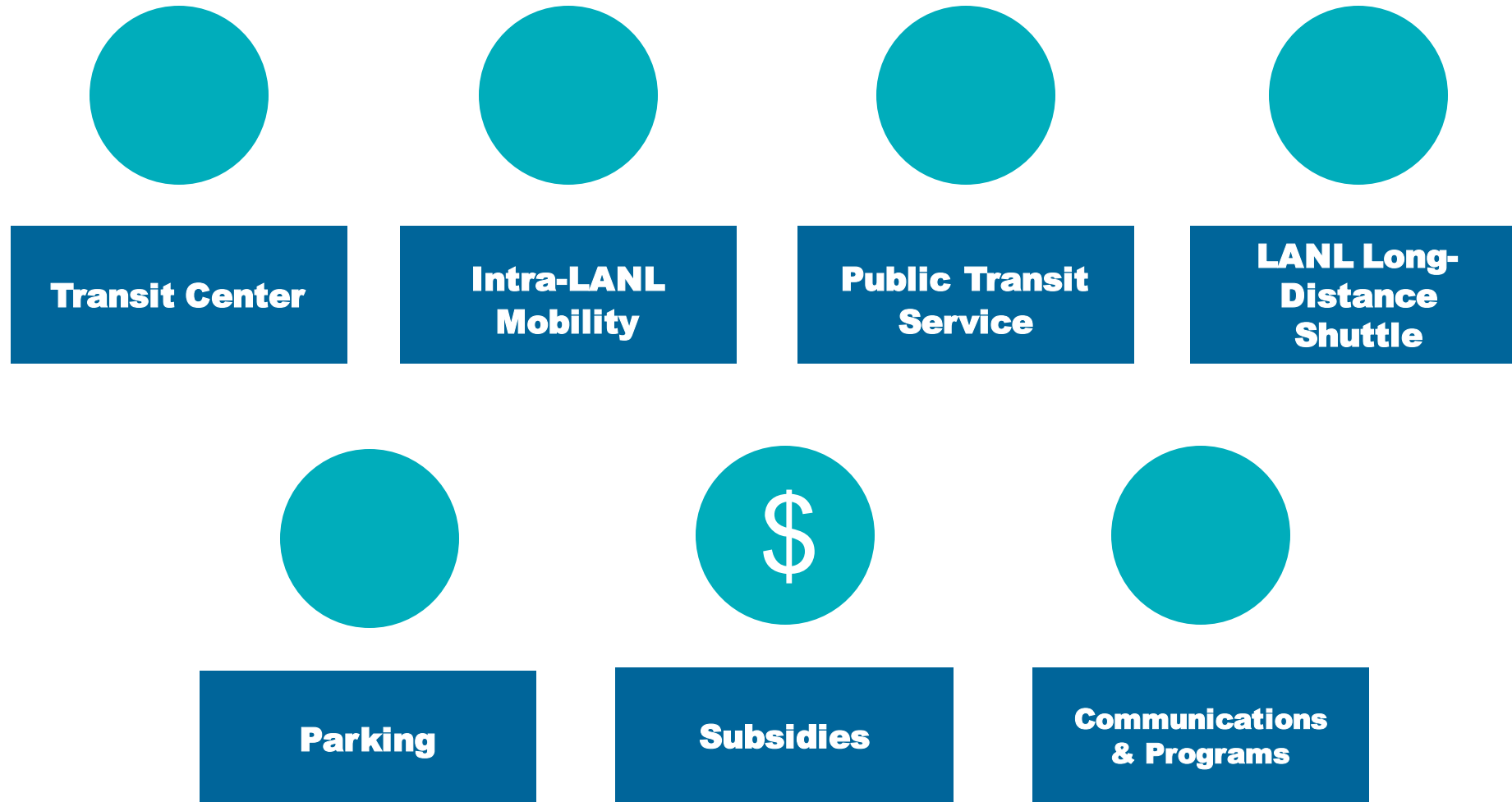
- There is not enough parking or road capacity to accommodate projected levels of growth at LANL if employees continue to drive alone to work at current rates.
- Existing park and rides do not have enough parking to offset the need for additional parking at LANL , estimated at 2,500 spaces needed by 2024.
- Existing transit services do not come often enough.
- The Los Alamos Transit Center adjacent to the Laboratory has limited capacity.
- Reaching LANL buildings from the Los Alamos Transit Center and getting around LANL without a car may be time consuming, uncomfortable, and indirect.
- Public transit vehicles cannot easily travel into TA-3, where nearly one-third of the total jobs in the county are located.
- Public transit vehicles cannot travel along Pajarito Road, where many jobs are located and how many employees get to work.
- Employees are not currently incentivized to take transit to work.
- There is no centralized information about commuting options to LANL.
- Due to limits in housing stock in Los Alamos County, most new employees will commute from further distances.
- There is not enough infrastructure to support biking and walking to, from, and around LANL.



**MEETING LANL'S GROWING
TRANSPORTATION NEEDS IS AN
OPPORTUNITY FOR THE REGION
TO EXPAND SUSTAINABLE
TRANSPORTATION OPTIONS**



PROJECT TYPES

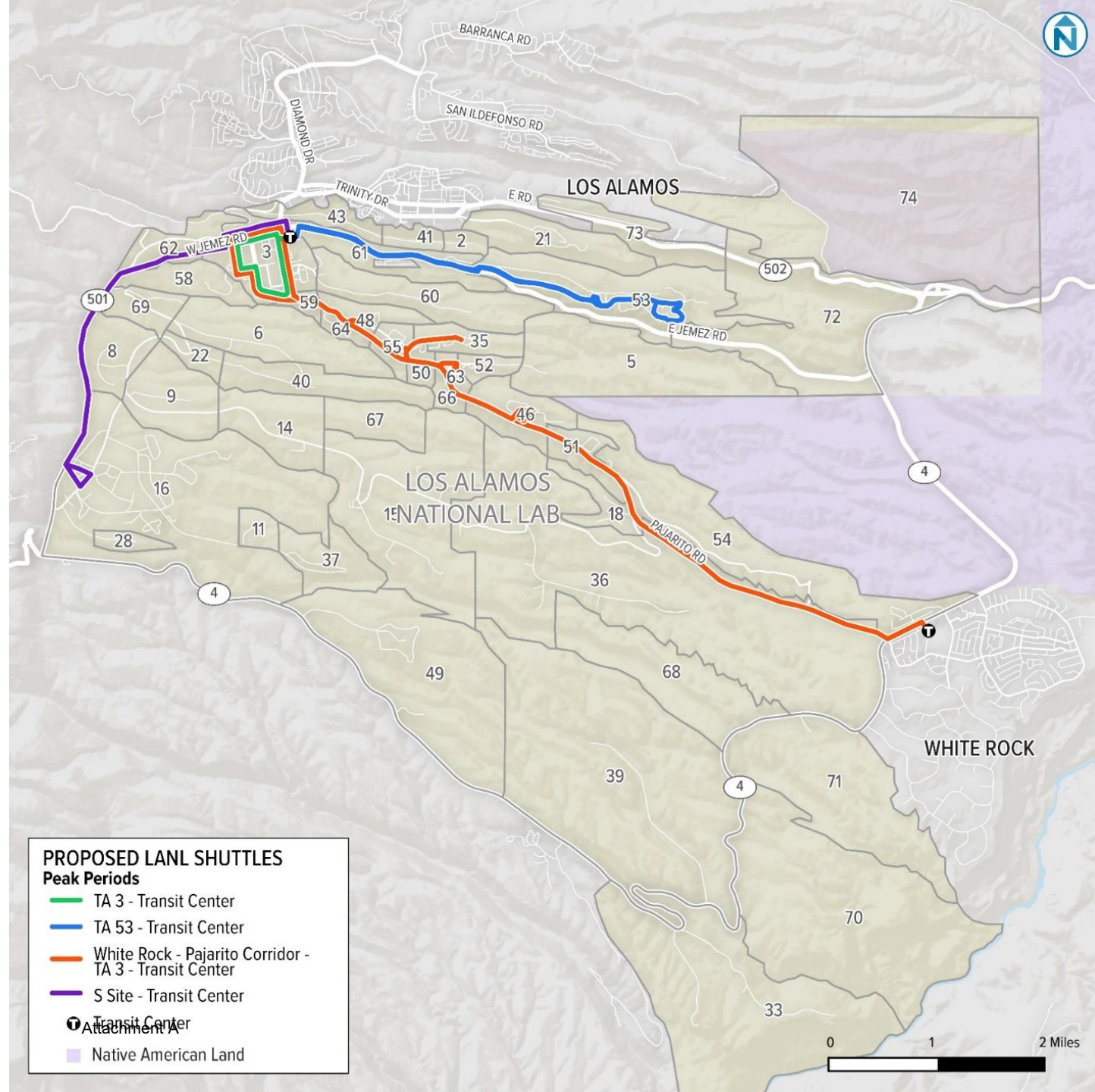


Evaluation Process

Evaluation Criteria	Description	Rating (0 – 3)
Increases # of employees who use alternative modes	The degree to which a project can attract new riders to take alternative modes. Projects that rate highly on this criteria are the most impactful overall.	
Improves time-competitiveness of alternative modes	The degree to which the project increases time- competitiveness; alternative modes must take a similar amount of time as driving alone and offer the opportunity to travel spontaneously to be competitive with driving alone.	
Improves cost competitiveness of alternative modes	The degree to which the project increases cost- competitiveness of alternative modes; offering subsidies or direct payments can make these options more attractive.	
Improves mobility on LANL property	The degree to which the project allows employees to travel within LANL; LANL covers 23,000 acres, and employees must be able to reach their work site and travel elsewhere on-site easily.	
Improves rider experience	The degree to which the project increases seamlessness of travel, comfort, access, and/or information about alternative modes of travel, etc.	
Cost/ease to implement	The cost or difficulty of LANL, transit agencies, and others implementing the project. Lower cost/easier to implement gets a higher rating.	

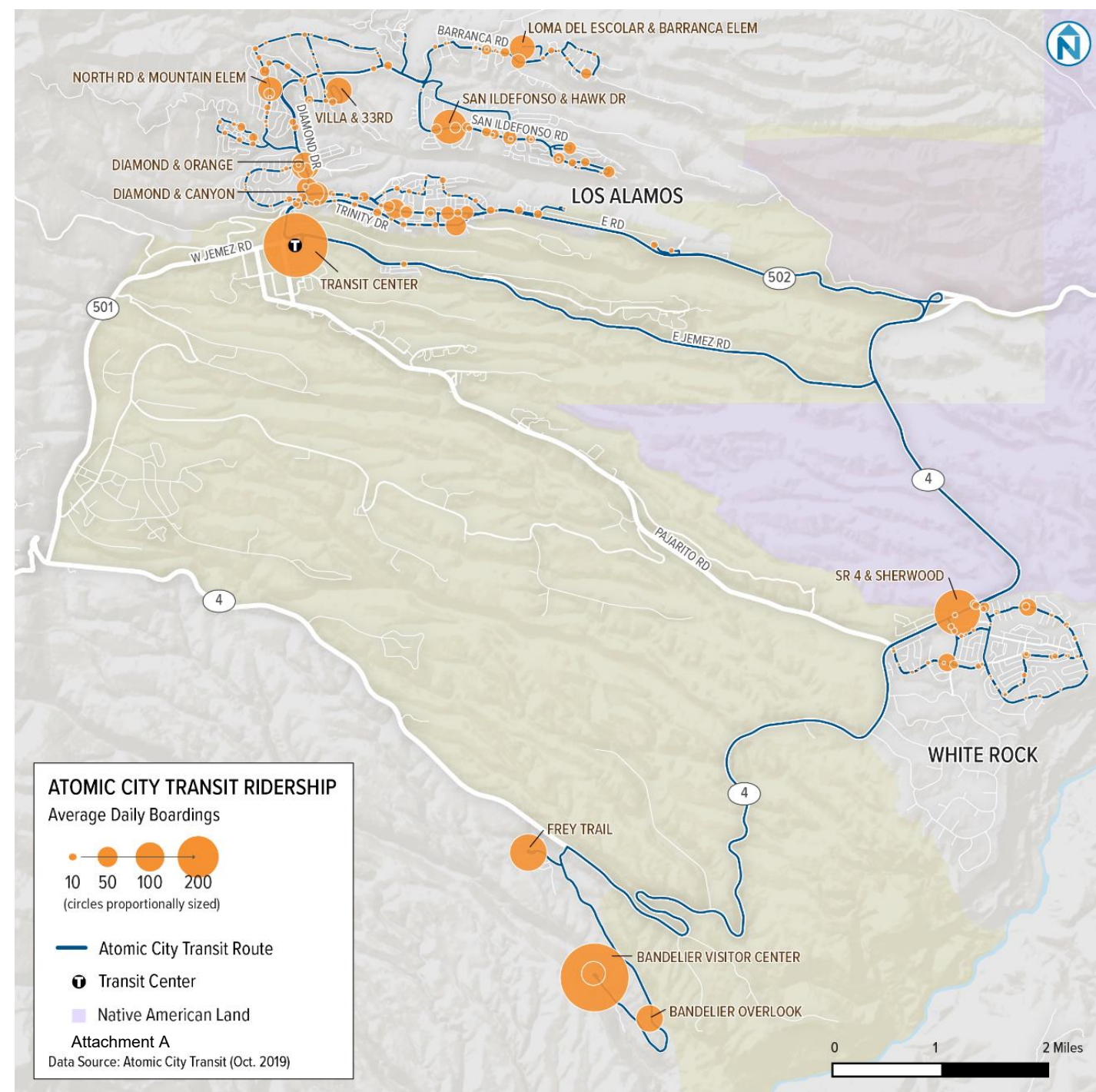
TRANSIT CENTERS AND ON-SITE SHUTTLES

- Expand current Transit Center
- Proposed White Rock Transit Center
 - Highest growth area for LANL is most accessible via the Pajarito Corridor
- Frequent on-site shuttles to large job sites
- All improve on-site mobility and time competitiveness for sustainable transportation options



ATOMIC CITY TRANSIT

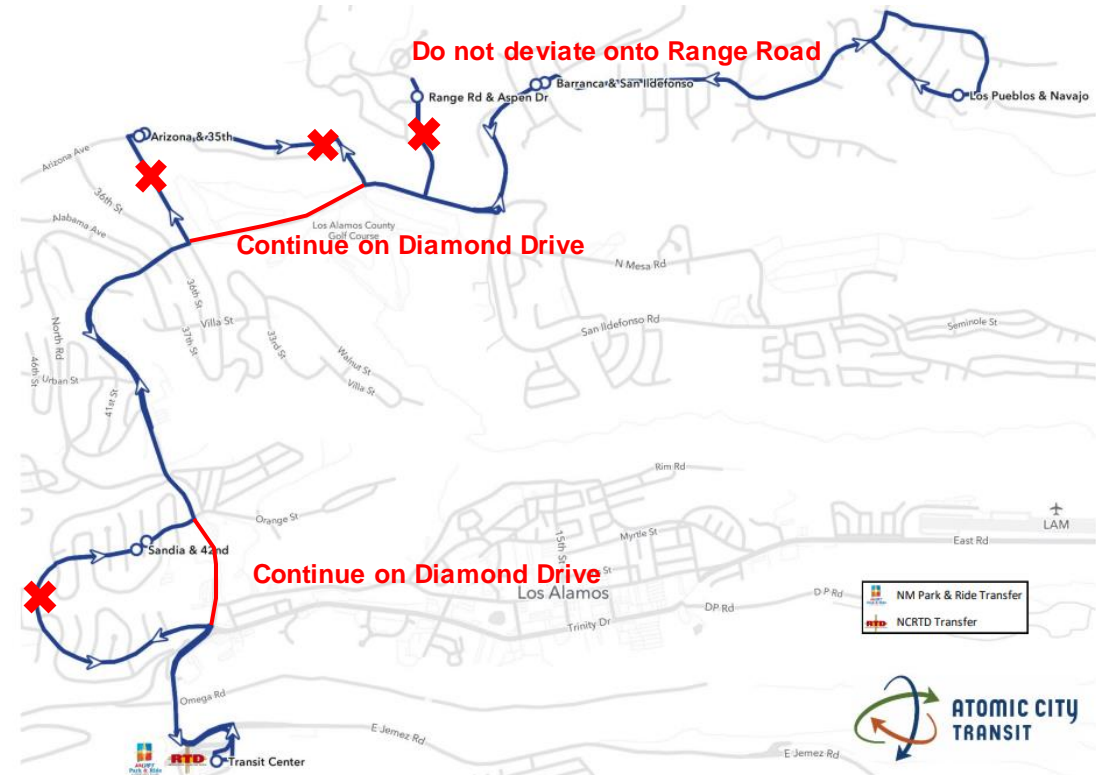
- Existing Ridership
 - Highest ridership (pre-COVID)
 - North Mesa
 - Downtown Circulator
 - Combined White Rock routes
 - All routes connect at the Transit Center adjacent to LANL property
- Routing and Service Options
 - No services currently operate at least every 15 minutes, which is considered frequent
 - Increasing frequency and streamlining service can make ACT more competitive with driving



ATOMIC CITY TRANSIT



Route 5 Barranca Mesa

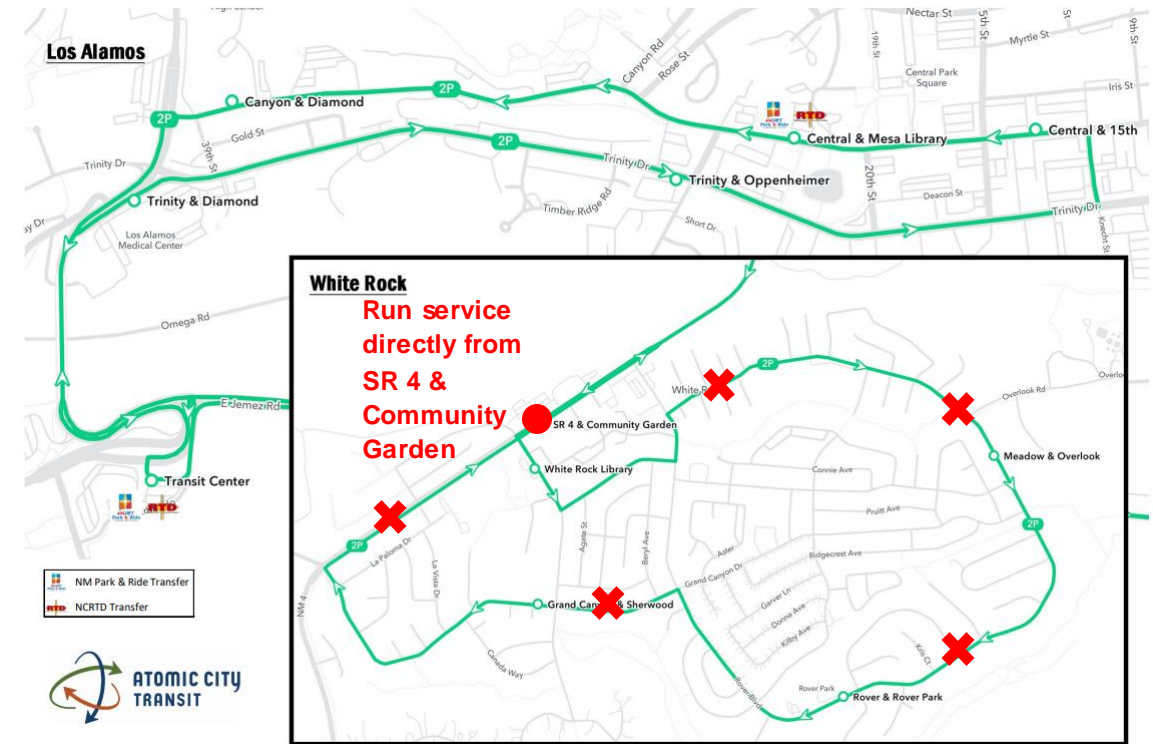


Route 6 North Mesa

ATOMIC CITY TRANSIT



SR 4 & Community Garden has a shelter, benches, and trash cans as well as a parking lot. This is a high-quality stop that can serve as the one pick up point in White Rock before heading express into Los Alamos.



BIKE SHARE

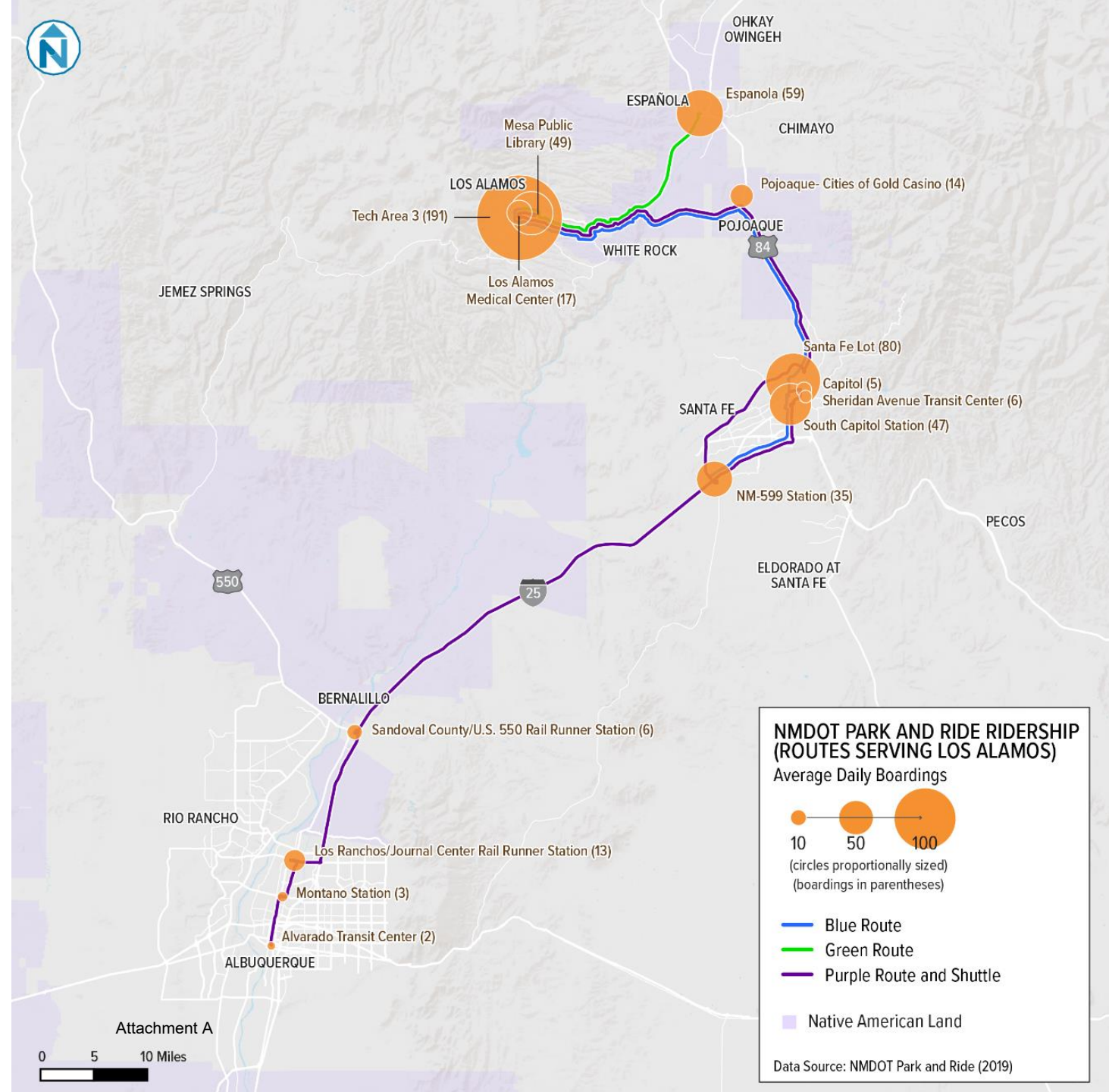
- Bike share on LANL property as well as throughout the County could boost active transportation trips
- Bike share can be used for a whole trip or as a first/last mile option to reach transit or other options
- Research has shown that bicycle facilities like separated lanes boost bikeshare use and bike ridership in general



Source: <https://www.bluebikes.com/how-it-works>

NMDOT PARK AND RIDE

- Existing Ridership
 - Blue, Green, and Purple Routes serve LANL
 - Blue Route had highest ridership pre-COVID

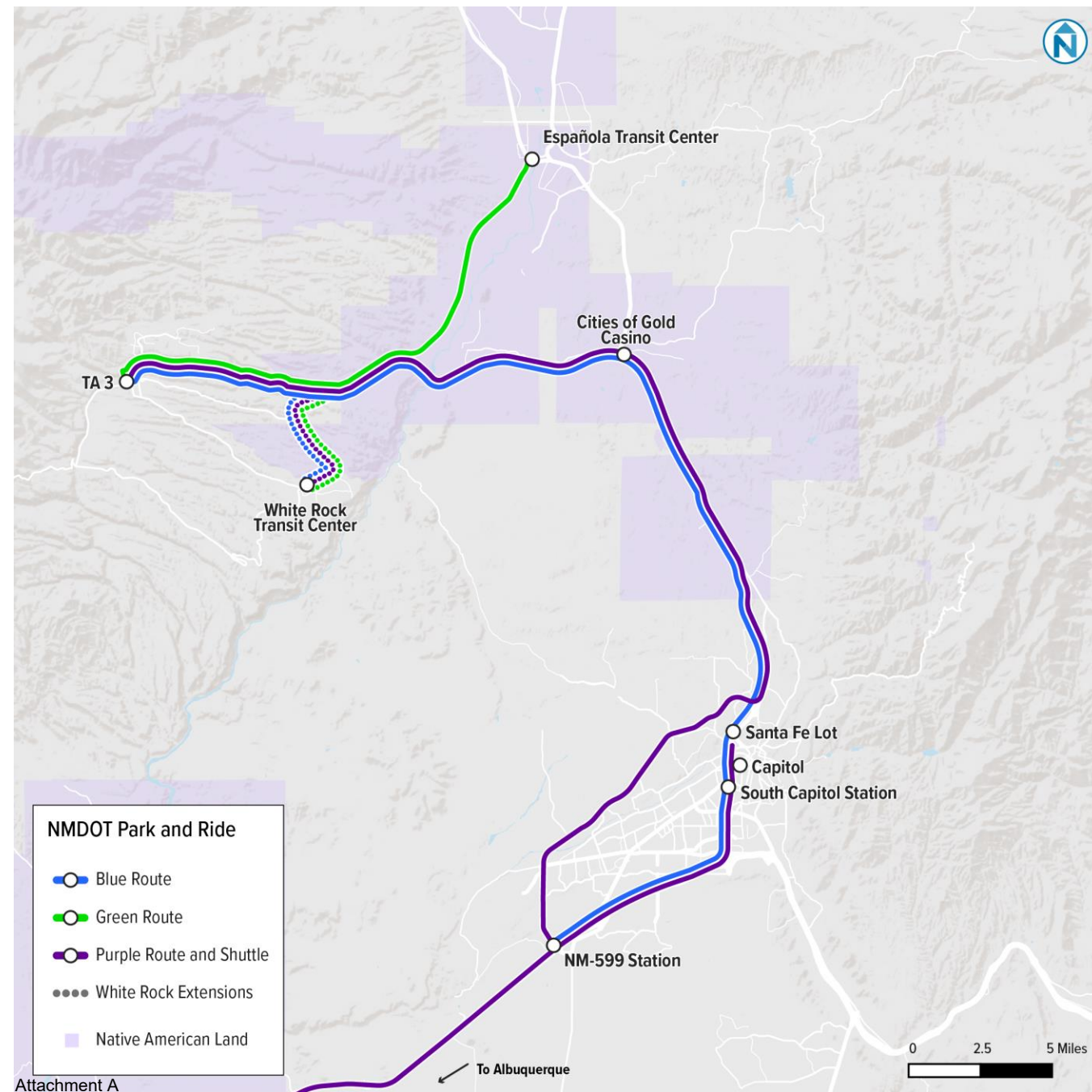
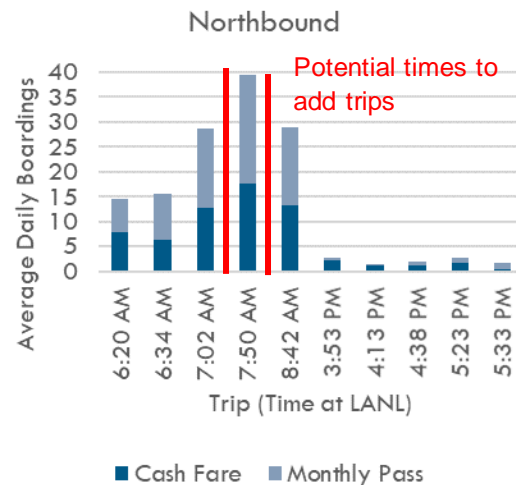


NMDOT PARK AND RIDE

Routing and Service Options

- Increasing NMDOT Park and Ride service, possibly serving proposed White Rock Transit Center
- Provide LANL employees with subsidies for passes
- Add trips first where demand is highest

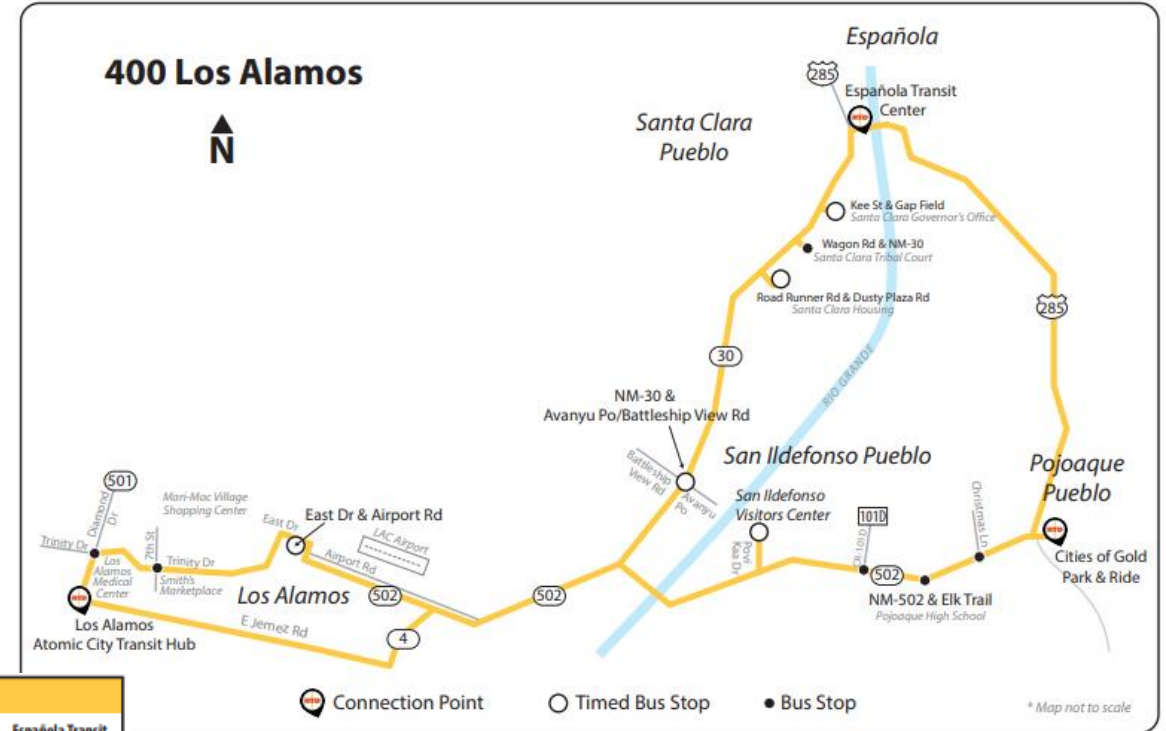
Blue Route Ridership



NCRTD

Existing Ridership

- NCRTD 400 Los Alamos
 - Low ridership: 6 riders per weekday pre-COVID

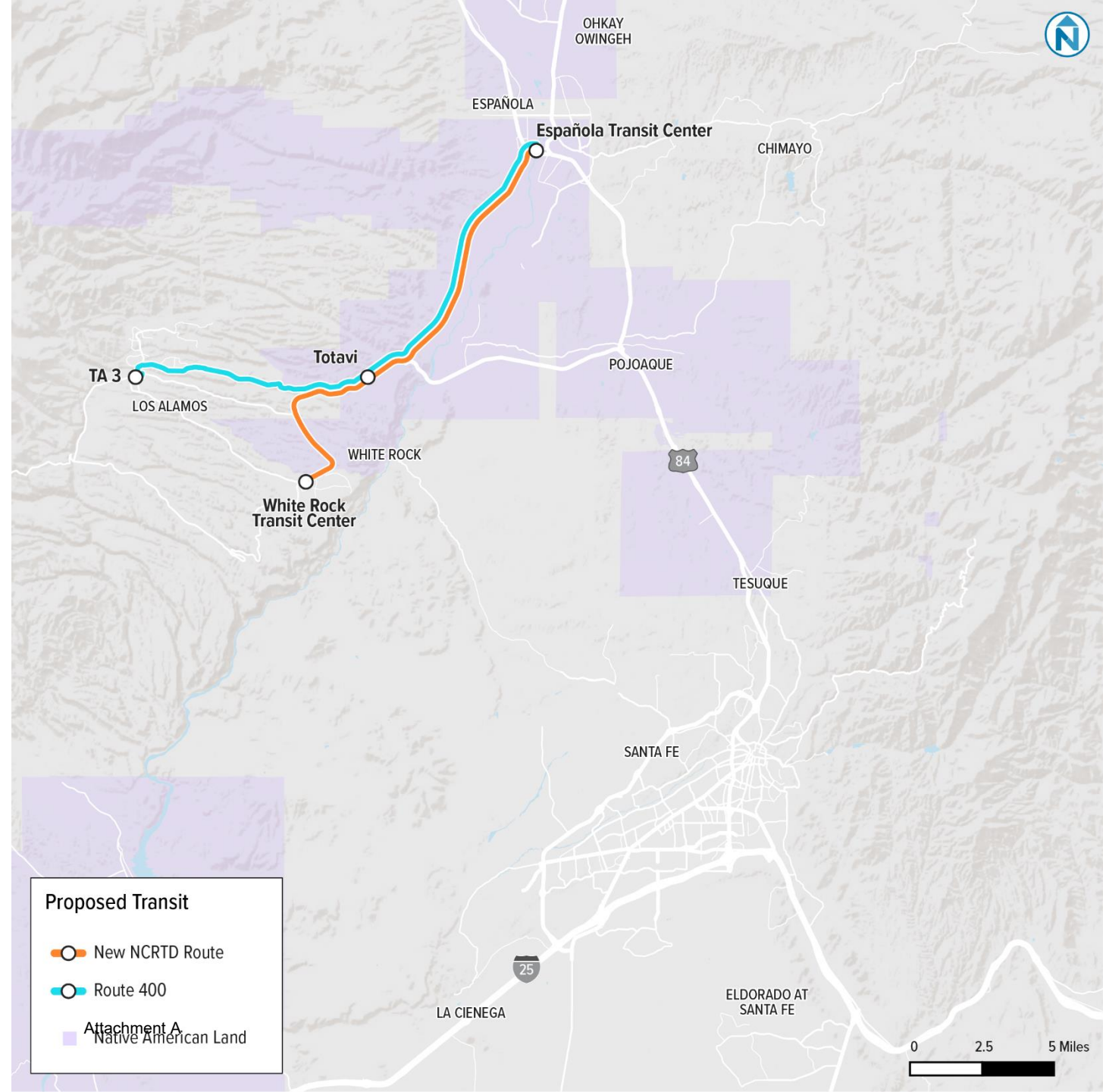


Eastbound ▶									
Trip No.	Española Transit Center	Key Street & Gap Field Santa Clara Governor's Office	Road Runner Rd & Dusty Plaza Rd Santa Clara Housing	NM-30 & Battleship View Rd	Los Alamos Atomic City Transit Hub	East Dr & Airport Rd	San Ildefonso Visitors Center	Cities of Gold Park & Ride	Española Transit Center
AM Trips									
1E	10:00	10:05	10:09	10:15	10:30	10:40	11:00	11:15	11:30
Westbound ◀									
Trip No.	Española Transit Center	Cities of Gold Park & Ride	San Ildefonso Visitors Center	Los Alamos Atomic City Transit Hub	East Dr & Airport Rd	NM-30 & Avanyu Po	Road Runner Rd & Dusty Plaza Rd Santa Clara Housing	Key Street & Gap Field Santa Clara Governor's Office	Española Transit Center
PM Trips									
1W	1:00	1:15	1:30	1:50	2:00	2:15	2:21	2:25	2:30

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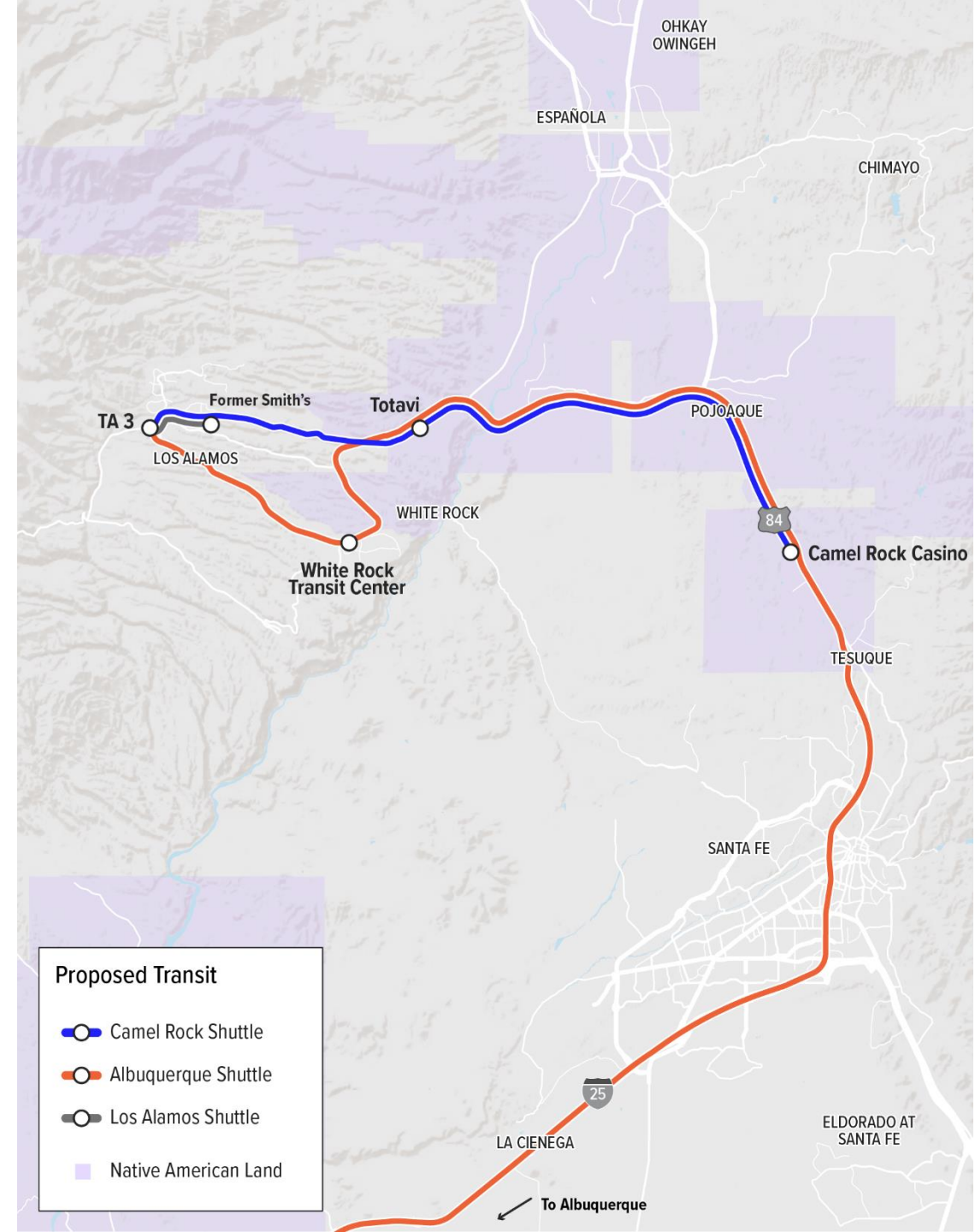
NCRTD

- Simplified NCRTD Route 400
- New NCRTD Route to proposed White Rock Transit Center
- Increases time competitiveness for transit



LANL PRIVATE SHUTTLES

- All demand might not be met by public transit options
- LANL running charter service can complement public transit
- Increases time competitiveness, cost competitiveness, and rider experience



PARK AND RIDE LOT CAPACITY

- Most employees will reach shuttles or public transit outside of Los Alamos County by parking
- Additional parking spaces will need to be identified or built



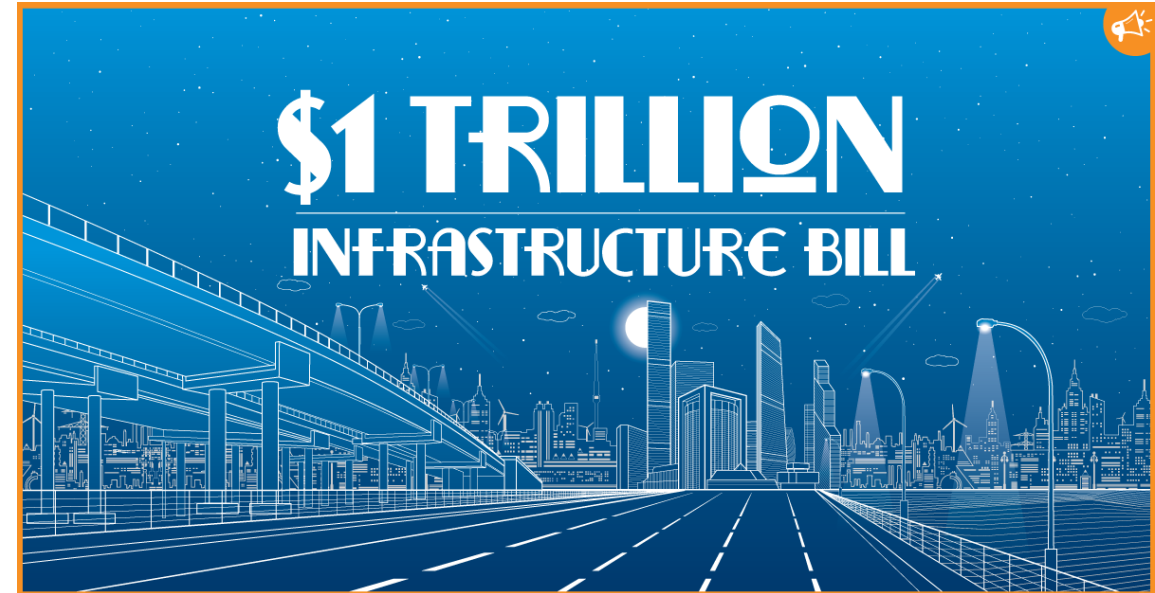
INCENTIVES AND PROGRAMMING

- LANL can help boost sustainable mode use by
 - Offering incentives
 - Communications and programming
 - Carpool and vanpool matching
 - Education
 - Surveying employees about needs and challenges around commuting
 - Targeting new employees during onboarding process



POSSIBLE FUNDING

- LANL can directly fund service increases to all transit agencies
- Pilots can be used to determine ridership levels and success of different options
- Bipartisan Infrastructure Bill Components
 - For NM:
 - \$2.5 billion for federal-aid highway apportioned programs over next 5 years
 - \$225 million for bridge replacement and repairs over next 5 years
 - \$366 million for public transportation
 - \$38 million for EV charging network
 - Possible federal grants
 - Additional EV charging (\$2.5 billion total)
 - Hydrogen power demonstration projects



THANK YOU



Brie Becker

Principal