

# 2019-2020 Public Lands Transportation Fellows Program



Presented by: Nate Begay and Jennifer Owen-White, Valle de  
Oro NWR



# Webinar logistics

- Duration is 1:00 - 2:30 PM Eastern
- Webinar – recorded and archived. For quality of recording, phone will be muted during presentation
- If listening on the phone, please mute your computer
- To maximize the presentation on your screen click the 4 arrows in the top right of the presentation
- At the end there will be time for Q&A
- There is a handout pod at the bottom of the screen



# Today's Presenters



Jennifer Owen-White  
Refuge Manager  
Valle de Oro National Wildlife Refuge (NWR)



Nate Begay  
Public Lands Transportation Fellow (PLTF)  
Valle de Oro National Wildlife Refuge  
(NWR)



# Goal of this Webinar

To document and archive the work completed by the PLTF at the Valle de Oro NWR from 2019-2020, including his lessons learned and tips and tricks for applying these to other USFWS units.



# Audience for this Webinar

- Today:
  - Educate unit, regional, and headquarters staff for public lands agencies on what a Fellow in the program can accomplish.
- Future:
  - Intended as a training for future classes of PLTF and will be used at orientation.



# Agenda

1. Introduction by Refuge Manager
2. Introduction by the Fellow
3. PLTF Projects
4. Lessons Learned for Future Fellows
5. General Suggestion
6. Q & A





# Valle de Oro National Wildlife Refuge



# Land Acknowledgement



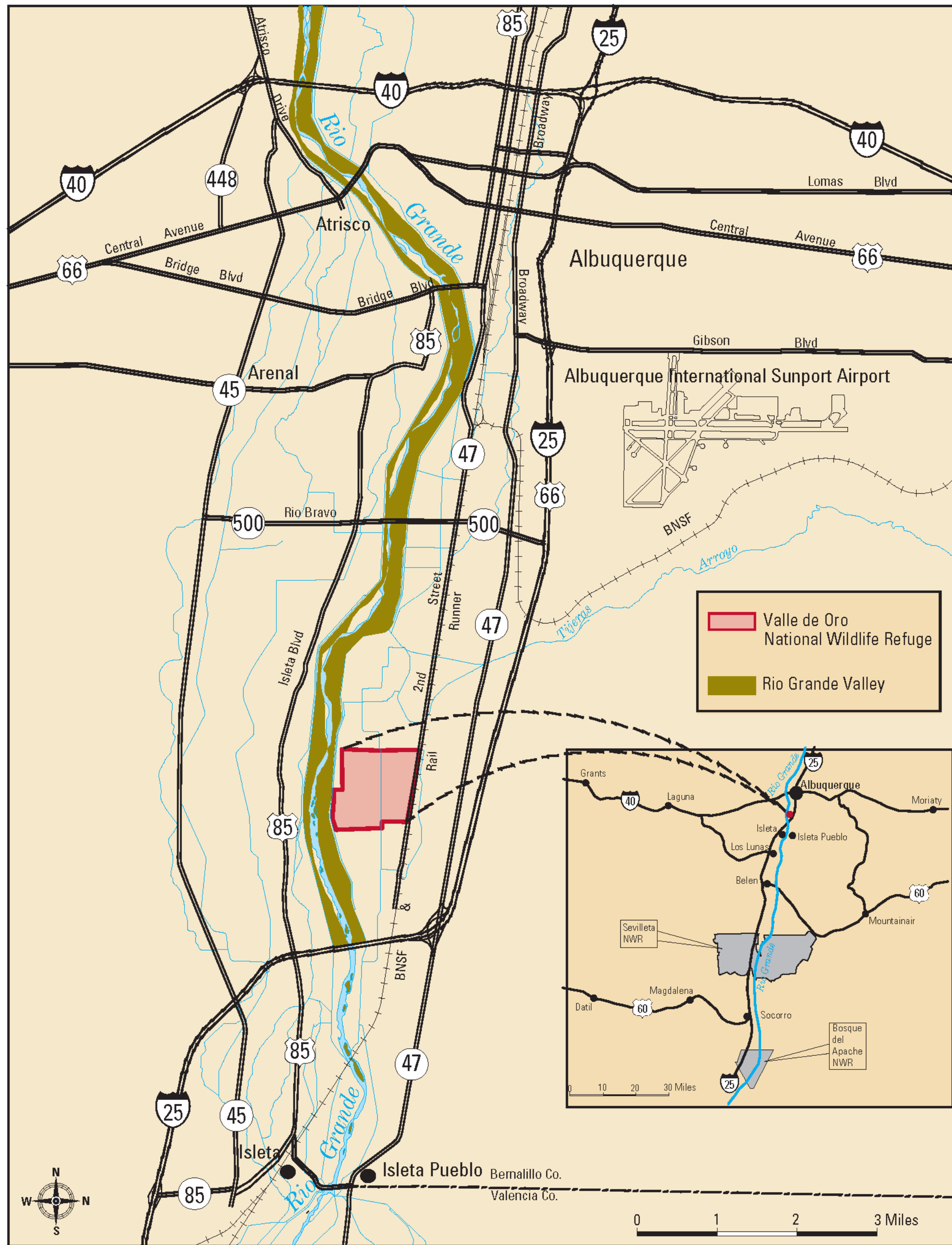


# Safe Place Policy



- At Valle de Oro NWR, we have a non-discrimination and Zero Tolerance Policy- a Safe Place Policy- at the refuge, where our tagline is “Growing a safe and healthy environment for wildlife and people.”
  - *Valle de Oro National Wildlife Refuge strives to create and foster an inclusive experience for all visitors, volunteers, interns, partners, and employees. We wish for the refuge to be a safe and healthy environment for wildlife and people.*







# Future of Valle de Oro NWR

## Goals and Visions



VALLE DE ORO NATIONAL WILDLIFE REFUGE

AMPHITHEATER / INTERPRETIVE GARDENS  
CF PADILLA - BRYCON joint venture | FORMATIVE architecture | WEDDLE GILMORE black rock studio  
25 OCTOBER 2018



VALLE DE ORO NATIONAL WILDLIFE REFUGE

VISITOR ARRIVAL PLAZA FROM THE EAST  
CF PADILLA - BRYCON joint venture | FORMATIVE architecture | WEDDLE GILMORE black rock studio  
25 OCTOBER 2018



### notes

- 1 rio grande river
- 2 sandia mountains
- 3 visitor center
- 4 barr drain / bio swale
- 5 wetlands
- 6 2nd street access
- 7 golden spiral
- 8 maintenance yard

VALLE DE ORO NATIONAL WILDLIFE REFUGE



WILDLIFE REFUGE SITE PLAN

CF PADILLA - BRYCON joint venture | FORMATIVE architecture | WEDDLE GILMORE black rock studio  
25 OCTOBER 2018



# Introduction

**Name:** Nate Begay

**Primary Refuge:** Valle de Oro NWR

**Start Date:** September 3, 2019

**Place of Birth:** Gallup, NM

**Educational Background:** M.C.R.P. and B.A. in Environmental Planning and Design, University of New Mexico

**Academic Focus:**

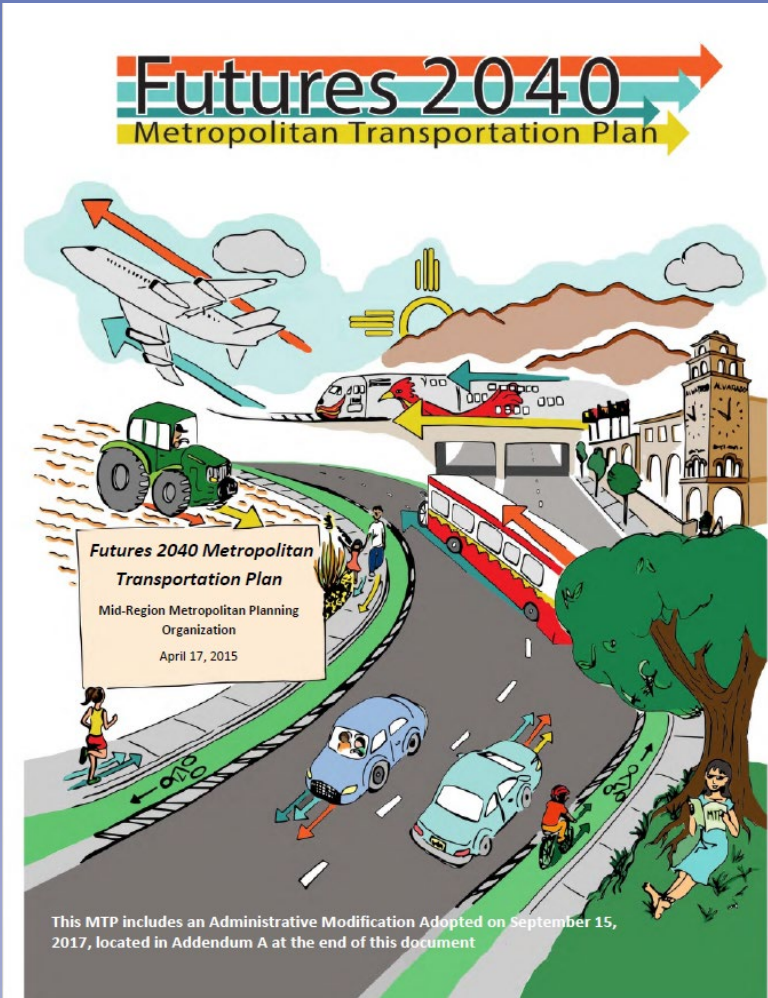
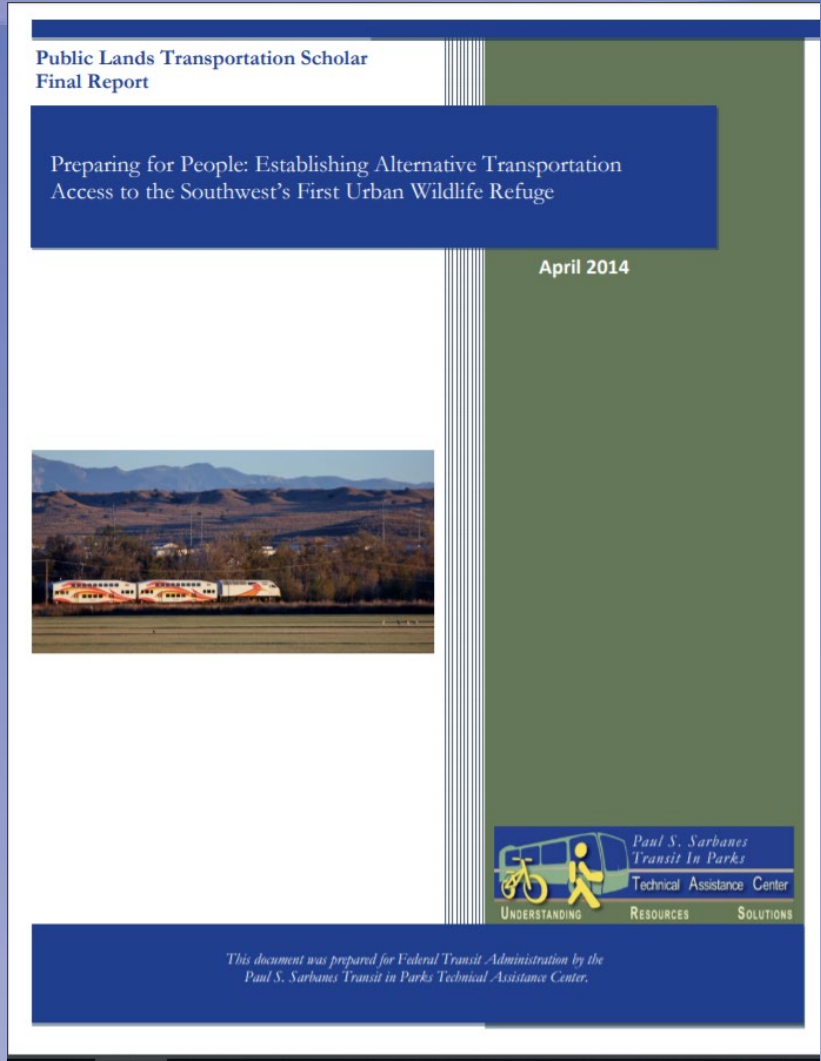
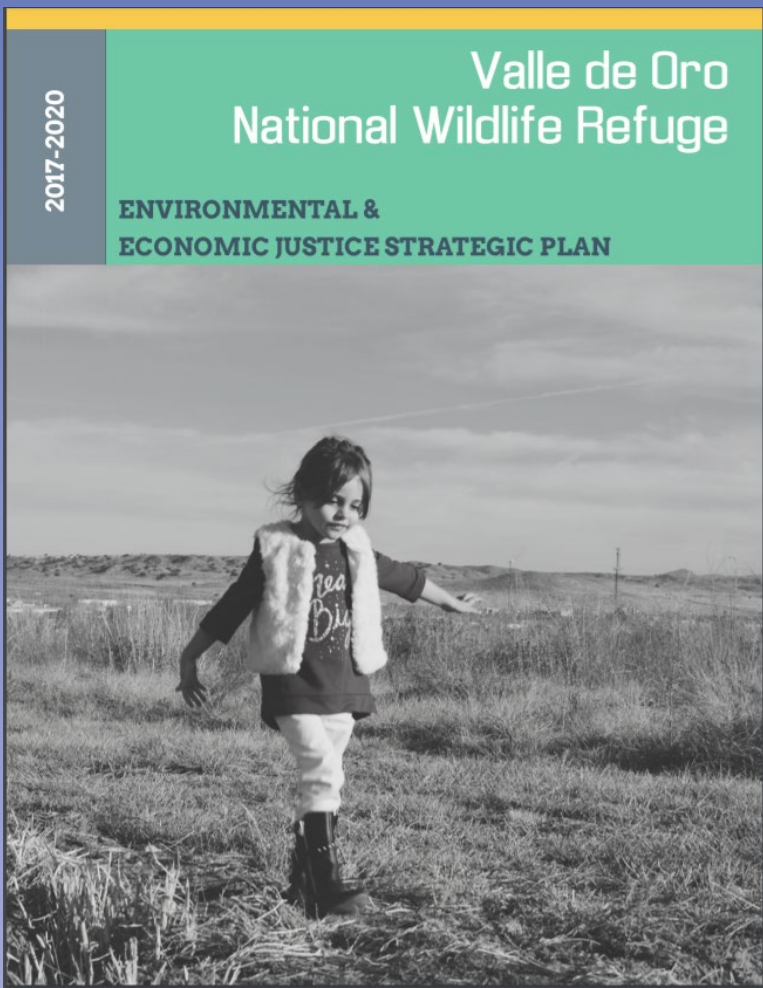
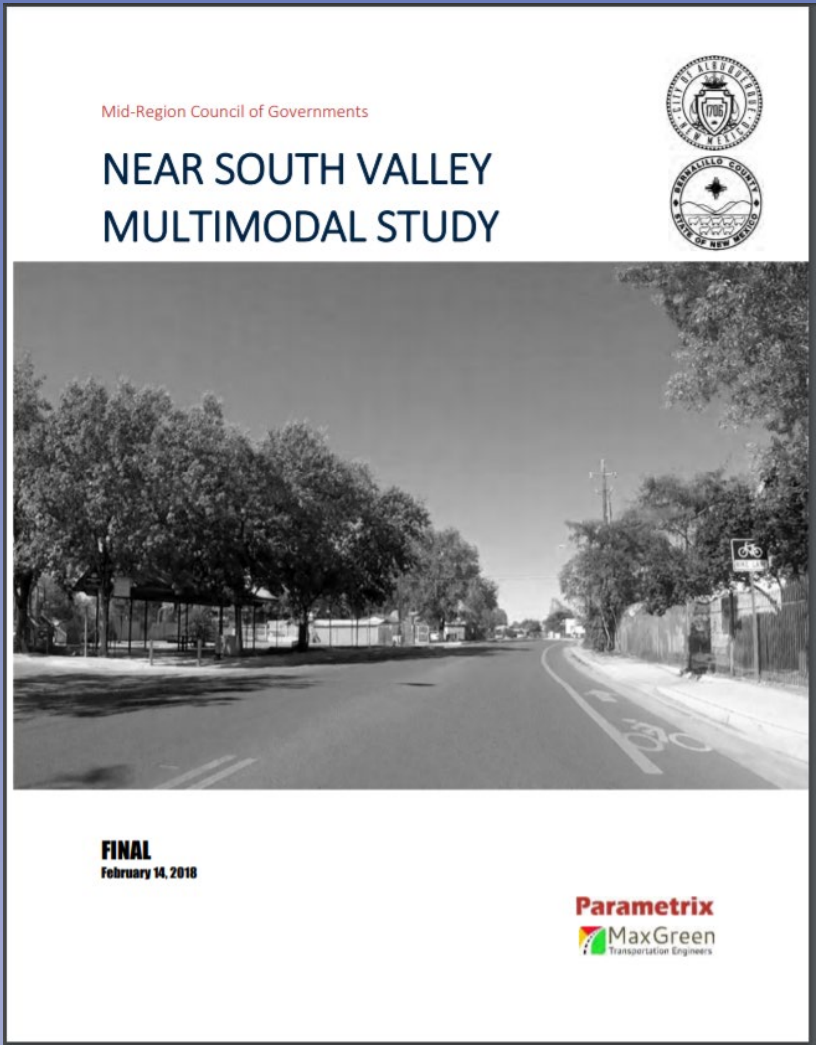
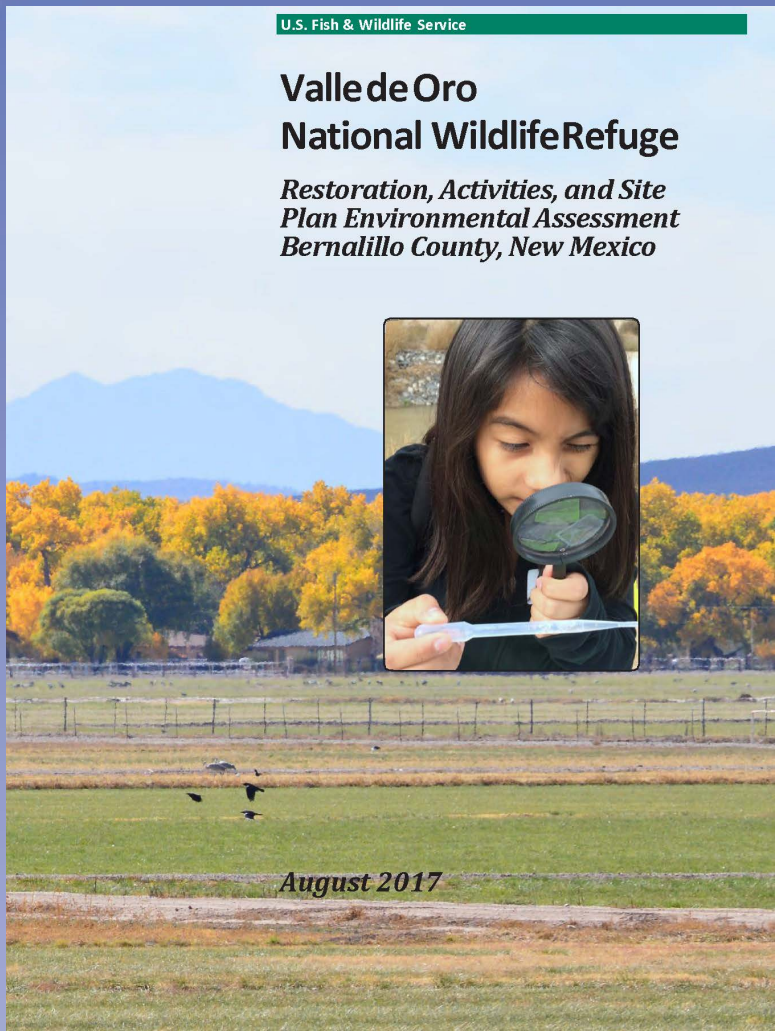
Physical planning and design, historic preservation, cultural planning and community development

**Fun Fact:** Nate's favorite past times are drawing murals and napping outside





# Valle de Oro NWR- Context and landscape



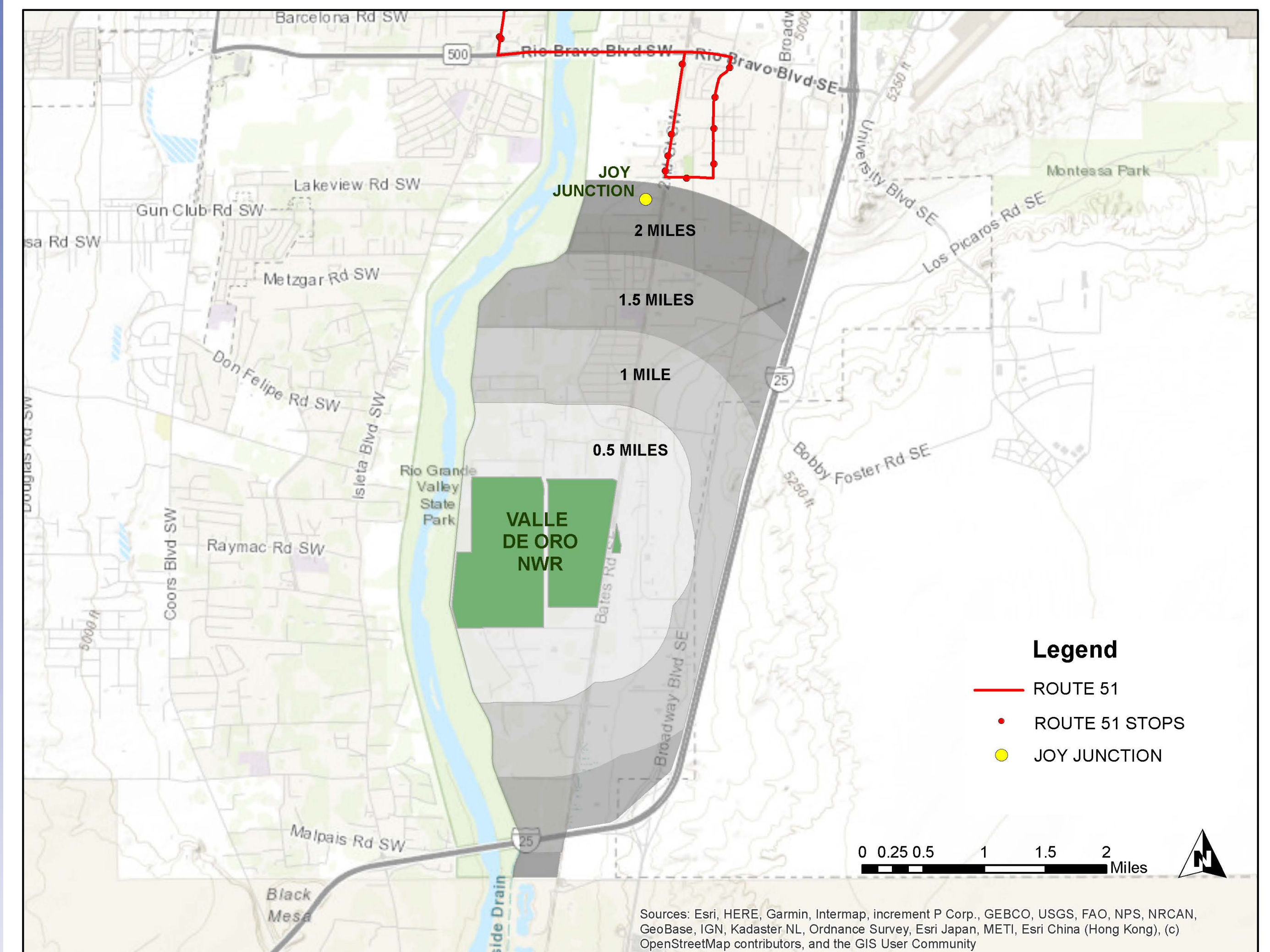
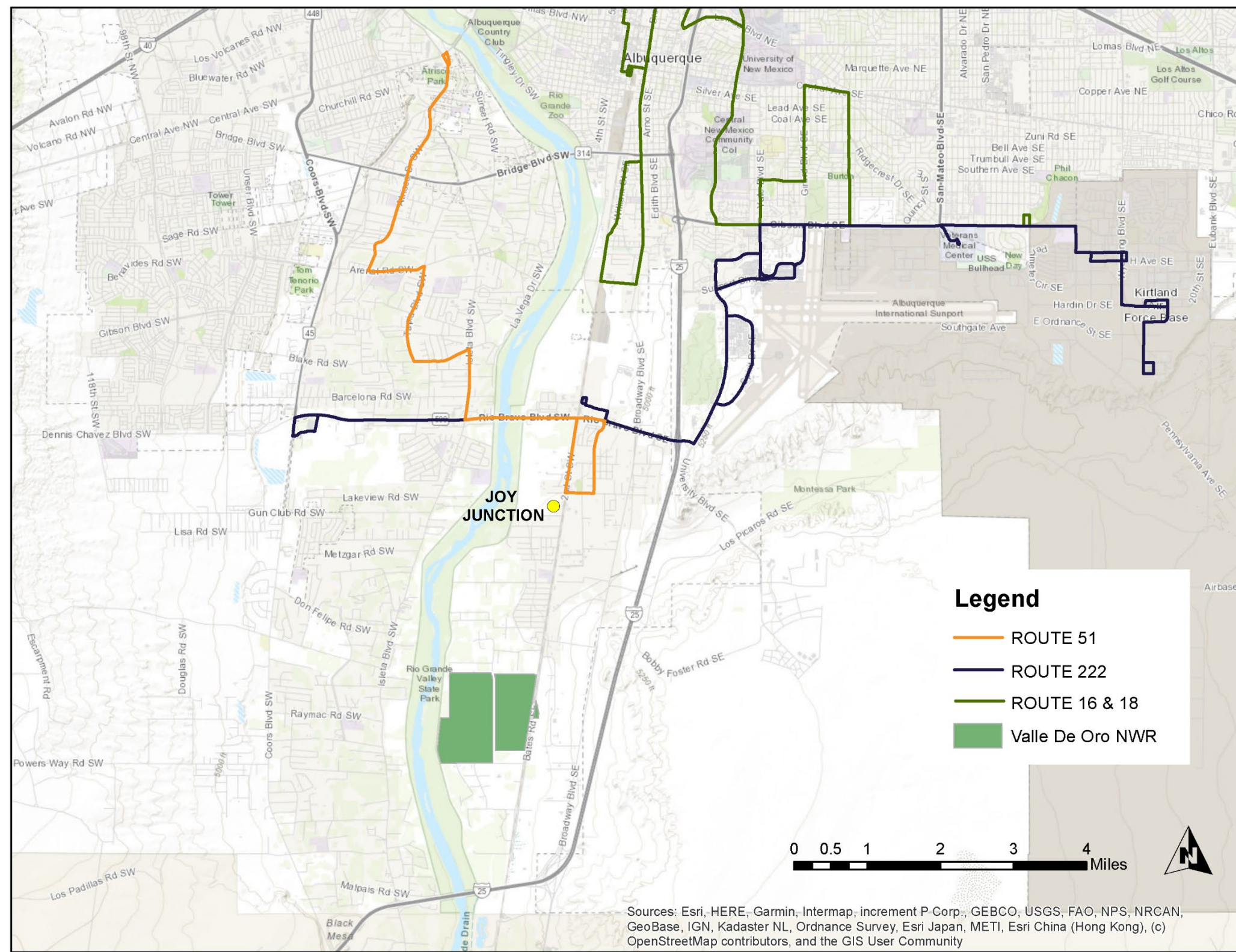


# Fellow's Projects

- Bus Service
- Shuttle Service
- Rail Runner Express Connection
- Trail Network Design
- Outdoor Classroom
- Refuge Access Plan
- FLAP I landscaping Improvements
- FLAP II 2<sup>nd</sup> street improvements
- Electric Vehicle public Charging Station
- Signage and Wayfinding
- Refuge map
- Bike Share
- Quiet Crossing
- Art and Design Projects



# Bus Service



- Needs:
  - Funding for bus vehicle
  - Funding for operations and maintenance
  - Bus shelters and signage

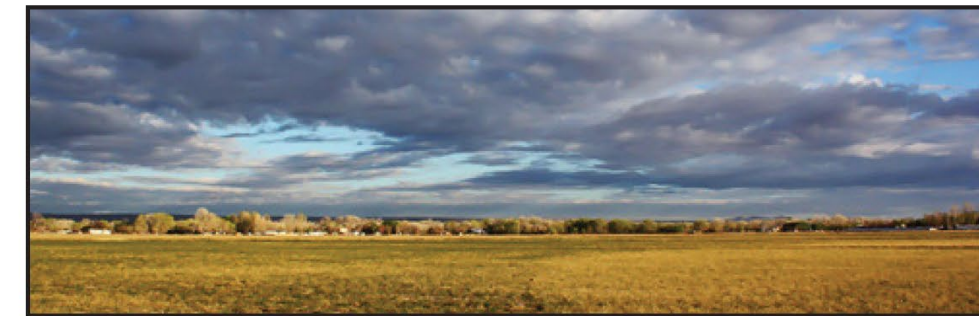
Route	Length	Annual Miles Driven	Service	Total Service Hours	Total Annual Ridership	Average Boarding Hours (2015)			
						AM	Mid-Day	PM	Evening
51	3.6 mi.	67,886	Weekday, Saturday	4,094	189,572	19.4	20.7	22.2	-



# Bus Service

- Solution
  - Advocate for Capital Outlay funding from the state
  - Partner with ABQ Ride and Bernalillo County for O&M
  - Partner with community organizations
- Capital Outlay
  - State funds for capital improvements
  - Work with State Representative and County representatives
- Outcomes and Next Steps

## PROVIDING BUS ACCESS TO VALLE DE ORO NATIONAL WILDLIFE REFUGE



**OBJECTIVE:** PROVIDE BUS SERVICE TO VALLE DE ORO NWR, JOY JUNCTION HOMELESS SHELTER, AND THE MOUNTAIN VIEW COMMUNITY BY ASSISTING ABQ RIDE ACQUIRE AT BUS FOR THEIR FLEET.

CURRENTLY, ROUTE 51 IS THE CLOSEST BUS ROUTE TO VALLE DE ORO, STOPPING 2.5 MILES NORTH OF THE REFUGE. WITH THE FUTURE VISITOR CENTER, THE REFUGE CAN FUNCTION AS A BUS TURN-AROUND, ALLOWING BUSES TO TRAVEL FURTHER SOUTH. IN ADDITION, JOY JUNCTION HOMELESS SHELTER LOCATED NORTH OF THE REFUGE DOES NOT HAVE SUFFICIENT BUS SERVICE. THEIR STOP IS LOCATED 1,000 FT NORTH OF THEIR ENTRANCE WITH NO CONSISTENT SIDEWALK TO SERVE THE AREA.

### PROJECT OUTCOMES:

- EXTEND ROUTE 51 DOWN 2<sup>ND</sup> STREET
- IMPROVE EQUITABLE ACCESS FOR THE REFUGE AND SURROUNDING COMMUNITIES
- IMPROVE SERVICE TO JOY JUNCTION
- PROVIDE ACCESS TO OUTDOOR RECREATIONAL OPPORTUNITIES
- DEEPEN CONNECTION OF URBAN POPULATIONS TO GREEN SPACE

### INITIAL CAPITAL COSTS

**\$665,000**

COMPRESSED NATURAL GAS BUS

(Assumes 4% annual price escalation since last purchase in 2015 at \$540,000 per CNG bus plus ~5% contingency.)

### FUNDING SOURCES FOR BUS

**\$300,000**

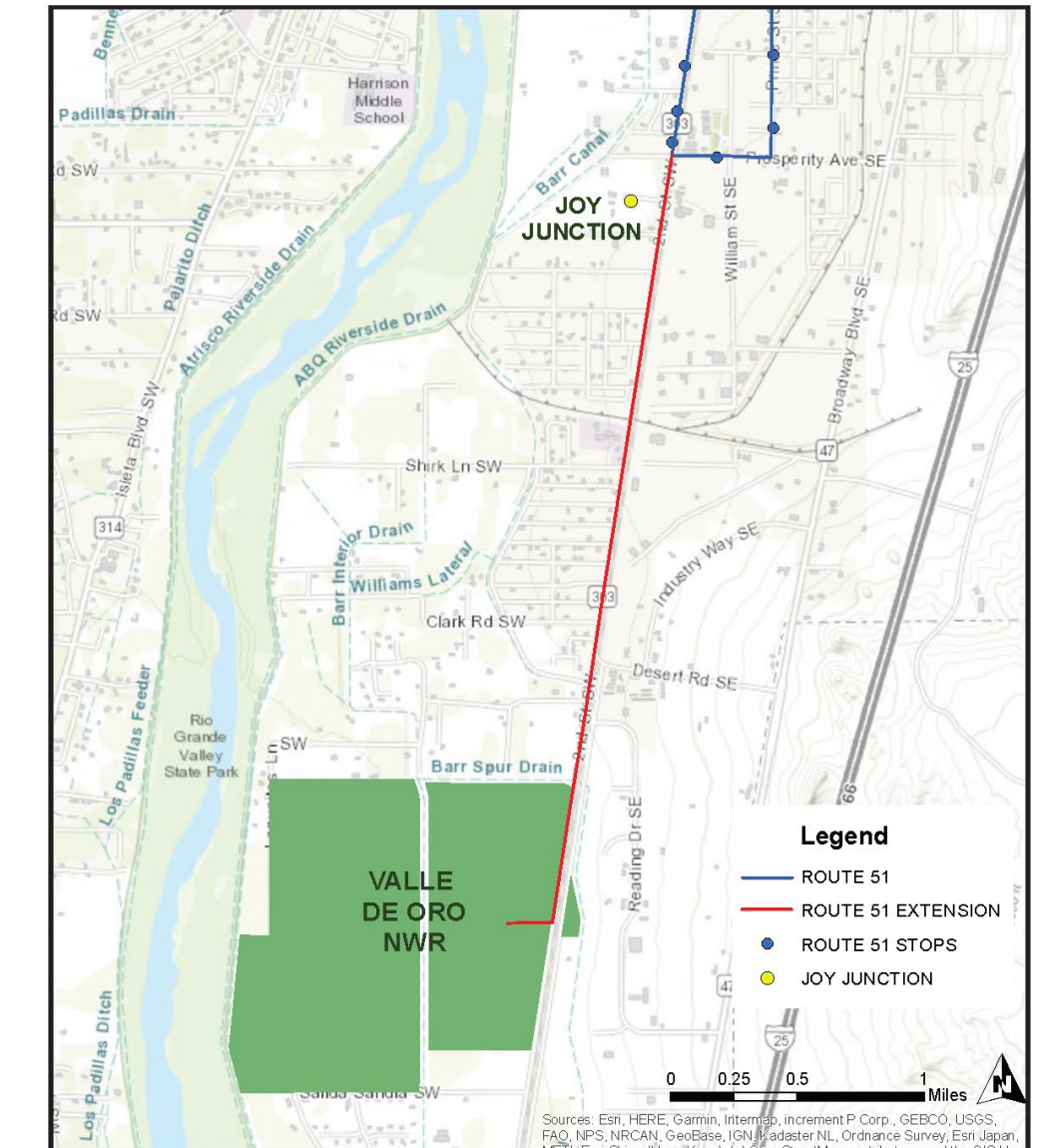
STATE CAPITAL OUTLAY  
(REQUESTED AMOUNT)

**\$365,000**

FUTURE GRANT SOURCES  
(LOW OR NO EMISSIONS PROGRAM OR OTHER FUNDING SOURCES)

**\$665,000**

TOTAL BUS COST



EXISTING ROUTE 51 (IN BLUE) AND PROPOSED EXTENDED ROUTE (IN RED) TO VALLE DE ORO.

### IMPROVED BUS SERVICES FOR ROUTE 51

BUS SERVICES TO THE REFUGE IT WILL INCREASE FREQUENCY FOR SERVICES THROUGHOUT ROUTE 51 OVERALL.

CURRENT BUS ROUTE	ALTERED BUS ROUTE
CURRENTLY RUNS WEEKDAYS AND SATURDAYS	ADD 5.1 MI. TO ROUTE AND 17 MIN. RUNTIME
54 MIN. RUN TIME	82 MIN. RUN TIME

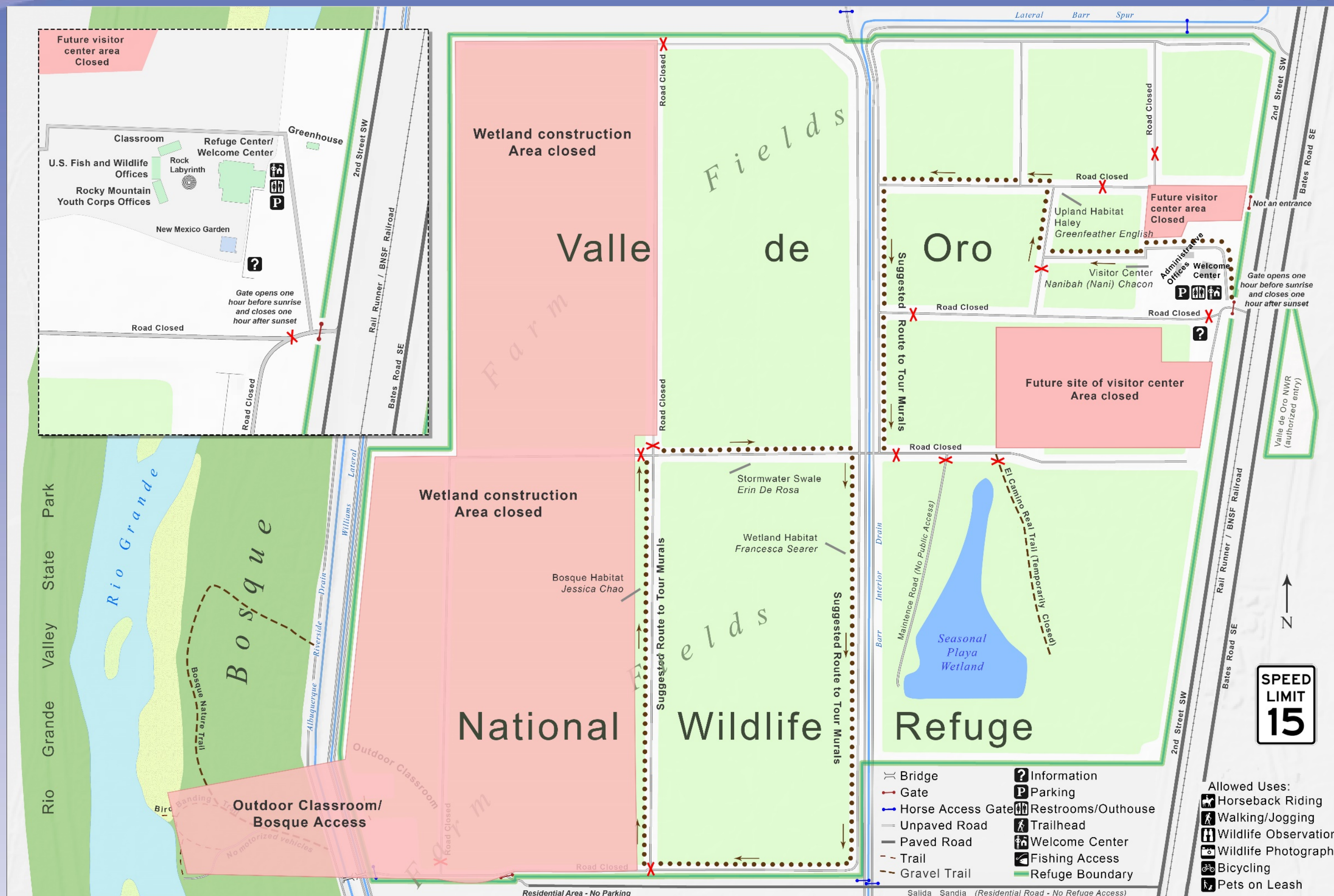
WITH 1 BUS	WITH 2 BUSES
65 MIN. HEADWAY	45 MIN. HEADWAY

### PARTNERING ORGANIZATIONS





# Trail Network Design



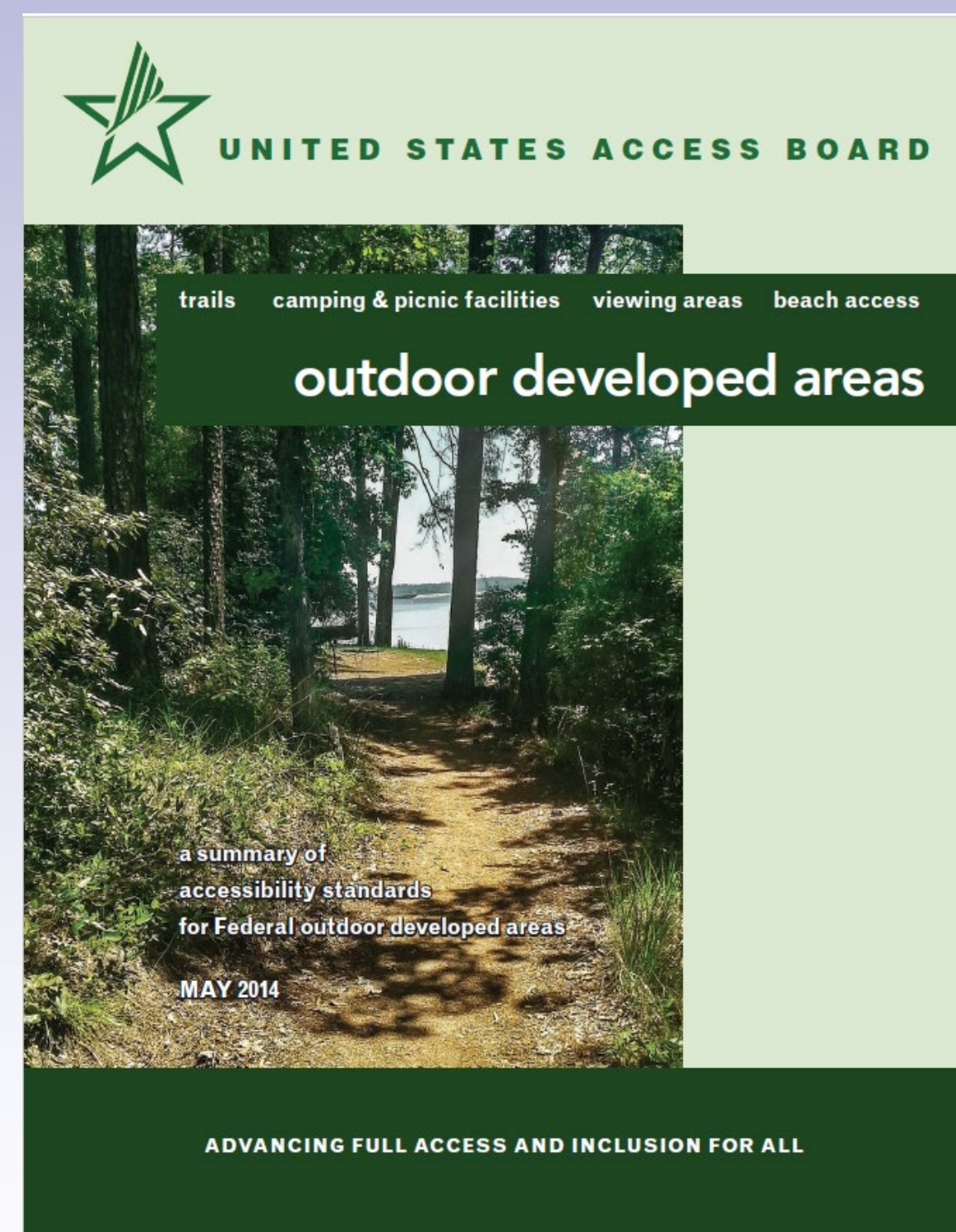
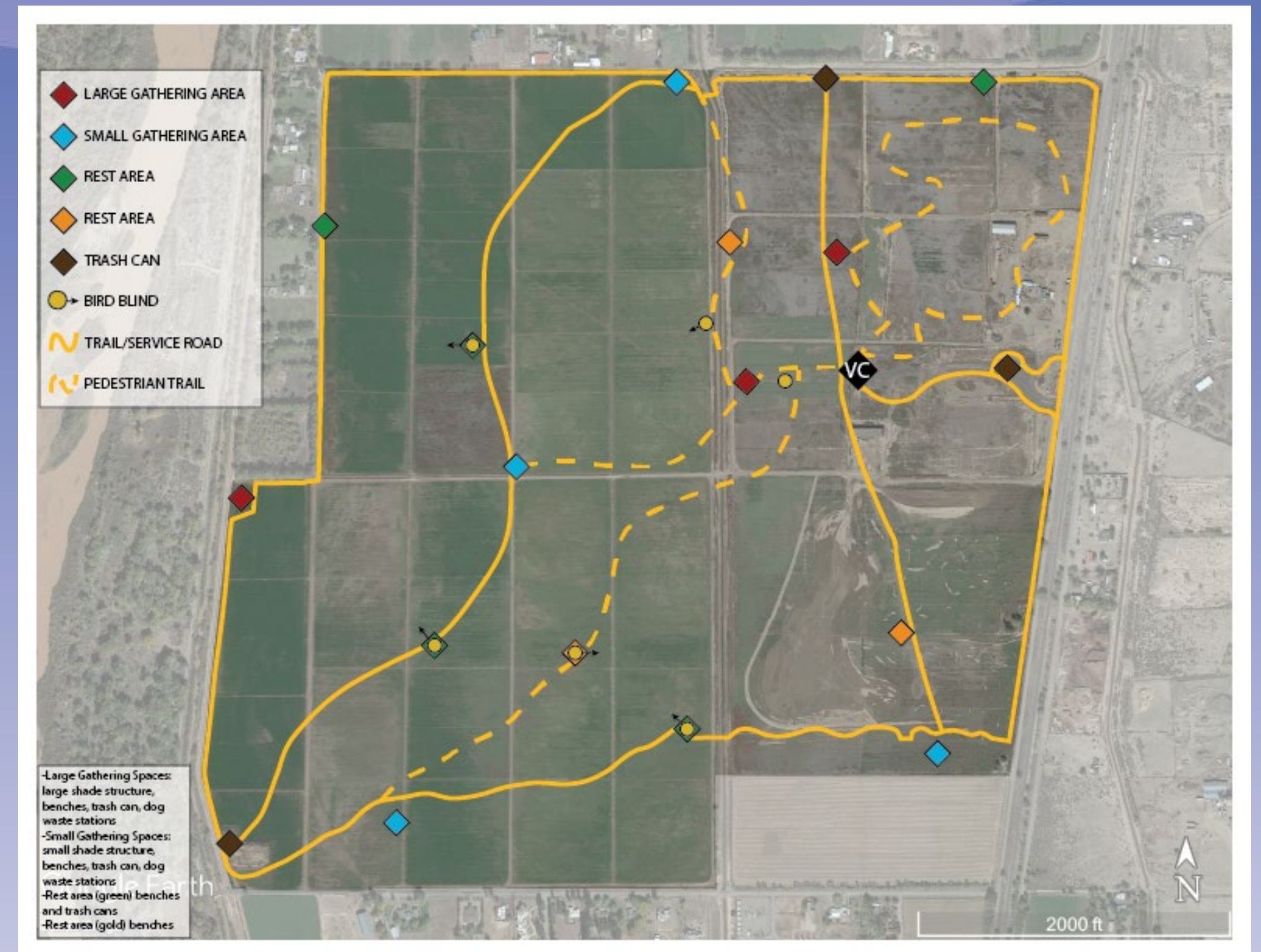
- Currently, the trail network consists of farm roads
- Looking to convert trail network to align with
- Elements of Trail Design:
  - Trail alignment
  - Surfacing
  - Accessibility
  - Amenities
  - Signage and Wayfinding





# Trail Network Design

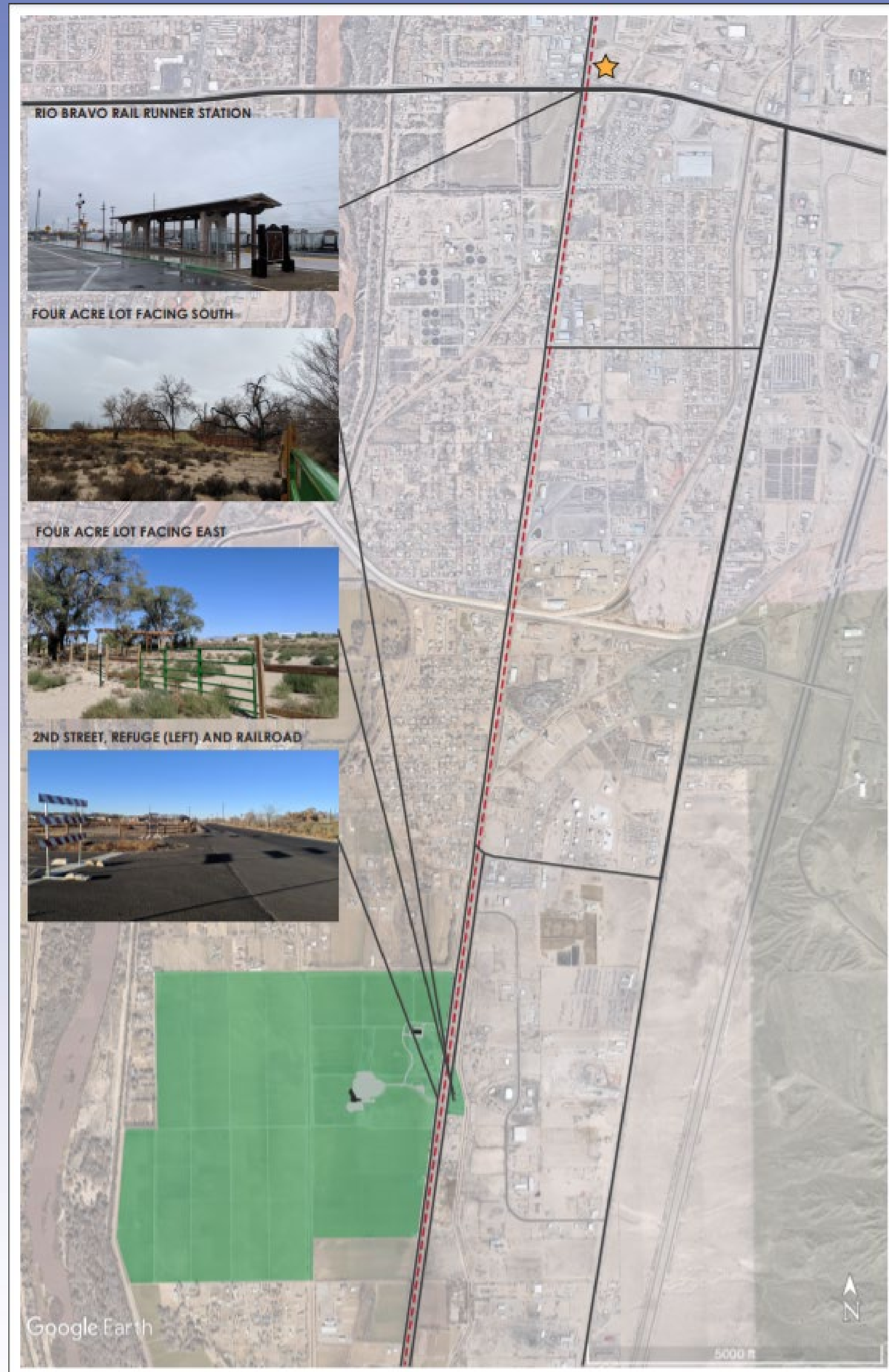
- Planning for the future of the trail network
  - Create a trail amenities plan
  - Create initial trail cost estimates
  - Create ABA standards checklist and example guide



Project	Type	Details	Unit	Amount	Unit Price Low	Unit Price High	Unit Price Average	Estimated Low Cost	Estimated High Cost	Estimated Average Cost
Trail Amenities	Small Shade Structures	24' x 24' shade structure construction cost (high with 20% contingency)	Ea.	6	27,282.00	100,000.00	27,282.00	27,282.00	100,000.00	163,692.00
	Large Shade Structures	30' x 30' shade structures capable of accommodating 4 people (high)	Ea.	4	27,282.00	100,000.00	49,107.60	27,282.00	400,000.00	196,430.40
	Picnic tables	6 ft. Wood picnic table (low), 8 ft wood picnic table (high)	Ea.	4	293.00	386.00	339.50	1,172.00	1,544.00	1,358.00
	Benches	Park bench with back (low) Recycled plastic bench (high)	Ea.	12	250.53	735.00	1,765.06	3,006.36	8,820.00	21,180.72
	Bike Racks	Bike Racks, standard U Rack (low) and custom racks (high)	Ea.	2	72.88	4,110.89	751.58	145.76	8,221.78	1,503.16
	Bike Repair Stations	Deluxe Public Work Stand. Low unit price is standard station. High U	Ea.	1	915.00	1,750.00	1,332.50	1,332.50	1,750.00	1,332.50
	Dog Waste Stations	Dog waste station with bags and trashcan	Ea.	12	229.99	299.99	264.99	2,759.88	3,599.88	3,179.88
	Trashcans/Recycling Receptacle	Standard steel trashcan/recycling receptacle	Ea.	12	353.01	3,666.78	1,617.03	4,236.12	44,001.36	19,404.36
ESTIMATED TOTALS								66,799.12	567,937.02	408,081.02
10% CONTINGENCY								73,479.03	624,730.72	448,889.12
15% CONTINGENCY								76,818.99	653,127.57	469,293.17
Trail Estimates	Shared -use Path, paved	Construction costs based on 8 ft paved trail	Miles	7.00	64,710.00	4,288,520.00	261,000.00	452,970.00	30,019,640.00	1,827,000.00
Trail Estimates	Shared -use Path, unpaved	Construction cost based on 8 ft unpaved trail	Miles	10.00	32,603.02	455,823.84	134,067.79	326,030.20	4,558,238.40	1,340,677.90
Driveable Trails	Design and Engineering	Construction costs based on estimate from CF Padilla, 10ft road	Miles	7.00	92,730.00	92,730.00	92,730.00	649,110.00	649,110.00	649,110.00
Pedestrian Trails	Multi-use Trail-Unpaved	3 ft wide soft-surface trail	Miles	10	58,314.35	58,314.35	58,314.35	583,143.50	583,143.50	583,143.50
Trail-Additional Structures	Boardwalk	Wooden boardwalk, 8 ft wide	Miles	0	872,433.70	4,739,671.58	2,452,957.87	0.00	0.00	0.00
ESTIMATED TOTALS								1,232,253.50	1,232,253.50	1,232,253.50
10% CONTINGENCY								1,355,478.85	1,355,478.85	1,355,478.85
15% CONTINGENCY								1,417,091.53	1,417,091.53	1,417,091.53
Trail Signage	Trailhead signage	Basic signage around communities	ea	12	148.04	592.15	387.18	1,776.48	7,105.80	4,646.16
	Interpretive Signage/waysides	3' x 2' fused polycarbonate signs mounted on frames.	Ea.	1	3,448.29	4,855.19	4,151.74	3,448.29	4,855.19	4,151.74
	Kiosks	Wood kiosk with bulletin board and overhang	Ea.	1	4,971.00	69,607.00	23,170.00	4,971.00	69,607.00	23,170.00
ESTIMATED TOTALS								10,195.77	81,567.99	31,967.90
10% CONTINGENCY								11,215.35	89,724.79	35,164.69
15% CONTINGENCY								11,725.14	93,803.19	36,763.09

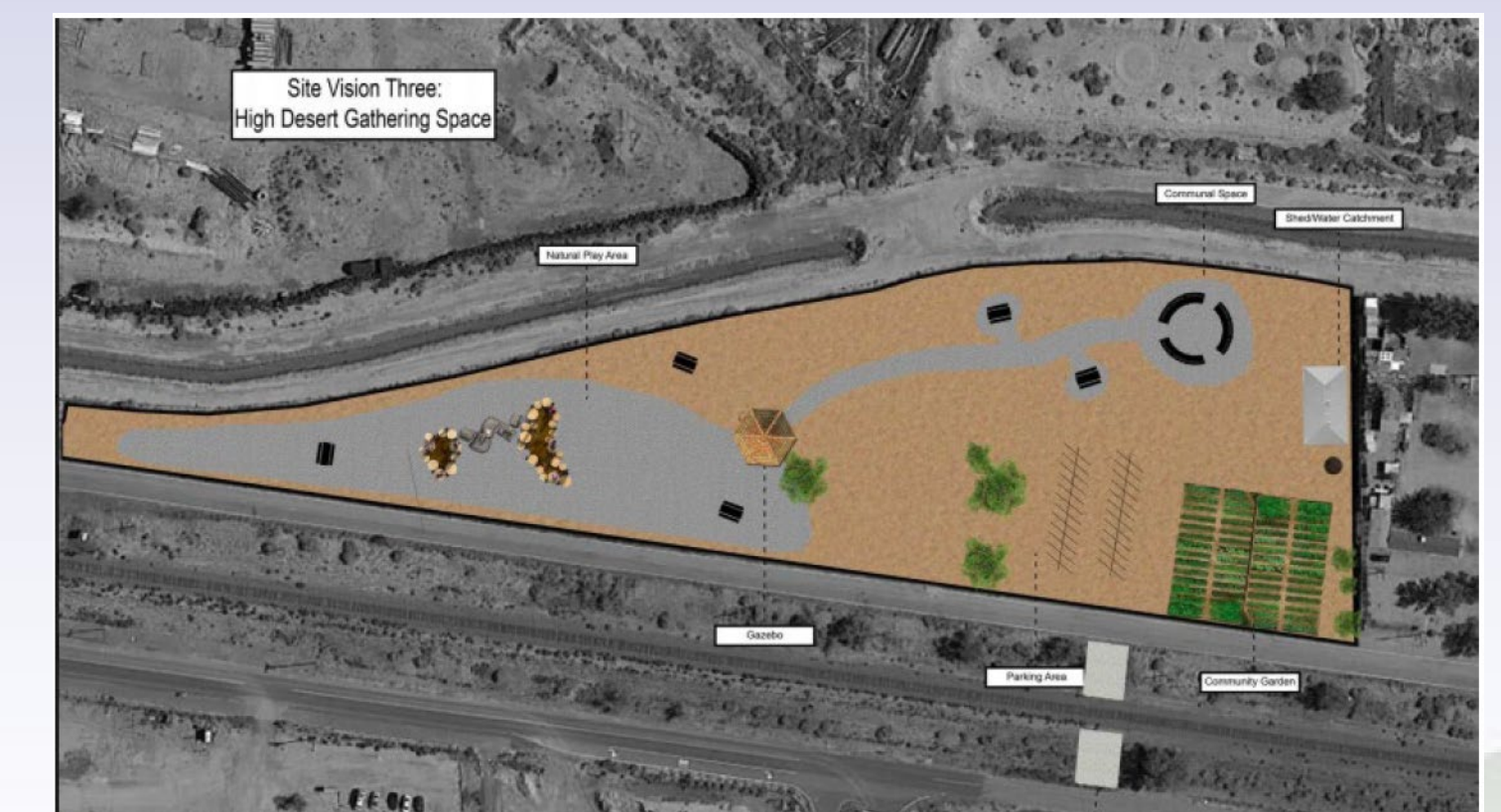
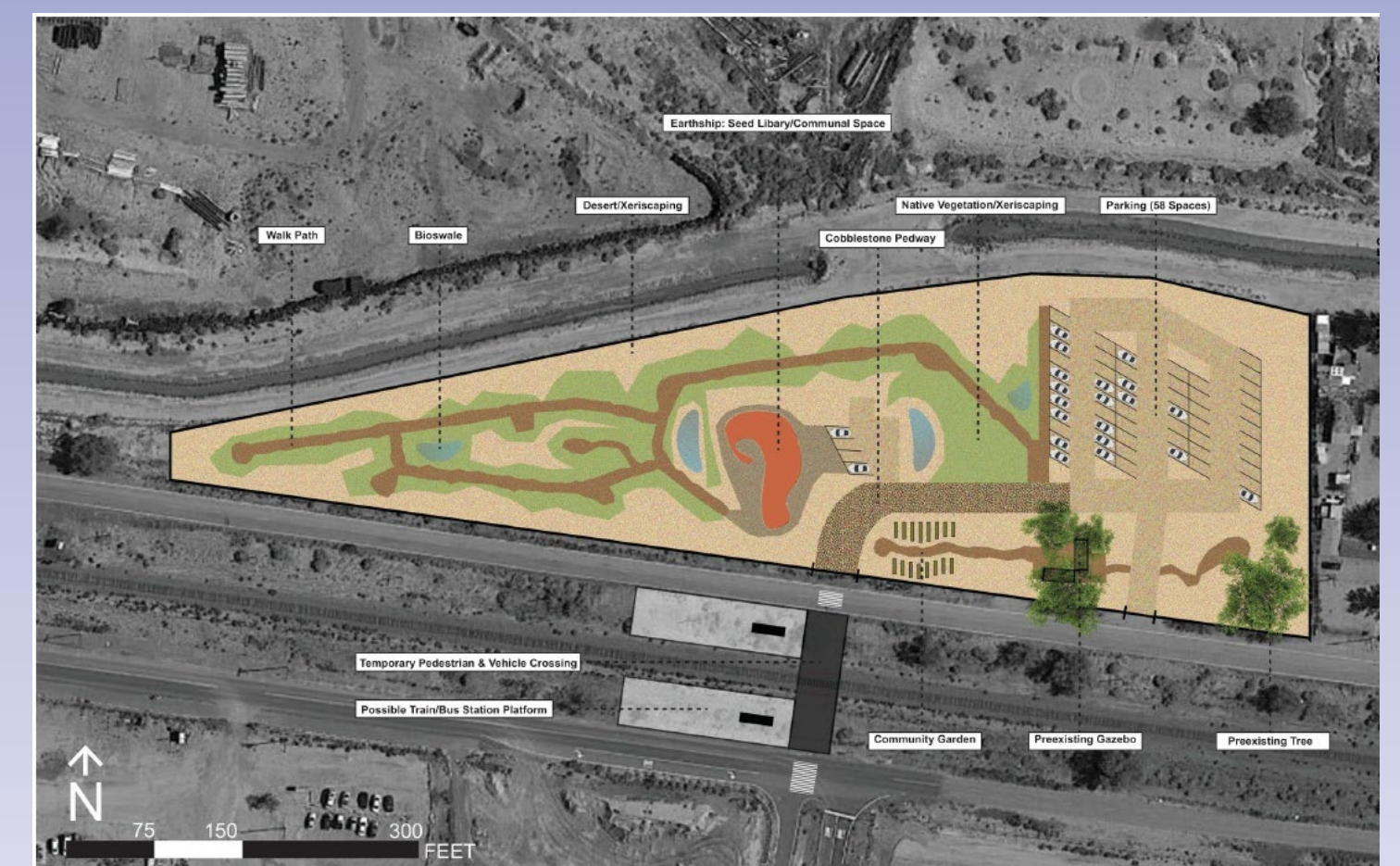
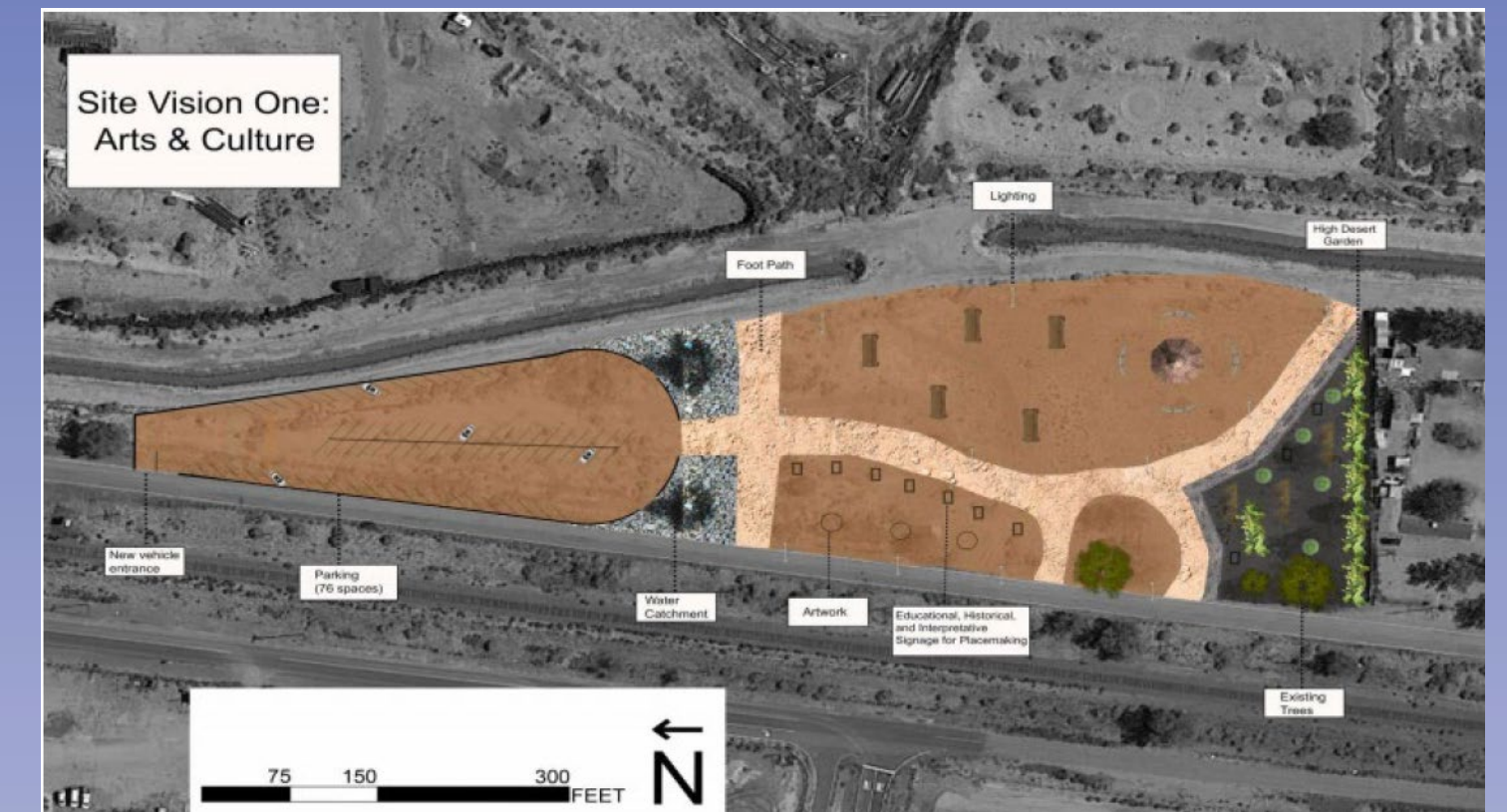
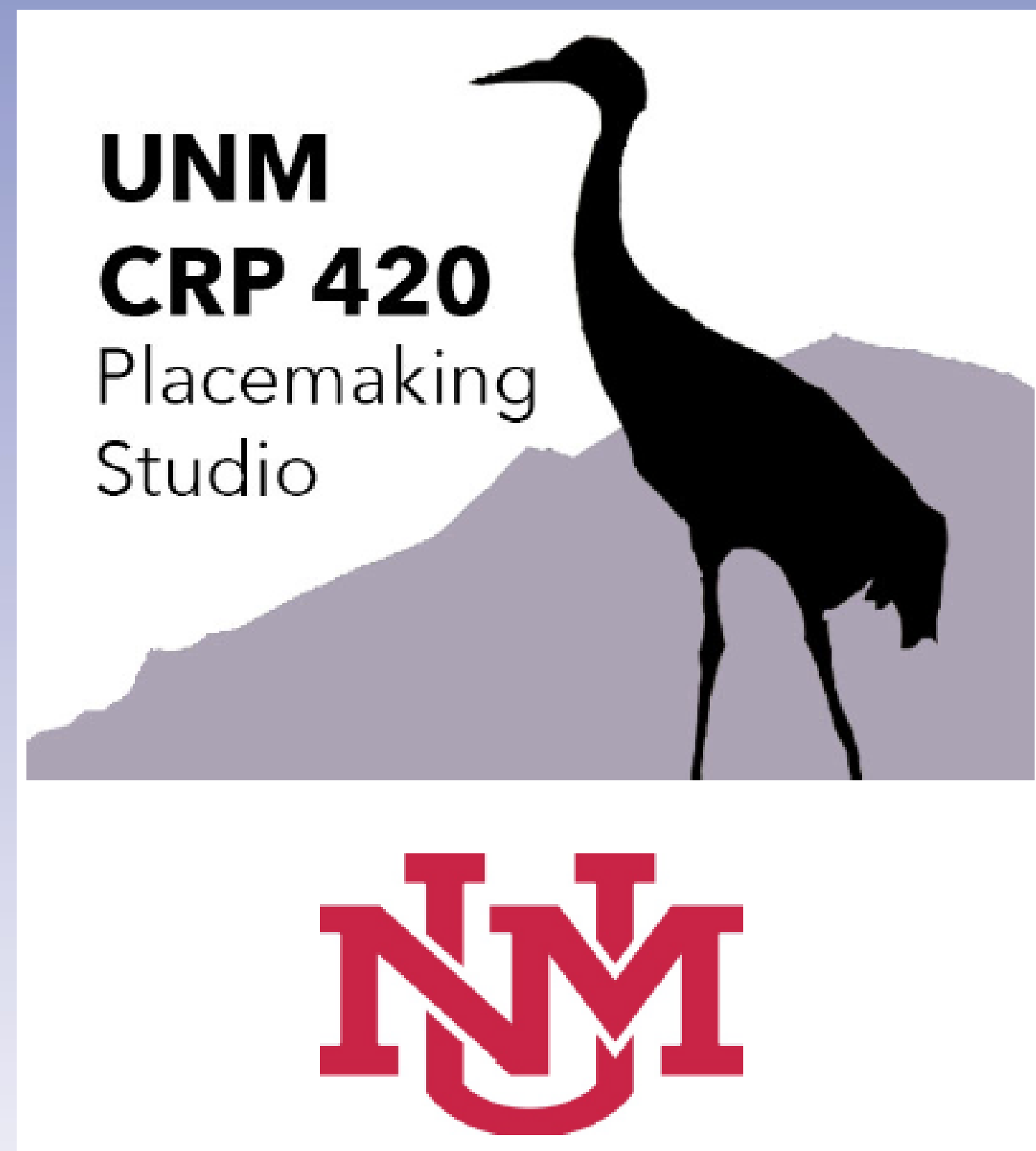


# Rail Runner Express Connection and the University of New Mexico



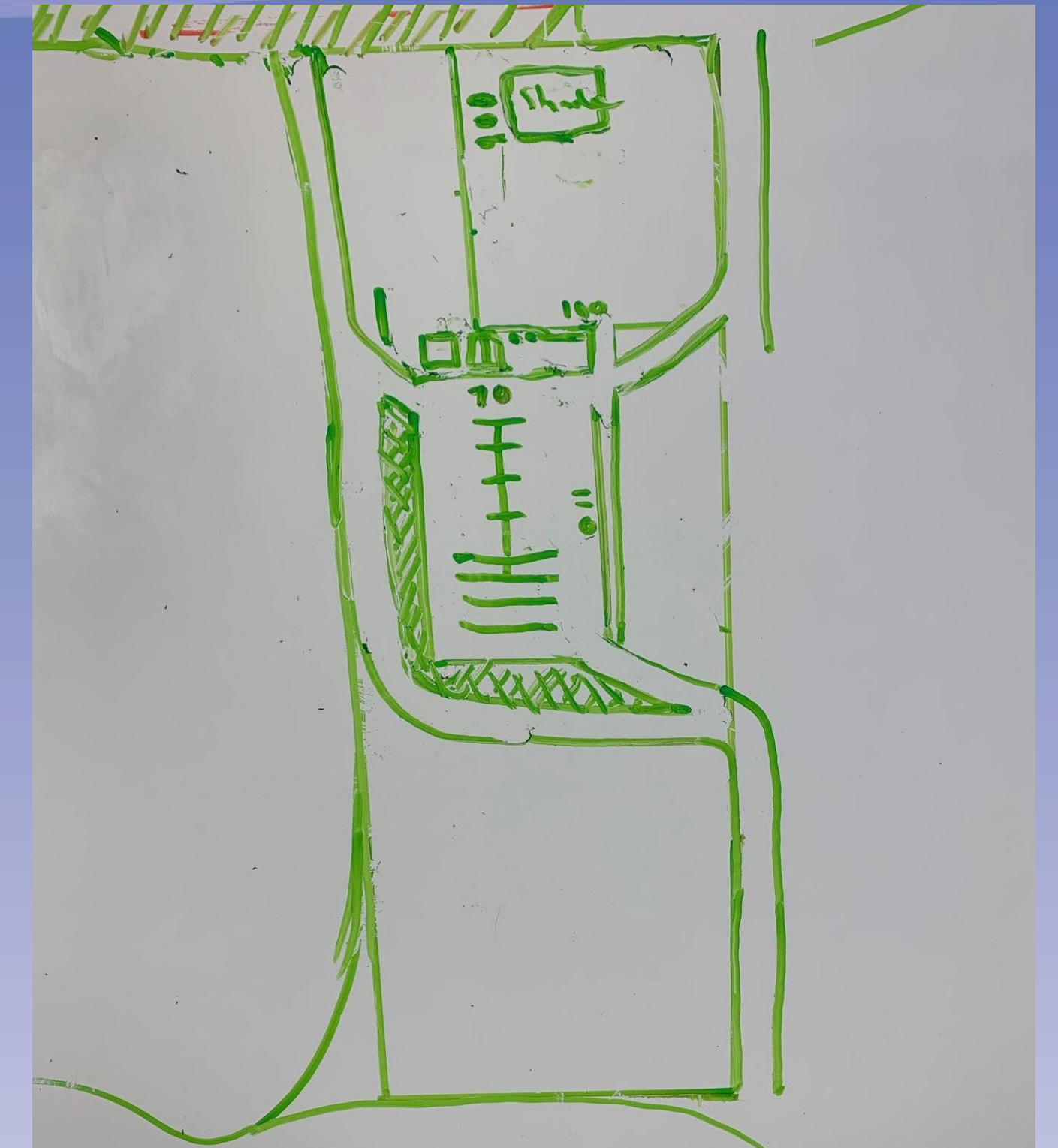
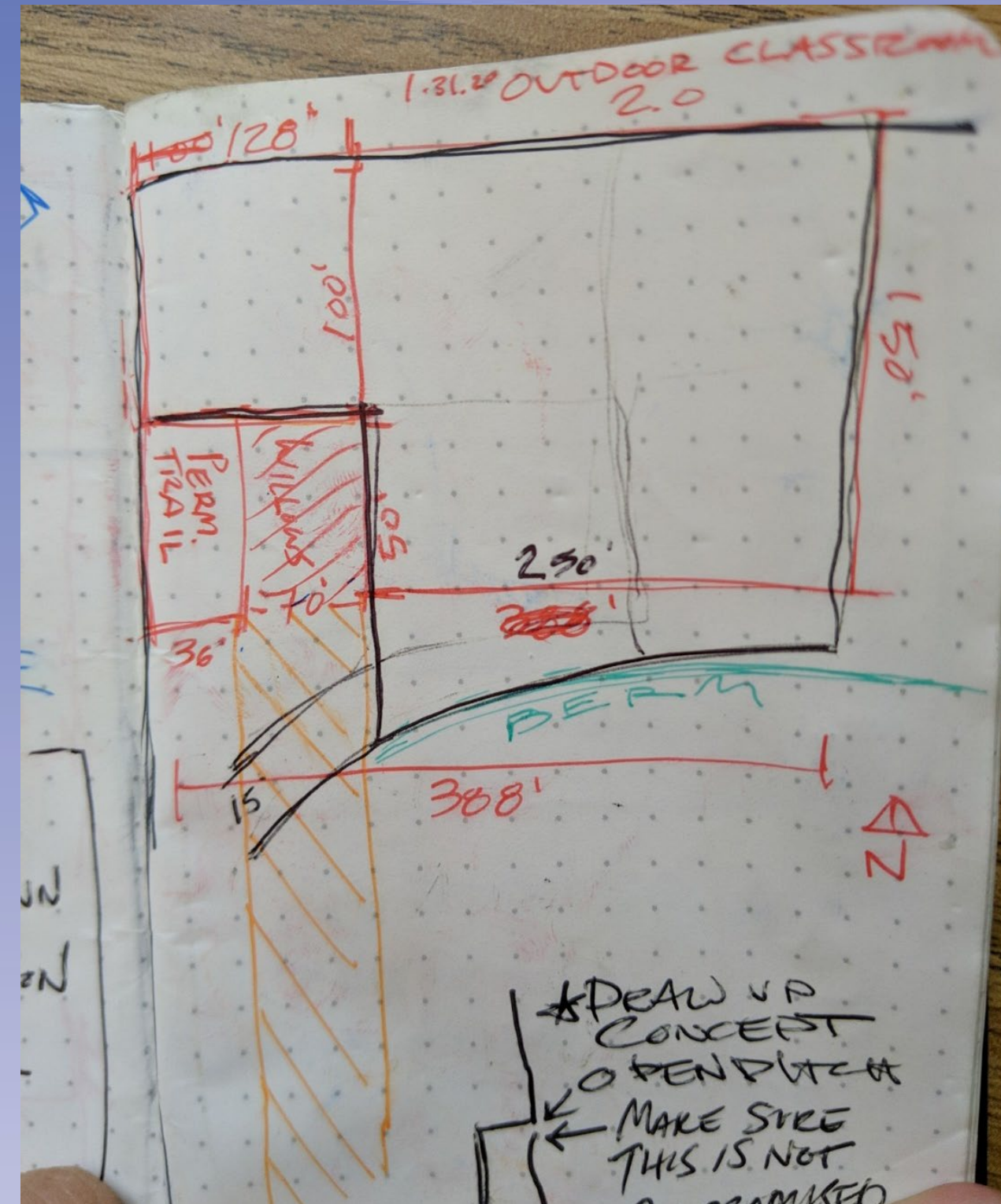
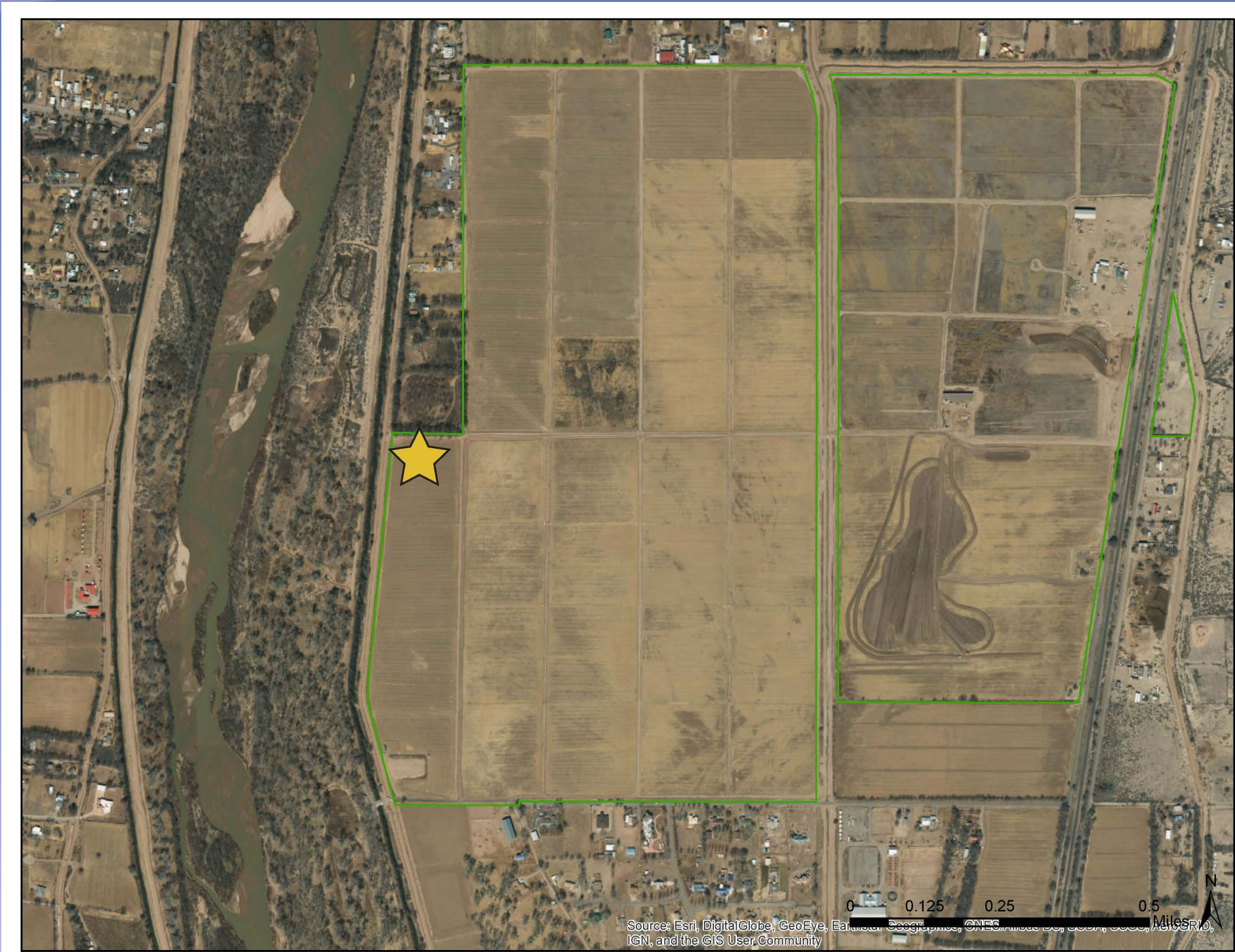


# Rail Runner Express Connection and the University of New Mexico



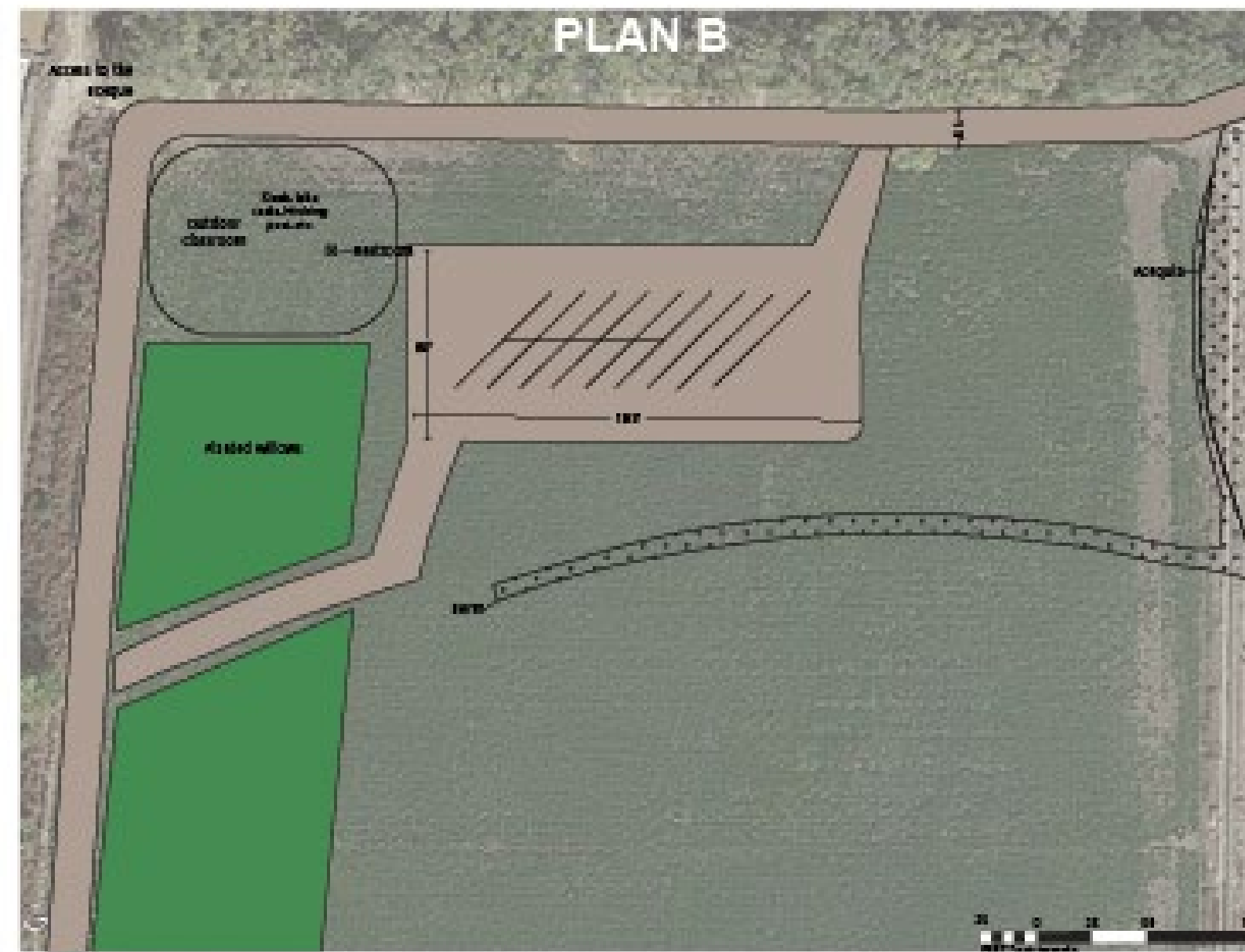


# Outdoor Classroom



- Educational space at the west side of the refuge.
- Will also function as formal trailhead and entrance to/from the Bosque

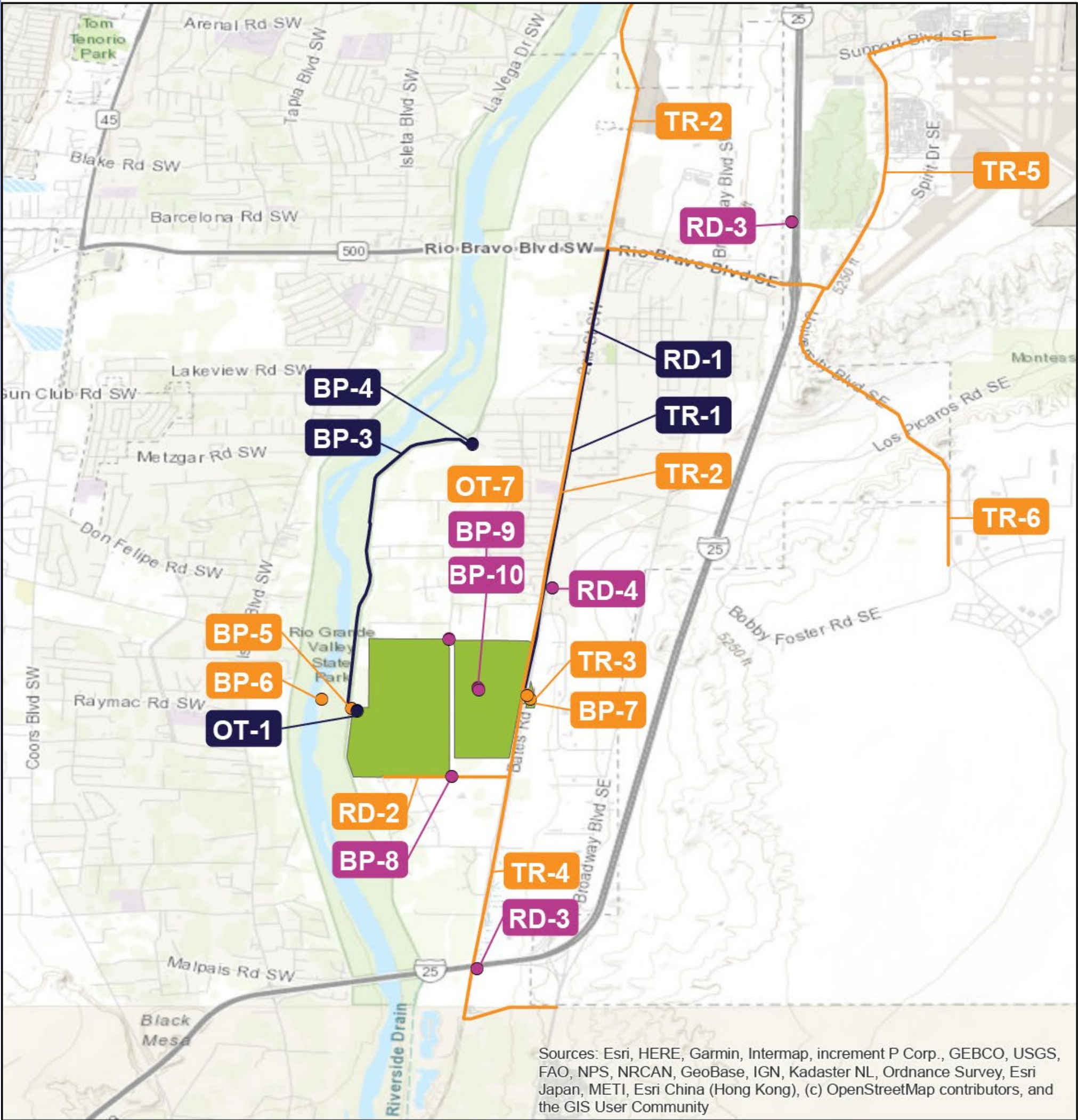
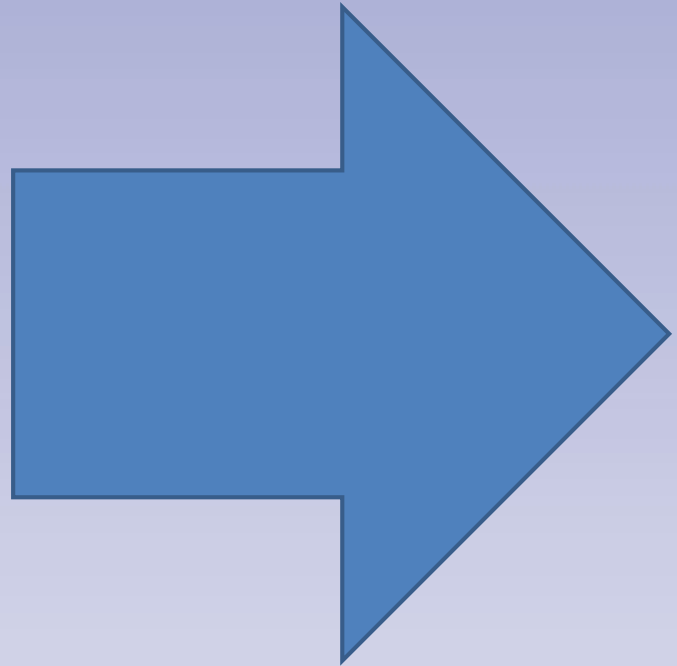
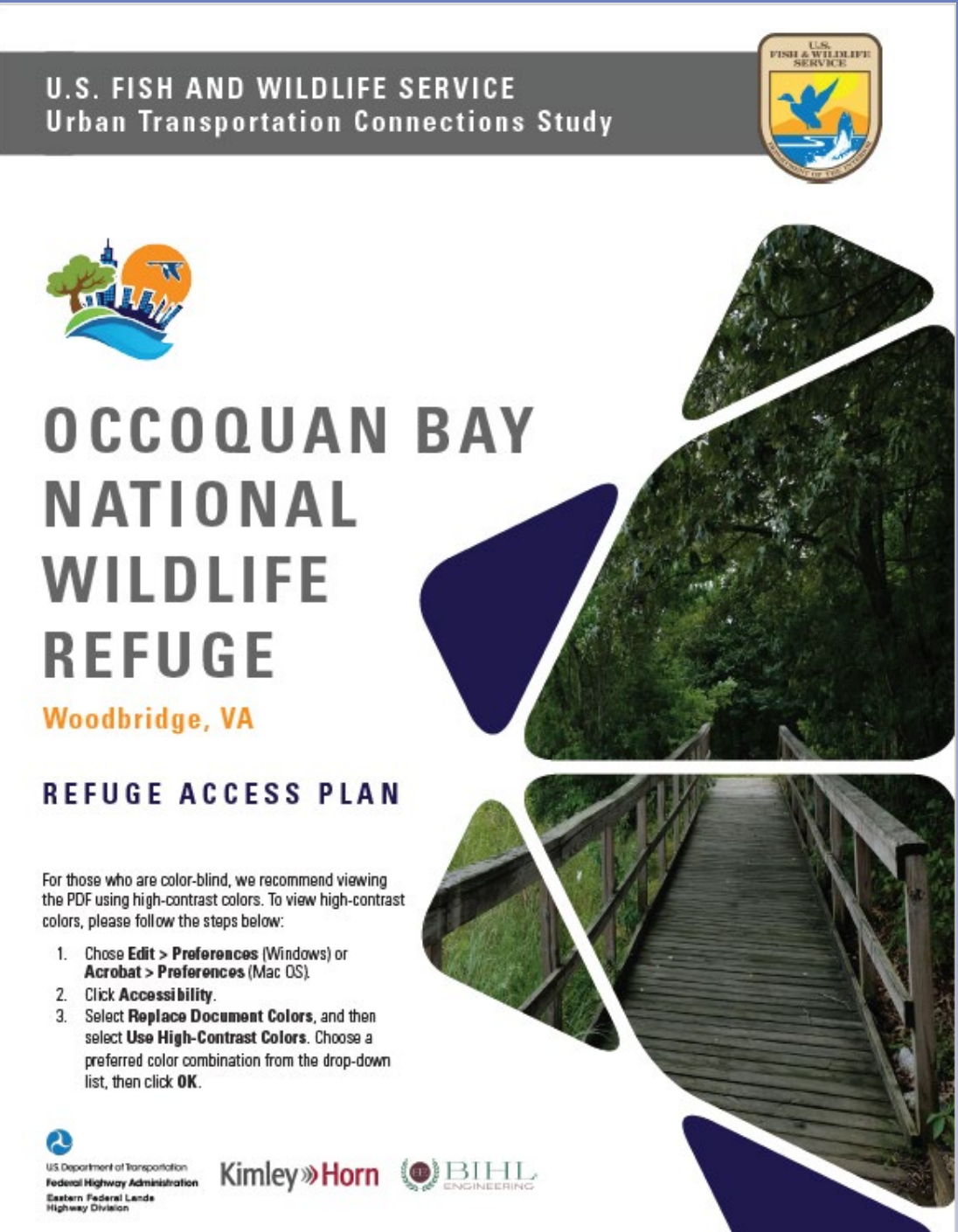




- Various iterations of design, focusing on parking lot alignment with perimeter trail
- Settle on Plan D which will provide sufficient parking and flow for school buses while minimizing space needed for parking



# Refuge Access Plan



## Valle de Oro National Wildlife Refuge Access Plan Prioritized Projects

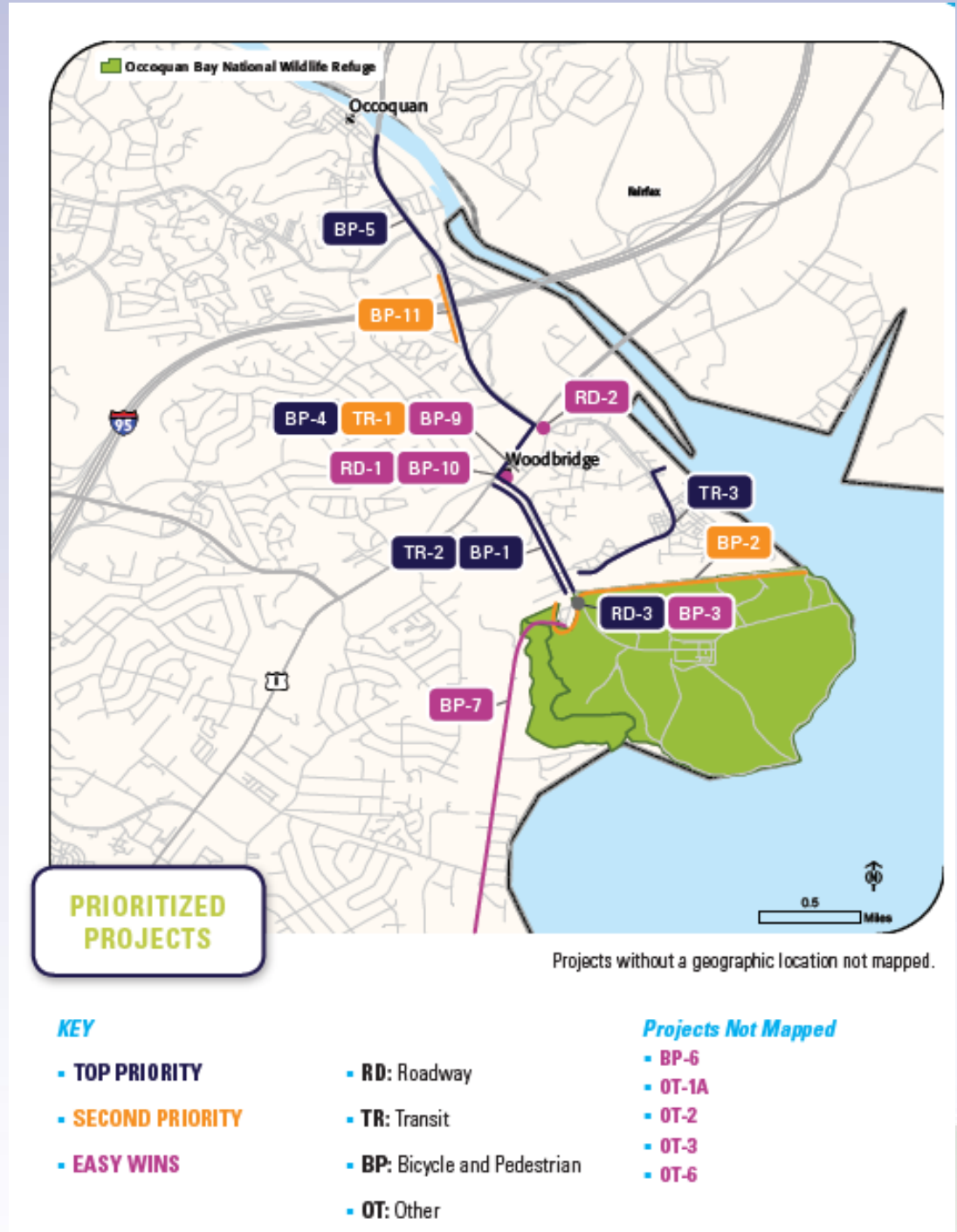
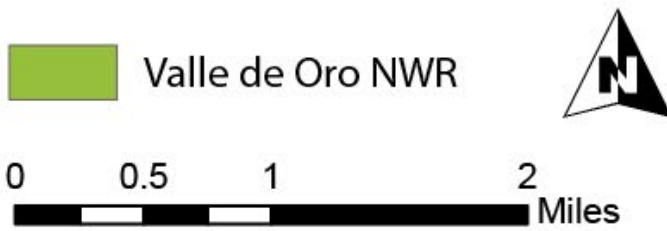
### Projects

- Top Priority  
Second Priority  
Easy Wins

- TR: Transit  
RD: Roadway  
BP: Bike/Pedestrian  
OT: Other

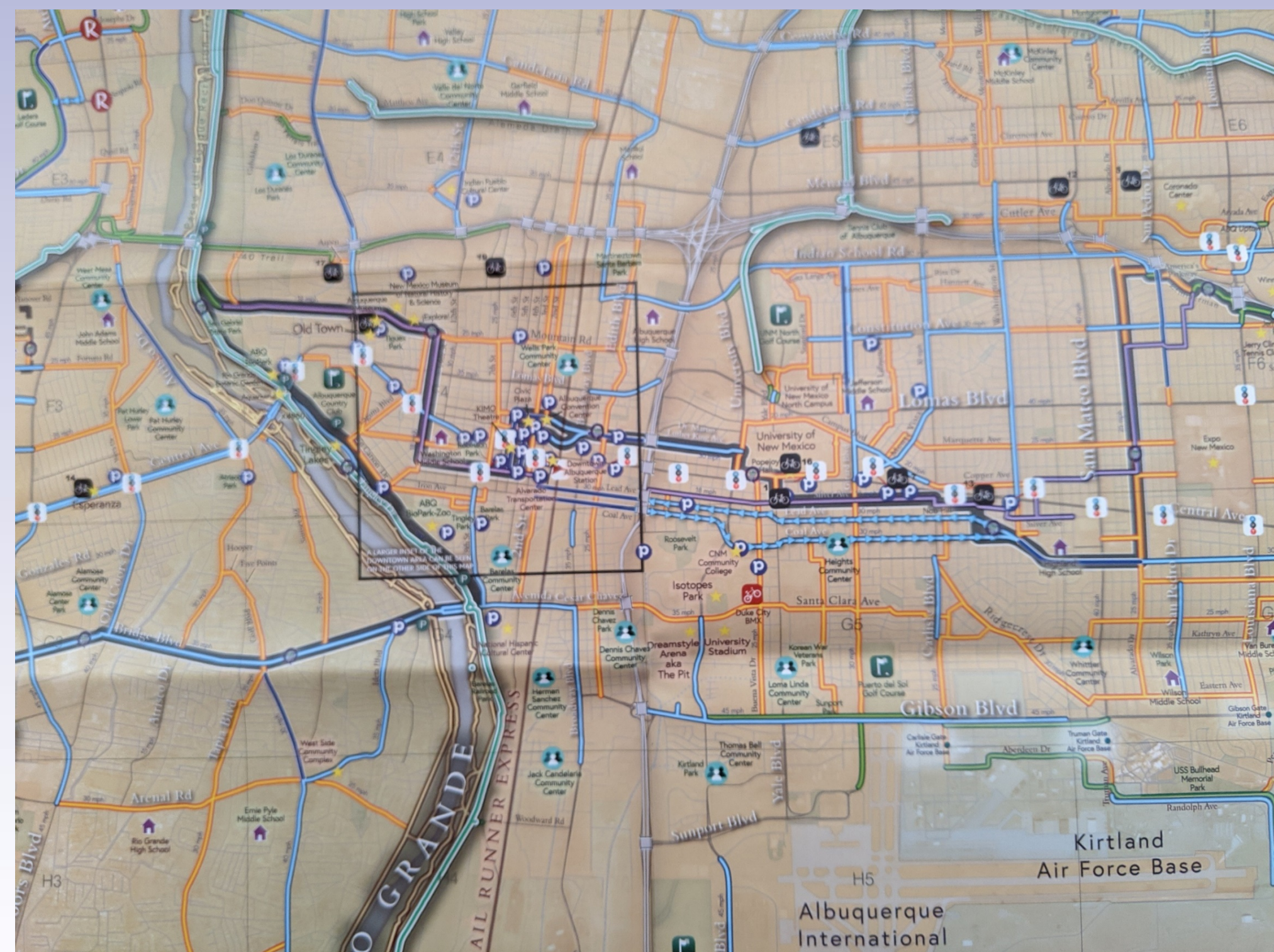
### Projects Not Mapped

- |      |      |
|------|------|
| BP-1 | OT-4 |
| BP-2 | OT-5 |
| OT-2 | OT-6 |
| OT-3 | OT-7 |





# Bike Share





# Signs and Wayfinding

Previous Friends Roadway  
Sponsorship sign



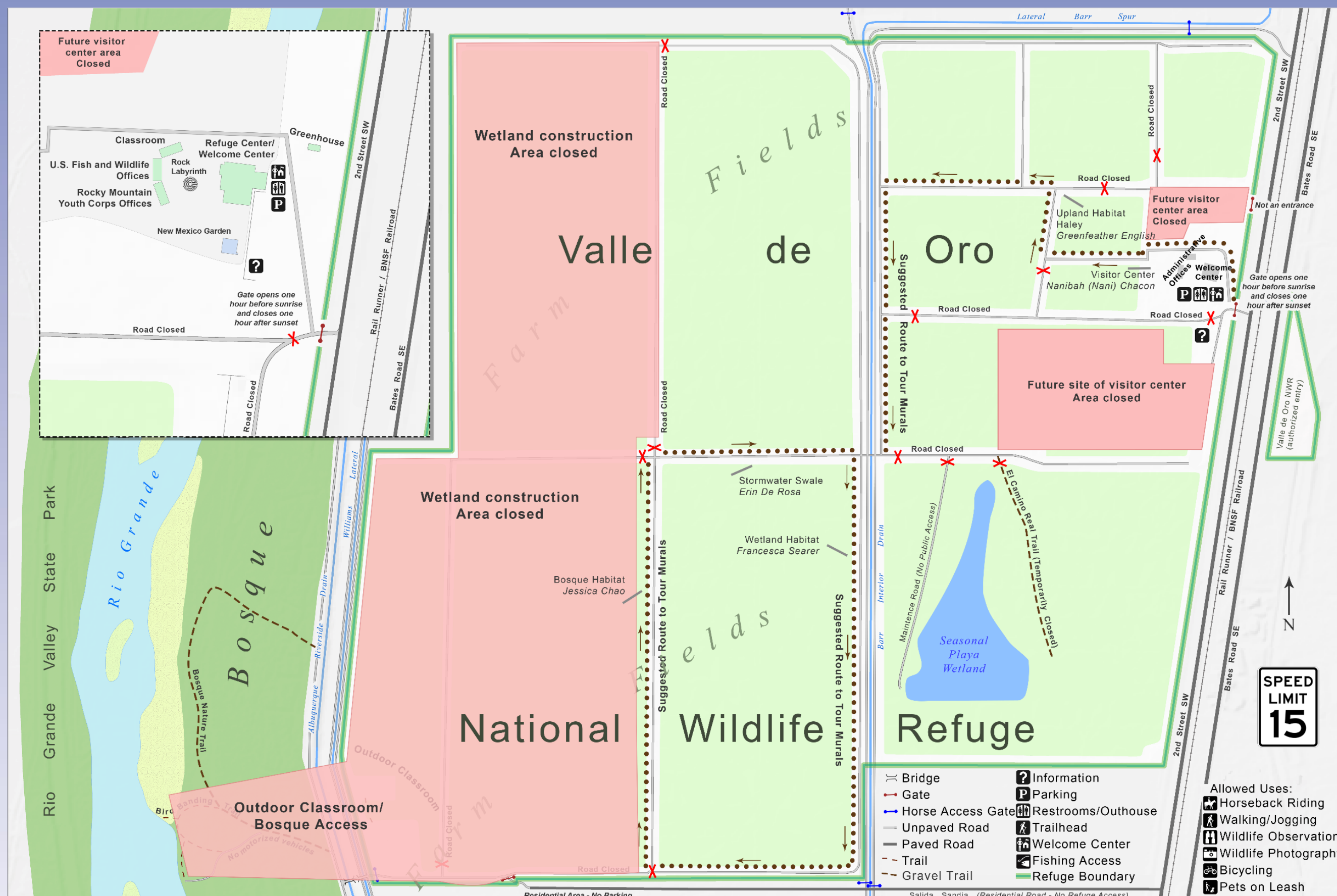
Current Friends Roadway  
Sponsorship sign



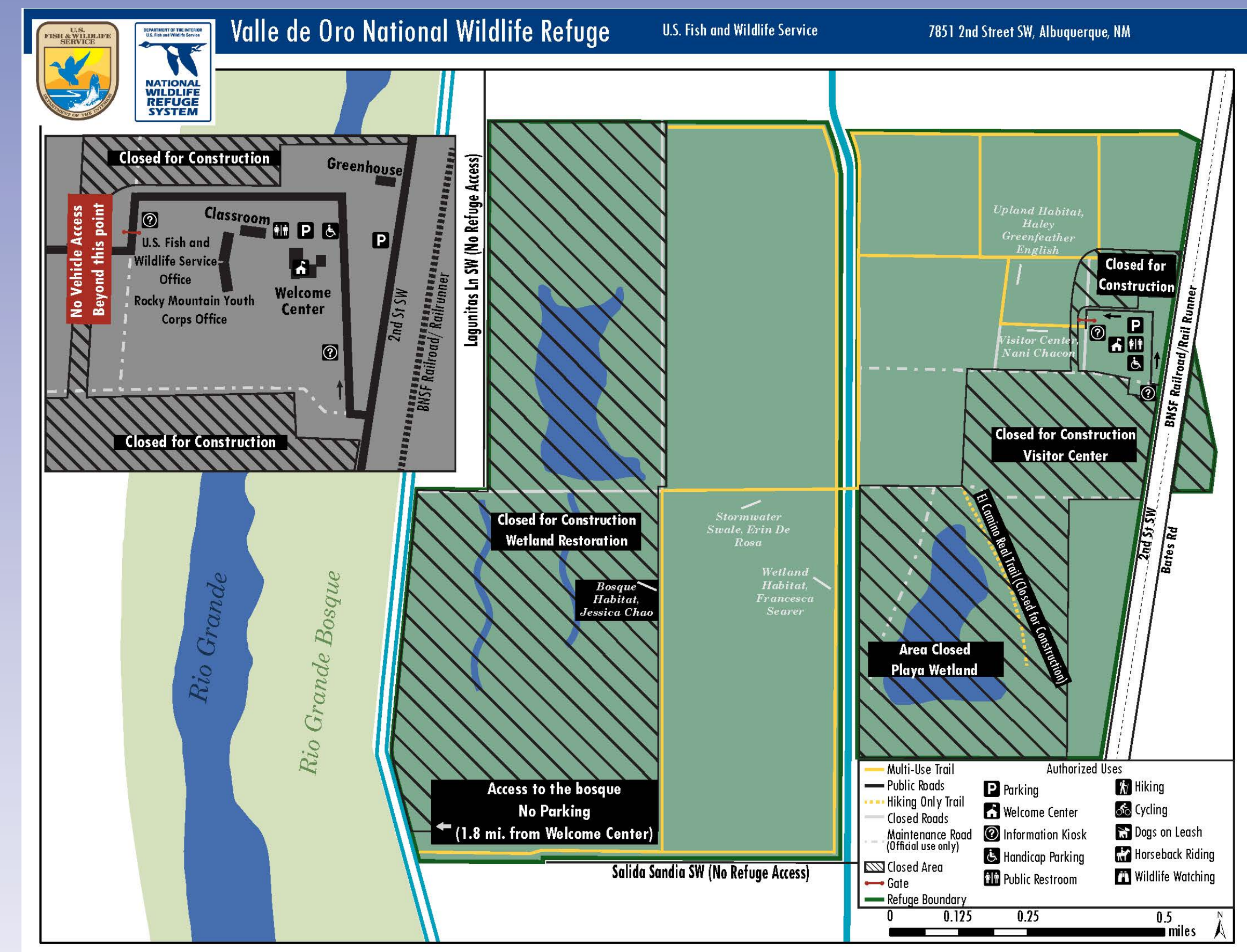


# Refuge Map

## Previous Refuge Sign

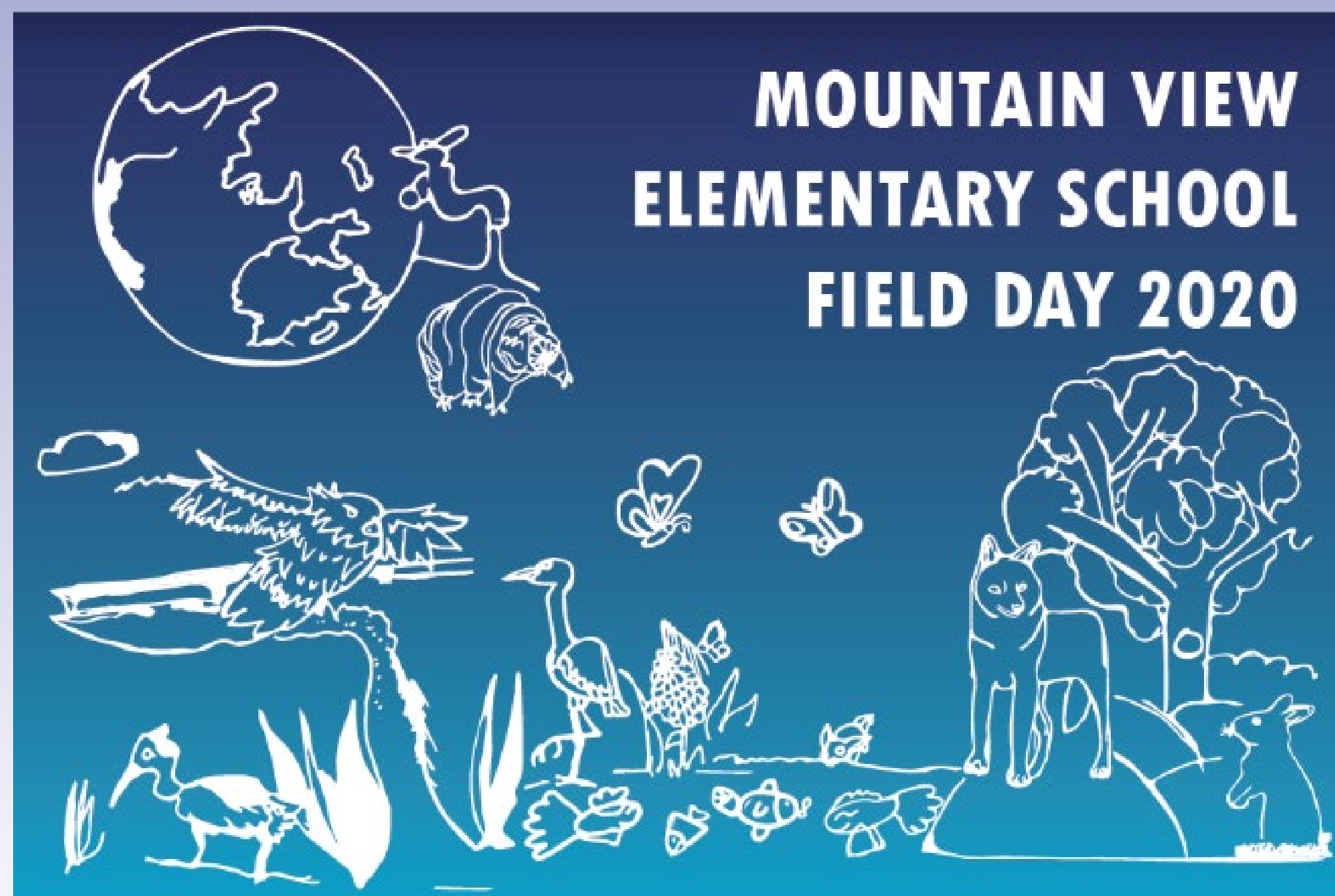


## Current Refuge Sign





# Art and Design





# Lessons Learned

- Your partners are your greatest asset
- Play within your strengths but don't be afraid to do things you aren't as comfortable with
- Flexibility is key
  - There is more than one way to get things done
  - Some things are out of your control, do what you can



# General Suggestions

- Reach out to partners new and old for help and inspiration
- Explore your surrounding area and see what makes it unique
- Take every opportunity to work alongside your fellow Refuge staff and get to know them
- Be honest and upfront with your project partnerships if things aren't going the direction you need them to
- Follow-up!
- Take the opportunity to pursue projects that you enjoy and have fun!



# Thank you

Including, but not limited to:

- Jennifer Owen-White, Katie McVey, Ariel Elliott, Teresa Skiba, Hannah Redwood, Toby Valdez-, Joe Mackey, Melanie
- Aryn LaBrake and Dave Barber and the rest of The Friends of VdO
- Natalie Villwock-Witte, Jaime Sullivan and the rest of the WTI staff
- Planning staff and representatives of Bernalillo County, the City of Albuquerque, and Mid-Region Council of Governments
- Transportation Fellows Vince Ziols and Naomi Fireman
- Mountain View Community



# Resources

- [Webinar: Creating Equitable Transportation Access to Urban Wildlife Refuges](#)
- [United States Access Board: Outdoor Developed Areas](#)
- [Best Practices for Electric Vehicle Supply Equipment Installations in the National Parks](#)

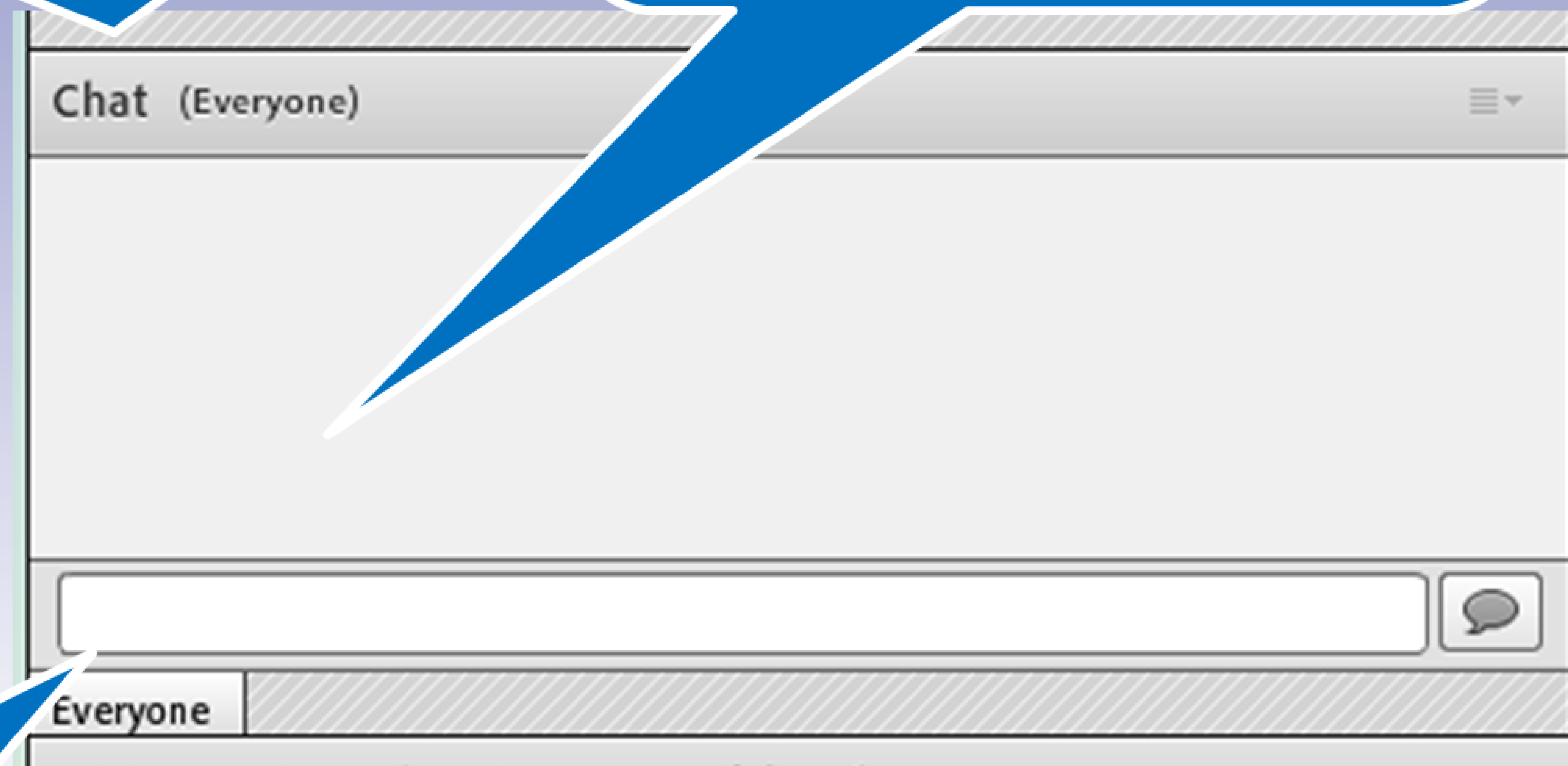


# Directing your Questions via the Chat Pod

1. Chat pod is on left side of screen between attendees pod & closed caption pod

3. Answers will appear here unless addressed verbally

2. Type your question or comment here





# Contact Information

*If you have any questions related to this presentation,  
please contact:*

*Refuge manager at [jennifer\\_owenwhite@fws.gov](mailto:jennifer_owenwhite@fws.gov)*

*or*

*Fellow at [nathanrbegay@gmail.com](mailto:nathanrbegay@gmail.com)*

***Or contact the PLTF Program Manager at:***

***(774) 571-3505 or [jaime.sullivan2@montana.edu](mailto:jaime.sullivan2@montana.edu)***

***<https://westerntransportationinstitute.org/professional-development/public-lands-transportation-fellows/>***