

# COMPASS Regional Park & Ride Study

JANUARY 8, 2021



**COMPASS**  
COMMUNITY PLANNING ASSOCIATION  
of Southwest Idaho



**WALKER**  
CONSULTANTS

# EXECUTIVE SUMMARY

The Treasure Valley community has a vested interest in more and better transit service. The Community Planning Association of Southwest Idaho (COMPASS), a metropolitan planning organization (MPO) providing regional collaboration and planning to support and maintain a healthy and economically vibrant Treasure Valley, has responded to this interest in part through this Regional Park and Ride Study. Developed in partnership with regional transportation agencies, this work is intended as both a long-range vision and a short-term action plan for the regional park and ride system to better serve the Treasure Valley community in keeping with goals developed in the Communities in Motion 2040 2.0 long-range transportation plan.



## PARTNER AND STAKEHOLDER COLLABORATION

This Study was produced in partnership with local agencies influencing the regional transportation and mobility space, including Valley Regional Transit, Ada County Highway District (ACHD) Commuteride, the Federal Highway Administration Idaho Division, and the Idaho Transportation Department. The study considers all modes of transportation anticipated to utilize park and ride facilities in the future and incorporates previous transportation planning efforts reflecting the visions for public transit investment set forth in ValleyConnect 2.0, Valley Regional Transit's plan for mobility beyond the single-occupancy vehicle for Ada and Canyon county residents.

In addition to these agencies, work to produce the study included four work sessions with stakeholders throughout the region. Participants included:

- Albertsons
- Association of Idaho Cities
- Boise GreenBike
- Boise State University
- Brookfield Properties
- Canyon County
- Capital City Development Corporation
- City Go
- City of Boise
- City of Mountain Home
- Idaho Association of Counties
- St. Luke's Health System
- State of Idaho

## WHAT WE HEARD

At the onset of the project, the Stakeholder Working Group and Project Management Team shared the following goals for the project:

- Learn more about park and rides and the park and ride system
- Expand connections with outer neighborhoods and increase access to alternative modes
- Create a strategic park and ride system that connects major arterials and makes sense with the public transportation system
- Augment local transportation investments, such as the City of Boise's investment in increased frequency/ service for the State, Fairview, and Vista transit lines
- Support local trips in addition to regional trips
- Understand how the communities' use the park and ride system
- Leverage the use of assets—such as the public parking garages downtown—for the park and ride system
- Improve access and amenities for new modes of transportation, such as e-scooters
- A result that makes it easier for providers and local jurisdictions to plan, build, and manage park and rides, with local communities actively engaged and empowered in that process
- A Plan that leads to a more robust park and ride system and induces more smart commuting
- A menu of strategies for park and ride services tailored to the unique style and aspects of travel in the Treasure Valley
- A Plan which takes into account how parking management and operational strategies can support smart commuting in different areas and contexts within Treasure Valley

## STUDY ORGANIZATION

This study is organized in two core sections: Foundation and Future.

The Foundation section sets the stage for actions and strategies recommended for the Treasure Valley Park and Ride System. This section discusses existing conditions of the park and ride system, influencing future conditions such as population and employment growth, financial decisions, and technological

advancement, and best practices used by other agencies under similar conditions.

The Future section outlines the recommended actions for the Treasure Valley Park and Ride System, including typology classifications, system expansion, a criteria and ranking system for future park and ride investments, and innovative funding mechanisms.

## **TREASURE VALLEY PARK AND RIDE SYSTEM: FOUNDATION**

The existing park and ride system provides parking for users of a broad range of mobility options for Ada and Canyon county residents, including the Valley Regional Transit bus lines and vanpool routes provided through Commuteride Club Red. The system encompasses both formal facilities—those owned and/or operated by an agency providing transit or mobility service—and informal facilities, where spaces are made available by a private owner and operator. At present, approximately 76% of the facilities in the system are informal. Systemwide, the park and rides have a lack of consistent signage, wayfinding, and maintenance standards, amenities, and first- and last-mile connections due to their primarily ad-hoc nature. In addition, many of the park and rides were created or initiated to serve a small number of users, or even used as a “placeholder” of sorts for new land acquired by the ACHD. As such, while the system can effectively serve loyal users, it has limited capability to strategically respond to the growing and evolving needs of its expanding community.

In the future, several sub-areas within Treasure Valley are expected to achieve significant employment and population growth, indicating increased need for transit and associated park and ride service. While commuters from outside the area will continue to impact transportation within the greater Treasure Valley area, for the purposes of this study, the Treasure Valley area focuses on the COMPASS planning area of Ada and Canyon Counties. Non-single-occupancy vehicle (SOV) commuting methods will have to be convenient and efficient enough to compete with the lure of SOV travel, which has trended upwards in the region over the last decade due to generally declining gas prices and investment from state transportation agencies to reduce congestion and increase travel speed.

Nationwide, many other transit agencies are examining how to best prioritize investment and site new park and rides, support non-SOV commuting through incentives and regulation, and partner with local jurisdictions to improve access to park and ride systems. Best practices from other agencies experiencing similar challenges and opportunities as the Treasure Valley—those covering broad regions with differing and often competing needs and interests, for example—have been used as inspiration and direction for the future Treasure Valley Park and Ride System.

## TREASURE VALLEY PARK AND RIDE SYSTEM: FUTURE

The future Treasure Valley Park and Ride System should focus on broad classification of park and rides across three core typologies: high-density or “mobility hub”, medium density, and low density. Each of these classifications is built around the typical user—their trip length, destination, first- and last-mile connection options, and unique needs.

In the next one to two years, it is recommended that COMPASS and its partners look to standardization of existing park and rides, with clear maintenance standards, signage and wayfinding standards, and regular updates to online resources for trip planning. Over the next five to 20 years, COMPASS and partners should look to formalize, enhance, and expand existing park and rides in core service areas, and identify new park and rides in areas where bus service is projected for expansion or there are significant opportunities for intercepting long commutes. Future investments—whether building new park and rides or adding to existing ones—should be guided by a clear and quantifiable ranking system. The ranking system developed as part of this work includes metrics for declining, assessing, or pursuing investment opportunities.

## NEXT STEPS

Implementation of recommendations in the next one to two years should center augmentation of the existing park and ride system. This includes actions such as expanded, regimented data collection, standardization of existing park and ride facilities, continued development of partnerships with jurisdictions and major employers, and formalization of a scoring methodology to assist COMPASS and its partners with prioritizing new investments.

Implementation in the next five to 20 years should center strategic expansion of the park and ride system. This includes actions such as continued data collection, formalization of select existing informal park and rides, establishment of new park and ride locations, and continued partnership development.

Ongoing collaboration with stakeholders identified as part of this process is also recommended on an ongoing basis to build broad support for the park and ride system and create opportunity for joint funding and other partnerships.

## HOW TO READ THIS DOCUMENT

This document is intended to be a dynamic tool, that while will be available to the public, will be used internally to inform COMPASS planning decisions. Chapter One provides much of the foundational research and analysis of the existing programming and best practices reviewed as part of this effort. Chapter Two focuses on the future conditions of the COMPASS planning area and resulting recommendations for the park and ride system.

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# FOUNDATION



## CHAPTER 1.1: EXISTING CONDITIONS

This chapter discusses existing park and ride facilities throughout the greater Treasure Valley region and the context of the local history and environment, including an inventory of existing park and ride facilities in the area, and several characteristics of these sites to determine their effectiveness in serving expanded and evolving demand in the future. Because the existing park and ride system was developed to and does predominantly serve vanpool riders participating in the Commuteride program, additional information directly relevant to the existing system for this program is provided. This information includes marketing, budgeting and history of the park and ride system. Other programs, such as transit and alternative modes are provided in the current state for context as they are projected to have greater influence and synergy with future park and ride system decisions.

### KEY FINDINGS

- Based on the limited existing parking demand information available, it appears many existing park and ride facilities have capacity to fulfill additional vehicle demand.
- There is a general lack of connectivity to first and last mile travel options serving existing park and ride facilities.
- Existing vanpool routes are demand-driven and determined based on rider requests, as opposed to fixed routes as used in public transit, which contributes to a tendency to strongly favor a select few employers/destinations, impeding the ability to attract and serve new riders.

### EXISTING TYPOLOGY DEFINED

**Park and Ride** facilities are parking lots and structures, often with connections to public transport, that allow commuters to store their vehicles and transfer to a higher capacity transportation option such as rail, bus, vanpool, or carpool for the remainder of their journey.

**Formal facilities** are park and ride locations leased, signed and managed by the Ada County Highway District (ACHD) or other transportation agencies, such as Idaho Transportation Department (ITD) or Valley Regional Transit.

**Informal facilities** are park and ride locations provided at existing facilities, often private properties through agreements, that have a different primary use. These locations include retailers, grocery stores, and churches, among others. Many of these are informal agreements between ACHD Commuteride and private businesses for limited vanpool usage and are not intended for general public usage.



## EXISTING TDM PROGRAMS

Transportation Demand Management (TDM) provides programs, services, and policies designed to encourage smart commuting choices to help mitigate traffic and congestion impacts associated with the use of personal vehicles and improve mobility and accessibility within the area.

### *COMPASS*

The Ada Planning Association was the original metropolitan planning organization (MPO) for the Boise Urbanized Area. It later became COMPASS and expanded to include the Nampa Urbanized Area, as well. The current COMPASS planning area encompasses both Ada and Canyon Counties. Under its Joint Powers Agreement, COMPASS, with its Board's direction, can work with agencies in the ten counties in Southwest Idaho.

### *ACHD COMMUTERIDE*

A program of the Ada County Highway District, Commuteride provides resources to help the Treasure Valley area make smart commuting choices through education, coordination of rideshare services, and strategic partnerships. Examples of such existing partnerships include Club Red, Share the Ride Idaho, and City Go.

## PROGRAM HISTORY AND CONTEXT

ACHD Commuteride and the associated existing park and ride system of formal and informal lots grew from grassroots vanpool programming that began in the 1970s, the first program of its kind in the nation. Initially, individuals would record their locations and hours of travel to identify matches. Once sufficient demand was achieved a vanpool was created. While initially commuters called into a centralized phone number to participate, commuters are now able to administer their membership online. During the height of the program, in 2014, in the aftermath of the Great Recession and when gas prices were at some their historically highest rates, the program served approximately 106 vanpools.

The broad mobility and transportation goals of Commuteride are to reduce vehicle miles traveled and expand transportation demand management initiatives throughout its planning area.

### **COMMUTERIDE WORKS**

Commuteride Works supports employers in their efforts to create and implement a customized commute benefits program. More recently Commuteride has partnered with Bogus Basin Recreation Area to help implement a carpool parking program and one-time trip matching service, as well as vanpool services for employees of the resort.

## EXISTING BUDGET

Commuteride works on an average annual budget of approximately \$2.5 million. The Club Red vanpool program comprises much of the budget, with 100% of the program's operations provided by rider fares. Additional funding is provided by the Federal government, ACHD, the sales of retired vans, sponsorships, and ITD. Several funding sources, however, come with specific requirements on the use of the monies. For instance, ACHD funding may only be utilized within the boundaries of Ada County. Additionally, Federal funds are reserved primarily for capital purchases, including replacement vans, and some marketing costs.

Vanpool operations, including administration of the program, marketing and outreach comprise the largest portion of the budget at over \$1 million annually. Next, at approximately \$600,000 annually is replacement of aging vans serving the routes. Annual marketing costs for smart commuting outside of the Club Red vanpool program range from \$30,000 to \$120,000, with those funds providing paid advertisements in the form of radio spots and billboards. The remainder of the budget provides for reserves, TDM initiatives, and the rideshare platform.

## EXISTING MARKETING

Through a recent strategic marketing plan process, ACHD Commuteride has expanded their marketing focus from strongly promoting vanpooling to a more holistic smart commuting message. ACHD Commuteride has two main annual marketing campaigns in addition to ongoing advertising in the form of billboards and radio placements. The first annual campaign is known as May in Motion and is directed toward employers. During the May in Motion event, Commuteride works one-on-one with the area employers (by workforce size) to develop programs promoting smart commuting. Programming is often competitive in nature and includes games and prizes. The second annual campaign, Ridetober, is in its fourth year and provides a similar competitively driven, smart commuting event to individuals and self-organized teams. Smart commutes are tracked through Share the Ride Idaho for opportunities to earn rewards.

## CLUB RED

Club Red is a self-funded vanpool program provided by Commuteride. Vanpools are driven by a volunteer member of the vanpool, with each vanpool required to have two volunteer drivers to be approved by Commuteride, who owns and maintains the vans. Additional amenities provided to members of Club Red include up to 6 emergency rides home (or up to \$300) per year, discounted membership for Boise GreenBike, and discounts at Les Schwab Tires and Wahooz Family Fun Zone. Potential members are provided a 30-day free trial, with members required to pay fees in advance and provide a 14-day notice of intent to terminate membership. Vanpool members have a 3-minute grace period at each stop, after which time the vanpool will leave without them. Vanpool fares range from \$72 to \$230 per month based on the distance of the member route.

**Table 1.1-1: Club Red and State of Idaho Demographic Quick Facts**

	CLUB RED	STATE OF IDAHO
Have at least 1 vehicle available	88%	78%
<b>Gender</b>		
Female	49.70%	49.90%
Male	50.30%	50.10%
<b>Age</b>		
18-24 years	1%	9%
25-34 years	10%	18%
35-44 years	18%	17%
45-54 years	39%	16%
55-64 years	28%	17%
65 years or older	5%	22%
<b>Income</b>		
Less than \$50,000 per year	45%	38%
\$50,000-\$100,000 per year	33%	53%
More than \$100,000 per year	22%	9%

Source: Club Red, U.S. Census

Administration of the vanpool programming is not without logistical challenges that present the potential for unique opportunities. The workforce is changing in that individuals are not as restrained to a traditional 8:00 a.m. to 5:00 p.m. schedule. More households are combining trips with stops not only on their way home from work but to work as well. More employers are providing opportunities for flexible hours and/or to telework, or work remotely, one or more days per week. The up and coming workforce grew up in an on-demand consumer culture where movies, groceries, and vehicles can be requested and delivered on a moment’s notice.

Not only is the workforce changing, but the cost for administration of the program and the operations and maintenance of the park and ride facilities is not always supported by local municipalities and counties, and funding sources often come with restrictions for where and for what those funds can be used. These limitations have led to some facilities outside the purview of Commuteride to be neglected by local agencies, with their disrepair leading to reduced utilization. Because much of their funding sources are tied to ACHD, programming has a heavy presence in Ada County. The following section provides more on the TDM programming components throughout Ada and Canyon Counties serving the COMPASS planning area.

Recently, Club Red has explored offering part-time and on-demand memberships. Currently, eight riders have reported to utilize the part-time option. Two additional riders have utilized the option of flex seating on vanpool routes to meet their scheduling needs. Launch of an on-demand exploration

option was delayed with the onset of the pandemic and reduction in demand, with plans to launch in the future as vehicle trip miles increase again.

Based on a comparative analysis of Club Red's annual respondents' vehicles available per household to the American Community Survey<sup>1</sup> conducted for the same year, Club Red riders report a higher occurrence of having a vehicle available in their household compared to the general population of Idaho. In 2018, the most recent year for which there is available data for both cohorts, 88% of Club Red riders reported having access to a vehicle for commuting to work, while only 78% of households throughout Idaho report having at least one vehicle available for the household. **Table 1.1-1** provides a comparison of the Idaho general population and Club Red riders' demographics for reference.

## SHARE THE RIDE IDAHO

Share the Ride Idaho is a rideshare matching platform managed by Commuteride and funded by the Idaho Transportation Department that incorporates several modes of travel including bicycles through identification of bike lanes, bike share locations, bike repair stations and shared bike routes; transit service; walking; carpool and vanpool; and personal vehicle. By entering the trip origin and destination points, Share the Ride Idaho provides distances and total anticipated travel times per mode choice. Registration for the program is free to track commutes and earn points for smart commuting toward rewards, but may require membership in commute programs, such as Club Red. With 600 points provided for registering an account, just 64 days with two-way smart commutes can lead to a \$10 gift card to popular retailers such as Amazon, Apple, Sephora, REI and more.

Prior to January 2020, from 2016 through 2019, a similar program provided commuters a \$10 reward gift card after smart commuting for 36 days. Commuters were eligible to earn a gift card each quarter. Review of recipients, however, revealed that the same recipients were earning rewards each quarter, rather than incentivizing new users or changing behaviors.

## CITY GO

City Go provides mobility options to the Downtown Boise business community in partnership with ACHD Commuteride, Boise State University, Capital City Development Corporation, City of Boise and Valley Regional Transit. Programming is targeted both to employers and individuals. City Go members may purchase discounted bus tickets, Club Red vanpool fares, carpool parking, locked bicycle facilities, and parking vouchers (up to 4 days per month) and receive a free membership to Boise GreenBike. Corporate members can receive assistance with trip reduction planning to support their employer commuter

<sup>1</sup> American Community Survey, 2018. <https://data.census.gov/cedsci/table?q=All%20counties%20in%20Idaho&tid=ACSDP1Y2018.DP04&hidePreview=false&vintage=2018>

program, with membership extended to each employee on the corporate account.

### ***VALLEY REGIONAL TRANSIT (VRT)***

VRT is the regional public transportation authority for Ada County and Canyon County, managing the contract for operations of ValleyRide bus service and ACCESS paratransit service and mobility assistance. ValleyRide provides 18 fixed-line routes in Ada County and 3 in Canyon County, with four intercounty routes between Ada County and Canyon County. A standard adult fare ranges from \$1.50 for a single ride or \$2.50 for a day pass for local routes, to \$4.50 for a single universal ride or \$7.50 for a universal day pass. A 31-day pass is available for adults at \$42 for local routes and \$90 for universal routes. Universal passes and routes include intercounty routes between Ada and Canyon Counties. Additionally, rider can benefit through a partnership with Lyft that extends transit through the availability of \$2 flat fee rides from a trip origination point to a ValleyRide bus stop. For those working shifts that do not coincide with transit services, the VRT Late Night program provides \$3 Lyft rides to and from work for income-qualified riders when the bus is not running.

### ***BOISE GREENBIKE***

Boise GreenBike is Boise's docked bikeshare service for those 16 years of age or above, also managed by VRT. Costs range from \$5 per hour to up to \$100 per year plus ride time over daily limits, with four individual membership options available. Station hubs and flex hubs (designated, ordinary bike racks) are located throughout Downtown Boise and surrounding areas, including Boise State University and Garden City. Boise GreenBike is also planning for a new dockless system, with an anticipated launch of 2021.

### ***MUNICIPAL TDM SUPPORTIVE POLICIES***

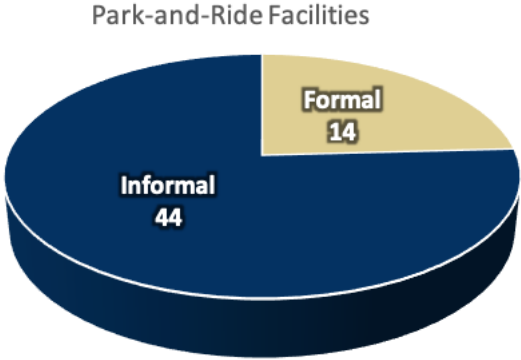
Many municipalities throughout the country provide incentives for developments that are designed to promote alternative modes of transportation and/or reduce patron reliance on personal vehicles. Boise, for example, provides an administrative approval process for a reduction up to 10% in the minimum parking requirement for multifamily residential developments located within a quarter mile of an existing or planned transit line.<sup>2</sup>

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<sup>2</sup> Boise Municipal Code Title 11 Chapter 6 Section 3. Residential Use Standards

**EXISTING FACILITIES**

There are 58 existing park and ride locations supported by ACHD Commuteride, Idaho Transportation Department and VRT, and others. Of these, 14 are formal facilities managed by area transportation entities and 44 are informal parking areas provided by a private entity with another primary use. With the exception of one location, the Elder Street Park and Ride, all parking is provided at no cost to park to commuters. Two facilities, the Sunrise Park and Ride and the Jacksons Shell Park and Ride, charge a combined \$600 per quarter lease fee. Leasing fees for park and ride facilities are included in operational expenses that are covered by fare revenues. These facilities serve, in part, 73 vanpool routes.



**Table 1.1-2** below and continuing on the following pages summarizes the facilities shown in **Figure 1.1-1** on **Page 11**, providing additional information on the type of facility and the land use context of the surrounding area. Note that while at some park and ride stations the average number of bus boardings and alightings is not known, park and rides in total generate roughly 1,400 boardings and alightings<sup>3</sup> daily. Excluding transit centers, there are nearly 500 daily boardings and alightings near park and rides.

<sup>3</sup> Average bus boardings and alightings refers to the average total number of people getting off or on a bus at a station each day.

**Table 1.1-2. Park and Ride Location Summary**

MAP ID	FACILITY NAME	CITY	TYPE	LAND USE CONTEXT	AVG. BUS WEEK-DAY BOARDING & ALIGHTINGS
1	Retail Center P&R	Nampa	Informal	Shopping center off I-84	15
2	Medical Campus off I-84	Meridian	Informal	Medical campus off I-84	No Service
3	Retail Center P&R	Boise	Informal	Shopping center off I-184, near junction with I-84	973
4	Rackham P&R	Meridian	Formal	Just off frontage road of I-84 near commercial district	No Service
5	Gem Ave P&R	Meridian	Formal	Gem Ave in low-density commercial transitional area approximately half mile north of I-84	No Service
6	Country Terrace P&R	Meridian	Formal	Commercial area off I-84	12
8	Jacksons Shell P&R	Nampa	Formal	Truck stop off I-84	No Service
9	Shilo P&R	Nampa	Formal	Behind the hotel off I-84; light industrial and low-density commercial area	No Service
10	Ballantyne Rd P&R	Eagle	Formal	Off of SH44, residential/agricultural area	No Service
11	Riverside Dr P&R	Eagle	Formal	Frontage road lot off Hwy 44 between commercial and residential areas	No Service
12	CWI P&R	Nampa	Formal	Small college campus in suburban residential area; I-84 approx. 1.5 miles south	28
13	Happy Day P&R	Caldwell	Formal	Happy Day Transit Center	54
15	Middleton P&R	Middleton	Informal	New park in a residential area	No Service
16	Ten Mile P&R	Meridian	Formal	Half mile off I-84 in residential area	32
17	Elder Street P&R	Boise	Formal	Off I-84 north of airport, paid parking	2
18	Emmett P&R	Emmett	Informal	Off SH16; edge of suburban area with light, low-density commercial	No Service
19	Sunrise P&R	Mountain Home	Formal	Dirt lot off I-84	No Service
20	Star P&R	Star	Informal	Church in a residential area	No Service
21	Fraternal Organization/Community Center	Caldwell	Informal	Residential area; across from a park; off I-84; van parking only	No Service
22	Shopping Center on Cleveland Blvd.	Caldwell	Informal	Commercial strip surrounded by residential along business route of I-84	8
23	Grocery Store	Caldwell	Informal	1/4 mile from I-84; two blocks from courthouse; main street type area	2

MAP ID	FACILITY NAME	CITY	TYPE	LAND USE CONTEXT	AVG. BUS WEEK-DAY BOARDING & ALIGHTINGS
25	Black Canyon Stock Pile P&R	Payette County	Informal	Off I-84 at truck stop	No Service
27	Albertsons on ID-16	Emmett	Informal	Commercial and residential area	No Service
28	Enterprise St. & Washington Ave.	Emmett	Informal	Auto shop on edge of town	No Service
29	Senior Center	Idaho City	Informal	Edge of residential area at senior center	No Service
30	Grimes Creek Rd. & Hwy 21	Boise County	Informal	Dirt lot off shoulder of county road	No Service
31	Church	Caldwell	Informal	Church just off I-84	No Service
32	Retail Store on American Legion Blvd.	Mountain Home	Informal	Low density shopping center off I-84	No Service
34	Restaurant on Northside Blvd.	Nampa	Informal	Shopping center off I-84	0
35	Church on Midland Blvd.	Nampa	Informal	Residential area; across from a school	No Service
37	Retail Store on Marketplace Blvd.	Nampa	Informal	Shopping center off I-84 with several big box stores	18
38	Retail Store on 12th Ave.	Nampa	Informal	Commercial and residential area	10
39	Retail Store on Marketplace Blvd.	Nampa	Informal	Shopping center off I-84	13
40	Church on 16th Ave. S.	Nampa	Informal	Church in a residential area	1
41	Retail Store on Caldwell Blvd.	Nampa	Informal	Commercial strip along business route of I-84	12
43	Retail Store on Idaho Ave.	Ontario, OR	Informal	Shopping center off I-84	No Service
44	Church on US-95	Wilder	Informal	Dirt lot off shoulder of state highway just outside of town	No Service
45	Military Installation	Boise	Informal	Boise airport, National Guard area	No Service
46	Retail Store on Overland Rd.	Boise	Informal	Shopping center off I-84 near junction with I-184	57
47	Retail Store	Boise	Informal	Light industrial area east of airport off of I-84	9
48	Retail Store on Overland Rd.	Boise	Informal	Shopping center off I-84 near junction with I-184	57
50	Restaurant on Spectrum St.	Boise	Informal	Shopping center next to residential area	11
51	Retail Store on Franklin Rd.	Boise	Informal	Shopping center off I-184	No Service
52	Retail Store on Overland Rd.	Boise	Informal	Shopping center in residential	7
53	Retail Store on Broadway Ave.	Boise	Informal	Former retail store off Broadway Ave. and S Federal Way; edge of low-density commercial to residential area	10
54	Grocery Store on Avalon St.	Kuna	Informal	Grocery store with residential to the north and low-density commercial to the south	No Service



MAP ID	FACILITY NAME	CITY	TYPE	LAND USE CONTEXT	AVG. BUS WEEK-DAY BOARDING & ALIGHTINGS
55	City Park on Deer Flat Rd.	Kuna	Informal	Residential area	No Service
56	Private Business at Meridian Rd. & Deer Flat Rd.	Kuna	Informal	Grocery store just outside residential area transitioning to rural	No Service
57	Retail Store on Eagle Rd. & Ustick Rd.	Meridian	Informal	Commercial shopping center surrounded by residential	No Service
58	Church on Ten Mile Rd.	Meridian	Informal	Church in a residential area	No Service
60	Retail Store on Overland Rd.	Meridian	Informal	Shopping center off I-84; across from Roaring Springs Water Park and Wahooz Family Fun Center	66
61	Shopping and Entertainment Center	Boise	Informal	Outlet shopping center off of I-84	No Service
63	Walking Path Parking Lot on 8th North St. & American Legion Blvd.	Mountain Home	Formal	Low density shopping center off I-84	No Service
66	Private Business at I-84 Exit 90	Mountain Home	Informal	Off I-84; surrounded by fields	No Service
67	City Park on Centennial Way	Caldwell	Informal	Park just off I-84	No Service
68	Local Park on Warm Springs Ave.	Boise	Informal	Local park on Warm Springs Avenue – festival parking seasonally	No Service
69	Private Business on Lake Hazel Rd.	Boise	Informal	Residential neighborhood	No Service
70	Saxton Drive and Gary Lane	Boise	Formal	New Park and Ride near mixed use multi-family housing; just off of State Street (Highway 44)	40

Source: *Commuteride, COMPASS*

## CAPACITY

Based on recent observations of a sample of 10 park and ride facilities completed by Commuteride staff, utilization of parking at the facilities ranged from 2% to 80%. Prior to the impacts of COVID-19, Commuteride staff observations of park and ride facilities indicate that two facilities along State Street are significantly underutilized. This underutilization is attributed to the perceived difficulty in locating the facilities, even with existing signage in place. However, the Ten Mile and Rackham Road park and rides, identified as 16 and 4 on the west side of Ada County in Figure 2, are often fully utilized. The challenges presented at Rackham Road, and several other locations, are perceived to be attributable to the nature of the land. Many park and ride facilities were made available to Commuteride from leftover right-of-way associated with completed road projects.

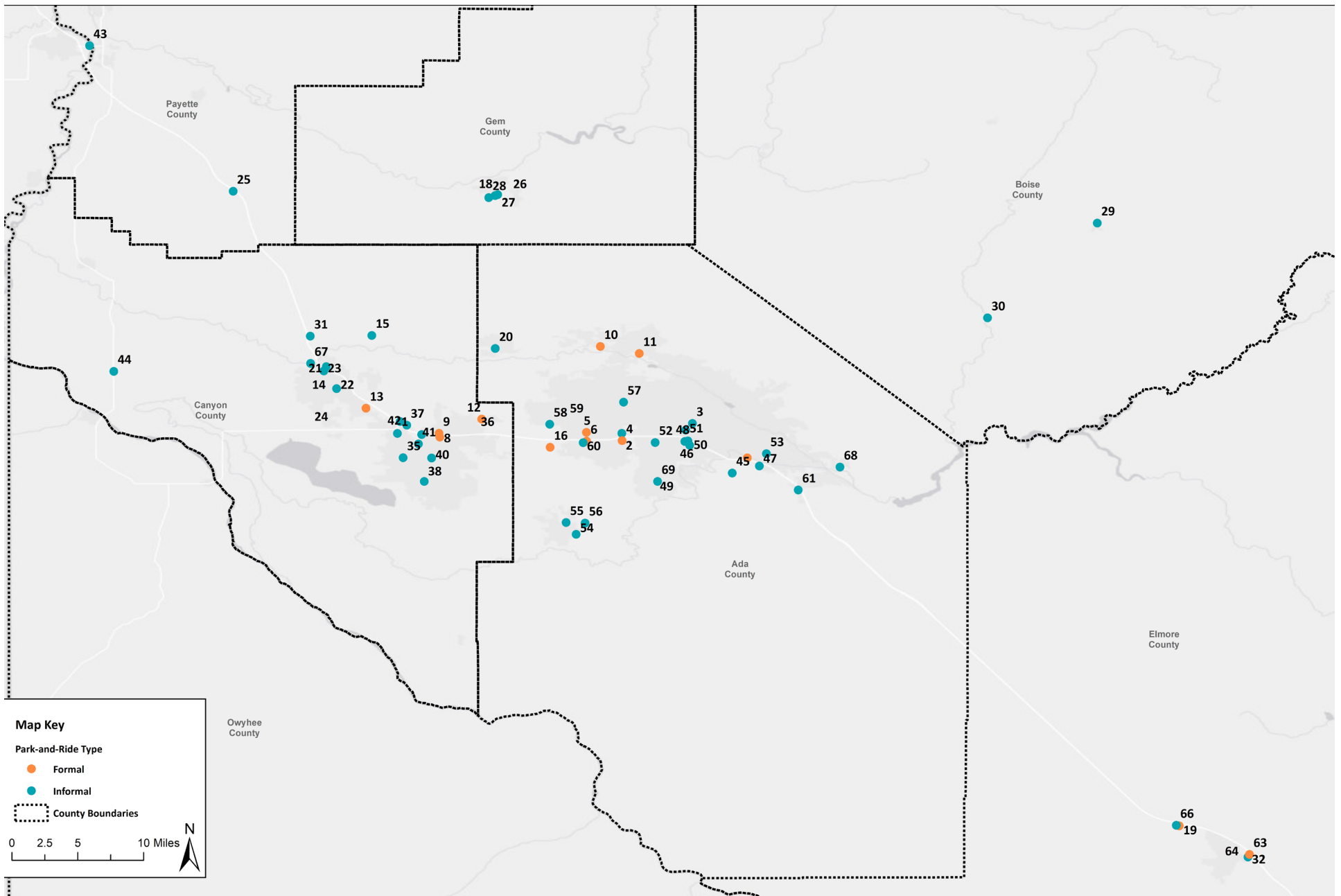
## EXISTING SIGNAGE

Signage at the existing park and ride facilities varies. Some lots are clearly marked with signs that are in good condition as shown in the photo below. Other locations, predominantly informal park and rides, have signage that is reportedly poorly located, in disrepair, or not authorized to post per the agreement. Current records indicate only 18 existing locations have signage. These are largely formal park and ride locations.



Example of Existing Park and Ride Signage

**Figure 1.1-1. Park and Ride Location Map**



Source: Commuteride  
FOUNDATION

## GENERAL CONDITIONS

A sampling of 12 park and ride facilities was completed by Commuteride and COMPASS staff. Commuteride's sample included the conditional observations noted and was completed in June of 2020. The COMPASS observations were completed over the course of July through November 2019 and focused specifically on utilization of the facilities. Observations such as those presented in **Table 1.1-3**, analyzed in conjunction with location and qualitative feedback received through the annual survey, inform on why certain lots may be better utilized than others and what characteristics are desirable in future locations.

**Table 1.1-3. General Conditions Park and Ride Locations, Sample Lots**

FACILITY	TYPE	SURFACE	PARKING UTILIZATION	LIGHTS	SIGNAGE	AMENITIES
1 Retail Center P&R	Informal	Paved	3%	Yes	No	None
2 Medical Campus off I-84	Informal	Paved	40%	Yes	Yes	Shelter
4 Rackham P&R	Formal	Paved	28%	Yes	Yes	Shelter Bike Locker
5 Gem Ave P&R	Formal	Paved	16%	No	Yes	None
8 Jacksons Shell P&R	Formal	Gravel	60%	No	Yes	None
9 Shilo P&R	Formal	Paved	28%	No	Yes	None
10 Ballantyne Rd. P&R	Formal	Paved	5%	Yes	Yes	Shelter Bike Locker (capacity of 4)
11 Riverside Dr. P&R	Formal	Paved	2%	Yes	Yes	Bike Locker (capacity of 8)
12 CWI P&R	Formal	Paved	3%	Yes	Yes	Shelter Bike Racks Emergency Phone
14 Jefferson Middle School P&R	Formal	Paved	11%	Yes	No	None
16 Ten Mile Park and Ride	Formal	Paved	49%	Yes	Yes	Shelter
18 Emmett P&R	Informal	Paved	14%	Yes	Yes	None

Source: Commuteride, COMPASS

## VANPOOL ROUTES

According to the 2019 vanpool rider survey, 66% of respondents receive some level of subsidy or an incentive from their employer to participate in the vanpool program. Employees at Mountain Home Air Force Base (MHAFB), Veterans Affairs, and Gowen Field receive subsidies covering 100% of their fees. Due to this level of reimbursement, 57 of 73 vanpools terminate at one of these three facilities, even though only MHAFB ranks within the top 25 largest employers in the state.<sup>4</sup> Figure 1.1-2, on the next page, shows the approximate start and end points for each vanpool route, connected by the routes' corresponding park and ride locations used by riders.

<sup>4</sup> Idaho State Profile: Largest Employers <https://www.careerinfonet.org/oview6.asp?soccode=&st-fips=16&from=State&id=11&nodeid=12>

Notably, vanpools utilize 40 of the 58 identified park and ride locations. Meanwhile, 18 park and ride locations are not reported to currently be in use for the vanpool program.

Vanpool routes have a reported 70% load factor, averaging 8.6 occupants per van. While a new vanpool route requires a minimum of 7 riders, some existing vanpools, such as minivans with fewer seats, have as few as 4 riders. The reduction in capacity on these routes creates challenges concerning scheduling and maintaining sufficient riders in each van, with multiple vans serving similar routes.

As previously mentioned, and largely due to employer subsidy programs, vanpool routes are not proportionately reflective of the COMPASS planning area’s largest employers. For instance, the seventh largest employer in Ada and Canyon Counties is the Department of Veterans affairs with 7 dedicated vanpool routes. Whereas Saint Alphonsus Hospital, the largest employer in the two counties does not have a dedicate vanpool route. **Table 1.1- 4** summarizes the ten largest employers in Ada and Canyon Counties and the dedicated vanpool routes that serve their employees. Not included in the list below, due to their location outside of Ada and Canyon Counties but having a large workforce base from these counties is the Mountain Home Air Force Base (MHAFB) and the Military Department. These two employment centers represent the two largest sets of dedicated vanpool routes, with MHAFB having 29 dedicated routes and the Military Department having 21.

**Table 1.1- 4. Largest Employers in Ada and Canyon Counties and Vanpool Routes**

EMPLOYER	RANK	CITY	NUMBER OF DEDICATED VANPOOL FOUTES
SAINT ALPHONSUS HOSPITAL (CURTIS ROAD)	1	Boise	0
MICRON TECHNOLOGY INC	2	Boise	2
BOISE STATE UNIVERSITY	3*	Boise	0
SAINT ALPHONSUS HOSPITAL (DOWNTOWN)	3*	Boise	0
ADA COUNTY	5	Boise	0
CITY OF BOISE	6	Boise	0
DEPARTMENT OF VETERANS AFFAIRS	7	Boise	7
IDAHO DEPARTMENT PENITENTIARY	8	Ada County	0
BLUE CROSS	9	Meridian	0
DEPARTMENT OF HEALTH AND WELFARE	10*	Boise	0
WELLS FARGO	10*	Boise	0

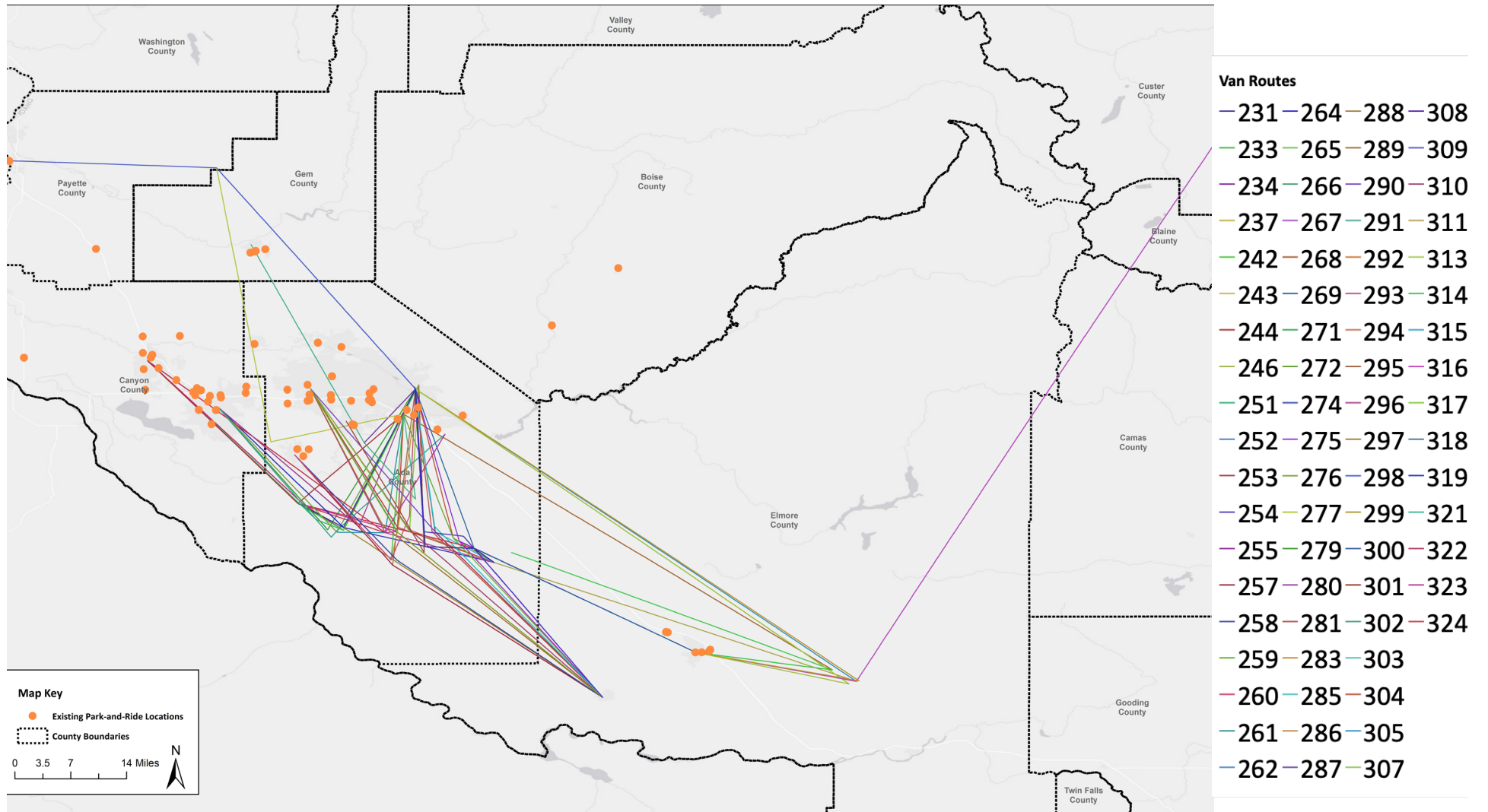
\*TIE

Source: Idaho Department of Labor

Walker also analyzed the list of potential riders, which is comprised of those who are awaiting space on existing vanpool routes or for sufficient demand to start a new route. **Figure 1.1-3** shows the potential riders home zip code connected to their desired commute destination, overlaid on the existing routes. It appears there is potential demand for routes with destinations in the relatively unserved area on the south side of Boise and the area just south of Downtown, yet largely within the metro area's limits.

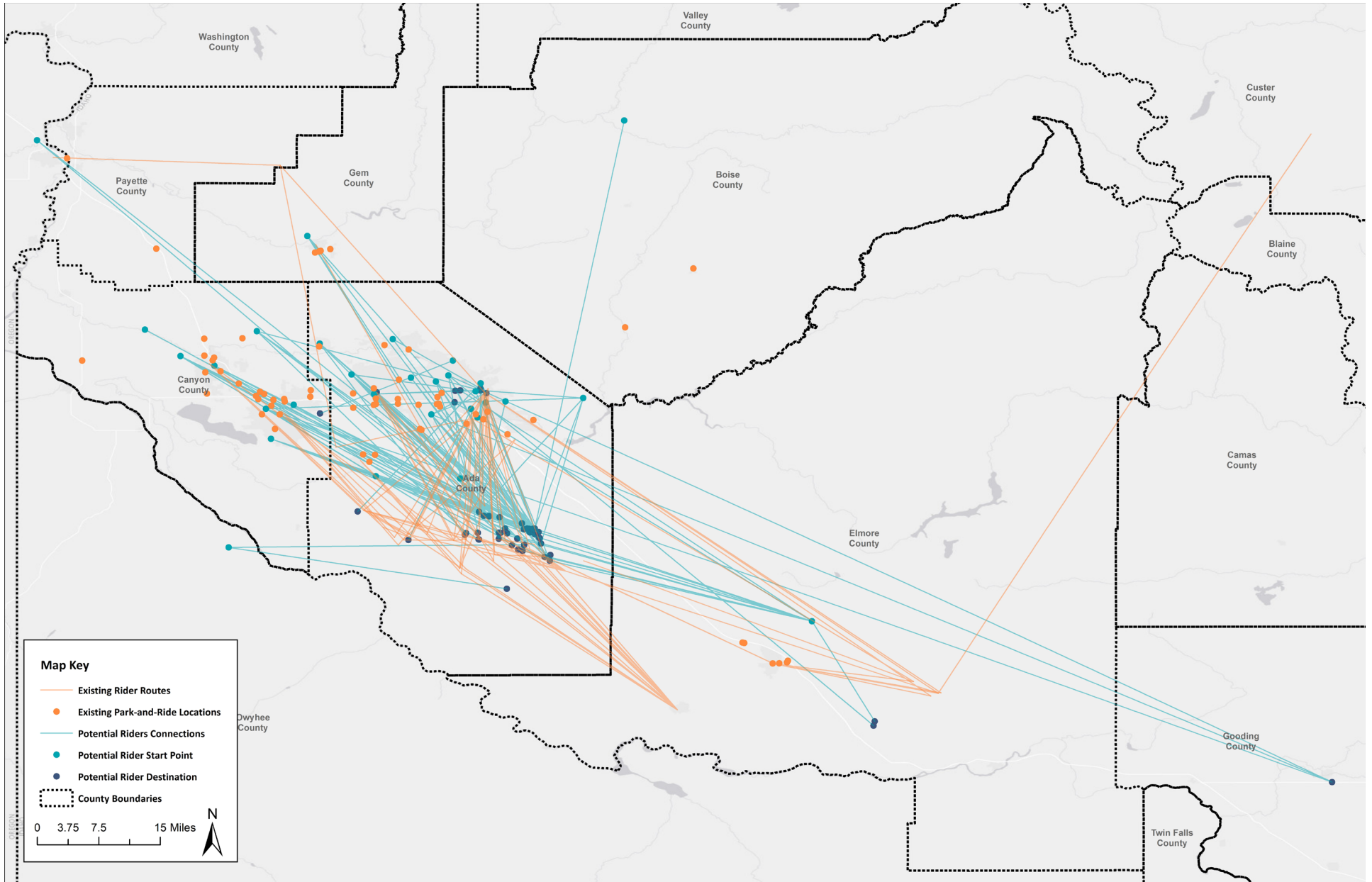
There are approximately 150 potential riders awaiting a vanpool match. Of these, start times range from as early as 1:30 a.m. to 9:00 p.m. For the 73 potential riders awaiting a match with daily start time in the 7:30 a.m. to 8:00 a.m. range, their daily quit times range from 4:00 p.m. to 6:00 p.m., demonstrating that challenges not only lie in proximity of trip origination and destinations, but in scheduling as well.

**Figure 1.1-2. Vanpool Route Map**



Source: Commuteride

**Figure 1.1-3. Club Red Riders Proximity to Park and Ride/Pickup Location**



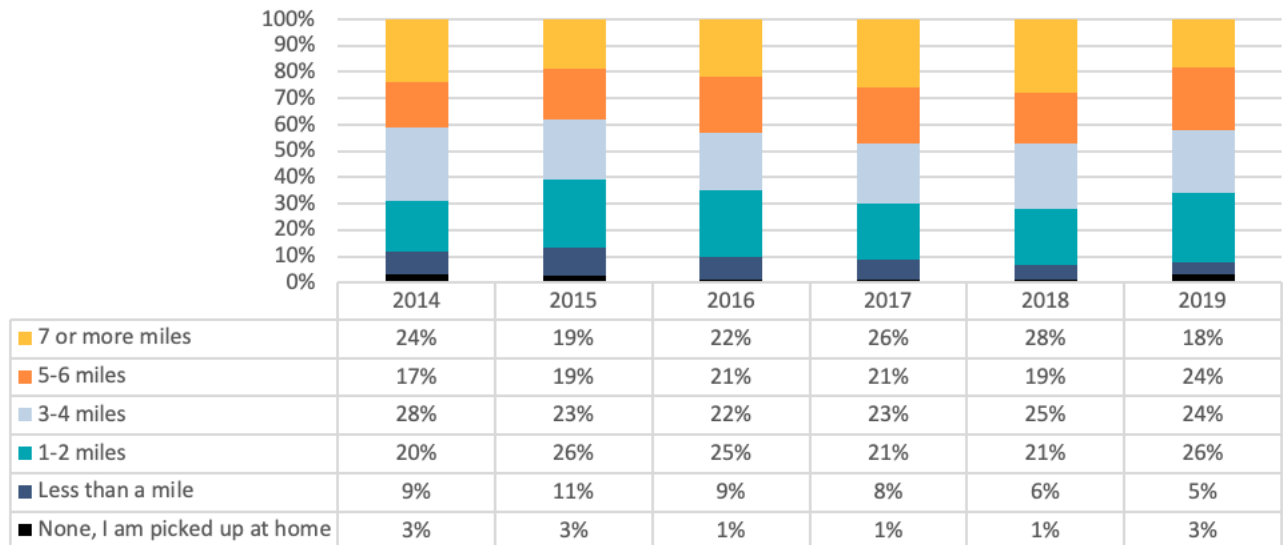
Source: *Commuteride*



## CONNECTIVITY

Each year, Commuteride conducts a survey among Club Red riders. Respondents of the 2019 survey indicate that almost one-third of riders live within 2 miles or less of their vanpool meeting location. As shown in Figure 1.1-4 below, this is a relatively consistent representation of riders' proximity to their vanpool meeting location.

**Figure 1.1-4. Club Red Riders Proximity to Park and Ride/Pickup Location**



Source: Commuteride

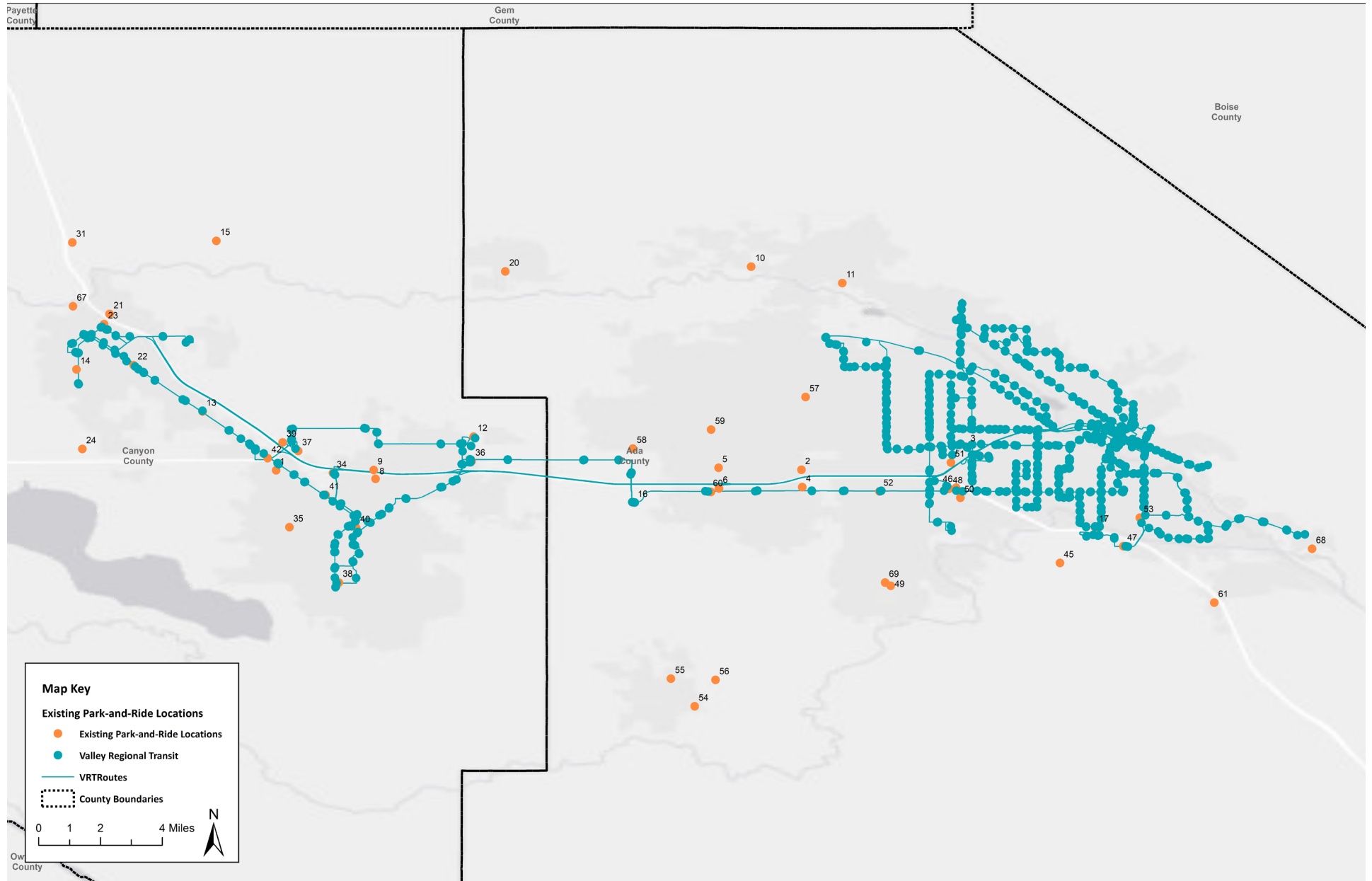
## TRANSIT

As shown in **Figure 1.1-5**, within the Valley Regional Transit bus service area, there are more than two dozen existing transit stops at or within a typically comfortable walking distance of a park and ride facility. Routes predominantly serve the downtown core and commercial districts of Boise with connections to activity centers in Nampa and Caldwell. During the weekday morning and evening peaks, routes typically run on a 30-minute headway, generally from approximately 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. Over the midday, from generally 9:00 a.m. to 3:00 p.m. routes run on 60-minute headways. Park and ride facilities adjacent to transit use experience on average over 1,400 daily boardings and alightings. Excluding transit centers, where transit is not typically driven by park and ride activity, there remains almost 500 daily boardings and alightings at or near existing park and ride facilities.

## BIKE / PED

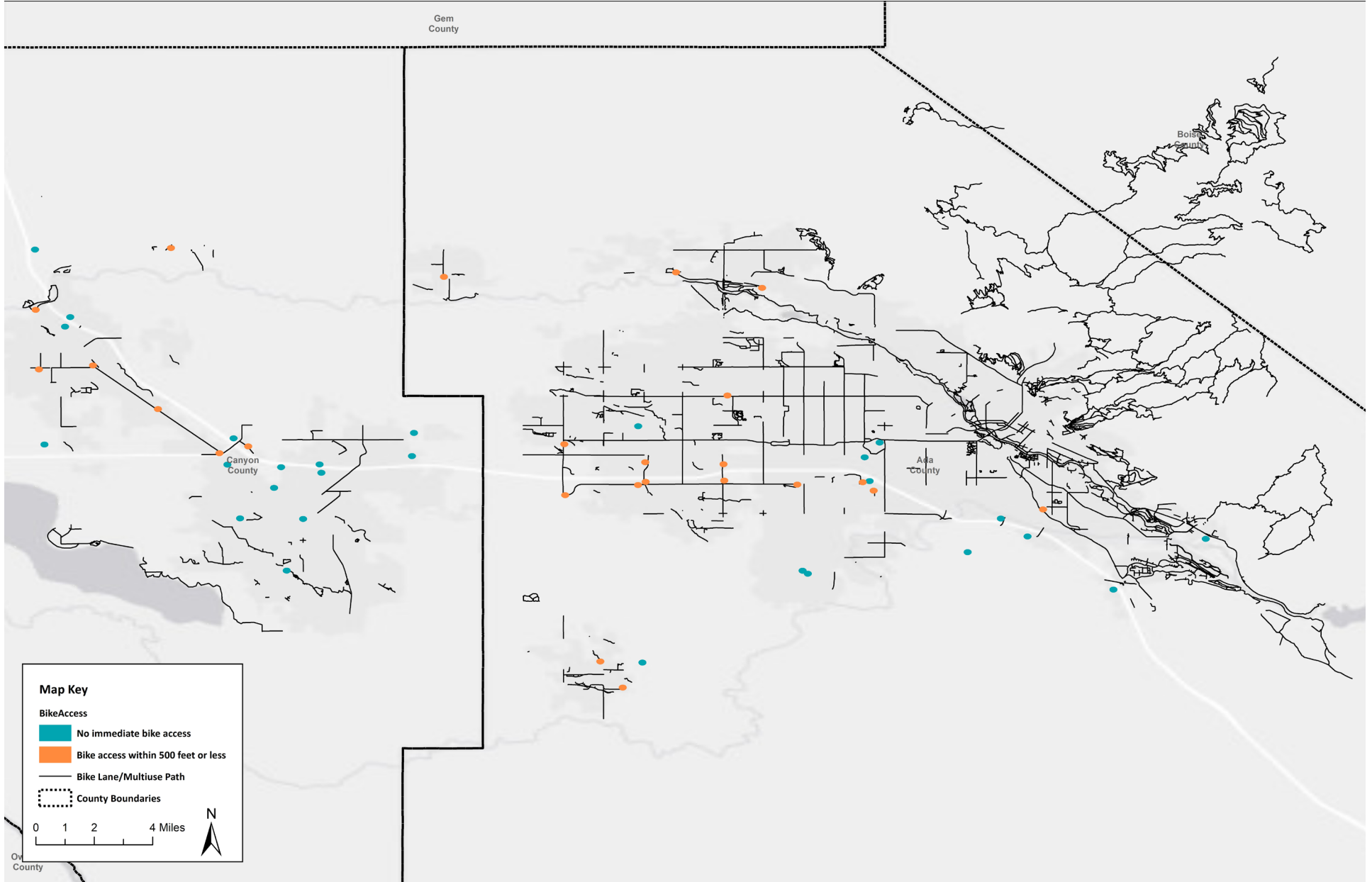
Shown in **Figure 1.1-6**, within the COMPASS planning area, 24 park and ride facilities provide direct access to or are within 500 feet of a multiuse path or dedicated bike path. Of the 10 facilities sampled by Commuteride staff in the park and ride facility reviews, 6 were confirmed to have bike lockers to accommodate at least 2 bicycles. The Riverside Park and Ride facility could accommodate up to 8 bicycles.

**Figure 1.1-5. Park and Ride and Valley Regional Transit Stop Location Map**



Source: Commuteride, COMPASS

**Figure 1.1-6. Park and Ride and Dedicated Bike Lane and Multiuse Path Location Map**



Source: *Commuteride, COMPASS*

## CONCLUSIONS

Based on the limited existing parking demand information available, it appears many existing park and ride facilities have capacity to fulfill additional demands. A full study of morning, midday, and evening parking occupancy counts completed under typical peak weekday conditions would inform the quantity and locations of existing availability. Such a study would also inform on areas of existing need for expansion, or opportunities to consolidate, park and ride facilities.

Where facilities exist today there is a general lack of connectivity to first and last mile travel options other than a personal vehicle, such as bicycling or walking. Facilities also generally lack connectivity to higher capacity transit options, limiting their ability to extend into underserved areas and making the single occupant trip an easy decision among many commuters.

Existing vanpool routes strongly favor a few employers that typically staff on consistent, full-time schedules and those that subsidize their employee's commute. Expanding the network of routes will encourage use of the existing part-time and flexible seating options, as well as promote usage among new employment centers.

## CHAPTER 1.2: FUTURE CONDITIONS

This chapter builds on the existing conditions analysis and discusses existing park and ride facilities throughout the COMPASS planning area and the context of its history and environment, including an inventory of existing park and ride facilities in the planning area, and several characteristics of these sites to determine their effectiveness in serving expanded demands in the future.

### KEY FINDINGS

- Several sub-areas within the broader COMPASS region are expected to achieve significant population and employment growth over the next 20 years. While sub-areas projected to experience substantial population growth can be viewed as possible origin locations for new park and rides, sub-areas that will experience substantial employment growth can be viewed as possible terminus locations and might be good candidates for new mobility hubs.
- Single-occupancy vehicle usage as the primary commuting method is generally trending upwards in Treasure Valley, jumping from 80% of workers over 16 in 2010 to 82% in 2018. This trend is supported by generally declining gas prices, as well as investments by state transportation agencies that reduce congestion and increase convenience for drivers.
- While new technology trends such as autonomous vehicles and micro-mobility (e.g. e-scooters and e-bicycles) are not expected to have a sweeping impact on commuting behaviors in the COMPASS region, these tools can play a role in supporting first- and last-mile connections for urban park and ride users.

### POPULATION AND EMPLOYMENT GROWTH

COMPASS provides demographic forecasts of area population and employment on its website for both Ada County and Canyon County. Walker reviewed and analyzed the *Communities in Motion 2040 2.0 Forecast by Demographic Area*<sup>5</sup> to gain an understanding of overall growth projections for Ada County and Canyon County, as well as to identify areas that are expected to grow the most over the 20-year projection horizon.

Population growth projections were derived by comparing the 2040 forecast to the 2019 population estimates provided, and employment growth projections were derived by comparing the 2040 forecast to the 2025 forecast since earlier estimates or job number actuals are not provided in the data set.

5 [https://www.compassidaho.org/documents/prodserv/demo/R5web\\_updated.pdf](https://www.compassidaho.org/documents/prodserv/demo/R5web_updated.pdf)

**Table 1.2-1** summarizes COMPASS's current population growth projections for Ada County and Canyon County.

**Table 1.2-1: Regional Population Growth Projections**

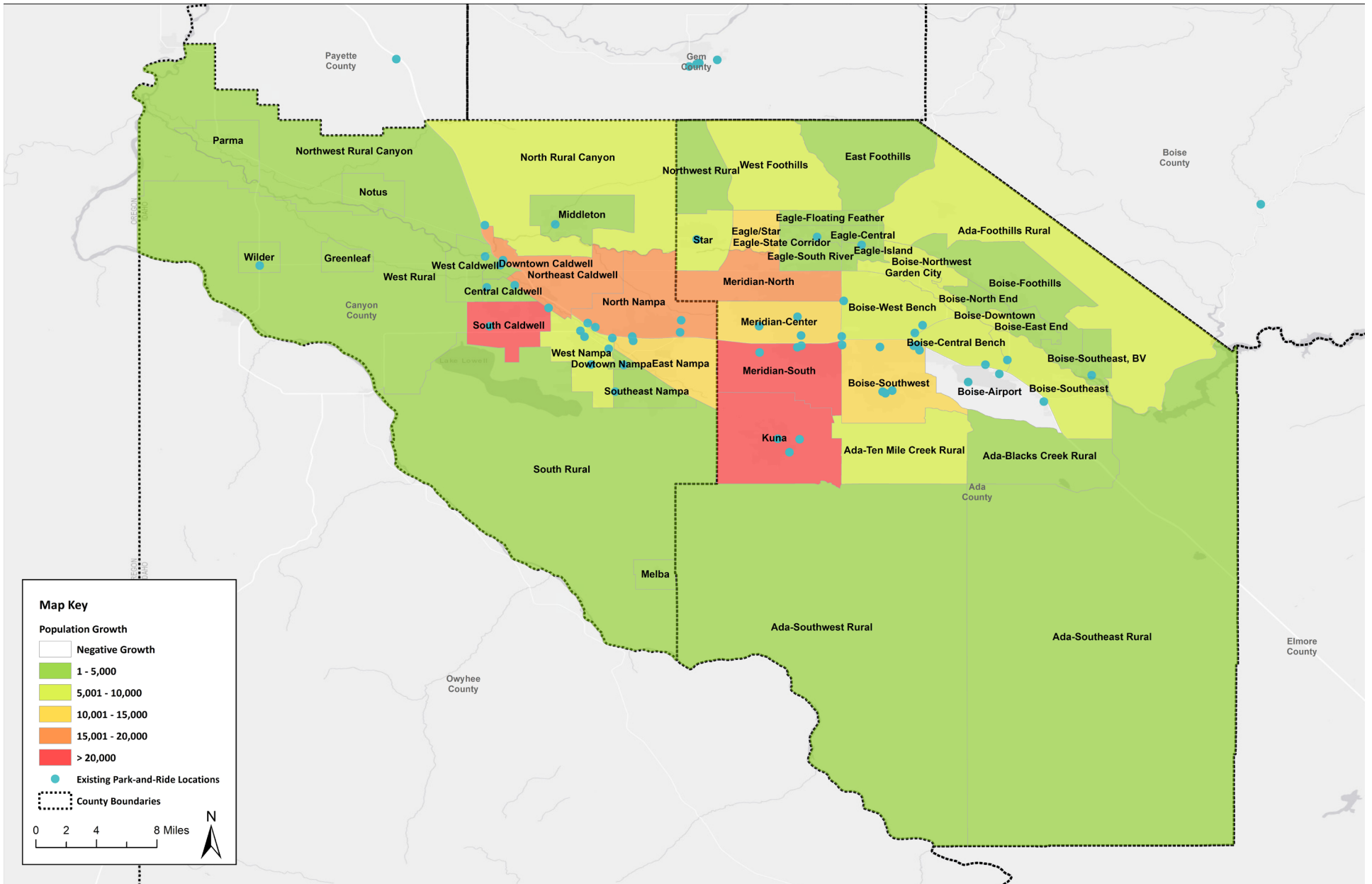
POPULATION GROWTH (ABSOLUTE)		POPULATION GROWTH (%)	
Regional Total	322,943	Two County Total	45%
Ada County	202,156	Ada County	41%
Canyon County	120,787	Canyon County	54%
TOP 12 SUB-AREAS		TOP 12 SUB-AREAS	
Greater Kuna	25,509	Ada-East Foothills	727%
Meridian-South	25,001	Ada-West Foothills	547%
Caldwell-South	23,425	Eagle/Star	371%
Caldwell-Northeast	19,457	Ada-Northwest Rural	248%
Nampa-North	19,374	Ada-Ten Mile Creek Rural	166%
Meridian-North	18,110	Nampa-North	150%
Eagle/Star	14,333	Ada-Foothills Rural	123%
Boise-Southwest	13,142	Caldwell-South	121%
Nampa-East	11,653	Eagle-Island	112%
Meridian-Center	10,554	Ada-Southeast Rural	110%
Boise-Central Bench	9,996	Boise-Downtown	108%
Greater Star	9,565	Greater Notus	106%

Source: COMPASS, 2020

**Figure 1.2-1** graphically depicts the projected population growth in the region.

As shown in **Table 1.2-1**, on an absolute level, parts of Caldwell, Meridian and Kuna are projected to be the fastest-growing population centers in the region, a continuation of growth trends in the region seen since the early 2000s. On a percentage basis, the list is dominated by rural and unincorporated areas with a low existing population, although it is notable that downtown Boise's population is expected to more than double over the forecast horizon. Caldwell-South, Nampa-North, and Eagle/Star are in the top twelve on both an absolute and percentage basis.

**Figure 1.2-1: Projected Population Growth in Ada and Canyon Counties**



Source: COMPASS, 2020

**Table 1.2-2** summarizes COMPASS’s current employment growth projections for Ada County and Canyon County.

**Table 1.2 2: Regional Employment Projections**

EMPLOYMENT GROWTH (ABSOLUTE)		EMPLOYMENT GROWTH (%)	
Regional Total	148,186	Two County Total	45%
Ada County	106,529	Ada County	41%
Canyon County	41,657	Canyon County	54%
TOP 12 SUB-AREAS		TOP 12 SUB-AREAS	
Boise-West Bench	15,271	Eagle/Star	170%
Meridian-Center	14,777	Ada-West Foothills	160%
Boise-Downtown	12,163	Ada-East Foothills	159%
Nampa-North	9,610	Greater Kuna	103%
Boise-Airport	8,677	Caldwell-Northeast	100%
Caldwell-Northeast	7,973	Greater Star	94%
Boise-Southeast	7,706	Greater Melba	92%
Boise-Central Bench	6,993	Ada-Southeast Rural	91%
Boise-Southwest	5,917	Greater Notus	87%
Greater Kuna	5,654	Greater Wilder	82%
Nampa-West	4,426	Eagle-Floating Feather	76%
Meridian-South	4,062	Ada-Foothills Rural	74%

Source: COMPASS, 2020

**Figure 1.2-2** graphically depicts the projected employment growth in the region.

As shown in **Table 1.2-2**, on an absolute level, the region’s existing job centers dominate the list and are expected to generate the lion’s share of new jobs in the region. On a percentage basis, the list is dominated by smaller communities, with Greater Kuna and Caldwell-Northeast in the top twelve on both an absolute and percentage basis.

**WHAT WE HEARD**

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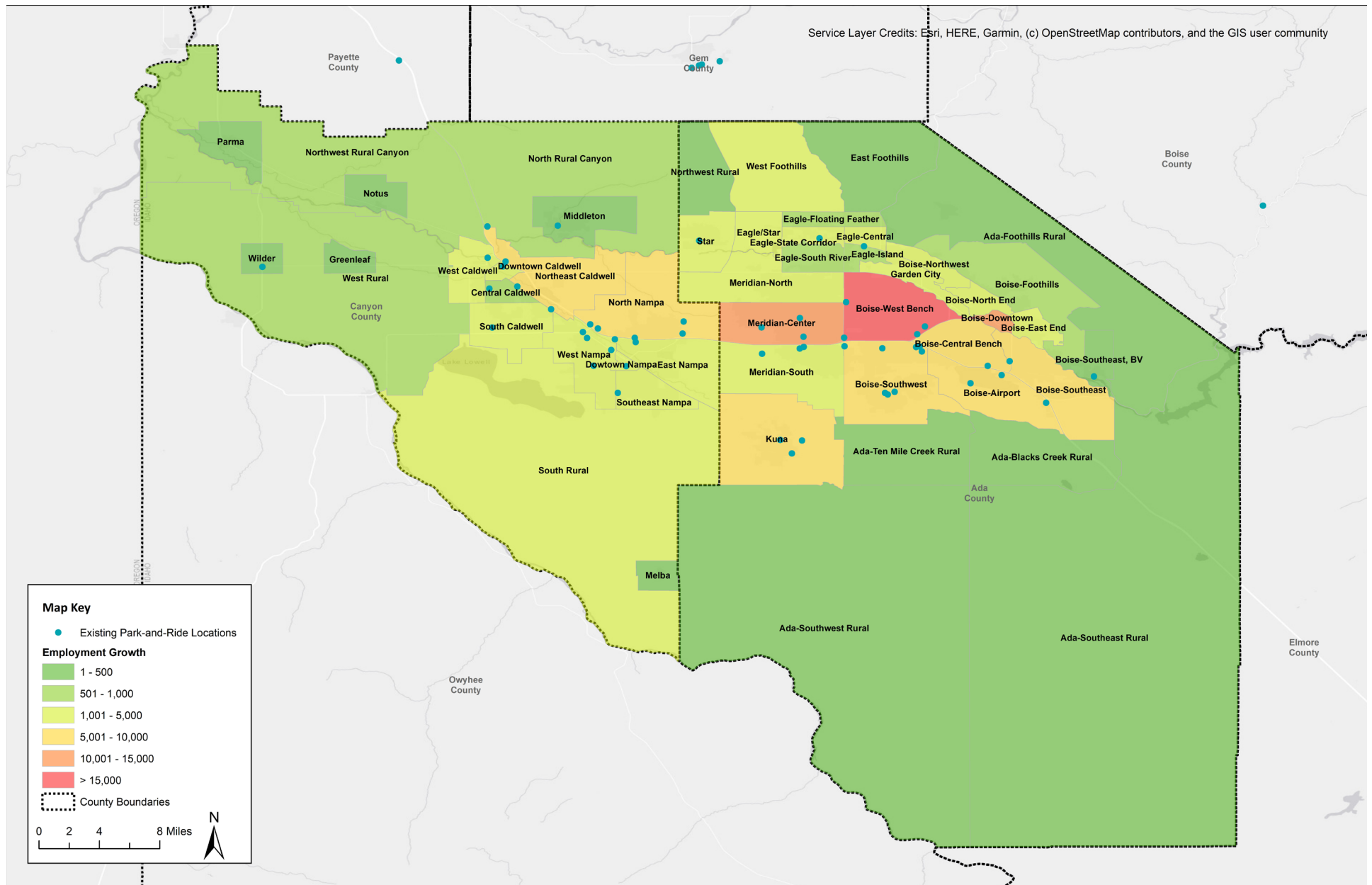
The Stakeholder Working Group felt that, among others, employment centers should be a key factor in evaluating potential park and ride locations and weighted to reflect as such.

**COMPARISON SUMMARY**

The comparison of population growth and employment growth was conducted to identify future potential gaps in both park and ride and non-single occupancy vehicle (SOV) trips. Where gaps are identified, the opportunity exists to increase these services between the two nodes. Gaps in this context are defined as a population center growing in an area where employment center growth is not occurring at the same or a similar rate, or vice versa. When this occurs, population centers are likely to commute to employment growth centers. An example of this is a large employment growth in the Boise West Bench without



**Figure 1.2-2: Projected Employment Growth in Ada and Canyon Counties**



Source: COMPASS, 2020

significant population growth in the same area. This indicates the employment growth will come from one of the surrounding areas. An additional conclusion to draw is the largest population growth areas are those wherein expansion and formalization of park and rides and incentivization of reduced SOV use would be a priority to be further evaluated.

## **INFLUENCING FACTORS IN USER TRANSPORTATION BEHAVIORS**

The following summarizes localized trends in commuting behaviors as well as broader advancements in transportation and mobility technology likely to influence the future of transportation choices among the Treasure Valley constituency.

### ***THE FUTURE OF PUBLIC TRANSIT IN TREASURE VALLEY***

Valley Regional Transit, the Regional Public Transit Authority (RPTA) for Ada and Canyon counties, has established goals for expanding and improving transit in its recent planning document, ValleyConnect 2.0. Overall, the plan sets forth the following core action steps to increase the freedom of Treasure Valley residents:

- Quadruple the amount of fixed-route service.
- Provide more frequent, late night, and weekend service.
- Keep transit moving with over 100 miles of roadway investments to support transit service.
- Increase transit usage by 800%

The plan establishes two separate scenarios for expansion and improvement of transit service—an intermediate scenario representing more conservative investment, and a growth scenario representing more aggressive investment. The conceptual network under the intermediate scenario includes expansion of express service connections, increases in service frequency, and enhanced passenger amenities like park and rides and transit centers. Note that express services are those that typically operate on a freeway or highway and generally provide longer distance transit trips.

The conceptual scenario under the growth scenario includes increases in express service connections as well as growth in frequent and secondary service. Frequent services are those provided frequently and all day in transit corridors that typically serve more local connections and destinations. Secondary services generally provide less frequent all-day connections in lower-density areas. Like the intermediate scenario, the growth scenario also sets a vision for enhanced passenger amenities and support.

## WHAT WE HEARD

Transit and multimodal connections were a recurring theme throughout the Stakeholder Working Group and Project Management Team meetings. Members reported a strong desire to locate park and rides along fixed transit routes with higher frequency headways to reduce vehicle congestion in high traffic areas, increase convenience for all users, and provide increased options for those without personal vehicles.

While transit and alternative modes of transportation are reflected in the future typologies proposed for the park and ride system, how they are weighted varies based on the type of facility to reflect an area's land use context that generally coincides with transit service availability in the area. For instance, a low-density or rural area that is not serviced by transit will weight this metric lower than a high-density or more urban area would, as discussed in greater detail in the future typologies section beginning on page 45.

**COMMUTING TRENDS**

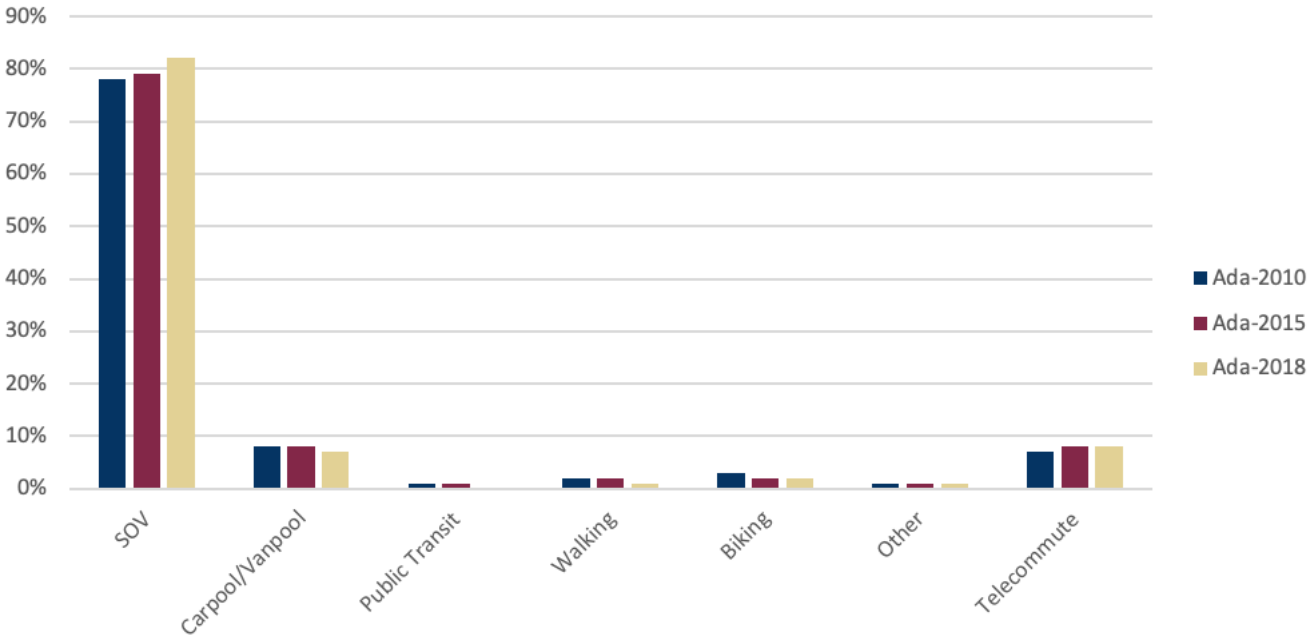
**Table 1.2-3** and **Figure 1.2-3** depict commuting choices among the Ada County worker population over the age of 16 in 2010, 2015, and 2018.<sup>6</sup> Note that percentages have been rounded to the nearest whole.

**Table 1.2-3: Ada County Commuting Choices**

	2010	2015	2018
SOV	78%	79%	82%
Carpool/Vanpool	8%	8%	7%
Public Transit	1%	1%	0%
Walking	2%	2%	1%
Biking	3%	2%	2%
Other	1%	1%	1%
Telecommuting	7%	8%	8%

Source: U.S. Census Bureau

**Figure 1.2-3: Ada County Commuting Choice Trends**



Source: U.S. Census Bureau

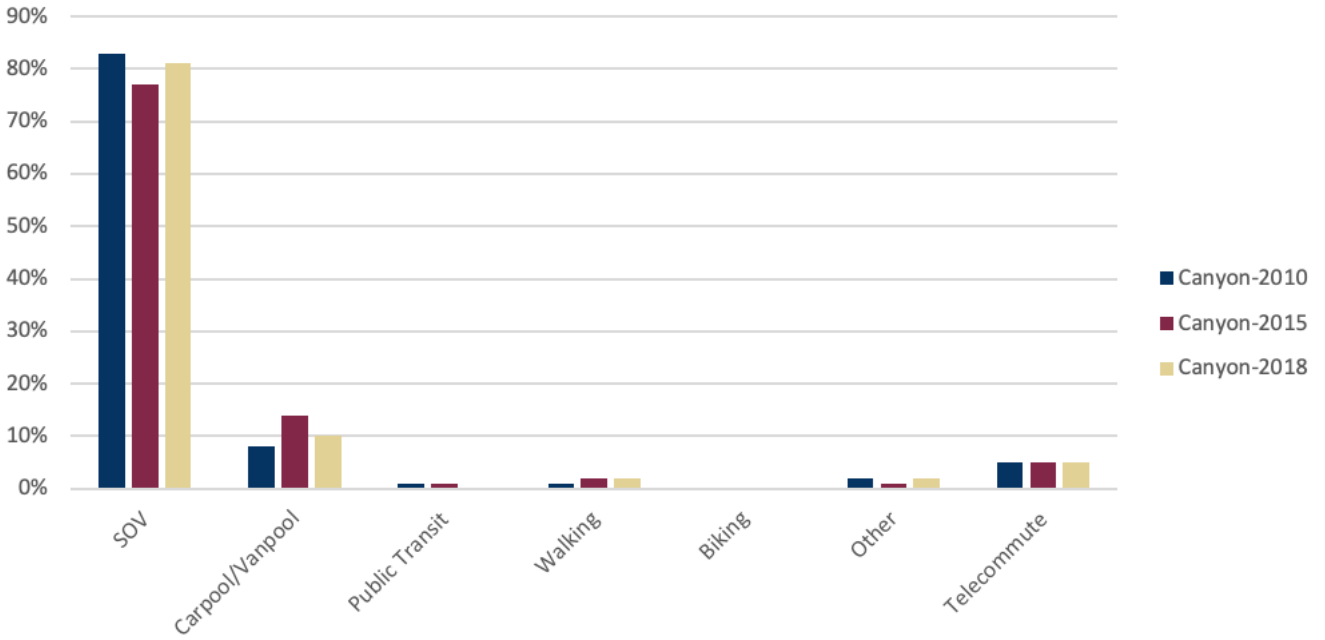
<sup>6</sup> American Communities Survey (ACS) Data, 1-Year Estimates

**Table 1.2-4** and **Figure 1.2-4**, below, depict commuting choices among the Ada County worker population over the age of 16 in 2010, 2015, and 2018.<sup>7</sup> Note that percentages have been rounded to the nearest whole.

**Table 1.2-4: Canyon County Commuting Choices**

	2010	2015	2018
SOV	83%	77%	81%
Carpool/Vanpool	8%	14%	10%
Public Transit	1%	1%	0%
Walking	1%	2%	2%
Biking	0%	0%	0%
Other	2%	1%	2%
Telecommuting	5%	5%	5%

**Figure 1.2-4: Canyon County Commuting Choice Trends**



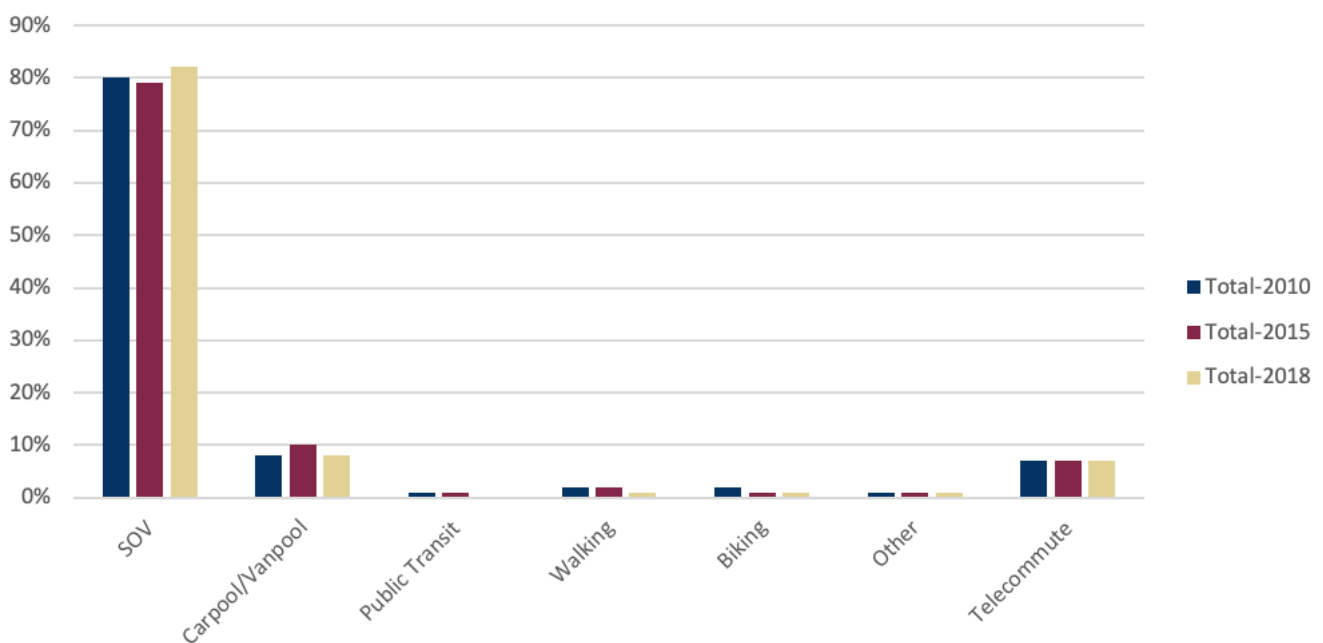
<sup>7</sup> American Communities Survey (ACS) Data, 1-Year Estimates

**Table 1.2-5** and **Figure 1.2-5**, below, depict the combined percentages by commuting choice for worker population over the age of 16 in Ada and Canyon counties in 2010, 2015, and 2018.<sup>8</sup> Note that percentages have been rounded to the nearest whole.

**Table 1.2-5: Ada/Canyon County Commuting Choices**

	2010	2015	2018
SOV	80%	79%	82%
Carpool/Vanpool	8%	10%	8%
Public Transit	1%	1%	0%
Walking	2%	2%	1%
Biking	2%	1%	1%
Other	1%	1%	1%
Telecommuting	7%	7%	7%

**Figure 1.2-5: Ada/Canyon County Commuting Choice Trends**



As shown in Table 5 and Figure 5, the single-occupancy vehicle usage is generally trending upwards in Treasure Valley, with an overall growth of 2% between 2010 and 2018. Assuming that the average 0.33% increase in SOV usage continues year over year in the region, we estimate that 86% of workers will regularly drive alone to their place of employment by 2032, as compared to an estimated 82% in 2020.

<sup>8</sup> American Communities Survey (ACS) Data, 1-Year Estimates

This trend is supported by external influences like declining gas prices and by the investment decisions of the Idaho Transportation Department. The majority of current and historical capital improvements funded by ITD and its partners have been in the roadway, which primarily increases convenience and reduces congestion for vehicles, including SOVs, trucks, vanpools, carpools, and buses. In the FY2021-2027 Draft Idaho Transportation Investment Program (ITIP), a total of \$22,207,000 in capital improvements are planned in District 3 through 2027. Of that, 9.2% is dedicated to improvements unrelated to roadway travel, and those improvements are focused on localized pedestrian and bicycle assets and ADA compliance.

### ***AUTONOMOUS VEHICLES AND MICRO-MOBILITY***

Autonomous vehicles (AVs) are currently being developed and most industry experts believe these vehicles will be available within the next decade, first to ride-hailing companies (or transportation network companies, TNCs), like Uber and Lyft, and then to consumers. AVs could disrupt transportation since households would likely need fewer cars to meet transportation needs. For example, one AV could drop off a family member, and then drive itself to pick up another. Once the service is driverless, it is generally expected that the cost of using ride-hailing for daily travel for urban residents will be 30 to 50% less than owning a personal vehicle. Numerous players, including tech companies like Google, Apple, and Amazon as well as auto manufacturers such as Ford and GM, are reportedly planning to enter the ride-hailing market and competition will likely be strong. If many urban residents then give up their cars and use TNCs, personal vehicle ownership rates could decline significantly, and parking could be impacted.

Based on a research review and our own data collection, Walker does not anticipate mass acceptance and purchase of fully autonomous personal vehicles before 2040, assuming continued advancement of AV technology at the current pace. However, autonomous vehicle options are already having an impact on circulation and first/last mile connections in urban environments. For example, municipalities like Ann Arbor, Michigan, Las Vegas, Nevada, San Rafael, California, and Arlington, Texas have incorporated autonomous shuttles and vans as a circulation option, taking passengers from central locations to different stops within 1 to 2 miles of the origin point.

Again, we don't anticipate that autonomous vehicles will have a significant impact on personal commuting behaviors—however, there is potential for autonomous vehicles in public use (such as driverless shuttles and vans) to play a role in the urban mobility hub system as an internal circulator. Autonomous shuttles and vans can offer an efficient and convenient first/last mile connection for commuters into Treasure Valley's urban centers, such as downtown Boise.

Similarly, micro-mobility options (such as e-scooters and e-bicycle) have the potential to serve as a first/last-mile connection in urban environments, like the City of Boise. At present, the City has three vendors providing e-scooters in the region (Bird, Lime, and Spin) and has adopted ordinances to regulate usage. While the scooters were temporarily pulled from the streets in Spring 2020 as a result of the pandemic, they have since been returned to the streets and are operational.



## CHAPTER 1.3: BEST PRACTICES

This section presents an analysis of best practices for park and rides and “smart commuting” strategies centered around four key questions:

1. How are other organizations/agencies determining appropriate locations for new park and rides and/or prioritizing where new locations are needed?
2. How are other organizations/agencies evaluating and/or improving the efficacy of existing park and ride locations, and what first mile/last mile strategies could be applied to improve park and ride efficacy?
3. How are other organizations/agencies encouraging the use of “smart commuting” in lieu of an entirely SOV trip?
4. How are other organizations/agencies working with local jurisdictions/ other agencies to improve access to park and rides and support their use?

### KEY FINDINGS

This section presents the summary of key findings from this analysis, organized by each of the best practice questions listed above.

1. How are other organizations/agencies determining appropriate locations for new park and rides and/or prioritizing where new locations are needed?

### KEY FINDINGS

- Agencies consider a variety of factors when selecting an appropriate location for a new park and ride facility, such as:
  - The extent to which the facility is served or will be served by transit
  - Visibility of the facility
  - Accessibility to the facility
  - Topographical site restrictions
  - Population density
  - Proximity to employment and activity centers
  - Proximity to future demand nodes that can be serviced by a new facility
- It is important to engage a variety of stakeholders in the selection of park and ride locations.
- A scoring system can be an effective way to prioritize potential park and ride locations.

2. How are other organizations/agencies evaluating and/or improving the efficacy of existing park and ride locations, and what first mile/last mile strategies could be applied to improve park and ride efficacy?

## KEY FINDINGS

- Examples of features that agencies are including (or considering) in park and ride facilities to improve their efficacy include:
  - Bicycle facilities (covered bike lockers and bike racks)
  - Pre-reserved parking
  - Wayfinding signage
  - Smart phone app allowing patrons to view transit arrival/departure and pay for parking
  - Designated areas for carpool/vanpool parking
  - Transit shelters
  - Real-time information about parking availability
- Microtransit options, such as flexible route services can help connect potential park and ride users from their place of origin to and from a park and ride facility.
- Implementing bike access improvements at park and ride facilities can promote access to transit for bicyclists.

3. How are other organizations/agencies encouraging the use of “smart commuting” in lieu of an entirely Single Occupancy Vehicle (SOV) trip?

## KEY FINDINGS

- Commute calculators help commuters understand the true cost of driving to help commuters change their behavior and consider an alternative mode of transportation.
- Employers can offer employee commute programs to encourage commuting by an alternative mode of transportation. Providing information about alternative transportation options in real-time is an important tool used to reduce uncertainties and increase commuters’ confidence in using alternative modes.
- To incentivize employees to utilize non-SOV modes of transportation, employers can implement commuter benefit programs in which employees track their commutes and participate in challenges.
- Trip planning sites and tools provide users with information to help plan their trip using a non-SOV mode of transportation.
- Carpool/vanpool ride matching services help match commuters who are interested in joining a carpool or vanpool. These services reduce the barriers to finding a carpool or vanpool.
- Providing amenities in shared vehicles such as wifi or more comfortable seating than a traditional 12- or 15-person van.

#### 4. How are other organizations/agencies working with local jurisdictions/ other agencies to improve access to park and rides and support their use?

### KEY FINDINGS

- As part of park and ride planning efforts, it is important to engage a variety of stakeholders gathering feedback from transit riders, operators, municipalities, and other transit agencies. Engagement can take place in a variety of formats, including surveys, workshops, site visits, and interviews.
- Real-time parking occupancy data and transit arrival data should be shared between jurisdictions and agencies.
- To assist with decision-making for park and ride improvements, it can be beneficial to utilize an existing regional governing body, such as a regional transportation council, that has representation from all local jurisdictions and transit agencies.
- An important factor to consider for park and ride facilities is spillover from park and ride facilities on adjacent neighborhoods. Agencies can partner with local jurisdictions to offer parking enforcement around station areas and recommend parking policy adjustments, such as time limits, permits, or manageable paid parking programs to increase the efficiency of the parking system.
- Consistent messaging and information about the options available, even if provided by another agency.



## **BEST PRACTICE QUESTION 1: HOW ARE OTHER ORGANIZATIONS/AGENCIES DETERMINING APPROPRIATE LOCATIONS FOR NEW PARK AND RIDES AND/OR PRIORITIZING WHERE NEW LOCATIONS ARE NEEDED?**

### **BERKELEY CHARLESTON DORCHESTER COUNCIL OF GOVERNMENTS, SOUTH CAROLINA**

The Berkeley Charleston Dorchester Council of Governments (BCDCOG) undertook a Park and Ride Study to evaluate the efficacy of existing park and rides and to select new potential locations.<sup>9</sup> Based on initial research and meetings with stakeholders, a list of 77 potential park and ride locations throughout the Charleston area was selected to be analyzed by the project team. A scoring matrix was developed to analyze the sites, based on the following criteria:

- *Visibility* – can drivers see the potential park and ride from a congested roadway?
- *Safety* – would everyday commuters feel safe about leaving their car?
- *Accessibility* – how easy is it to get into and out of the potential park and ride facility?
- *Topography site restrictions* – are there wetlands or other constraints on the site?
- *Transit connectivity* – is the park and ride location along an existing transit route, high-capacity corridor, or future bus rapid transit corridor?

The project team ranked the list of 77 locations on a scale between 1 and 3 for each of the above-referenced categories. The highest scoring sites (21 sites) were carried forward for further analysis. The project team and stakeholders conducted site visits at the 21 locations, and reviewed maps, identified constraints, and discussed access options and challenges at each location. The following are examples of factors that were considered as part of this additional analysis:

- Whether the site is an existing parking lot
- The availability of land for the site
- Proximity from the site to a highway
- Commuter traffic/high traffic volume
- The population density of the area surrounding the site
- Whether the area surrounding the site is experiencing population growth and increased development

Based on the site visits and additional analysis, the project team narrowed down the list to 14 locations and organized them based on timeframe for implementation: short-term (1-2 years), mid-term (3-5 years), and long-term (more than five years).

<sup>9</sup> Source: Park and Ride Study Site Selection Report. Prepared by AECOM for Berkeley Charleston Dorchester Council of Governments, September 2018. <https://www.bcdkog.com/wp-content/uploads/2018/11/00-Park-Ride-Study-Final-Report.pdf>.

## FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

The Florida Department of Transportation (FDOT) created a State Park and Ride Guide designed to help FDOT and other Florida agencies to plan, implement and manage park and ride facilities.<sup>10</sup> Examples of criteria that the guide suggests for evaluating new park and ride locations include:

- Existence of informal park and ride activity
- Proximity to existing and/or planned transit
- Site visibility and accessibility
- Adequate spacing of park and rides locations to avoid redundancy
- Site expansion potential
- Proximity to other major corridors or critical junctions
- Distance to major residential areas and employment or activity centers
- Existing and future transportation-related improvement plans and programs
- Anticipated future development activity at the trip origin and destination
- Access to bicycle and pedestrian routes
- Perceived and real user safety
- Site size
- Costs of acquiring right of way

The State Park and Ride Guide includes the following matrix (**Figure 1.1-3**) that includes park and ride standards and considerations specific for the type of park and ride lot (remote or rural, urban fringe, peripheral, urban corridor, and High Occupancy Vehicle (HOV) Corridor facilities). By tailoring standards and considerations to specific lot types, local agencies are able to quickly glean relevant information for park and ride planning activities.

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<sup>10</sup> Source: Florida Department of Transportation State Park-and-Ride Guide. Prepared by Frederick R. Harris, Inc, Revised by The Marketing Institute, AECOM, Revised June 1, 2012. <https://www.fdot.gov/docs/default-source/Transit/Pages/FinalParkandRideGuide20120601.pdf>

**Figure 1.3-1: Florida Department of Transportation Guide to Identifying Areas for Park and Ride Facilities**

**Table 3-1: Identifying Areas for Park-and-Ride Facilities**

Lot Type	Description	Standards	Considerations
Remote or Rural Facilities	Remote lots are located in areas with low population growth and are not expected to grow excessively. Lots are generally located outside the urban area in a rural or small town setting. Trip lengths for home-to-lot and lot-to-work tend to be longer than for other lot types.	<ul style="list-style-type: none"> <li>• Between 20-60 miles from employment centers</li> <li>• More than 20,000 employees at trip end</li> <li>• Centrally located</li> <li>• Publicly-owned Right-of-Way (ROW) available</li> <li>• Less than 1 mile from commute route</li> </ul>	The success of a remote lot is dictated by the level of employment located at the destination end and the distance traveled. Lots should be centrally located to the service area population. Usage will be greater if located near a major commute route.
Urban Fringe Facilities	Urban fringe lots are located at the edge of urban development. These lots can be, but are not generally served by transit. Trips tend to originate outside or at the outer limits of the urban area while the destinations may be concentrated or dispersed within the urban area.	<ul style="list-style-type: none"> <li>• Trip destination patterns may be concentrated or dispersed within the urban area</li> <li>• Located along arterial roadways with 4 lanes or more</li> <li>• Minimum of 10,000 employees per square mile to support the formation of car pools</li> <li>• Located in the vicinity of an urban area boundary</li> <li>• More than 3/4 mile from commute route</li> </ul>	Service area demand and concentration of employment are factors that determine the usage of an urban fringe lot. 35,000 Average Daily Traffic (ADT) is suggested as a working traffic minimum.
Peripheral Facilities	Peripheral lots are typically located at periphery or on the edge of an intensely developed, highly congested or access-restrained activity center. These lots are designed to supplement parking deficiencies and include facilities that service activity centers with limited parking and/or auto access such as auto-free zones, colleges, and universities.	<ul style="list-style-type: none"> <li>• Congested or restricted access</li> <li>• On a major access route</li> <li>• Insufficient parking facilities in the area</li> <li>• Distances from residential areas generally longer than other Park-and-Ride facilities, while distances to the activity center are usually shorter</li> </ul>	Consider: <ul style="list-style-type: none"> <li>• Parking demand/supply</li> <li>• Activity center circulation</li> <li>• Activity center access routes</li> <li>• Existing parking facilities</li> </ul>
Urban Corridor Facilities	Urban corridor lots are located along a major commute route within an urban area, typically served by express bus, urban rail, or commuter rail services. Trip origins tend to be disbursed along the corridor; destinations are usually concentrated in a Central Business District (CBD) or employment center.	<ul style="list-style-type: none"> <li>• Level-of-Service E or worse</li> <li>• 50,000 ADT</li> <li>• Traffic based on support of one 100-space lot operating at 75% capacity</li> <li>• More than 2,000 dwelling units within 2 miles of lot</li> <li>• More than 10 miles from employment center</li> </ul>	Identify areas in highly congested corridors. Prime corridors are operating at Level-of-Service (LOS) E or worse. It is better to locate a lot closer to trip origins and further from trip destinations.
High Occupancy Vehicle (HOV) Corridor Facilities	HOV corridor lots are a subset of the urban corridor, located adjacent to a major commuter highway constructed with HOV lanes. They support carpool formation and access to express buses using the HOV lanes.	<ul style="list-style-type: none"> <li>• High volumes more than 35,000 ADT</li> <li>• Confluence of feeder roads near facility</li> <li>• 5-10 miles minimum spacing between lots</li> </ul>	Take lot spacing and its effect on the utilization of individual lots into account to maximize usage. Parkers tend to use the first lot encountered. Lots too closely spaced together may become underutilized.

(D5 Park-and-Ride Implementation Manual)

Source: Florida Department of Transportation State Park-and-Ride Guide. Revised June 1, 2012.

## RICHMOND REGIONAL TRANSPORTATION PLANNING ORGANIZATION, RICHMOND, VA

The Richmond Regional Transportation Planning Organization led the Richmond Regional Park and Ride Investment Strategy study to help leverage park and ride lots in the Richmond region as part of a larger travel demand management strategy.<sup>11</sup> As part of the study, a two-phased needs evaluation was conducted to identify and evaluate potential locations for park and ride investments that align with regional needs:

Phase 1 – scores were calculated for each census tract in the region based on the following data-driven evaluation factors:

- *Multimodal Connectivity*
  - Proximity to existing and proposed transit - number of existing and proposed transit service termini
  - Proximity to vanpool origins - number of vanpool passengers
- *Access*
  - Density of working population – working population (all employed persons) per square mile (by census tract)
  - Anticipated population growth – forecast residential growth percentage
  - SOV commuting mode split – percentage of employed workers that drive alone to work
- *Congestion Mitigation*
  - Commute time - mean travel time to work (by census tract)
  - Priority Investment Area (PIA) – percentage of census tract within 3-mile buffer PIA

Phase 2 – the study advisory group (which included local jurisdictions and other transit agencies) identified additional high-priority park and ride investment areas to account for added-value factors (factors that may not have accounted for in the data analysis completed as part of Phase 1). These factors include:

- Major commuter corridors and roadway interchanges
- Priority transit locations
- Locations near unofficial lots
- Locations near where vanpools had to be relocated
- Locations where existing park and ride lots are currently at or approaching capacity (greater than 80 percent full)

<sup>11</sup> Source: Richmond Regional Park and Ride Investment Strategy. Prepared by Kimley Horn for Richmond Regional Transportation Planning Organization, December 5, 2019. [https://planrva.org/wp-content/uploads/RRTPO-Parkand\\_Ride\\_Strategy\\_12-05-19.pdf](https://planrva.org/wp-content/uploads/RRTPO-Parkand_Ride_Strategy_12-05-19.pdf)

## **BEST PRACTICES QUESTION 2: HOW ARE OTHER ORGANIZATIONS/AGENCIES EVALUATING AND/OR IMPROVING THE EFFICACY OF EXISTING PARK AND RIDE LOCATIONS, AND WHAT FIRST MILE/LAST MILE STRATEGIES COULD BE APPLIED TO IMPROVE PARK AND RIDE EFFICACY?**

### **ALAMEDA COUNTY TRANSPORTATION COMMISSION, ALAMEDA COUNTY, CA**

Alameda County Transportation Commission conducted a Tri-Valley Integrated Transit and Park and Ride Study to address traffic congestion and commuting in the Tri-Valley jurisdiction (Dublin, Pleasanton, Livermore, San Ramon, and Danville).<sup>12</sup>

As part of the study, an existing conditions assessment of park and ride facilities in the Tri-Valley area was completed. Key features of the existing park and rides that improve their efficacy include:

- Covered bike lockers and bike racks
- Security cameras
- Bus shelters
- Trash receptacles
- Bus bays
- Transit information booths
- ADA parking
- Motorcycle parking
- Passenger waiting areas
- Parking lot lighting
- Wayfinding signage
- Bus stop striping
- Technology that provides live transit arrival/departure information

The following recommendations were made as part of the study to improve the efficacy of park and rides:

- Implement high-frequency shuttle service during peak commute hours from park and ride facilities to transit stations.
- Facilitate the use of park and ride lot capacity for private employer shuttles.
- Deploy Intelligent Transportation System (ITS) enhancements to better integrate transit and park and ride facilities, including:
  - Transit signal priority treatments
  - Real-time vehicle arrival/departure information
  - Real-time parking occupancy information
- Charge parking fees at certain parking facilities to distribute parking demand system-wide. Revenue obtained from the fees could support customer information services or to offset the costs of a shuttle service.

<sup>12</sup> Source: Tri-Valley Integrated Transit and Park-and-Ride Study. Prepared by DKS in association with CDM Smith, CHS Consulting, and Transportation Analytics for Alameda County Transportation Commission, May 2017. [https://www.alamedactc.org/wp-content/uploads/2018/11/AlamedaCTC\\_Tri-Valley\\_Integrated\\_Transit\\_and\\_Park-and-Ride\\_Study\\_May2017.pdf](https://www.alamedactc.org/wp-content/uploads/2018/11/AlamedaCTC_Tri-Valley_Integrated_Transit_and_Park-and-Ride_Study_May2017.pdf)



- Implement mobile payment options to allow for cost-effective collection and processing of fee payments.
- Utilize remote enforcement of lots using license plate reader (LPR) cameras.

### **BAY AREA RAPID TRANSIT (BART), SAN FRANCISCO BAY AREA, CA**

Bay Area Rapid Transit (BART) owns park and rides throughout the San Francisco Bay area. Park and rides operated by BART have a variety of features that improve their efficacy, including:

- Pre-reserved parking in a designated permit area.
- A cell phone app that allows parking patrons to pay for parking, plan their trip, view advisories, and view real-time transit departure information.
- The option to pay for parking using BART transit card (Clipper Card).
- A carpool parking program that allows carpoolers preferential parking in permit-only areas.
- Bike racks and covered bike lockers.
- Bike inspections and repairs at select locations.
- Motorcycle parking.
- A pilot program with Electric Vehicle parking and charging stations.
- Data on estimated fill times for each park and ride.



### **BERKELEY CHARLESTON DORCHESTER COUNCIL OF GOVERNMENTS (BCDCOG), CHARLESTON, SC**

The Berkeley Charleston Dorchester Council of Governments (BCDCOG) undertook a Park and Ride Study to evaluate the efficacy of existing park and rides and to select new potential locations.<sup>13</sup> To evaluate existing conditions, the project team conducted a site inspection at each lot. Site inspectors observed

<sup>13</sup> Source: Park and Ride Study Site Selection Report. Prepared by AECOM for Berkeley Charleston Dorchester Council of Governments, September 2018. <https://www.bcdkog.com/wp-content/uploads/2018/11/00-Park-Ride-Study-Final-Report.pdf>

characteristics such as number of available parking spaces at the lot, as well as access and lighting. The study included an analysis of the existing agreements in place for each park and ride facility. Recommendations that were made in the study to improve existing park and ride locations include:

- Formalize and extend existing agreements with property owners
- Improve wayfinding signage
- Designate areas for carpools and vanpools

The study included design criteria for new park and rides, including the following:

- Passenger shelter and amenities
- Restroom facilities
- Emergency call boxes
- Trash receptacles
- Lighting
- Paved parking
- Transit information
- ADA parking spaces
- Reserved spaces for vanpools and carpools with preferential parking
- Parking spaces for passenger pick-up/drop-off
- Bike racks and bike lockers
- Car sharing services
- EV parking spaces

## **STRATEGIES FOR FIRST MILE/LAST MILE ACCESS**

First mile/last mile strategies can help improve the efficacy of park and ride facilities by promoting greater access to the facility. This section includes first mile/last mile strategies that have been implemented in other regions.

### ***MICROTRANSIT***

This section provides two examples of microtransit shared ride services (users share a ride with several people along a flexible route). Flexible route services could help connect potential park and ride users from their place of origin to and from a park and ride facility.

### **OC FLEX – ORANGE COUNTY, CA<sup>14</sup>**

OC Flex is an on-demand shared ride service serving select communities in southern Orange County, California. OC Flex is a service provided by the Orange County Transportation Authority (OCTA) and is funded by a grant provided by the Mobile Source Air Pollution Reduction Review Committee (MSRC). Riders book and pay for a ride using a mobile app. Riders can book a ride within the specified zone in Aliso Viejo and Mission Viejo and choose any origin and destination within that zone. OC Flex operates seven days per week (Monday

<sup>14</sup> Source: <http://octa.net/OCFlex/Overview/>

through Friday from 6:00 a.m. to 9:00 p.m. and Saturday/Sunday from 9:00 a.m. to 9:00 p.m.). Riders pay a daily fee to ride OC Flex. OC Flex provides free transfer connections with OC buses, Metrolink commuter rail and Amtrak at the Mission Viejo Transportation Center and Metrolink Station.

### **BFT CONNECT – KENNEWICK, WA<sup>15</sup>**

BFT Connect is an on-demand shared ride service operated by Ben Franklin Transit, in partnership with Via (private mobility company). The service runs in the Tri-Cities area of Kennewick, Pasco, and West Richland. The service is primarily designed to get riders from home to designated locations along major bus routes, called Transit Connections. Riders may be asked to walk to an intersection near their home to get picked up. Riders book and pay for a ride using the Via cell phone app. The service operates Monday through Saturday (Monday through Friday from 7:00 a.m. to 7:00 p.m. and Saturday from 9:00 a.m. to 5:00 p.m.).

### **BIKE ACCESS**

This section provides two examples of programs designed to improve access to bicycles. Similar programs could be applied to park and ride facilities:

### **BIKE LOCKERS AND BIKE RENTALS - BIKE LINK<sup>16</sup>**

BikeLink provides on-demand, covered bike lockers and bike rental services. BikeLink is available in select regions in California, Oregon, Washington, Utah, Illinois, and Vermont. Bicyclists can purchase a BikeLink card to book a bike locker and pay an hourly rate to park their bike. Bikes can also be rented through the bike locker system. Users in San Francisco can link their Clipper transit card to use a BikeLink locker.

King County Metro and Sound Transit in the Seattle metro area have been replacing all their annual subscription bike lockers with BikeLink lockers in order to increase daily utilization of bike parking at Transit Centers and train stations and provide flexible on-demand use of their installed capacity.

### **BIKE SHARING – LA METRO, LOS ANGELES, CA<sup>17</sup>**

The Los Angeles County Metropolitan Transportation Authority (LA Metro) offers a bike share program, called Metro Bike Share, in select locations in the City of Los Angeles. Metro Bike Share is a partnership between LA Metro and the City of Los Angeles. The bike share program offers 24/7 access to a fleet of bicycles designed to be used for short trips. Riders can book a bicycle online or using the Metro Bike Share app and pick up the bicycle at a designated bike share station. Riders can return bicycles at any Metro Bike Share station.

15 Source: <https://www.bft.org/services/connect/>

16 Source: <https://www.bikelink.org/>

17 Source: <https://bikeshare.metro.net/>

## **BEST PRACTICE QUESTION 3: HOW ARE OTHER ORGANIZATIONS/AGENCIES ENCOURAGING THE USE OF “SMART COMMUTING” IN LIEU OF AN ENTIRELY SINGLE OCCUPANCY VEHICLE (SOV) TRIP?**

### **COMMUTER CALCULATORS**

Commute calculators help commuters understand the true cost of driving to help commuters change their behavior and consider an alternative mode of transportation. This section presents two examples of effective commuter calculators.

#### ***COMMUTE SOLUTIONS***<sup>18</sup>

Commute Solutions, as referenced in the Trip Planning Sites/Tools section, offers a Commute Cost Calculator. To use the calculator, commuters enter their commute and vehicle information into an online calculator to obtain their monthly cost for commuting using their personal vehicle. Commuters enter the mileage of their daily round trip, car payment amount, working days, fuel price, and vehicle type. This tool is designed to help commuters understand the monthly cost of driving.

#### ***COMMUTE COST AND CARBON EMISSIONS CALCULATOR***<sup>19</sup>

Stanford University has a commute cost and carbon emissions calculator to quantify the financial and environmental costs (or savings) of a commute. The tool allows users to enter their commute information including commute mileage, working days, fuel cost, parking cost, and toll amounts. The tool also allows for the calculation of the environmental cost savings of using a sustainable mode of transportation, such as bicycling or public transit.

### **MULTI MODAL COMMUTE INFORMATION**

Many employers offer employee commute programs to encourage commuting by an alternative mode of transportation. Providing information about alternative options in real-time is an important tool used to reduce uncertainties and increase commuters' confidence in using alternative modes of transportation. Two examples of companies that provide commuters with real-time information include:

#### ***COMMUTIFI***<sup>20</sup>

Commutifi offers an open mobility platform that quantifies and scores commuting routes. Commutifi works with employers to assess employee commuting behavior based on an initial survey of employees. Commutifi creates a dashboard tailored to each employee that includes maps of how they get

18 Source: <https://commutesolutions.com/commute-cost-calculator/>

19 Source: <https://transportation-forms.stanford.edu/cost/>

20 Source: <http://www.commutifi.com/>

to and from work and a variety of plans to improve the employee's commute score. Commutifi integrates with partner companies (i.e. Uber, Lyft, bike share companies) to collect commute data in the background. The platform helps organizations understand employees' commuting behavior to inform mobility solutions.

### ***DYNAMIC TRANSPORTATION ARRIVAL PLATFORMS***

There are technology providers that provide employers with real-time transportation arrival data, including public transit arrivals and availability of bikeshare, carshare, and ride hailing services. Some of these platforms provide electronic displays that employers can place in a common area, such as a lobby. Some also provide an app that people can use to find transit information on their smart phone, incorporating a MobilityScore tool that provides a scale between 0 and 100 to assess how easy it is to get around from any address without a personal car.

### ***COMMUTE TRACKING AND GAMIFICATION/CAMPAIGNS***

To incentivize employees to take non-SOV modes of transportation, employers can implement commuter benefit programs in which employees track their commutes and participate in commuter challenges (gamification). This section presents two examples of commute tracking/gamification campaign services.

### ***CLOUD-BASED COMMUTE MANAGEMENT FOR COMMUTERS***

Cloud-based commuter management solutions for regional, corporate, and campus commuter networks offers an interactive commuter dashboard for commuters to plan journeys, log trips, and track statistics. Platforms can include gamification and incentive campaign tools for commuters that organizations can use to boost user engagement., such as Ride Amigos, which is the current platform provider for Share the Ride Idaho.<sup>21</sup>

### ***CLOUD-BASED COMMUTE MANAGEMENT FOR EMPLOYERS***

Similarly, cloud-based, commuter benefits management software for employers provide administrative tools that help employers identify and implement incentive programs for commuters. These can include a variety of commuter gamification and incentive ideas including commuter challenges, giveaways, point programs, employee reimbursement, and event discounts.

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<sup>21</sup> Source: <https://rideamigos.com/>

## CASE STUDIES

### *TRIP PLANNING WEBSITES/TOOLS*

Trip planning sites and tools provide users with information to help plan their trip using a non-SOV mode of transportation. Two examples of trip planning websites/tools include:

#### **CHOOSE YOUR WAY – BELLEVUE, WA<sup>22</sup>**

Choose Your Way, Bellevue is a transportation resource website and program provided by the City of Bellevue, Washington, for employers, commuters, property managers and residents of Downtown Bellevue. The program is part of the City's effort to reduce Single-Occupancy Vehicle (SOV) travel, traffic congestion, and improve access to information about mobility options through transportation demand management (TDM). The Choose Your Way website has resources to help people plan their trip using a non-Single Occupancy Vehicle (SOV) mode of transportation, including walking, bicycling, transit, and ridesharing. The website features personalized commute assistance that allows participants to specify their trip schedule and travel route, and the Choose Your Way Bellevue staff will create a customized commute plan for free. Participants can log their commute on the Choose Your Way website and earn rewards for taking non-SOV modes of transportation.

#### **COMMUTE SOLUTIONS – AUSTIN, TX<sup>23</sup>**

Commute Solutions is a “one-stop” transportation resource for Central Texans provided by Capital Area Council of Governments to provide solutions that promote non-SOV travel. The Commute Solutions website has resources on various methods of commuting, including carpool, vanpool, bike/walk, transit, telework, flexible work schedule, commute-friendly workplaces, and emergency ride home. The website has resources tailored to a variety of audiences, including students, seniors, persons with disabilities, residents in rural communities, and employers. Participants can log their commute on the Commute Solutions website and earn rewards for taking non-SOV modes of transportation.

### *CARPOOL/VANPOOL RIDEMATCHING SERVICES*

Carpool/vanpool ridematching services help match commuters who are interested in a carpool or vanpool. For instance:

<sup>22</sup> Source: <https://chooseyourwaybellevue.org/>

<sup>23</sup> Source: <https://commutesolutions.com/>

***RIDEFINDERS – RICHMOND, VA<sup>24</sup>***

RideFinders is a division of the Greater Richmond Transit Company (GRTC), which is the regional non-profit ridesharing and TDM agency in Central Virginia. The RideFinders website has a variety of tools for commuters who are considering using a non-SOV mode of transportation. RideFinders features a rideshare matching service that matches riders with a vanpool of at least seven people. Passengers make a monthly payment that contributes to the cost of the vehicle, maintenance, insurance, fuel, parking fees, sales tax, and tolls. RideFinders works with vendors to provide vans to riders. In addition to the website, there is also a RideFinders mobile app that allows participants to use the ride matching services.

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24 Source: <http://ridefinders.com/>

## **BEST PRACTICE QUESTION 4: HOW ARE OTHER ORGANIZATIONS/AGENCIES WORKING WITH LOCAL JURISDICTIONS/OTHER AGENCIES TO IMPROVE ACCESS TO PARK AND RIDES AND SUPPORT THEIR USE?**

### **ALAMEDA COUNTY TRANSPORTATION COMMISSION, ALAMEDA COUNTY, CA**

Alameda County Transportation Commission conducted a Tri-Valley Integrated Transit and Park and Ride Study to address traffic congestion and commuting in the Tri-Valley area (Dublin, Pleasanton, Livermore, San Ramon, and Danville).<sup>25</sup> The study team included representation from all five local jurisdictions, Alameda County, and transit agencies providing service in the Tri-Valley area.

Rather than recommending separate coordination processes for each park and ride project, the study recommended a forum for collectively exploring alternatives, reaching consensus, and monitoring and managing issues during development. The region has an existing Tri-Valley Transportation Council (TVTC), with representation from the two counties in the Tri-Valley (County of Alameda and County of Contra Costa), and five cities (Livermore, Pleasanton, San Ramon, Dublin, and Danville). The study recommended use of this existing forum for project coordination.

The study recommends a variety of technology improvements, including transit signal priority treatments, real-time vehicle arrival/departure, and real-time occupancy for park and ride lots. The real-time parking availability and transit arrival technologies are to be provided to commuters via internet and/or smart phone applications. It is recommended that these technology improvements are coordinated between jurisdictions and agencies, and data is shared between agencies.

### **BERKELEY CHARLESTON DORCHESTER COUNCIL OF GOVERNMENTS, CHARLESTON, SC**

The Berkeley Charleston Dorchester Council of Governments (BCDCOG) undertook a Park and Ride Study to evaluate the efficacy of existing park and rides and to select new potential locations.<sup>26</sup> The BCDCOG Park and Ride study included a stakeholder engagement process. BCDCOG engaged a variety of stakeholders to seek input on the usage of existing lots and to inform future park and ride locations. The key stakeholders engaged and examples of input collected include:

- Bus Drivers
  - Engagement method - interviews
  - Examples of topics discussed - park and ride lot usage, commuter destinations, and travel time patterns.

<sup>25</sup> Source: Tri-Valley Integrated Transit and Park-and-Ride Study. Prepared by DKS in association with CDM Smith, CHS Consulting, Transportation Analytics for Alameda County Transportation Commission, May 2017. [https://www.alamedactc.org/wp-content/uploads/2018/11/AlamedaCTC\\_Tri-Valley\\_Integrated\\_Transit\\_and\\_Park-and-Ride\\_Study\\_May2017.pdf](https://www.alamedactc.org/wp-content/uploads/2018/11/AlamedaCTC_Tri-Valley_Integrated_Transit_and_Park-and-Ride_Study_May2017.pdf)

<sup>26</sup> Source: Park and Ride Study Site Selection Report. Prepared by AECOM for Berkeley Charleston Dorchester Council of Governments, September 2018. <https://www.bcdkog.com/wp-content/uploads/2018/11/00-Park-Ride-Study-Final-Report.pdf>



- Large employers
  - Engagement method – stakeholder workshops
  - Examples of topics discussed - commute mode, travel time of day, preferred park and ride locations, and potential non-SOV mode share incentives.
- Municipalities
  - Engagement method – stakeholder workshop
  - Examples of topics discussed – existing park and ride utilization, typical commuting patterns of users, preferred park and ride locations, potential non-SOV incentives, and anticipated community growth.

To seek input on potential locations for new park and rides, BCDCOG conducted map exercises, where stakeholders placed dots on the maps indicating locations that they thought would be beneficial for park and ride facilities. The stakeholder feedback helped to inform potential locations for park and ride facilities. Select stakeholders also joined the project team to conduct a field review of potential sites and participated in a scoring process to prioritize locations.

## LOS ANGELES METROPOLITAN TRANSPORTATION AUTHORITY (LA METRO)

Los Angeles County Metropolitan Transportation Authority (LA Metro) conducted a study, the Supportive Transit Parking Program Master Plan (STPP), to govern how the agency manages its park and ride facilities.<sup>27</sup>

A pilot paid parking program was conducted at over 10 stations concurrent with the formation of the STPP. The plan builds on LA Metro’s pilot program to implement paid parking at select park and ride facilities that meet certain criteria. One of the challenges with implementing paid parking is that parking demand may spill over from the lots to adjacent areas. A key recommendation of the plan is to work with local jurisdictions to limit parking spillover in communities around the station areas. The plan suggests that LA Metro can offer assistance to jurisdictions to manage spillover near stations by offering parking enforcement around station areas and recommend parking policy adjustments, such as time limits, permits, or manageable paid parking programs to increase the efficiency of the parking system.

The preparation of the plan also included a stakeholder outreach effort. Outreach was conducted to transit riders through surveys designed to understand riders’ needs and priorities with respect to LA Metro parking facilities and other travel modes for accessing transit stations. Workshops were also held for agency stakeholders that solicited input on potential program management alternatives.

<sup>27</sup> Source: Supportive Transit Parking Program Master Plan. Prepared by Walker Consultants, Arellano, Iteris, AVS Consulting, Inc, and Steven T. Kuykendall & Associates for Los Angeles County Metropolitan Transportation Authority, October 2017. <http://libraryarchives.metro.net/DPGTL/parking/2017-Supportive-Transit-Parking-MasterPlan.pdf>

# FUTURE



## CHAPTER 2.1: FUTURE PARK AND RIDE SYSTEM TYPOLOGIES

This chapter develops future typology classifications for the regional park and ride system, drawing upon the unique needs of transit and vanpool riders in the varying land use contexts throughout the region.

### KEY FINDINGS

- In the future, new park and rides should be classified based on a variety of factors, including housing and land use density, distance from a central business district, and access to the park and ride via various travel modes.
- Amenities and supportive measures leveraged at a park and ride facility should be determined based on the typology classification.
- All park and rides should also follow a set of universal standards regardless of typology classification, ensuring an acceptable level of maintenance, access, and visibility for all customers regardless of where they start or end their ride.

### FUTURE PARK AND RIDE TYPOLOGIES

At present, park and rides are defined using a formal/informal distinction, wherein “formal” refers to park and rides that are leased, signed, and managed by a transportation agency, while “informal” refers to park and rides that are not owned or operated by an agency and are typically located in existing parking facilities serving other purposes (such as a retail store parking lot). While this categorization helps to evaluate the operational requirements for each park and ride, it does not bode well for a systemic approach where park and rides are evaluated or relocated, or new park and rides are created, based on the convenience and access they provide to the active or potential consumer.

In the future, consumer needs and context will be better reflected by categorizing existing and future park and ride locations by type of user and type of achievable first/last-mile connections to provide increased context that directly relates to how facilities are used and relate to their surrounding area and less on facility ownership.

### BROAD TYPOLOGY CLASSIFICATION

#### *TYPOLGY 1: HIGH DENSITY PARK AND RIDE*

With strong growth projected for Downtown Boise and other existing population centers, the potential for vanpool and carpool demand for ‘reverse’ commutes should not be overlooked. High-density park and rides are mobility hubs

rather than park and rides only, with access through a variety of modes as the priority rather than solely single-occupancy vehicle access. High-density locations present the greatest opportunity for non-vehicular first- and last-mile connections and are organized around the availability of transit-to-transit connections, pedestrian, and bicycle infrastructure. Non-automobile connections should be prioritized and incentivized.



### ***HIGH-DENSITY PARK AND RIDE: AMENITIES AND SUPPORTIVE MEASURES***

As centers for local and regional mobility, high-density park and rides are outfitted with amenities and tools that support first- and last-mile connections through options outside the single-occupancy vehicle. These may include:

#### ***Amenities***

- Covered bike lockers and bike racks
- Dockless scooter and e-bicycle parking
- Bike share
- Restrooms/locker rooms with showers
- Real-time transit information
- Security, safety, and health basics, like trash receptacles and security cameras

***Transportation Demand Management/Commute Choice Support***

- Trip planning desktop and mobile application, for instance including park and ride facilities along potential routes. Share the Ride Idaho currently lists individuals along the input route with their preferred schedules and how far off their route you are. These distances could be shortened, and additional similar schedules presented, with the inclusion of park and ride facilities in the algorithm
- Partnerships with local jurisdictions and/or major employers on a commute calculator program

***Jurisdictional Partnerships***

- Partnership with local jurisdiction to provide a microtransit option as a first/last mile connection
- Transit and/or vanpool subsidies provided by the municipality and/or major employers

***Zoning Considerations***

- Reduced or eliminated parking requirements in proximity to an official park and ride or mobility hub (e.g. within  $\frac{1}{4}$  to  $\frac{1}{2}$  mile)
- Parking maximums in proximity to an official park and ride or mobility hub (e.g. within  $\frac{1}{4}$  to  $\frac{1}{2}$  mile)
- Retail frontage requirement of 50% within  $\frac{1}{4}$  to  $\frac{1}{2}$  mile of an official park and ride or mobility hub
- Parking reduction allowances for transportation demand management (TDM) plans

**The City of Meridian, Idaho** allows for director approval of alternative parking plans for projects that meet certain conditions, such as close proximity to a transit stop (within  $\frac{1}{4}$  mile), transportation demand management programming, amenities for active transportation use, shared parking with nearby developments, and more.

***TYOLOGY 2: MEDIUM-DENSITY PARK AND RIDE***

Medium-density park and rides are defined by a moderate amount of density, with a mix of transportation options available. Medium-density areas accommodate both traditional ‘to downtown’ commutes as well as point-to-point vanpools and carpools to other area employment centers such as the Mountain Home Air Force Base. Ideally medium-density park and rides, like their higher density counterparts, are organized around the availability of transit-to-transit connections, pedestrian, and bicycle infrastructure where possible, and provide a modest amount of parking. Medium-density locations present the largest opportunity to turn users on to the use of non-vehicular first- and last-mile connections and the benefits of van/carpools into the urban population centers. Non-automobile connections should be prioritized and incentivized.



### ***MEDIUM-DENSITY PARK AND RIDES: AMENITIES AND SUPPORTIVE MEASURES***

While medium-density park and rides must still support single-occupancy vehicle connections as a primary mission, they can also leverage a combination of incentive- and regulation-based transportation demand management to support transit and vanpool usage and encourage alternative methods of arrival.

#### ***Amenities***

- Covered bike lockers and bike racks
- Real-time transit information
- Automated Parking Guidance Systems (APGS)
- Security, safety, and health basics, like trash receptacles and security cameras

#### ***Transportation Demand Management/Commute Choice Support***

- Trip planning desktop and mobile application
- Partnerships with local jurisdictions and/or major employers on a commute calculator program

#### ***Jurisdictional Partnerships***

- Partnership with local jurisdiction to provide vanpool/ride matching services
- Transit and/or vanpool subsidies provided by the municipality and/or major employers

### **Zoning Considerations**

- Reduced parking requirements in proximity to an official park and ride or mobility hub (e.g. within 1 mile)
- Parking reduction allowances for transportation demand management (TDM) plans
- Parking reductions and/or other incentives for affordable housing and service retail within ½ mile of an official park and ride or mobility hub

**The City of Boise, Idaho** sets forth a parking maximum of 1.75x the minimum requirement in its zoning code for all uses except for single-family residential. This provision is intended to prevent overbuilding of parking and encourage reliance on transportation options outside the personal vehicle.

### **TYOLOGY 3: LOW-DENSITY PARK AND RIDE**

Low-density park and rides are presently and likely to remain car-dependent, with the main goal and benefit of low-density park and rides having the ability to reduce vehicle miles traveled by encouraging carpools and vanpools to form up at major roadway system points in advance of a long commute. Low-density locations are organized around convenient system transfer points, such as freeway interchanges, and major arterial intersections. Participants will likely need to drive to these locations given a lack of transit, pedestrian, and bicycle infrastructure in low-density locations, but would still save a mileage and wear and tear on their personal vehicles. Low-density park and rides are akin to a funnel where people will travel in from the rim (rural residences) and get together before going down the tube of the funnel (freeway or major arterial). Low-density park and rides may have to provide more parking than high and medium-density park and rides as the predominant trip to the park and ride will be the personal automobile. The applicability of other first- and last-mile connections is low in this type of setting, with a personal vehicle being the most efficient form of travel to the meetup point. It may be possible to achieve some level of bicycle or e-bicycle acceptance as a connection if safe routes can be identified.



### ***LOW DENSITY PARK AND RIDES: AMENITIES AND SUPPORTIVE MEASURES***

Low-density park and rides focus primarily on maximizing trip convenience for users arriving via single-occupancy vehicle.

#### ***Amenities***

- Real-time transit information
- Automated Parking Guidance Systems (APGS) within highway signage
- Security, safety, and health basics, like trash receptacles and security cameras

#### ***Transportation Demand Management/Commuter Choice Support***

- Trip planning desktop and mobile application

#### ***Jurisdictional Partnerships***

- Partnership with local jurisdiction to provide vanpool/ride matching services



**Zoning Considerations**

- Reduced parking requirements in proximity to an official park and ride (e.g. within 1 mile)
- High-density zoning and/or Floor Area Ratio (FAR) bonuses within 1 mile of an official park and ride, similar to and in addition to a density bonus strategy recently explored by Boise city leadership to promote affordable housing options. Location of a development near a transit hub or park and ride facility can drastically reduce independence on personal vehicles, in turn increasing shared parking opportunities and the associated costs with building excessive parking onsite

**The City of Denver, Colorado** offers an alternative minimum parking ratio for affordable housing and economy housing at 0.25 spaces per unit—25%-33% of the ratio prescribed for standard, market rate housing citywide.

**Table 2.1-1** presents the above typologies with potential subcategories, their characteristics and examples of existing park and ride facilities.

**Table 2.1-1: Park and Ride Typologies and Subcategories**

TYPE	LAND USE DENSITY	DISTANCE FROM CBD (TYP.)	TRANSIT AVAILABILITY	BIKE/PED ACCESS	SCALE (EST. SPACES)	EXAMPLE*
High-Density Urban Core	High	< 2 miles	Transit hub	High	<10	NA
High-Density Neighborhood	High	0 – 5 miles	Sub-regional hub	High	<20	NA
Medium-Density TOD	Medium - High	5 – 15 miles	Local bus connections	Good within area of station	50-100+	NA
Medium-Density Freeway	Low	10+ miles	Possible regional bus connections	Difficult or none	30-70	Park and Ride #21
Medium-Density Joint Use	Low – Medium	10+ miles	Some local bus connections	Poor to Fair	50-100+	Park and Ride #3
Medium-Density Transit Center	Low – Medium	10+ miles	Intermodal transit center/ transit hub	Good	50-100+	Park and Ride #13
Low-Density Highway	Low	15+ miles	Limited or none	Difficult or none	20-50	Park and Ride #29
Low-Density Joint Use	Low – Medium	15+ miles	None	Difficult or none	50+	Park and Ride #43
Regional Busway	Low	15+ miles	Regional transit stop	Difficult or none	50+	Park and Ride #16

Source: Walker, 2020

## RECOMMENDED UNIVERSAL STANDARDS

To the extent feasible, COMPASS should create a set of universal standards for all park and ride facilities in regards to the following:

- Pavement Quality
- Striping
- Lighting and Light Levels
- Signage
- ADA compliance
- Access to information about the facility (where, how much parking, etc.)

While it may be difficult or impossible to provide even an occasional security presence at park and ride locations due to the number of locations and distance the program covers, park and ride managing organizations should do what is feasible to make park and rides clean and safe environments for potential users. Uncleanliness and perceptions of lack of security are likely to discourage the use of the park and ride system.

## CHAPTER 2.2: POTENTIAL PARK AND RIDE SYSTEM ENHANCEMENT AND EXPANSION

This chapter discusses potential expansion of the regional park and ride system network in the near term and mid-long term.

### KEY FINDINGS

- In the immediate term, COMPASS and its partners should look to standardization of existing park and rides, with clear maintenance standards, signage and wayfinding standards, and regular updates to online resources for trip planning.
- In the mid- to long-term, COMPASS and its partners should look to formalize, enhance, and expand existing park and rides in core service areas, and identify new park and rides in areas where bus service is projected for expansion or there are significant opportunities for intercepting long commutes.

### POTENTIAL PARK AND RIDE NETWORK ENHANCEMENT AND EXPANSION

#### IMMEDIATE RECOMMENDATIONS

In the immediate future, it is recommended that COMPASS look to fill existing service gaps and to build a strong foundation upon which future expansion of the system may be made. While formal park and ride facilities provide increased control over all aspects of the parking facility, subject to local zoning considerations, informal facilities typically require little upfront capital investment. Even with informal park and ride locations, however, basic program components should be a requirement. With an initial focus on the 40 park and rides currently utilized by the vanpool routes, facilities should at a minimum have signage for wayfinding from the nearest freeway or arterial roadway directing commuters to the location and raising awareness of the program and the site along their existing commute. Signage should be installed at the facility. Informal facilities that will not allow signage should be prioritized for replacement to a nearby alternative informal site that will allow signage or for replacement with a formal park and ride facility. It should be noted that signage does not need to designate any portion of parking as or implied to be reserved for vanpool commuters, as shown in **Figure 2.2-1**.

**Figure 2.2-1. Example Park and Ride Signage***Source: San Bernardino County Transportation Authority**Source: Michigan Dept. of Transportation*

Additionally, ongoing data collection should be immediately implemented to benchmark service efficiencies. This includes vanpool rider data to identify existing routes with capacity that can be filled by commuters on the potential riders list. Regular park and ride facility utilization counts should also be completed. These counts will identify well utilized facilities that may indicate a need to increase capacity, as well as aid in prioritizing installation of security features and amenities such as electric vehicle charging stations. The following provides a recommended list of benchmarks to collect and analyze on a bi-annual basis to complement and support the annual data collected from riders:

- Rider usage (how many passengers per vanpool by route on a typical, non-holiday day)
- Park and ride facility utilization (vehicles parked by space type where applicable, i.e. EV spaces, ADA spaces, etc.)
- Facility conditions field survey (signage, amenities, security and other features conditions)
- Transit utilization including boardings and alightings in relation to park and ride facilities

#### WHAT WE HEARD

Throughout the stakeholder outreach process, the importance of connecting the park and ride system to the transit system and providing increased options to personal vehicles was a strong and recurring request. The importance of reaching currently underserved populations to expand mobility and accessibility was also expressed. To reflect this, not only do park and ride typologies have varying weights based on their intended multimodal availability, but recommendations were developed to align with the scenarios presented in ValleyConnect 2.0.

For potential riders that do not meet the minimum requirements for an official vanpool route, facilitating organizations should consider incentivizing potential riders to use personal vehicles to create carpools of at least 3 passengers. Such personal carpools can be combined into vanpool routes when a sufficient demand level is reached. While Share the Ride Idaho currently provides carpool matching, it is not widely promoted. For instance, materials discussing vanpool route minimum requirements do not provide this option as a means of

establishing routes before the minimum number of riders is met for a van to be issued.

Building on the foundation established under the short-term recommendations, ensuring park and ride facilities moving into the mid and long-term planning horizons include minimum components such as signage and security installations, the long-term recommendation is to make data driven decisions to expand individual clusters of service to create a broader, more comprehensive park and ride system that supports multimodal commuting. This continues to orient the park and ride system with partner plans and complementary systems, such as ValleyConnect 2.0 and Valley Regional Transit, and to develop strategic partnerships to promote smart commuting choices with park and ride facilities acting as neighborhood connectors to the network. Such partnerships may include the Treasure Valley Cycling Alliance, Federal Highway Administration and its Bicycle and Pedestrian Program, the Federal Transit Administration, Idaho Walk Bike Alliance, Idaho Smart Growth, as well as local organizations.

These state or local organizations can help identify and connect with harder to reach stakeholders that may not be on transit lines but would benefit from park and ride facilities and multimodal services. For example, neighborhoods with limited employment opportunities would provide more transportation options networked to employment activity centers. Locales such as Kuna, which is projected to grow 4.5:1 in population to jobs by 2040, may be focus areas.

Once a framework upon which commuters can more consistently rely on to identify and interact with park and ride facilities is built, the following scenarios look to expand the park and ride network to fill gaps in service along fixed transit routes, based on the intermediate and growth scenarios discussed in ValleyConnect 2.0.

## INTERMEDIATE SCENARIO

While both scenarios for service expansion set forth in ValleyConnect 2.0 are aggressive, the Intermediate Scenario represents an intermediate step between current service and fulfillment of the regional transportation vision set forth in Communities in Motion planning work done by COMPASS. This scenario represents 200,000 hours of transit service, or roughly double the current service level in place today. Proposed improvements include nearly 40 added miles of high-frequency bus service, increases to service frequency and span systemwide, and enhanced passenger amenities such as new transit centers and park and rides, among others.

**Figure 2.2-2** depicts the service projected under this scenario, alongside existing informal and formal park and rides and projected 20-year population growth.

Areas highlighted in the **red** square depict locations where park and ride system enhancement should be focused on formalization of existing park and rides

pursuant to their typology classification. Areas for this type of enhancement were chosen due to their proximity to existing and expanded transit service and their potential as core trip-starting and terminal park and rides.

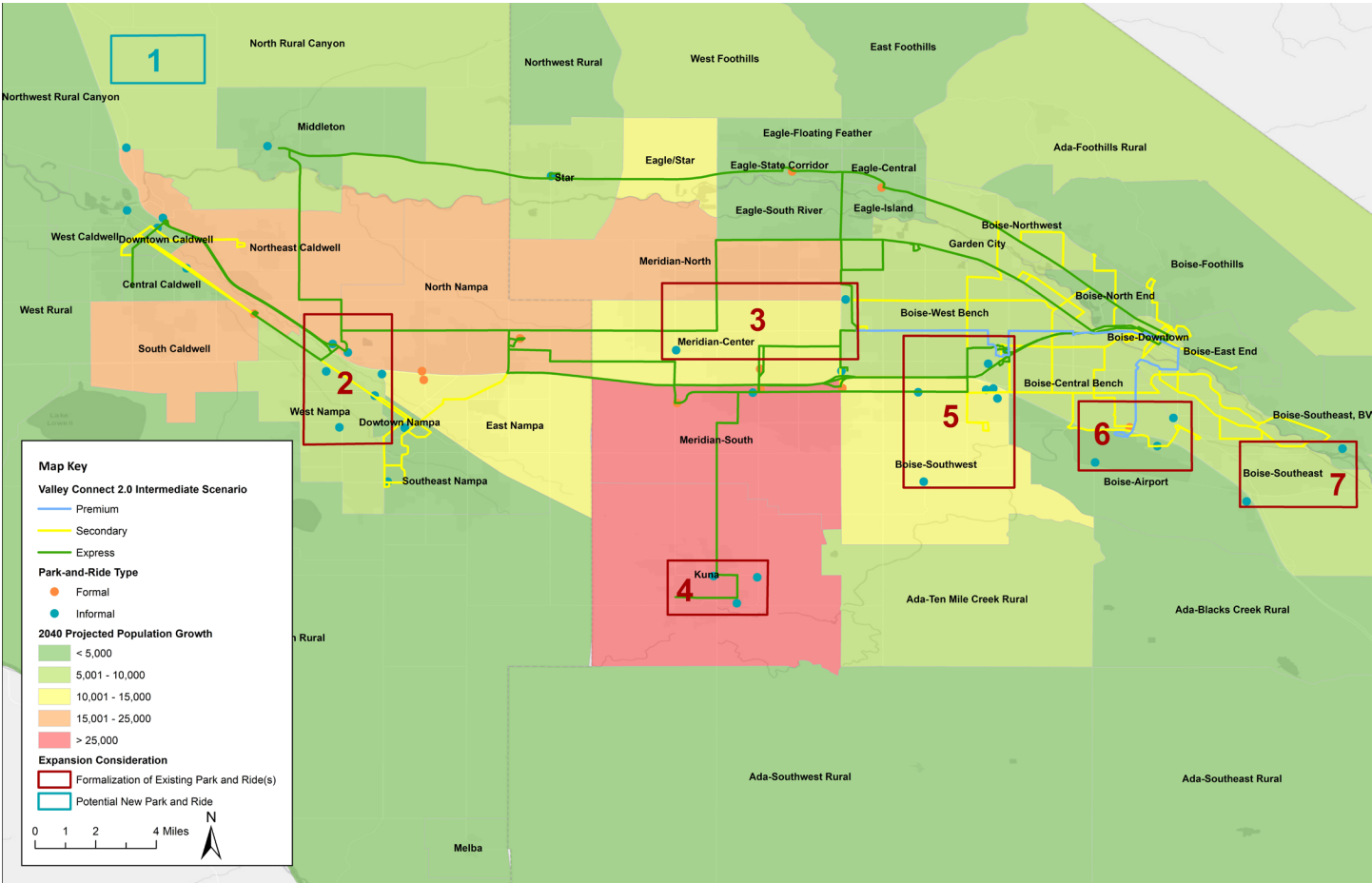
Areas highlighted in the **teal** square depict potential locations for new park and rides. In this case, new park and rides are envisioned as vanpool or shuttle-to-bus service. Park and rides in these areas have potential to intercept single-occupancy vehicle trips over 40 minutes to centers (such as downtown Boise). In some cases, intercepted driving trips require use of more than one major roadway. These focus areas are shown at existing activity centers off existing roadways, including Notus and Melba.

The table on the next page describes the approximate boundaries of the general areas highlighted in the map below.

**Table 2.2-1. Potential Park and Ride System Enhancement and Expansion Area Boundaries-Intermediate Scenario**

LOCATION ID	MUNICIPALITY	NORTHERN BOUNDARY	SOUTHERN BOUNDARY	EASTERN BOUNDARY	WESTERN BOUNDARY
1	North Rural Canyon County	Goodson Road	Purple Sage Road	Emmett Road	Old Highway 30
2	Nampa	Cherry Lane	Amity Road	Southside Boulevard	Middleton Road
3	Meridian	Ustick Road	Franklin Road	Cloverdale Road	Black Cat Road
4	Kuna	Kuna Road	Deer Flat Road	Ten Mile Road	Meridian Road
5	Boise	Fairview Avenue	Lake Hazel Road	Cole Road	Cloverdale Road
6	Boise	Nez Perce Street	Gowen Road	Illinois Avenue	Pond Street
7	Boise	Bergeson Street	Columbia Road	Shakespeare Way	S. Eisenman Road

**Figure 2.2-2. Potential Park and Ride System Enhancement and Expansion-Intermediate Scenario**



## GROWTH SCENARIO

The Growth Scenario fulfills the regional transportation vision set forth in Communities in Motion planning work done by COMPASS. Proposed improvements for this scenario include more than 110 added miles of high-frequency bus service, increased service frequency and span, and enhanced passenger amenities including transit centers and park and rides, among others.

**Figure 2.2-3** depicts the service projected under this scenario, alongside existing informal and formal park and rides and projected 20-year population growth.

Areas highlighted in the **red** square depict locations where park and ride system enhancement should be focused on formalization of existing park and rides pursuant to their typology classification. Areas for this type of enhancement were chosen due to their proximity to existing and expanded transit service and their potential as core trip-starting and terminal park and rides.

Areas highlighted in the **teal** square depict potential locations for new park and rides. In this case, new park and rides are envisioned as terminus locations for new bus service, and as vanpool or shuttle-to-bus service. Park and rides in these areas have potential to intercept single-occupancy vehicle trips over 40 minutes to centers (such as downtown Boise). In some cases, intercepted driving trips require use of more than one major roadway. These focus areas are shown at existing activity centers like Notus and Melba, or intercept areas off existing roadways, like Givens Hot Springs.

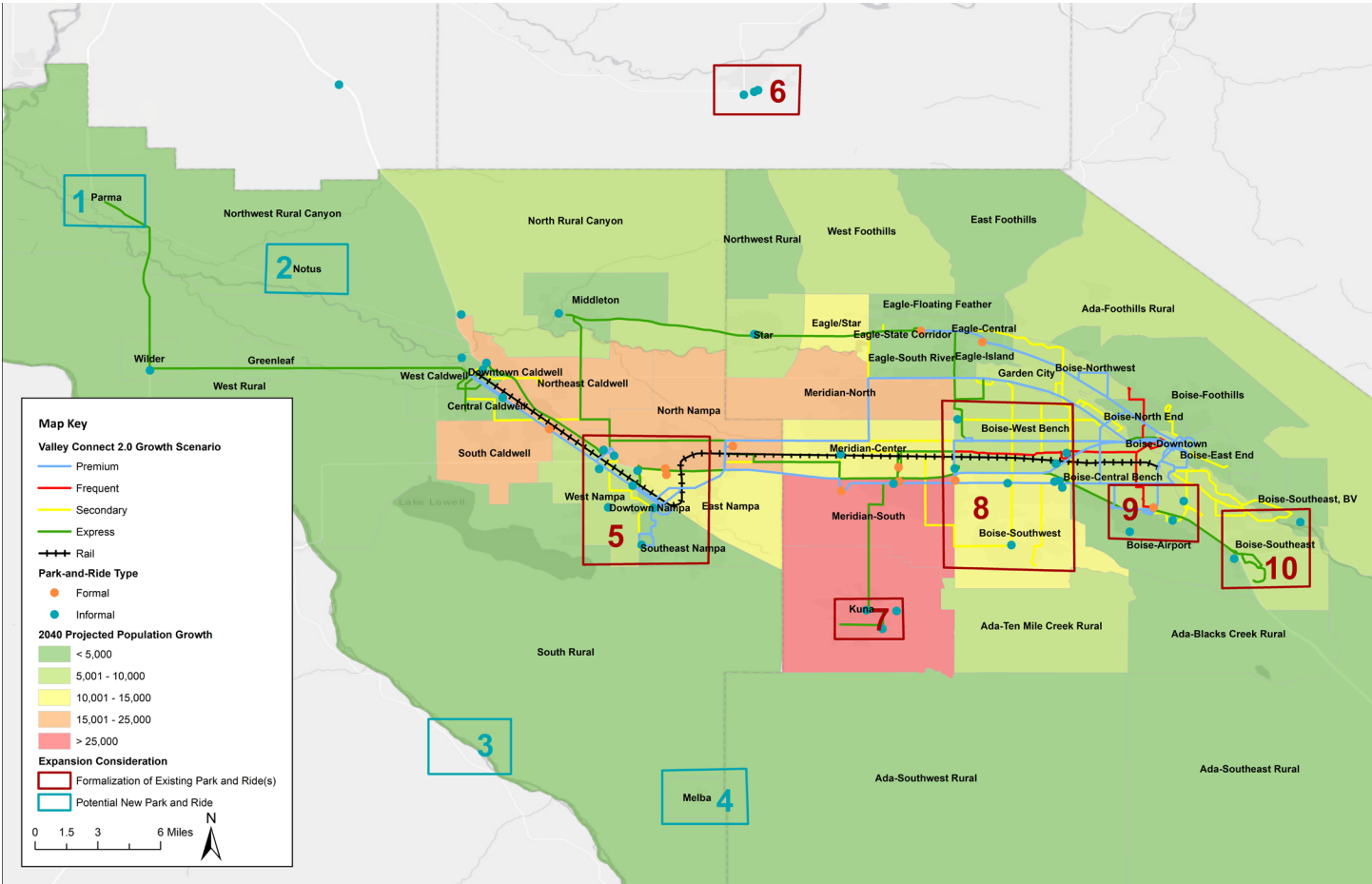
The table on the next page describes the approximate boundaries of the general areas highlighted in the map below.



**Table 2.2-2. Potential Park and Ride System Enhancement and Expansion Area Boundaries-Growth Scenario**

LOCATION ID	MUNICIPALITY	NORTHERN BOUNDARY	SOUTHERN BOUNDARY	EASTERN BOUNDARY	WESTERN BOUNDARY
1	Parma	Burden Road	Sand Road	Shelton Road	Roswell Road
2	Notus	Ten Davis Road	Boise River Road	Hop Road	Lon Davis Road
3	South Rural Canyon County	Big Foot Road	Jaca Lane	Pump Road	Pheasant Lane
4	Melba	Melba Road	Butte Road	Can Ada Road	Powerline Road
5	Nampa	Cherry Lane	Amity Road	39th Street	Middleton Road
6	Emmett	Main Street	Sales Yard Road	12th Street	Tyler Road
7	Kuna	Kuna Road	Deer Flat Road	Ten Mile Road	Meridian Road
8	Boise	Fairview Avenue	Columbia Road	Cole Road	Eagle Road
9	Boise	Nez Perce Street	Gowen Road	Illinois Avenue	Pond Street
10	Boise	Bergeson Street	Freight Street	Shakespeare Way	S. Eisenman Road

**Figure 2.2-3. Potential Park and Ride System Enhancement and Expansion- Growth Scenario**



## CHAPTER 2.3: PARK AND RIDE SITING CRITERIA AND RANKING SYSTEM

This chapter presents recommended site selection criteria and ranking system for the selection of new park and ride facilities. These criteria were developed using Walker's analysis of current and future park and ride conditions in the COMPASS planning area, review of the best practices of other communities, as well as Walker's knowledge and experience with similar projects.

### KEY FINDINGS

- Any decision making or funding entity should use a consistent quantitative scoring methodology for evaluating potential investment in expanding, enhancing, or adding new park and rides.
- While precise parameters should be determined by COMPASS and its partners on a case-by-case basis, it is recommended that investments with quantitative scores falling below 50% of the highest potential score be declined. Investments with scores falling between 50-75% should be given additional consideration, and investments with scores over the 75% mark should be pursued.

### SCORING METHODOLOGY

There are two components to developing a quantitative score for investment in new or existing park and rides.

The first component is **weight**. Weight refers to how important each criteria is to the success of the park and ride. Weights are assigned on a 4-point scale between 0.7 to 1.0 as follows:

- 0.7: The criterion is desirable, but not a determining factor in success of the park and ride.
- 0.8: The criterion is important to success of the park and ride.
- 0.9: The criterion is very important to success of the park and ride.
- 1.0: The criteria is essential to the success of the park and ride.

### WHAT WE HEARD

There are many components of the existing park and ride system that reflect best practices yet could be improved to more effectively meet the needs of the COMPASS system users and stakeholders. For instance, existing marketing efforts are predominantly centered around targeted campaigns at specific points during the year. Additionally, services provided to business are listed online, however there are no reported efforts to proactively reach new and expanding businesses throughout the year or contact businesses outside of the annual campaign. Improvements may include proactively coordinating needed maintenance agreements for facilities, joint marketing efforts, and land use and transportation planning updates as the COMPASS planning area continues to grow and experience new development. Agencies may come to include formal partnerships with more localized groups such as merchant or home owner associations in existing and potential future facility locations.

The second component is **criterion score**. Criterion score refers to how well the park and ride meets an individual criterion. Criterion scores are assigned on a 3-point scale between 1 and 3 as follows:

- 1: The location perfectly meets the criterion.
- 2: The location mostly meets the criterion.
- 3: The location does not meet the criterion.

To determine the final score for each criterion, the weight and criterion score are multiplied. A **total score** is obtained by adding the final scores for each criterion. This methodology is demonstrated in **Table 2.3-1** and **Table 2.3-2**.

## SITE SELECTION CRITERIA

The following is a recommended list of criteria to use for the evaluation of potential new and/or enhanced park and ride facilities. It should be noted that the weight assigned to the criterion will vary depending on the type of park and ride.<sup>28</sup>

- **Visibility** – The extent to which motorists can see the park and ride facility from adjacent travel routes. Visibility helps commuters identify and navigate to the park and ride facility. Visibility also alerts potential park and ride users of the presence of the facility for future use. Further, visibility results in additional “eyes on the street,” promoting safer parking facilities.
  - Scoring:** Based on the distance at which signage identifying the site can be seen from the facility’s entrance. The closer a driver must be, the lower the score. If the site is mapped in an automated parking guidance system, it automatically receives the highest score. Lack of any signage, however, receives a score of zero as signage has been identified as a base recommended requirement for all facilities, both formal and informal.
  - Weighting:** Signage and wayfinding is weighted as “very important” across all nine types of park and ride facilities.
- **Accessibility** – The ease at which the park and ride facility can be accessed by both passenger vehicles and transit vehicles and the movements necessary for these vehicles’ ingress and egress. The park and ride should be in close proximity or easily accessible to a high traffic corridor or critical junction.
  - Scoring:** To quantify a level of ease in accessing a facility, and apply that measure consistently, the number of turns necessary to enter and exit the park and ride as counted from the nearest freeway or arterial roadway is used.
  - Weighting:** Accessibility is very important for large profile and oversized vehicles such as transit buses as well as for

<sup>28</sup> See Chapter 2.1 for detailed typology classifications.

drivers navigating denser neighborhoods with more visual and mental noise that can make wayfinding more challenging. As such, preliminary weights assigned range from 0.8 to 0.9 to reflect these conditions.

- **Safety** – The extent to which commuters feel safe about leaving their car or bicycle at the park and ride facility. Commuters are more likely to use a park and ride facility where they feel safe, even outside of daylight hours.
  - Scoring:** While a sense of safety is a highly personal perception, to provide for a consistent measure across all locations, use of crime statistics is recommended. While an example measure by subarea is provided, these metrics should be reviewed and established with coordination from local law enforcement officials. For example, subareas with fewer than 100 annual violent or property crimes are scored highest, ranging to subareas reporting more 1,000 such crimes receiving a score of zero.
  - Weighting:** Safety is important, and improvement measures should be considered, regardless of initial scoring. However, because park and ride utilization typically does not correlate with the crime in the area, and additional measures can be installed or deployed to any facility, all facility types have equally been weighted on the lower range for this metric.
- **Security** – Similar to a perception of safety, commuters are more likely to use a park and ride facility in which they feel secure. Security includes equipment and other resources that can be added to a facility. For example, surveillance cameras, security patrols, and enhanced lighting. Because security features can typically be added to any park and ride facility, they have a low relative weight in influencing location decisions. Specific security measures should be reviewed and implemented by a qualified third party.
  - Scoring:** Points assessed match the number of listed security measures in place at the location.
  - Weighting:** Because security measures can be installed or deployed to any facility, all facility types have been equally weighted on the lower range for this metric.
- **Transit Availability** – The extent to which the park and ride facility is located in close proximity to an existing or proposed transit stop (such as a ValleyRide bus stop) and the number of routes serving the stop(s). The efficacy of a park and ride facility relies on the ability of a motorist to use a park and ride facility to access higher capacity transportation options, such as public transit. However, in locations with low density development and a lack of transit access, park and ride facilities can be used for other purposes, such as connecting motorists, bicyclists, and pedestrian users to other forms of transportation, such as carpooling, vanpooling, or

micromobility options. Therefore, sites that have a low rating for transit access should not be disregarded as potential park and ride sites.

**Scoring:** Transit availability is scored based on the number of routes and stops available within a minimum distance or at the location.

**Weighting:** The typologies for the park and ride system are closely tied to the transit and alternative mode options available at each classification. As such, the High-Density Urban Core, Medium-Density TOD, Medium-Density Transit Center, and Regional Busway park and rides weight this metric heavily, whereas the Medium-Density Freeway and Low-Density Highway weight this metric on the lower end of the range.

- **Bicycle and Pedestrian Route Access** – The proximity of the park and ride facility to bicycle and pedestrian routes. The presence of bicycle and pedestrian routes can connect bicyclists and pedestrians to transit or vanpool options at park and ride facilities. Motorists driving to a park and ride facility can also use bicycle and pedestrian routes to complete their commute.

**Scoring:** Bicycle access is scored based on the infrastructure leading to and at the location, including bike parking and the Level of Service (LOS), utilizing the evaluation methodology as published in the Highway Capacity Manual.<sup>29</sup> This method of evaluating bicycle LOS was developed at the University of Idaho and is a standard used throughout the country. Pedestrian access is scored based on the Pedestrian Environment Quality Index originally developed by the San Francisco Department of Public Health in 2008.<sup>30</sup> COMPASS is currently reviewing their methodology for evaluating pedestrian and bicycle service. Based on the outcome of that parallel effort, this metric and the scoring measures used for bicycle and pedestrian level of service may be updated to reflect the updated methodology.

**Weighting:** Similar to transit, the importance of bicycle and pedestrian access to a park and ride facility's success is tied to the type of facility analyzed. As such, High-Density facilities rate this metric high whereas low-density facilities, such as the Regional Busway and Low-Density Highway facilities rate this metric lower.

- **Topography and other Site Restrictions** – The extent to which the site is impeded by topographical challenges or other environmental features, such as wetlands. The ideal park and ride site would be a relatively flat site to reduce construction costs associated with grading.

<sup>29</sup> Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis, Transportation Research Board. 2010 <http://www.trb.org/Main/Blurbs/175169.aspx>

<sup>30</sup> Pedestrian Environment Quality Index, 2008 <http://www.peqiwalkability.appspot.com/about.jsp>

- Scoring:** The average slope is used to score the location, with a 1 to 3% grade scored highest, ranging to a grade in excess of 8% receiving a score of 0.
- Weighting:** Preparing a site for construction or improvement is equally important regardless of location. As such, topography is weighted equally across all park and ride facility types.
- **Site Size** – The size of the site is adequate to accommodate a new park and ride facility. Sites that are too large often result in an over-expenditure of funds and inefficient use of space. Sites that are too small may be unable to provide sufficient parking spaces to meet user demand.
 

**Scoring:** To ensure the facility has room to grow beyond accommodation of 1 vanpool route, a minimum of 10 stalls is necessary to receive a score above zero. However, to ensure large seas of vacant asphalt or overbuilt parking garages are not encouraged, while supporting growth and economies of scale, the highest score rank can be achieved with as few as 50 parking stalls.

**Weighting:** Size of the park and ride facility is less heavily weighted among the types of facilities that are anticipated as remote or satellite locations with fewer alternative mode options, such as the Medium-Density Freeway and Low-Density Highway facilities.
  - **Population Density** – Park and ride facilities are often most successful in areas with significant existing and/or growing residential populations, as there are more potential commuters that would use park and rides. The zoning of the surrounding area, which regulates future development, should be considered because it can determine future population density. While population density is an important factor, park and rides are also important in areas with lower population density to provide commuters access to non-single occupancy vehicle travel opportunities.
 

**Scoring:** The population density is scored twice in the evaluation tool, reflecting both current population and the projected future growth in population.

**Weighting:** Because park and ride facilities are intended to be long-term investments and may serve populations extended beyond the immediate subarea, more weight is placed on the future growth in population, with current population weighted relatively low across all facility types.
  - **Employment Density** – Areas that have a higher density of employment can be viewed as possible terminus locations and could be good candidates for mobility hubs. Again, the zoning of the surrounding area should be considered because it can determine the type of future development and employment density.

- Scoring:** The employment density is also scored twice in the evaluation tool, reflecting both current employment in the subarea and the projected future growth in jobs.
- Weighting:** Because park and ride facilities are intended to be long-term investments and may serve populations extended beyond the immediate subarea, more weight is placed on the future growth in jobs, with current employment weighted relatively low across all facility types.
- **Existing Park and Ride Activity** – The presence of informal park and ride activity. Locations that already have informal park and ride activity are ideal candidates for formal park and ride facilities, as they already have existing park and ride demand. Establishing a formal facility within these areas reduces the risk associated with potential loss of an informal facility due to a change in land use or ownership.
 

**Scoring:** Based on the number of vehicles that utilize the facility under typical conditions on a regular basis.

**Weighting:** Joint-Use facilities weight this metric lower given the captive audience and additional draw of the primary use of the location. For example, a Low-Density Joint Use facility weights this low, while a High-Density Neighborhood facility is weighted higher.
  - **Land Acquisition Costs** – The costs to acquire the land for the park and ride facility. Consideration should be made to the current site ownership and costs to purchase the land for the development of the park and ride.
 

**Scoring:** Ranges from a per acre cost of less than \$100,000 for a higher score to a zero score for locations cost in excess of \$300,000 per acre.

**Weighting:** Land acquisition is necessary for any facility type, as without land either through a purchase or joint use there is no facility. As such, it is rated lower across all facility types.
  - **Funding** – Certain jurisdictions offer funding opportunities for park and ride facilities, some for the initial acquisition, some for ongoing maintenance and operations, and some for both. Locating a park and ride facility in a jurisdiction that has funding opportunities will facilitate implementation and reduce the burden of cost on vanpool riders to subsidize the facility.
 

**Scoring:** Scoring is based on the level of funding committed by other agencies to the acquisition of land and ongoing operations and maintenance of the park and ride facilities. With ongoing operations and maintenance anticipated to generate a higher cumulative cost, the greater the committed participation in covering these expenses, the higher the score.

**Weighting:** While funding is important it can vary based on jurisdiction and agency relative to location. The preliminary weight assigned to metric is relatively high across all facility types at 0.9, to reflect that while important it should not be a final determining factor.

- **Potential Trip Distance** – Park and ride facilities are typically utilized for longer commutes. The median existing commute from the riders’ zip code central point to the route destination is 43.38 miles, with a standard deviation of 11.2972. Commutes less than 2 standard deviations from the median, or shorter than 15.18 miles are not anticipated to realize sufficient benefit from a park and ride to generate a significant enough demand to justify the expense. The chart below demonstrates the relative distribution of demand generation based on existing commutes where red shows little demand and green shows higher demand. In evaluating future potential commutes, the subject site could be evaluated based on its location serving existing and future potential population centers in relation to existing and future potential destination/employment centers.

**Scoring:** A score of 2 is based on the approximate median commute of existing vanpool riders, or with a commute range of 37.74 to 49.02 miles based on the approximate commutes of riders on the Potentials List that would potentially utilize the location based on their reported starting and destination centers. Median commutes exceeding 49.02 miles are scored highest, with median commutes of less than 26.45 miles, 2 standard deviations below the median existing commute, receiving a score of zero as not likely to utilize the facility in place of their personal vehicles.

**Weighting:** Trip distance is more likely to impact satellite and low to medium-density facilities, or facilities with lower scores for pedestrian and bicycle connections. As such, trip distance is more heavily weighted for the Low-Density Highway and Medium-Density Freeway facilities than the High-Density Urban Core or Neighborhood facilities.

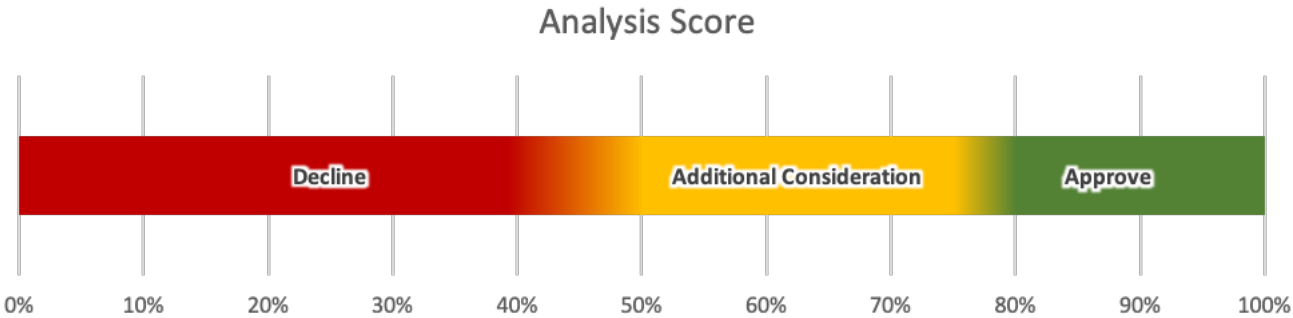
As discussed per metric above, based on the type of park and ride considered for the location, the various criterion will have varying weights of importance. For instance, a High-Density Neighborhood park and ride would have a greater weighted score for bicycle and pedestrian access than a Low-Density Highway park and ride. Alternatively, the High-Density Neighborhood park and ride may have a lower weighted score on the potential trip distance of commuters than the Low-Density Highway park and ride, based on its intended use to also act as a sub-regional transit hub.

Walker has prepared an evaluation tool, provided to COMPASS, based on the unique components and weighting identified by COMPASS in evaluating potential



locations for expansion of existing or development of new park and ride facilities. Preliminary scoring and weights included in the tool are summarized in **Table 2.3-1** and **Table 2.3-2** on the following pages.

When interpreting scores, it is recommended that facilities having a total score below 50% of the maximum for the selected facility type not be considered for expansion or new construction of a park and ride facility in order to maximize regional resources. Facilities scoring between 50 and 75% of the maximum potential score should be further reviewed for long-term impacts on resources and additional qualitative input from the community to be served and local and regional decision makers. Facilities scoring at least 75% of the maximum potential score for the facility type analyzed should be considered for moving forward for expanding or developing a new park and ride facility.



**Table 2.3-1 Criteria Score by Metric**

Criterion	Brief Description	Metric	Score			
			0	1	2	3
Visibility	The extent to which motorists can see the park and ride facility from adjacent travel routes.	Signage - existing or proposed	No signage	Signage is not visible from more than 50 feet of the facility entrance	Signage is not visible from more than 100 feet of the facility entrance	Signage is visible from more than 100 feet of the facility entrance or APGS direct commuters to the facility
Accessibility	The ease with which the park and ride facility can be accessed and moved throughout by both passenger vehicles and transit vehicles.	Movements necessary to enter the facility from the closest collector or arterial classified roadway	More than 3 Turns	3 turns	2 turns	1 turn or direct access
		Movements necessary to exit the facility to the closest collector or arterial classified roadway	More than 3 Turns	3 turns	2 turns	1 turn or direct access
Safety	The extent to which commuters feel safe about leaving their car or bicycle at the park and ride facility.	Crime statistics available for the subarea served; annual violent or property crimes reported for the subarea	> 1,000	501 - 1,000	101 - 500	<100
Security	Resources installed at the facility intended to increase commuter safety.	<ul style="list-style-type: none"> <li>- Surveillance Cameras</li> <li>- Emergency Call Boxes</li> <li>- Enhanced Lighting</li> <li>- Routine Security Patrols</li> <li>- Other Installation(s)</li> </ul>	No security resources installed	1 item listed under metrics installed	2 items listed under metrics installed	3 or more items listed under metrics installed
Amenities	Extra features that are desirable or useful to commuters utilizing the facility.	<ul style="list-style-type: none"> <li>- Sheltered waiting areas</li> <li>- Decorative landscaping</li> <li>- Electric Vehicle Chargers</li> <li>- Garbage Cans</li> <li>- Other Installation(s)</li> </ul>	No amenities	1 item listed under metrics installed	2 items listed under metrics installed	3 or more items listed under metrics installed
Transit Availability	The extent to which the park and ride facility is served by public transit.	Existing bus Stops, routes, and high-capacity transit connections are provided on site or within a reasonable walking distance of the facility or are planned for the future with reasonable certainty	No existing transit access within 500 feet of the park and ride	1 transit stop served by 1 route within 500 feet of the facility	At least 1 transit stop served by at least 2 routes within 500 feet of the facility	At least 1 bus loading space provided within the facility and serves at least 2 routes
Bicycle Access	The extent to which the park and ride facility is connected to and the quality of bicycle infrastructure	Bike parking	No bike parking available on site	Bike racks available on site	Bike racks and repair stand(s) available on site	Bike lockers and repair stand(s) available on site
		Highest Bicycle LOS per the Highway Capacity Manual developed at the University of Idaho on the immediately adjacent roadway(s)*	LOS F	LOS D or E	LOS B or C	LOS A

**Table 2.3-1: Criteria Score by Metric (Continued)**

Criterion	Brief Description	Metric	0	1	2	3
Pedestrian Access	The extent to which the park and ride facility is connected to and the quality of pedestrian infrastructure	Score from the Pedestrian Environment Quality Index	≤ 35	36 - 50	51 - 80	> 80
Topography & Other Site Restrictions	The extent to which the site is impeded by topographical challenges or other environmental features, such as wetlands.	Average slope of site	≥8%	5 - 7.99%	3 - 4.99%	1 - 2.99%
Site Size	The size of the site is adequate to accommodate a new park and ride facility.	Potential parking stalls available	≤10	11 - 25	26 - 50	> 50
Population Density	The existing and future population density of the area served by the facility based on subarea as outlined in the Communities in Motion Forecast	Existing population of subarea	< 2,000	2,000 - 4,999	5,000 - 14,999	≥ 15,000
		Projected future population growth of subarea	< 10%	10 - 29.99%	30 - 99%	≥ 100%
Employment Density	The existing and future employment density of the area served by the facility.	Existing jobs of subarea	< 750	750 - 4,999	5,000-14,999	≥ 15,000
		Projected future job growth of subarea	< 10%	10 - 29.99%	30 - 99%	≥ 100%
Existing Park and Ride Activity	The presence of informal park and ride activity.	Typical, consistent usage of the facilities based on car counts.	< 5	5 - 9	10 - 19	≥ 20
Land Acquisition Costs	The costs to acquire the land for the park and ride facility.	Cost per acre	≥\$300,000	\$200,00 - 299,999	\$100,000 - \$199,999	< \$100,000
Funding	The funding opportunities for the facility's initial acquisition and ongoing operations and maintenance.	Funding commitment per interagency agreement for the site	No outside funding commitment	Partial site acquisition or less than 25% ongoing maintenance commitment fully funded by local jurisdiction or other agency(s)	Site acquisition or at least 50% ongoing maintenance commitment fully funded by local jurisdiction or other agency(s)	Site acquisition and ongoing maintenance commitment fully funded by local jurisdiction or other agency(s)
Potential Trip Distance	The average potential commute length to be served by the facility.	Miles measured from the central area of the anticipated served residential population core to the general employment commute terminus core	< 26.45	26.45 - 37.73	37.74 - 49.02	> 49.02

\* COMPASS is currently reviewing their methodology for evaluating pedestrian and bicycle service. Based on the outcome of that parallel effort, this metric and the scoring measures used for bicycle and pedestrian level of service may be updated to reflect the updated methodology.

**Table 2.3-2: Criteria Weight by Facility Type**

Criterion	Brief Description	High-Density Urban Core	High-Density Neighborhood	Medium Density TOD	Medium Density Freeway	Medium Density Joint Use	Medium Density Transit Center	Low-Density Highway	Low Density Joint Use	Regional Busway
Visibility	The extent to which motorists can see the park and ride facility from adjacent travel routes.	1	1	1	1	1	1	1	1	1
Accessibility	The ease with which the park and ride facility can be accessed and moved throughout by both passenger vehicles and transit vehicles, as well as the ease with which the park and ride facility can be exited, each based on turning movements.	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
		0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Safety	The extent to which commuters feel safe about leaving their car or bicycle at the park and ride facility.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Security	Resources installed at the facility intended to increase commuter safety.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Amenities	Resources installed at the facility intended to increase commuter safety.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Transit Availability	Resources installed at the facility intended to increase commuter safety.	1	0.9	1	0.7	0.8	1	0.7	0.7	1
Bicycle Access	The extent to which the park and ride facility is connected to and the quality of bicycle parking and infrastructure.	1	1	0.9	0.7	0.8	0.8	0.7	0.7	0.7
		1	1	0.9	0.7	0.7	0.8	0.7	0.7	0.7
Pedestrian Access	The extent to which the park and ride facility is connected to and the quality of pedestrian infrastructure.	1	1	0.9	0.7	0.7	0.8	0.7	0.7	0.7
Topography & Other Site Restrictions	The extent to which the site is impeded by topographical challenges or other environmental features, such as wetlands.	1	1	1	1	1	1	1	1	1
Site Size	The size of the site is adequate to accommodate a new park and ride facility.	0.9	0.8	0.9	0.7	0.9	0.8	0.7	0.8	0.8
Population Density	The existing and future population density of the area served by the facility based on subarea as outlined in the Communities in Motion Forecast.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
		1	1	1	1	1	1	1	1	1
Employment Density	The existing and future employment density of the area served by the facility.	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
		1	1	1	1	1	1	1	1	1
Existing Park and Ride Activity	The presence of informal park and ride activity.	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.7	0.7
Land Acquisition Costs	The costs to acquire the land for the park and ride facility.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Funding	The funding opportunities for the facility's initial acquisition and ongoing operations and maintenance.	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Potential Trip Distance	The average potential commute length to be served by the facility.	0.7	0.7	0.8	0.9	0.9	0.8	1	1	0.9
Maximum Potential Score		49	49	72	45	76	47	45	46	46

## EXPANSION ANALYSIS EXAMPLE

Based on the existing list of potential riders maintained by Commuteride, categorizing the list by estimated commute distance based on the preliminary scoring outlined in the matrix, and overlaying the approximate routes on the future population growth map, there are approximately 46 potential riders traveling, by way the bird flies, within approximately 8 miles of the Idaho Center & East Gate Valley Regional Transit stop in the North Nampa subarea with destinations within the same 3 mile radius in the Southeast Rural Ada County subarea and a mean estimated commute of 30.28 miles. This transit stop is also in close proximity to an existing informal park and ride at the nearby Wal-Mart, providing an opportunity to fill an existing gap in service while also providing an improved experience for existing riders.

The Wal-Mart informal facility, as it operates today is estimated to score a 29.8 out of a potential 46 as a Medium-Density Joint Use park and ride facility and is in approximate vicinity to be served by the expanded transit services in the ValleyConnect 2.0 Intermediate Scenario. The development of a formal Medium-Density Freeway park and ride facility in this same vicinity, could be served by the higher transit Growth Scenario proposed in the ValleyConnect 2.0 scenario, as well. This assumes installation of signage both on the freeway guiding commuters to the location and identification at the site entrance, one less turn to and from the freeway to access the new formal park and ride facility, built with enhanced lighting and emergency call boxes, an EV charging station and trash receptacles on site, providing 1 on site bus loading space, bike racks and a bike repair station, 50 parking stalls, a land acquisition cost of approximately \$150,000 per acre and committed ongoing maintenance provided by the City or County or both, provides a potential score of 35 on a possible 45. These two examples are summarized in **Table 2.3-3**.

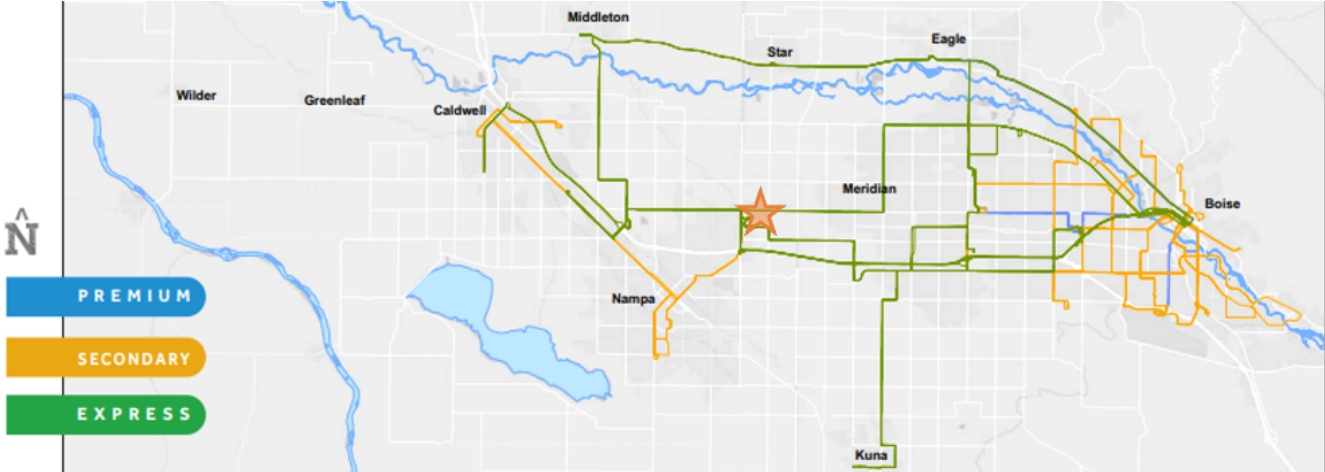
**Table 2.3-3. Growth Scenario Expansion Example Comparison**

Criterion	Metric	Existing Low-Density Joint Use Facility (Intermediate Scenario)			New Medium-Density Freeway Facility (Growth Scenario)		
		Score	Weight	Weighted Score	Score	Weight	Weighted Score
Visibility	Signage	0	1	0	3	1	3
Accessibility	Movements necessary to enter the facility from the closest collector or arterial classified roadway	1	0.8	0.8	2	0.8	1.6
	Movements necessary to exit the facility from the closest collector or arterial classified roadway	1	0.8	0.8	2	0.8	1.6
Safety	Crime statistics available for the subarea served; annual violent or property crimes reported for the subarea	2	0.7	1.4	2	0.7	1.4
Security	- Surveillance Cameras - Emergency Call Boxes - Enhanced Lighting - Routine Security Patrols - Other Installation(s)	3	0.7	2.1	2	0.7	1.4
Amenities	- Sheltered waiting areas - Decorative landscaping - Electric Vehicle Chargers - Garbage Cans - Other Installation(s)	3	0.7	2.1	2	0.7	1.4
Transit Availability	Bus Stops, routes, and high capacity transit connections are provided on site or within a reasonable walking distance of the facility	2	0.7	1.4	3	0.7	2.1
Bicycle Access	Bike parking	1	0.7	0.7	2	0.7	1.4
	Highest Bicycle LOS per the Highway Capacity Manual developed at the University of Idaho on the immediately adjacent roadway(s)	1	0.7	0.7	1	0.7	0.7
Pedestrian Access	Score from the Pedestrian Environment Quality Index	1	0.7	0.7	1	0.7	0.7
Topography & Other Site Restrictions	Average slope of site	3	1	3	3	1	3
Site Size	Potential parking stalls available	1	0.8	0.8	3	0.7	2.1
Population Density	Existing population of subarea	2	0.7	1.4	2	0.7	1.4
	Projected future population growth of subarea	3	1	3	3	1	3
Employment Density	Existing jobs of subarea	3	0.8	2.4	3	0.8	2.4
	Projected future job growth of subarea	2	1	2	2	1	2
Existing Park and Ride Activity	Typical, consistent usage of the facilities based on car counts.	1	0.7	0.7	1	0.8	0.8
Land Acquisition Costs	Cost per acre	3	0.7	2.1	2	0.7	1.4
Funding	Funding commitment per interagency agreement for the site	3	0.9	2.7	3	0.9	2.7
Potential Trip Distance	Miles measured from the central area of the anticipated served residential population core to the general employment commute terminus core	1	1	1	1	0.9	0.9
<b>TOTAL SCORE</b>					<b>29.8</b>		
<b>Potential Score</b>					<b>46</b>		
					<b>25</b>		
					<b>45</b>		

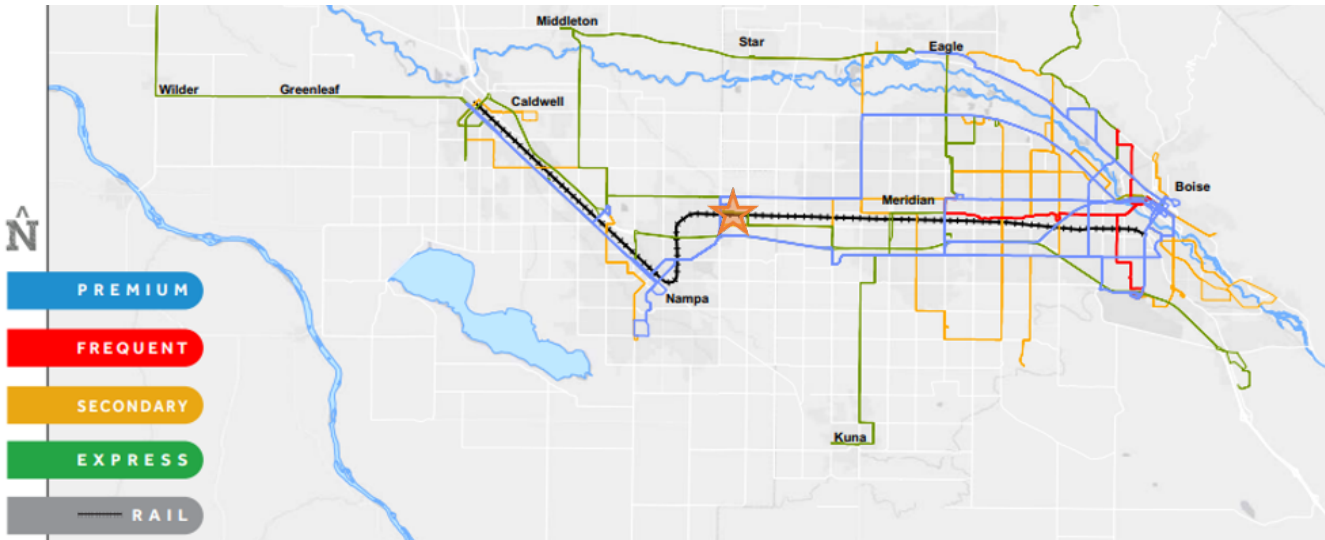
**Figure 2.3-1** shows Idaho Center & East Gate Valley Regional Transit stop's close proximity to proposed express, premium and rail routes proposed in the ValleyConnect 2.0 Growth scenario. **Figure 2.3-2** highlights the location in relation to 46 potential riders' estimated commutes based on an 8-mile buffer of the existing transit stop. This central location provides access to the existing extended Valley Regional Transit network, serving regional connector routes which provide connection to local routes, and the future expanded service lines shown in **Figure 2.3-1**.

**Figure 2.3-1. ValleyConnect 2.0 Scenarios Conceptual Networks with Analyzed Location Marked**

**Intermediate Scenario**

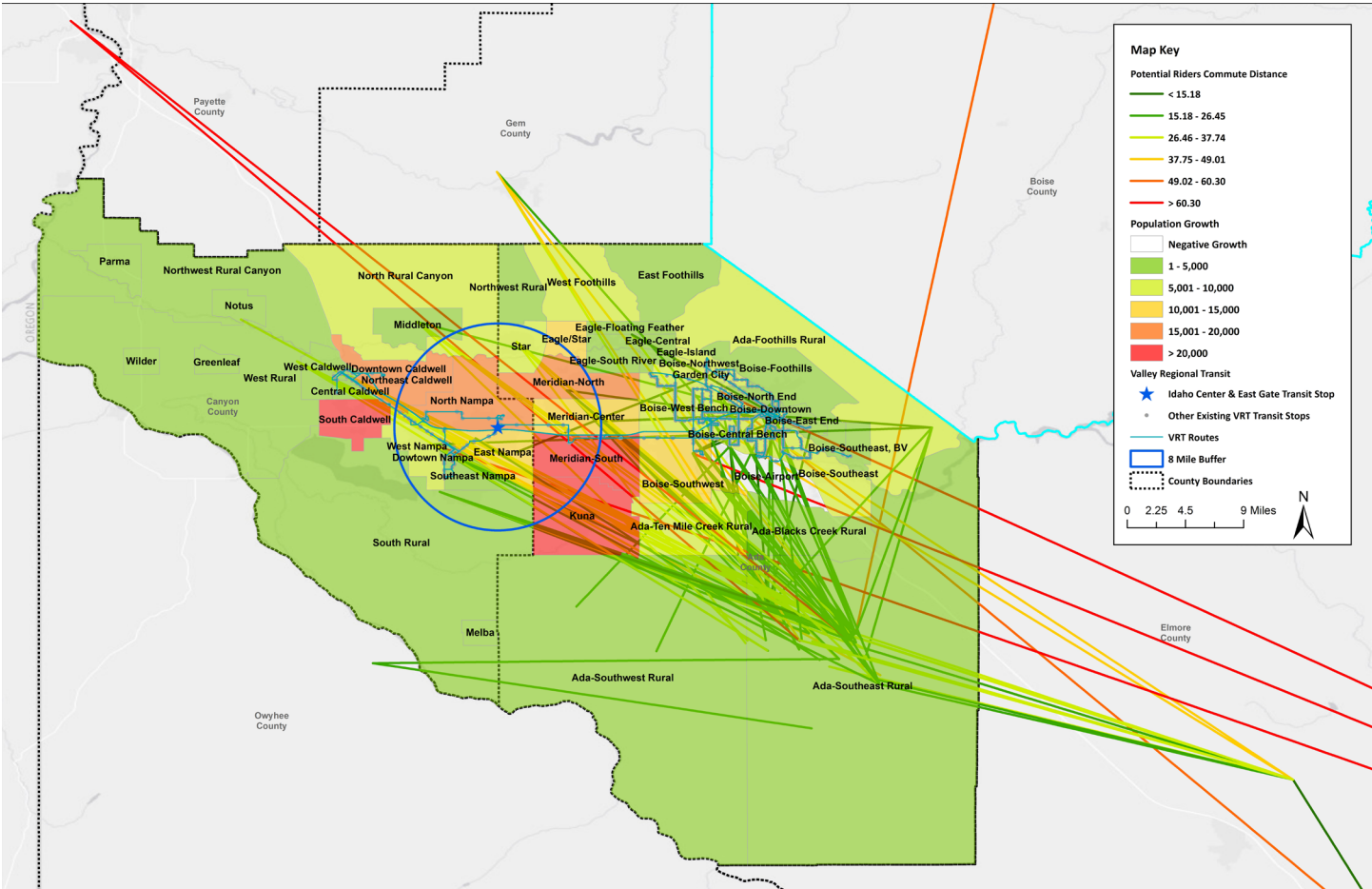


**Growth Scenario**



Source: ValleyConnect 2.0

**Figure 2.3-2. Example Expansion Location Map Showing Potential Riders and Population Growth**



Source: Walker Consultants



## CHAPTER 2.4: NEXT STEPS

This chapter discusses next steps for implementation of a regional park and ride strategy.

### NEXT STEPS IN THE IMMEDIATE TERM

In the immediate term, next steps for implementation include:

- **Expanded Data Collection:** Collect regular data and develop key performance indicators (KPIs) for the following:
  - Rider usage (how many passengers per vanpool or bus by route on a typical, non-holiday day)
  - Park and ride facility utilization (vehicles parked as compared to inventory by space type)
  - Facility conditions field survey (signage, amenities, security, and other features conditions)

It is also recommended that the Commuteride and VRT systems perform annual ridechecks to assess system performance and possible efficiencies. The expanded quantitative and qualitative data collection establishes a baseline and provides an ongoing analysis of the effectiveness of strategies implemented. It supports COMPASS is more proactively responding to trends and future projections.

- **Standardization of Existing Park and Ride Facilities:** Provide standard levels of maintenance, signage and wayfinding, lighting and light levels, ADA compliance, and trip planning tools for all park and ride facilities, formal and informal.
- **Formalization of Scoring Methodology for COMPASS and All Partners:** Refine and formalize the recommended scoring methodology for new park and ride investments.
- **Continue to Develop and Expand Partnerships with Jurisdictions and Major Employers:** Create collateral, such as one-pagers and brochures, social media, etc. to share the benefits of the park and ride system and smart commuting generally with jurisdictions and major employers in the service area. Provide these materials regularly on a proactive basis and to organizations with parallel missions and work with partnering agencies and jurisdictions to promote the park and ride system and its various components such as the Share the Ride Idaho app. Develop options and market subsidies for vanpool and transit usage for residents and employees to municipalities and major employers within the service area.
- **Establish a Park and Ride System Management Team:** Responsibility for evaluation of potential new and expanding facilities, as well as oversight of expanded data collection efforts and support for improved partner communications and marketing efforts should be allocated to either existing COMPASS staff or a dedicated new position, as resourcing and work loads permit. While the day-to-day oversight is often most efficiently completed by dedicated staff, a committee of stakeholders should be

considered for feedback on proposed changes in evaluation methodology and evaluated locations.

## NEXT STEPS IN THE MID-LONG TERM

In the mid- to long-term, next steps for implementation include:

- **Continued Data Collection:** Continue to collect and monitor data collected within the park and ride system.
- **Formalization/Enhancement of Select Existing Park and Rides:** Using the scoring methodology, consider formalization and enhancement of existing park and rides where expanded service and ridership is projected or possible and where applicable criteria are sufficiently met.
- **Establishment of New Park and Ride Locations:** Using the scoring methodology, consider adding new park and rides to the system where applicable criteria are sufficiently met.
- **Continued Partnership Development:** Continue to strengthen and expand partnerships with municipalities and major employers within the service area, including working with local jurisdictions where facilities are desired to determine opportunities for establishment and joint service.

## FUNDING BEST PRACTICES AND CASE STUDIES

Federal and state grants, state funding, and use fees are common methods for paying for regional park and ride systems. COMPASS members leverage a variety of user fees including fuel taxes local property taxes, vehicle registration fees and others to fund transportation programs, and strategies have been explored to expand these funding sources. Beyond these, nationwide transit funding has traditionally come from sources like the Congestion Mitigation and Air Quality (CMAQ) program, Federal Transit Authority grant programs, Surface Transportation Program, and other funding mechanisms authorized by federal and state transportation legislation. Note that the Idaho Transportation Department does not use these funds.

However, given the frequent gaps between monies available through these sources, the current unsettled state of federal transportation funding in the wake of the COVID-19 pandemic, and operational costs associated with a robust and responsive system, this plan outlines a series of alternative funding mechanisms for consideration by COMPASS and its partners.

## MUNICIPAL PARTNERSHIPS

### *BUSINESS IMPROVEMENT/PARKING BENEFIT AND ASSESSMENT DISTRICTS*

Some municipalities and county governments use business improvement districts (“BIDs”) and parking assessment districts to generate income to fund parking facility capital improvements and operating expenses. Both business

improvement districts and parking tax districts can be used to finance the acquisition of land; the construction, operation, and maintenance of surface parking lots and parking structures; as well as the costs of engineers, attorneys, and other professionals, needed to complete infrastructure projects. The State of Idaho permits the establishment of BIDs through adoption of local ordinance, as detailed in Title 50 of the State's Statutes, for "the acquisition, construction or maintenance of parking facilities for the benefit of the district."<sup>31</sup>

Over 1,200 BIDs have been implemented in the U.S. BIDs, which are most often formed at the request of their member businesses, typically address a wide variety of issues, not all related to parking. Common issues addressed include marketing, transit, beautification, signage, lighting, parking, street and public space maintenance, unarmed security patrols, "customer service representatives" or "ambassadors" to provide information and assistance to tourists and shoppers, etc. The collection of assessments tends to be applied uniformly on a square foot, gross receipts, or assessed value basis because benefits are universally recognized by all property owners. Typically, no exemptions or tax credits are provided to property owners who provide all or a portion of their required parking. There are currently six BIDs in the State of Idaho, including those in Boise, Idaho Falls, and Nampa.

A smaller number of communities have implemented parking tax districts, which are narrower in focus. For example, Olympia, Washington has a long-standing Parking and Business Improvement District, formed in 2006. The District, encompassing the entirety of the City's downtown, levies special assessments to fund downtown parking improvements, including administrative costs, construction, operation, and maintenance costs. Assessments are levied upon business owners and multi-family residential owners/operators within the district boundaries, calculated annually based on the property's use and intensity. In this district and many similar districts, parking fees and fines collected within the district boundaries are used to fund parking operations and maintenance and capital improvements.

### **TRANSPORTATION IMPACT FEES**

Transportation Impact Fees are fees assessed by municipalities for new developments that increase transportation needs. These fees are typically one-time fees associated with capital improvements necessitated by increased density but can also be charged overtime on a monthly or annual basis. Traditionally, transportation impact fees have been used to develop capital funding for vehicle infrastructure, such as expanded roadway capacity. However, in recent years, some municipalities have repurposed this fee to encompass broader forms of transportation, using the funds to develop multi-modal transportation facilities, bicycle, and pedestrian amenities and connections, expand local transit service, and develop new parking facilities. For example, the cities of San Francisco, Seattle, Portland, and Santa Monica, as well as Broward

<sup>31</sup> State of Idaho. <https://legislature.idaho.gov/statutesrules/idstat/Title50/T50CH26/SECT50-2601/>

County in Florida, use transportation impact fees or transit impact fees to fund public transit enhancements and expansion, including the development of park and rides<sup>32</sup>. Impact fees assessed on new development generally must be directly tied to projected impacts associated with the new development.

A measure to use transportation impact fees as a funding mechanism for new park and rides could specifically target communities where increased population and development density is expected to expand service needs. As most municipalities already have a framework in place for impact fees generally and, in many cases, transportation impact fees specifically, the measure would focus on a redirection of these funds in part to localized public transit, including new park and rides and mobility hubs.

## PUBLIC-PRIVATE PARTNERSHIPS

### *PRIVATE PARKING OWNER PARTNERSHIP/SHARED PARKING*

To alleviate over-utilization of existing park and rides and increase parking supply in a cost-effective way, some transit agencies seek partnerships with private parking facility owners whose facilities have ample capacity. Steps to initiate such a transaction include:

- **Setting Up Parameters for Acceptable Facilities:** Develop criteria for acceptable parking facilities, including surrounding density and/or proximity to land uses, services, or populations, proximity to a central business district, and others in keeping with the site ranking criteria set forth in Section 2.3.
- **Creating a Template Agreement:** Draft an agreement outlining the terms of usage, including length of term, liability, maintenance and upkeep, installation of signage and other physical markers for the facility, and others as necessary to ensure a standard, universally applied policy.
- **Establishing Financial Incentives:** Create financial incentives for parking facility owners. Because the Treasure Valley Park and Ride System is unpaid, user fees (e.g., fees paid by parkers for use of the parking spaces) would not be an option. Alternatively, the leasing agency could pay a static monthly lease fee, or a use fee based on the number of spaces to the facility owner.
- **Develop Marketing Collateral and Market Program:** Create digital material, such as a flyer, a landing page, and a social media strategy, to market the program to parking facility owners and operators.

An example of a one-page fact sheet distributed to potential parking facility partners by King County Metro is shown in **Figure 2.4-1**.

Figure 2.4-1: Park and Ride Typologies and Subcategories




**MULTI-FAMILY PARK & RIDE PROGRAM**

**Generate Income from Your Vacant Parking Spaces**

If you own or operate a building that meets the listed requirements, please contact King County or Diamond Parking to learn how (contact info below).

**Program Description**

King County Metro Transit is looking at ways to increase parking supply near crowded Park-and-Rides. Utilizing existing parking spaces rather than building new parking is a cost-effective way to offer new parking opportunities and improve mobility for transit customers. To meet demand, King County Metro has partnered with Diamond Parking to implement a new, innovative pilot program that allows building owners to generate income by offering parking to transit users.

**FAQs**

***How do I benefit from participating in this program?***  
 The key benefit is that it allows you to generate income from your vacant parking spaces. Focus group participants were generally willing to pay between \$44 and \$110 per month for a guaranteed space.

***How much upfront investment is needed to participate in the program?***  
 The required upfront investment depends on a number of factors; however, the program aims to start with properties that require minimal, if any, upfront investment.

***If I participate, what am I responsible for?***  
 Your main responsibility is to provide parking that meets the program's requirements. King County Metro will market the program to Park-and-Ride users, and Diamond Parking will provide customers a way to find, reserve, and pay for parking.

**Requirements**

**Building Type:** Multi-family or Mixed-Use (with residential component)

**Location:** King County - Within a quarter mile of frequent transit service or Park-and-Rides.

**Parking Type:** Garage or Surface

**Parking Spaces:** 10+ spaces (Must be available either 24/7 or 8am-6pm)

**Timing:** Immediate (For first-quarter 2017 program start)

**Other:** Sites with safe, secure, and adequate lighting, a safe pedestrian connection to transit, and/or located in areas with paid or time-limited street parking preferred.

**CONTACT US:**

**Daniel Rowe**, King County Metro  
 daniel.rowe@kingcounty.gov  
 206-477-5788

**OR**

**Hailey Mattson**, Diamond Parking  
 hailey.mattson@diamondparking.com  
 206-284-6303 ext 7465



## TAX INCREMENT FINANCING/URBAN RENEWAL DISTRICTS

Especially applicable in blighted or redevelopment areas, tax increment financing (TIF) leverages the incremental increase in assessed value and property taxes to fund infrastructure improvements. TIF, a form of “value capture” funding, is most appropriate in stable and/or growing areas where increases in property tax or other revenue are likely with public investments in transit and development. Idaho state code permits the use of TIF funds (called “revenue allocation” in Idaho) for parking infrastructure. Revenue allocation funding in Idaho is targeted at urban renewal or other specific areas and is subject to specific review and approval.

Tapping into TIF to fund parking infrastructure is common across the country. Dorchester County, South Carolina, outside of Charleston, leveraged TIF to fund park and ride improvements. The county developed a redevelopment plan that outlines a strategy to revitalize an area known as Oakbrook. As part of this plan, a TIF District was created to improve infrastructure and make improvements in the area. This included improvements to park and ride areas associated with the Charleston Area Regional Transportation Authority (CARTA).

## SALE OF ADVERTISING RIGHTS

Selling rights to advertising can help fund at least a portion of operations expenses. Common practice with many transit operations in the country, including VRT, advertising can include in-bus signage, station signage, and bus wraps. Metro Transit in Minneapolis/St. Paul, Minnesota offers park and ride advertising where vendors can set up tables or kiosks to advertise products and services in-person to transit riders.

## PAID PARKING

Paid parking offers one option to cover operations and maintenance costs of park and ride facilities. While across-the-board paid parking for all parkers at park and ride facilities is likely to decrease use of the park and ride facility and accompanying transit service, paid parking options can be offered for premium service for certain users and may be useful in managing parking demand at busy park and ride facilities, while also generating revenue to fund operations.

For example, Sound Transit in the Seattle area recently launched reserved parking permits for the busy Mercer Island Park and Ride and the Issaquah Transit Center locations. Single-occupant vehicle parking permits can be purchased for both locations, providing guaranteed reserved parking at the park and ride facilities until 9:00 a.m. on weekdays during the morning commute rush. Reserved spaces are held in nested areas, and the number of spaces reserved is tightly correlated with the number of reserved permits sold. No more than 50% of the facility is set aside as reserved, and unreserved spaces are made available on a first-come, first-served basis.

Important considerations when implementing any type of paid parking include mitigating potential spillover parking impacts on surrounding land uses and neighborhoods, ensuring options for low-income commuters, and establishing a system and process for payment collection, credentialing, and enforcement. Sound Transit leverages paid parking to incentivize carpooling by offering discounted high-occupancy vehicle parking. Additionally, paid parking at park and ride facilities (when combined with the cost of a transit pass) should be less per day than the daily cost of driving to and parking in busy employment areas.