

# **Public Transportation**

*Communities in Motion 2040 2.0* (CIM 2040 2.0) focuses on four transportation system components public transportation, roadways,<sup>1</sup> freight,<sup>2</sup> and bicycle/pedestrian (active transportation)<sup>3</sup>—and how they integrate to comprise a complete transportation system. The public transportation network provides a suite of transportation services that help meet the future needs of the region. Public transportation investments expand mobility choices and create opportunities for non-motorists to participate in economic and social activities.

# FUNDED PUBLIC TRANSPORTATION SERVICES

## Valley Regional Transit

Valley Regional Transit<sup>4</sup> (VRT) is the Regional Public Transportation Authority for Ada and Canyon Counties. VRT manages contracts for the operation of ValleyRide bus services and ACCESS paratransit service. ValleyRide bus services consist of 21 fixed-line routes in Boise/Garden City, three fixed-line routes in Nampa/ Caldwell, and six intercounty routes between Ada County and Canyon County (Figure 1). A route map and real-time locator<sup>5</sup> allow individuals to check routes, schedules, and bus locations at any given time.



Figure 1. 2018 Valley Regional Transit's bus routes

In 2017, VRT provided 1.345 million boardings during 104,000 hours of fixed-route service with 55 buses in peak times. Those services were supported by 27,000 hours of paratransit service providing an additional 60,000 boardings. A network of 14 specialized transportation options provided additional services, including access to healthcare, access to jobs for people with low incomes, and access to community services for seniors and persons with disabilities.

## Ada County Highway District (ACHD) Commuteride

ACHD Commuteride<sup>6</sup> operates Club Red, the oldest multi-employer vanpool program in the nation, in addition to hosting the rideshare platform MyCommuterCrew.com<sup>7</sup> that helps like-minded commuters find one another. ACHD Commuteride provides around 80 vanpools that travel within and through Ada County, and its Commuteride Works program assists employers with their commute benefit programs.

### Share the Ride Idaho

Share the Ride Idaho<sup>8</sup> is an online platform that matches commuters with commuting options. Using home and work addresses, individuals can find vanpools or buses that match their commutes and search for nearby commuters looking for carpool, biking, or walking partners.

## **Treasure Valley Transit**

Treasure Valley Transit<sup>9</sup> (TVT) is a private, nonprofit transportation company operating in rural southwestern Idaho since 1992. TVT's services include Mountain Home Community Transit, Snake River Transit Idaho, Mountain Community Transit (McCall and surrounding area), purchase of service contracts in 17 regional communities, and Medicaid transportation in Canyon, Owyhee, and Payette Counties. In Canyon County, TVT provides Medicaid and "beyond ADA" (Americans with Disabilities Act) transportation services that fill gaps in service not provided by fixed-route or complementary paratransit. This service primarily accommodates passengers with disabilities, allowing them to attend developmental workshops and access adult day care and medical services. TVT does not serve Ada County.

## **Boise State University Shuttles**

Currently, Boise State University's Bronco Shuttle<sup>10</sup> provides 41,000 boardings annually to connect the main Boise State University campus to downtown Boise and park-and-ride lots.

## **Boise GreenBike**

Boise GreenBike<sup>11</sup> is a VRT service that provides approximately 100 rental bikes throughout downtown Boise and on the Boise State University campus.<sup>12</sup> The bikes and locking stations have been paid for primarily using federal funds, while operational funding comes from a combination of user fees, sponsorships, and advertising.

# FINANCING PUBLIC TRANSPORTATION

Public transportation was identified as the top transportation funding priority for the Treasure Valley, according to a 2017 survey by Boise State University.<sup>13</sup> Roughly 74% of the respondents indicated that the region could benefit from more investments in mass transportation options, a 7% increase from the previous 2016 survey. A commuter rail connecting Caldwell/Nampa and the City of Boise, along with expanding fixed-route transit services, were identified as the top two priorities for public transportation investments. Securing funding for current and future public transportation needs is a challenge in Idaho and the Treasure Valley. Idaho ranks second to last in statewide monetary contributions per capita<sup>14</sup> (19 cents) and is one of two states in the country without a dedicated funding source.

Local funding for Valley Regional Transit comes from directly generated funds (e.g., riders' fares and employer pass sales), auxiliary transportation funds (e.g., bus advertising revenues), non-transportation funds (a



compressed natural gas rebate), federal funds, and contributions from local governments (Table 1). In 2017, the total revenue was a combination of directly generated funds (5%), auxiliary and non-transportation funds (<1% each), federal resources (48%), and local contributions (45%). Total revenues fund both operations and capital costs.

Revenues	2015	2016	2017
Directly generated funds	\$1,192,892	\$1,155,042	\$1,027,500 (5%)
Auxiliary transportation funds	\$72,712	\$75,523	\$107,175 (<1%)
Non-transportation funds	\$48,578	\$44,844	\$166,177 (<1%)
Federal funds	\$11,310,488	\$10,665,211	\$9,171,491 (48%)
Local funds	\$8,840,122	\$8,533,219	\$8,683,586 (45%)
Total	\$21,464,792	\$20,473,839	\$19,155,929

#### Table 1. Valley Regional Transit revenue sources

The current contributions from local governments to VRT are insufficient to maintain the existing service levels, which are approximately 25% of the service needed for the long term. VRT developed Valley**Connect** 2.0<sup>15</sup> as a plan to grow transit service to meet the future levels of transit service envisioned in CIM 2040 2.0. Valley**Connect** 2.0 focuses VRT's efforts on increasing both directly generated revenues (by improving the productivity of the existing network, increasing fare sales and advertising revenues, etc.) and working with local jurisdictions to identify new revenues that will allow VRT to quadruple fixed-route transit services and grow specialized services to fill gaps in the transit network. Additionally, VRT pursues competitive grant opportunities to help expand transit service in Ada and Canyon Counties.

According to the COMPASS financial analysis,<sup>16</sup> assuming that cities will maintain their current levels of contributions to VRT over time, adjusted for inflation, costs will increase more rapidly than revenue, with a projected deficit starting in FY2019 (Figure 2). Without additional revenue from existing or new sources, VRT will have to reduce existing services to match available funding.

In fact, in October 2018, the VRT Board of Directors voted to approve service changes to fine-tune the routes to best serve the most people and peak ridership times. The changes will take effect in January 2019 and will reduce or eliminate service in some areas through rerouting or less frequent service, and improve service in areas with more riders and destinations. For example, State Street and Vista Avenue in Boise will have more frequent service, both extended past 9 p.m.; Garden City routes will only run during peak periods to serve higher ridership times; and Meridian north of I-84 will lose all service to improve performance of intercounty routes. To close the 2019 budget shortfall, Nampa will see a reduction in service, as east Nampa will have only peak period service. Service in Canyon County will face additional challenges unless more funding is secured by 2020.

The financial situation for the ACHD Commuteride vanpool program is more stable, as 100% of its base costs (fuel, maintenance, and administration) are covered by rider fares, which are adjusted annually to cover those costs. However, federal funding is needed to cover 80% of vehicle replacement costs, with the remaining 20% covered with local funds. From 2012 through 2018, Commuteride costs amounted to roughly \$1.6 million per year, with approximately 80 vans in operation during 2017. The exact number of vans in operation at any



Figure 2. VRT revenues and expenditures, 2018–2040

given time varies to accommodate changes in ridership and routes. There are insufficient resources within the program to purchase additional vans. Projected federal funding to replace vans as they reach the end of their useful life will fall short starting in 2023.

Treasure Valley Transit receives federal funds to provide service above and beyond ADA requirements for paratransit services in the Nampa Urbanized Area.

The operating funds for the Boise State shuttle service come from self-generating revenue such as parking permits, citations, visitor parking, and events. These are used to cover not only shuttles but also other transportation, parking, and safety systems costs. Boise State University has received federal grants to cover capital costs for shuttles, bicycle infrastructure, and related projects.

# PUBLIC TRANSPORTATION GOALS AND NEEDS

The regional goals for transportation, established in CIM 2040 and carried forward in this plan, call for improved accessibility and connectivity, including connecting communities throughout the region, providing for the efficient movement of people and goods, and ensuring reliability of travel by all modes.

The means to achieving these goals include enhancing public transportation services to connect communities in the Treasure Valley and provide access to more jobs and households, increasing the frequency of services, and encouraging land-use decisions that lead to transit-supportive corridors.

## **Planning Considerations**

Planning for public transportation considers access to public transportation services, congestion and service reliability, first/last mile, and the COMPASS Complete Streets policy.<sup>17</sup> The planning process started with a

concept network based on 2040 housing and employment densities and potential service thresholds. This design focused future public transportation services in areas that met cumulative population and employment density thresholds, while connecting outlying communities. Overall, about 12% of the forecasted 2040 population and 37% of jobs were within a quarter-mile of a bus stop in this system (Figure 3.) Projected employment, housing, and block densities were mapped and used to build a system using incremental five-year steps from 2020 to 2040.



Figure 3. Initial 2040 public transportation network design

#### Access to Public Transportation Services

After the initial concept, COMPASS, with input from the Public Transportation Workgroup<sup>18</sup> (PTWG), redesigned the 2040 public transportation network to expand fixed-route coverage and increase services in growth areas. The revised 2040 system improved overall access to jobs and households in the Treasure Valley while adding better east/west connections from Nampa to Meridian and providing more high-frequency service. This iteration improved bus stop access but did not integrate high-capacity transit into the network.

This 2040 bus-only network included four fixed-route typologies: premium, frequent, secondary, and express service routes (Figure 4). Premium routes are regionally significant transit corridors offering high-frequency (less than 15-minute headways), all-day service with the potential for high-capacity transit, such as bus rapid transit or a rail-based fixed-guideway service, in the future. Frequent routes operate on 15-minute headways all day, every day, along corridors that serve local connections and destinations. Secondary routes either run less frequently throughout the day or provide lower-density local connections with frequent services in the peak hours and services on weekends. Express routes are typically longer-distance services that operate on highways and occasionally on freeways, with longer headways and limited weekend services.





Figure 4. 2040 Bus-only public transportation network

#### **Congestion and Service Reliability**

Thirty people driving 30 single-occupancy vehicles use more space on the road than 30 people riding a bus (Figure 5). However, although public transportation can take many cars off the roadway, it cannot be the sole means to reduce congestion: bus riders will face the same frustrations as motorists if they are all caught in the same congestion.

Performance metrics show that dedicating space for public transportation improves speed, travel times, ontime performance, and ridership. For example, in Pittsburgh, bus speeds increased by an average of 13% and travel times decreased by 20 minutes after routes were diverted to a dedicated busway space. Total ridership increased by 5,000 riders daily, with a ridership survey reporting that the reallocation of space for buses (the busway) was an important factor in choosing to start using a bus. In addition, on-time performance increased by 68%.<sup>19</sup>

State Street from the City of Star to downtown Boise was identified as a high-capacity, possibly bus rapid transit (BRT), corridor in the 2011 *State Street Transit and Traffic Operational Plan*<sup>20</sup> (TTOP). Additional high-capacity, fixed-guideway services are part of the conceptual 2040 Treasure Valley public transportation system and are discussed in more detail below.

#### First/Last Mile

First/last mile analyses focus on how people get to a bus stop or station from their origin and how they get to their destination from a bus stop or station. Considerations include safety, walk or bike access, comfort, and other factors that provide access to and can encourage use of public transportation. Together, COMPASS' Active Transportation and Public Transportation Workgroups<sup>21</sup> have begun and will continue to identify areas



Figure 5. Thirty people driving 30 single-occupancy vehicles use more space on the road than 30 people riding a bus.

for improved sidewalk access, well-lit bicycle and pedestrian routes, safe crossings, and bike parking near bus stops.

#### **Complete Streets**

The COMPASS Complete Streets policy,<sup>22</sup> in place since 2009, envisions a Treasure Valley where roadways are designed to be safe, efficient, and viable, and provide an appropriate balance for all users, including motorists, bicyclists, transit, and pedestrians of all ages and abilities. Achieving Complete Streets was a consideration throughout the public transportation planning process. COMPASS will be updating its 2009 Complete Streets policy in 2019.

# UNFUNDED PUBLIC TRANSPORTATION SYSTEM PRIORITIES

The concepts and initial designs described above, coupled with VRT's Valley**Connect** 2.0 plan, led to a concept for a 2040 Treasure Valley public transportation system that includes high-capacity fixed-guideway services with a supporting bus network. However, the regional public transportation system cannot simply jump to this 2040 conceptual system; other systems must be in place to support, or serve as stepping stones to, this ultimate system. In this planning process, COMPASS identified five prioritized public transportation system. As noted above, there is not sufficient funding to maintain the current public transportation system, much less grow it; therefore, the priorities described below are all **unfunded** (Table 2).

#### Table 2. Unfunded public transportation priorities

Priority	Public Transportation Priority	Estimated Annual Operating Dollars	Estimated Annual Service Hours	Estimated Capital Costs
1	State Street High-Capacity Corridor	TBD	TBD	\$46.1 million
2	Valley <b>Connect</b> 2.0 Intermediate Scenario	\$10 million*	200,000	\$60 million <sup>+</sup>
3	Boise Downtown Circulator	\$3.3 million	TBD	\$114.3 million
4	Valley <b>Connect</b> 2.0 Growth Scenario	\$23.5 million <sup>‡</sup>	435,000	\$118 million <sup>§</sup>
5	2040 Treasure Valley Public Transportation System	\$47 million#	647,000	\$693 million**

Note: Priorities 1 and 3 can be completed without significant changes to the overall public transportation system. As such, project costs are shown for those as individual projects. Priorities 2, 4, and 5 build upon the current transportation system and on each successive priority. Therefore, costs for these are shown as additional costs to take the public transportation system to the next "level" of service.

\*Annual operating cost in addition to current operating costs

<sup>†</sup>Capital cost in addition to current costs

<sup>‡</sup>Annual operating cost in addition ValleyConnect 2.0 intermediate operating costs

<sup>§</sup>Capital cost in addition to ValleyConnect 2.0 intermediate capital costs

\*Annual operating cost in addition to ValleyConnect 2.0 growth operating costs

\*\*Capital cost in addition to ValleyConnect 2.0 growth capital costs. Includes commuter rail capital cost, but not right-of-way cost.

## Priority #1: State Street High-Capacity Corridor

State Street from the City of Star to downtown Boise has been identified as a high- capacity corridor. The 2011 State Street TTOP<sup>23</sup> identified BRT as one of the preferred modes of high-capacity transit, especially at the eastern end of the corridor from Glenwood Street to downtown Boise (Figure 6). Some conclusions from the TTOP include:

- widening State Street will not significantly improve travel times or mobility in the long-term;
- transit service was already reaching its capacity to move people (in 2011); and
- the public was supportive of development patterns that improve and support public transportation options along the corridor.

The Idaho Transportation Department and ACHD have made design and implementation investments at various intersections along the corridor, including those at Veteran's Memorial Parkway, Pierce Park Lane, Collister Drive, and Glenwood Street/Gary Lane. In addition, VRT, in cooperation with the City of Boise, extended bus service on State Street to increase ridership. VRT's Route 9 runs from 5:15 am to 10:05 pm with 30-minute headways. A second route (Route 9x) was added to complement the services offered by Route 9.

In 2017, COMPASS funded the State Street Transit Oriented Development Design and Implementation Planning Project,<sup>24</sup> which builds on the long-term vision for State Street established by TTOP. The project is looking at previous plans and policies to generate recommendations for BRT stations and examine the market feasibility for transit-oriented development around those stations. A final planning product will be complete by December 2018.

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Figure 6. State Street High-Capacity Corridor

## Priority #2: ValleyConnect 2.0 Intermediate Scenario

As part of VRT's Valley**Connect** 2.0 update, an intermediate 2023 scenario would double the fixed-route transit services from the 2017 system (Figure 7). The intermediate scenario also adds three premium service routes that would run every 15 minutes from 5:00 am to 10:00 pm and adds over 40 miles of corridor investments to keep buses running quickly and on time. Capital investments include passenger amenities such as shelters, transit centers, park-and-ride lots, and real-time information kiosks. Operation costs would double from current investment levels of \$10 million per year to approximately \$20 million per year. An additional \$60 million in capital investments would be needed to build the facilities and amenities called for in the intermediate scenario.



Figure 7. Valley**Connect** 2.0 Intermediate Scenario. Fixed guideway service on State Street is anticipated to be BRT.



### Priority #3: Boise Downtown Circulator

As the main regional employment center and key destination in the eastern end of the region, downtown Boise represents the "end of the line" for many commuters and other travelers. To provide a "park once" option upon reaching downtown, a circulator has long been part of the vision for a regional public transportation system. In 2005, the City of Boise conducted a mobility study, which recommended starting with a bus circulator and conducting a feasibility study of the potential for a streetcar or other rail-based circulator. The study also recommended a phased implementation of a two-route system, with one eastwest route and one north-south route. Additional studies in 2009 and 2010 examined the feasibility of, and potential routes and costs for, a streetcar or other rail-based circulator. Building upon the earlier studies, the City of Boise completed a *Locally Preferred Alternative Report*<sup>25</sup> in May 2017. With input from a steering committee and the public, the city recommended implementing a "T-Route" alignment along Idaho/Main Streets and 9th Street/Capitol Boulevard to connect with Boise State University (Figure 8).



Figure 8. Boise Downtown Circulator "T-Route"

## Priority #4: ValleyConnect 2.0 Growth Scenario

The Valley**Connect** 2.0 growth scenario, designed for the year 2026, builds upon the intermediate scenario and would quadruple the service hours from 2017, increase operating costs by another \$23.5 million, and add another \$118 million in capital investments to the intermediate scenario (Figure 9). These investments would add four additional high-performance transit routes and an additional 70 miles of corridor enhancements beyond what is included in the intermediate scenario. In this scenario, 54% of all operational bus service hours would be high-frequency routes, running on 15-minute headways or better.



Figure 9. ValleyConnect 2.0 Growth Scenario. Fixed guideway service on State Street is anticipated to be BRT.

# Priority #5: 2040 Treasure Valley Public Transportation System

The concept for an "ultimate" public transportation system for the Treasure Valley by the year 2040 was envisioned to fully integrate a bus system, east/west high-capacity services on State Street, and east/west high-capacity fixed-guideway services (Figure 10). The 2009 Treasure Valley High Capacity Transit Study Priority Corridor Phase I Alternatives Analysis<sup>26</sup> study team had recommended three potential alignments for further analyses for a high-capacity fixed-guideway transit service: Fairview Avenue/Cherry Lane, Franklin Road, and the Boise Cutoff rail line. The conceptual 2040 public transportation system considers two of these alignments—Fairview Avenue/Cherry Lane and the existing rail line—for east/west high-capacity fixed-guideway service.

This conceptual system also includes the State Street high-capacity corridor, the Boise Downtown Circulator, and the Valley**Connect** 2.0 improvements that would support the fixed-guideway services.

The 2040 Treasure Valley Public Transportation System concept features five service typologies: premium, frequent, secondary, express, and high-capacity fixed-guideway transit.

Since a mode (e.g., commuter rail, light rail, or BRT) has not yet been selected for the high-capacity fixedguideway service, costs for commuter rail services were used to estimate costs; commuter rail provides a "middle" cost estimate, as it is more expensive than BRT but less than light rail. Planning-level estimates for rail construction in the Treasure Valley range from \$11.8 million to \$15.4 million per mile, for a total of about \$339 million, not including right-of-way acquisition costs, which are yet to be determined. The total estimated capital costs of the 2040 Treasure Valley Public Transportation System are almost \$700 million.



Figure 10. 2040 Treasure Valley Public Transportation System concept. The two parallel fixed guideway routes south of the Boise River depict two potential route options. Fixed guideway service on State Street is anticipated to be BRT.

A commuter rail would have an estimated annual operating cost of \$10 million, in addition to capital costs for design and construction. The overall additional operating cost of this conceptual system is estimated at \$47 million per year (in 2018 dollars; not adjusted for inflation). It is estimated that it will take a minimum of 14 years to complete the various federal and state processes, including environmental studies, right-of-way acquisition, design/engineering certifications, and construction. For the 2040 Treasure Valley Public Transportation System to be operational by 2040, a financial commitment to construct and operate such a system would need to be made no later than 2027.

# CONCLUSION

Good public transportation provides options for area residents and can greatly enhance the quality of the entire transportation system. Growth in the Treasure Valley, as well as changing demographics, require CIM 2040 2.0 to plan for a wider variety of public transportation services than are available today to provide more access to jobs and activity centers, increase the mobility of all travelers, and encourage development that will support public transportation and connectivity and efficient use of the transportation infrastructure.

The 2040 Treasure Valley Public Transportation System concept fully integrates east/west high-capacity fixedguideway alignment(s) with an associated supportive bus system and passenger amenities. The necessary funding to build the 2040 network would need to be secured before 2027 to meet regional goals for public transportation.

# NOTES

- 1 *Roadways*, CIM 2040 2.0, http://www.compassidaho.org/documents/prodserv/CIM2040\_20/TechDocs/ Roadways.pdf
- 2 Freight, CIM 2040 2.0, http://www.compassidaho.org/documents/prodserv/CIM2040\_20/TechDocs/ Freight.pdf
- 3 Active Transportation, CIM 2040 2.0, http://www.compassidaho.org/documents/prodserv/CIM2040\_20/ TechDocs/ActiveTransportation.pdf
- 4 Valley Regional Transit website, https://www.valleyregionaltransit.org
- 5 Valley Regional Transit schedule and real-time bus locator, https://vrt.routematch.com/fixedroute
- 6 ACHD Commuteride website, http://www.commuteride.com
- 7 ACHD ride-share platform, https://www.sharetherideidaho.com/public/home.aspx?customsubsite=district3
- 8 Share the Ride Idaho website, https://www.sharetherideidaho.com/Public/Home.aspx
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- 11 Boise GreenBike website, https://boise.greenbike.com
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- 20 State Street Transit and Traffic Operational Plan, prepared for ACHD, the City of Boise, and VRT by Kittelson & Associates, Inc., http://www.compassidaho.org/documents/planning/studies/9260\_ ImplementationPlan\_Final\_June2011\_highres.pdf
- 21 Active Transportation and Public Transportation Workgroups, http://www.compassidaho.org/people/ workgroups.htm
- 22 See note 17.



- 23 See note 20.
- 24 State Street Transit Oriented Development Design and Implementation Planning Project, Valley Regional Transit, https://www.statestreettod.com
- 25 Locally Preferred Alternative DRAFT Report, City of Boise, https://pds.cityofboise.org/planning/comp/ circulator
- 26 Treasure Valley High Capacity Transit Study Priority Corridor Phase 1 Alternatives Analysis, COMPASS, http://www.compassidaho.org/documents/specialprojects/HCTFinalReport.pdf