



2022 RAISE Grant Application

Boise, Idaho

Project Name State Street Premium Corridor Infrastructure Project

 Total Project Cost
 \$10,572,000

 Local Match (secured)
 \$2,115,000

 RAISE Funds Requested
 \$8,457,000

For more information, please visit: **buildabetterstatestreet.org/raise**

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STATE STREET PREMIUM CORRIDOR INFRASTRUCTURE PROJECT



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Cover image courtesy of Ada County Highway District (ACHD)





1.0 Project Description

1.1 Project Overview

Valley Regional Transit (VRT), the regional public transportation authority of Ada and Canyon counties in Southwest Idaho, otherwise known as the Treasure Valley, is seeking funding for improvements to the State Street/State Highway (SH) 44 corridor to enhance transit access and improve pedestrian and bicycle infrastructure to achieve greater accessibility, livability, and walkability.

With a benefit of over \$2.50 for every dollar invested, the targeted projects in transit amenities and bicycle and pedestrian infrastructure near transit stops are a cost-effective way to improve transit travel times, improve pedestrian and non-motorized levels of service, and reduce accidents and emissions.



The State Street Premium Corridor Infrastructure Project covers a six and one-half mile section of State Street/SH 44 from downtown Boise to Bogart Lane, which is the only continuous eastwest connection north of the Boise River. It connects the cities of Eagle, Garden City, Middleton, and Star to Boise – Idaho's capital and largest city. The corridor, which links two of the most diverse, dense, and growing counties in the state, is currently served by VRT's highestridership 9 State Street bus route. Approximately 39,000 vehicles commute along State Street daily, with 166,000 transit boardings in fiscal year 2021. Despite the impacts of Covid-19, which

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caused a 26% decrease in ridership from fiscal year 2020, State Street is still the busiest transit corridor in the Treasure Valley.

Figure 2. Project Improvements



The State Street Premium Corridor Infrastructure Project will build transit, pedestrian, and bicycle facilities that will benefit vulnerable populations by improving transit speed and reliability, enhancing accessibility and safety at and near transit stops, increasing the comfort and ease of non-motorized and transit travel, and closing gaps in the pedestrian and bicycle network. The Project addresses current transportation equity concerns by connecting low-income residents, refugee populations, and affordable housing developments with employers, grocery stores, healthcare facilities, schools, recreational facilities, and other life enhancing opportunities.

As one of the fastest-growing regions in the nation, building and maintaining a safe and reliable transit system is critical for sustaining efficient movement throughout the Treasure Valley. Rapid development has resulted in a highly

competitive housing market, making it difficult for residents, especially immigrants and refugees, to find affordable places to live. The search for affordability has pushed many further away from services, jobs, and public transportation. The State Street corridor remains one place where transit, affordable housing and access to jobs and services converge.

State Street residents (see Table 1 below) live in a high-density area, in a mix of both owner- $(\sim 54\%)$ and renter-occupied ($\sim 46\%$) housing units. Residents along the corridor comprise about

8.4% of the total county population. Over a quarter (~33%) of owner-occupied households in the study area have only one vehicle, and a combined 8% of residents either bike or walk as a means of transportation work. Over 450 affordable housing units within one-half mile of the corridor receive some type of assistance, while two census tracts in the project area (Tracts 1 and 4) meet the Federal definition for Areas of Persistent Poverty (APP)

The greater Boise area of Idaho is one of the fastest-growing regions of the nation. With this growth, innovative solutions are necessary to create opportunities for residents to be connected to jobs, critical services, and recreation.





according to the United States Department of Transportation's (USDOT) APP status tool. Table 1 shows the unique demographics of the project area and offers insights that residents are less likely to own a car than the county as a whole, more likely to be below the poverty level, and more likely to rent rather than own a home.

Table 1. Demographics	s*	hic	ph	ogra	Den	1.	ble	Та
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Indicator	Project Area	Ada County	Difference
Poverty Rate	13.9%	10.80%	28.7%
Zero-Car Households	7.1%	3.7%	91.9%
Take Transit to Work	0.8%	0.4%	100.0%
Household Income <\$25,000	22.4%	17.0%	31.8%
No High School Diploma	6.2%	3.8%	63.2%
Age 65 and Older	15.0%	14.0%	7.1%
Speak English "less than very well"	17.9%	14.4%	24.3%
Foreign Born	4.4%	5.7%	-22.8%
Renter Occupied Housing	45.5%	30.7%	48.2%
Black	2.5%	1.6%	51.2%
American Indian	0.7%	0.7%	7.6%
Asian	1.8%	2.8%	-35.4%
Pacific Islander	0.2%	0.3%	-27.2%
Some Other Race	2.0%	3.3%	-39.0%
Two or More Races	8.5%	8.0%	6.2%
Hispanic or Latinx (of any race)	10.7%	7.6%	41.9%

*2020 ACS 5-Year Estimates

VRT and regional partners identified the need for multi-modal investments in the State Street Transit Operational Analysis (TOA), which was completed in 2022. This analysis was built on previous planning efforts and with input from stakeholders across the region. Projects were selected because they would bring immediate benefit to the traveling public, could be implemented quickly, and would advance the regional vision of a livable, walkable, and affordable transit corridor. With this RAISE grant, VRT will provide enhanced transit amenities, expand transit system electrification, and make substantial bicycle and pedestrian improvements. The project will also include



Figure 3. State Street and Bogart Lane. The area is not currently served by transit.

planning of transit and non-motorized infrastructure at the key intersection of State and Bogart





Lane, which will expand service to growing neighborhoods currently unserved by transit today. Altogether, the improvements will provide transit access that is faster, quieter, and easier to use.

1.2 Corridor Challenges

Future Growth

The region's explosive growth is anticipated to overwhelm State Street's capacity, thus threatening the livability of adjacent neighborhoods. By 2035, the number of households along the corridor is expected to double, from 1,541 to 3,157, while employment is anticipated to grow from today's 3,829 jobs to 12,595 – outgrowing available space and requiring accessible transit for workers. The auto-centric design of State Street adds challenges to sustainable growth respectful of the unique character of the neighborhoods. This project evaluated the comfort and safety of bicycle and pedestrian infrastructure using a multi-modal level of service analysis, which grades performance on an A to F scale. In this analysis the bicycle and pedestrian level of service (LOS) is a C or below for much of the corridor. Eight of eleven major intersections examined had an LOS of D or below for bicycles and pedestrians (see Figure 10).

To face these demands, the cities and urban renewal district along the corridor are preparing for

significant transit-oriented development (TOD) investments and are creating opportunities for a live-work-recreate lifestyle that further enhances the region's attractiveness for creative talent and entrepreneurship. Projected growth in residential, office, and retail development, envisioned to be achieved through higher density infill development, is dependent on the highquality investments this project will deliver.

All of this will serve to promote compact, mixed-use, mixed-income development along the corridor that is supportive of and supported by transit and alternative transportation. John Brunelle Executive Director, CCDC

Transit Delay

Traffic volumes along the corridor are expected to grow from 39,000 daily vehicles at present to over 50,000 daily vehicles by 2035, with thousands more diverted trips because of anticipated congestion. As shown in Table 1, residents in the project area are more reliant on transit, with lower median household incomes (\$61,569) and 14% of residents living below the federal poverty level, which is 29% higher than the county benchmark. Residents are nearly twice as likely to live in households with no vehicles, impacting their access to employment and essential services. Renter households with no vehicles make up 12% of the corridor. Any transit travel delay is felt by these residents disproportionally because they effectively have fewer transportation choices.





The activity and speed of State Street can make it a barrier for walking and biking to businesses and schools.

City of Boise Development Analysis, 2021

Corridor Connectivity

State Street acts as a barrier between the neighborhoods to the north and south, as well as the 25-mile Greenbelt, a trail along the Boise River that provides access downtown and to residential areas, jobs, restaurants, greenway parks, and more. Signalized crossings are

widely spaced, often feature incomplete sidewalk networks, and lack Americans with Disabilities Act (ADA) facilities in certain locations. Sections of State Street have limited or no bicycle and pedestrian facilities, discouraging active transportation along the corridor. Poorly configured intersections and excessive speeds make walking unsafe, deterring transit and active transportation. The corridor's deficiencies are most profoundly felt by persons with one or more disability in 18% of households along the corridor.

Lack of Transit Infrastructure and Amenities

The unknown long-term impacts of the COVID-19 pandemic have made transit forecasts challenging. As part of the planning process for this project, VRT updated its ridership forecasts, which reaffirmed previous estimates showing significant ridership growth in the State Street corridor. By 2035, ridership is expected to increase by four to five times over our COVID-19 numbers, with 2,200 to 2,400 daily boardings.

Currently, much of State Street lacks modern transit infrastructure necessary to provide reliable service and minimize conflicts between transit, motorized, and non-motorized options. In some places along State Street, the adjacent development has no access to transit due to a lack of bus stops and pedestrian infrastructure, depressing ridership growth and subjecting existing riders to inadequate accessibility and weather protection.

Poor Air Quality

As a major transportation corridor, State Street's motorized traffic contributes to the region's emissions and impacts residents with increased particulates. While VRT introduced electric

vehicles (EVs) in 2021, the current range from each charge does not allow the electric vehicles to be in service along the corridor all day, requiring the use of Compressed Natural Gas (CNG) buses. Project investment in onroute charging will facilitate the complete conversion of State Street to battery electric buses and will accelerate a transition to an EV fleet in the future.

State Street's composition of diverse and mixed income households makes it an essential area for infrastructure investments that can integrate affordable housing initiatives with climate and transit goals.

> Mayor Lauren McLean City Council President Elaine Clegg City of Boise



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Figure 4. Existing Challenges

Future Growth

State Street is expected grow substantially in the next two decades while Route 9 already has the most ridership in Boise, carrying over 200,000 annual trips prior to COVID-19. Plans are in place to invest a significant amount of capital to create a high-quality Bus Rapid Transit corridor supporting mixed-use, TOD hubs providing both market and affordable housing. The projects in this RAISE grant are a first step in achieving this vision.

Corridor Connectivity

State Street acts as a barrier between the residential neighborhoods north and the amenity rich greenway parks along the Boise River. Improvements at intersections to create safe and comfortable crossing will better connect people to both transit and recreational opportunities.

Transit Delays 🛑

Traffic volumes will grow to over 50,000 along many stretches of the corridor only adding to increased transit delay, including over a minute of additional delay for each bus in the PM Peak at the most congested intersections. Bus priority treatments at intersections and improvements to reduce dwell times by speeding up passenger boarding will help to maintain and improve transit operations.

Electrification

VRT started operating the first electric buses in Idaho in the fall of 2021 and has plans to significantly expand the electric bus fleet in coming years. Currently, VRT operates a fleet of mostly CNG buses, and switching to fully electric-battery buses will help reduce greenhouse gas emissions of the fleet. Investing in on-route charging infrastructure will accelerate this effort.







1.3 Project History

The critical multi-modal function of State Street/SH 44 has been identified in regional plans, such as the Community Planning Association of Southwest Idaho's (COMPASS) Communities in Motion 2040 2.0 long-range plan and VRT's ValleyConnect 2.0 transit vision. From its origins, the corridor has been a significant east-west transportation link moving people across the Treasure Valley, starting with an inter-urban streetcar that operated for several decades in the early 1900s.

Since 2005, nine land use and transportation agencies have coordinated development of transportation infrastructure and service decisions through a Memorandum of Understanding (MOU). The purpose of this MOU was to build the multi-modal corridor the region envisioned. Figure 5 illustrates a timeline of plans and studies that established the foundation for the regional coordination in the corridor and this project. A more detailed description of the collaboration can be found in section 4.7, Partnership and Collaboration.

Most recently, the 2022 Transit Operational Analysis (TOA) identified transit priority treatments to improve operations and travel times at key locations in the near-term while anticipating future implementation of transit priority along the length of the corridor. The project also addressed connectivity and safety challenges for bicyclists and pedestrians to make access to transit safer and more convenient. In addition to the State Street TOA, VRT completed a Bus Stop Typology Study in 2022 to establish bus stop

Figure 5. Project History Timeline

2004	State Street Corridor Strategic Plan Study
2007	State Street Corridor Market Strategy
2009	Downtown Boise Multimodal Center Alternatives Analysis
2011	Blueprint Boise update
2011	State Street Transit and Traffic Operational Plan (TTOP)
2019	State Street Transit Oriented Development
2021	State Street Alternatives Analysis
2022	State Street Transit Operational Analysis
2022	State Street NEPA and Final Design

design guidance for premium corridors like State Street and identify amenities needed provide high quality experiences for passengers. Combined, these two studies guided the scope of the State Street Premium Corridor Infrastructure Project, ensuring that VRT will be able to quickly implement improvements that will benefit both existing and future travelers in the corridor.

1.4 Broader Context and Other Investments

The State Street/SH 44 corridor has been designated as a priority corridor in the region's longrange plan. The full build-out concept includes a Bus Rapid Transit (BRT) line between downtown Boise and the City of Eagle. Transitioning the arterial corridor from its existing auto-





oriented design to a high-capacity transit corridor will take continued commitment and investment from all MOU partners. This grant would help build on existing infrastructure investments to provide better connections for all users, especially non-driving residents including youth, elderly, lower-income, and other disadvantaged populations. In

Because transit along this corridor serves a high number of refugee and racial minority riders, this project creates equity in access to services and opportunity for vulnerable populations.

Ada County Board of Commissioners

the project area, 18% of households have persons with disabilities and 7% of households do not own a vehicle (see Table 1). This project's investments in alternative travel mode infrastructure will especially benefit residents in the State Street corridor, as mode share by bicycle, transit and walking are all higher in this corridor than the county average (203%, 117%, and 82% higher respectively). Investments will support existing and future residents, creating a more livable, walkable, and affordable – a better – State Street.

Project partners have worked collaboratively to make investments in bicycle, pedestrian, and intersection improvements. The adoption of the City of Boise's comprehensive plan, Blueprint Boise, set forth a vision for compact, mixed-use TOD along the corridor. In 2022, the Capital City Development Corporation (CCDC), Boise's urban renewal district, established the State Street Urban Renewal District (URD) to enable the types of investments identified in Blueprint Boise. Problems identified include a substantial number of deteriorated structures, defective and inadequate street layout, lagging property valuations compared to the City of Boise and Ada County overall, and higher commercial vacancy rates compared to the City of Boise. Transit improvements are a key element to support opportunities in the district.

To prepare for premium levels of service in the future, VRT has invested in transit service enhancements in peak-hour (6-9 a.m. and 3-6 p.m.) and weekend frequency, first- and last-mile connections to transit stops and increases in off-peak service. Three major intersections have been completed or are programmed to accommodate better sidewalks, pedestrian crossings, bike lanes, transit stops and accessible multi-use pathways. Investments to improve street lighting have been completed to improve visibility and safety in older neighborhoods.

1.5 Statement of Work

The State Street Premium Corridor Infrastructure Project presents a unique opportunity to activate the region's vision to transform State Street into a multi-modal corridor. Communities in Motion 2040 2.0 highlights improvements to this segment of the corridor as the highest priority among all unfunded regional public transportation projects. A RAISE grant would fund final design and construction of active transportation infrastructure at six locations along the corridor and transit amenities at 27 bus stops and provide the opportunity to update existing transit signal priority (TSP), reducing transit travel time. It would also fund planning of transit and active transportation infrastructure at the key intersection of West State Street and North Bogart Lane to improve walk and bike infrastructure and create transit facilities, providing transit access to a fast-growing neighborhood that currently lacks transportation options (see Figure 6).



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Figure 6. Project Improvements



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2.0 **Project Location**

The State Street Corridor Infrastructure Project is located in Ada County, Idaho within the cities of Boise and Garden City. The project is within the Census-designated urbanized area of Boise. Two areas of persistent poverty (APP), Census Tracts 1 and 4, are within the project area. State Street/SH 44 serves as an essential east-west arterial, connecting northern and western communities that include Eagle, Star, and Middleton along the corridor, Emmett at SH 16, and Horseshoe Bend at SH 55 to Boise. The project area is a six and one-half (6.5) mile section of the corridor beginning at VRT's major downtown transit hub, Main Street Station and ending at the intersection of State Street and Bogart.

Figure 7. Project Location Map



3.0 Grant Funds, Sources and Uses of Project Funds

The total cost of the project is \$10,572,000. VRT has secured \$2,115,000 in local match, representing 20% of the project cost, and is requesting a RAISE grant of \$8,457,000 to fund final design and construction of non-motorized infrastructure and transit amenities at multiple locations along State Street. It would also fund planning of transit and non-motorized infrastructure at the key intersection of State Street and Bogart Lane.





RAISE funding is critical to the timely completion of this project, allowing VRT and its partners to help accommodate the explosive growth in accordance with community supported plans. Without these funds, VRT and our partners would have to rely on limited formula and local funding, resulting in a continual delay as the region tries to keep up with current growth.

Table 2 below outlines the major project elements and estimated costs. RAISE funding would be applied across all major project elements, and include:

- **Transit electrification**, including on-route charging infrastructure to facilitate the complete electrification of transit service on State Street, reducing emissions and transportation noise in the corridor (47%)
- **Bicycle and pedestrian improvements** that encourage non-motorized transportation and improve transit access (29%)
- **Transit amenities and improvements,** such as improved passenger amenities, real-time information, and ticket vending machines (16%)
- **Planning and design,** including final design at all construction locations and preliminary planning at State and Bogart (8%)

Project Elements	Current Year Dollars	With Escalation	Percent of Total
On-route charging	\$ 4,432,062	\$ 4,946,000	47%
Transit amenities and improvements	\$ 1,560,681	\$ 1,682,000	16%
Planning and design	\$ 842,647	\$ 848,000	8%
Bicycle and pedestrian improvements	\$ 2,885,611	\$ 3,096,000	29%
Total	\$ 9,721,000	\$ 10,572,000	100%

Table 2. Total Project Cost Estimate by Major Project Element

The project costs include final design, construction management, utility relocation, contingency, and a three-year escalation (7%, 4%, and 2% in the first, second, and third year respectively to account for high inflation rates).

The local match for this project combines contributions from four co-sponsors and partners in the corridor, as shown in Table 3. As guided by the MOU, each co-sponsor is providing local financial contributions aligned with their agency's mission and role in the corridor. That multiple agencies have committed matching funds is an indication of the collaboration and level of support for improving State Street. Letters of commitment from each of these co-sponsors is included in the attachments.





Table 3. Local Match by Co-sponsor

Co-sponsor: Major Project Elements Funded	Project Total	Local Share		
City of Boise On-route charging Transit amenities and improvements Bicycle and pedestrian improvements Planning and design	\$ 6,558,000	\$ 1,312,000		
CCDC Transit amenities and improvements Bicycle and pedestrian improvements Planning and design	\$ 1,046,000	\$ 209,000		
Idaho Transportation Department (ITD) Bicycle and pedestrian improvements Planning and design	\$ 1,774,000	\$ 355,000		
Ada County Highway District (ACHD) Bicycle and pedestrian improvements Planning and design	\$ 1,194,000	\$ 239,000		
Total	\$ 10,572,000	\$ 2,115,000		
Remaining federal share	\$ 8,457,000			

4.0 Merit Criteria

4.1 Safety

Like many urban corridors, investments in the State Street corridor have historically favored auto travel over bike, pedestrian, and transit modes. The corridor has many key destinations generating pedestrian, bicycle, and transit trips despite a lack of investment in these modes. The lack of safe crossings, locations of bus stops in relation to intersections, and inadequate bicycle and pedestrian facilities contributes to less safe travel for all who live and use the corridor.

Data analyzed from 2016 through 2020 found that 239 crashes occurred at project intersections. Of those, 77 were injury crashes with no fatalities reported. Three crashes involved a pedestrian being struck by a vehicle and one crash involved a bus. Of the intersections evaluated, those targeted by the project show the highest crash rates. The data also shows



most crashes to be rear-end or angle incidents. A predictive crash model applying appropriate Crash Modification Factors (CMFs) are shown below in Table 4. In 2035, the planned

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intersection improvements, such as buffered, multi-use pathways, curb ramps, crosswalks, refuge islands, protected bike lanes, enhanced bus shelters, and lighting, will reduce the number of crashes by 6.25 each year, marking 12% reduction compared to a 2035 case where the intersection improvements are not made. At some intersections, this project would reduce accidents by as much as a 50% attributed to geometric changes, improved pedestrian crossings, and bicycle lane installation.

Table 4. Predicted Crashes, 2035

	2035: No Build				2035: Build			2035 Crash Reduction							
			Inju	ries				Inju	ıries				Inju	ıries	
Intersection	Total	Fatalities	Serious	Other	Property	Total	Fatalities	Serious	Other	Property	Total	Fatalities	Serious	Other	Property
State & 7th St	0.25	0	0	0	0.25	0.25	0	0	0	0.25	0	0	0	0	0
State St & 15th St	8.37	0	0.25	1.77	6.34	8.37	0	0.25	1.77	6.34	0	0	0	0	0
State St & 18th St	5.34	0	0	2.29	3.05	5.34	0	0	2.29	3.05	0	0	0	0	0
State St & 23rd St	2.29	0	0	0.51	1.78	1.11	0	0	0.26	0.86	1.17	0	0	0.25	0.92
State St & 27th St	5.33	0	0.51	1.27	3.56	2.96	0	0.27	0.7	1.99	2.37	0	0.24	0.57	1.56
State St & Whitewater Park	5.73	0	0.55	1.64	3.54	5.73	0	0.55	1.64	3.54	0	0	0	0	0
State & Clover Dr	7.42	0	0	2.97	4.45	7.42	0	0	2.97	4.45	0	0	0	0	0
State & Arthur St.	2.97	0	0	0.99	1.98	2.97	0	0	0.99	1.98	0	0	0	0	0
Gary & Bunch	1.78	0	0.25	0.5	1.02	1.54	0	0.25	0.46	0.82	0.24	0	0	0.05	0.19
SH 44 & Saxton Dr	13.7	0	0.25	4.57	8.89	11.25	0	0.21	3.8	7.25	2.46	0	0.05	0.78	1.64
Totals	53.2	0	1.82	16.51	34.86	46.94	0	1.53	14.87	30.54	6.25	0	0.29	1.65	4.32

4.2 Environmental Sustainability

The transit, bike, and pedestrian infrastructure improvements proposed in the project lead to higher utilization of transit in the near- and long-term horizon of the project. Transit travel times upon completion of the project are estimated to improve by 13% during a service day, contributing to a 6.5% increase in boardings above current projections. Of the new transit riders, 5,300 to 11,100 are attributed to auto diversions, resulting in annual reductions of between 37,000 and 77,500 vehicle miles traveled (VMT). These benefits continue to 2035, when projected boardings increase to 39,700 due to travel time improvements. Approximately 23,800

of these are auto diversions, resulting in a decrease of VMT by 166,800 annually by 2035, corresponding to a reduction in emissions of 1,489 tons of CO₂ equivalent that year, which raises to 266,400 tons by 2055. To take full advantage of the environmental benefits of transit, VRT has already begun to electrify its transit fleet. This project will construct on-route charging stations at Main Street Station, which will enable the full electrification of transit service on State Street. The introduction of a fully electric service along the corridor also benefits the adjacent neighborhoods with a quieter and cleaner transit system.

The addition of on-route charging infrastructure through this grant strengthens VRT's commitment to electrifying their fleet. This will be an important piece of Boise becoming a fully carbon neutral city by 2050.

> Mayor Lauren McLean City Council President Elaine Clegg City of Boise





4.3 Quality of Life

VRT's 9 State Street bus route provides critical transit service along State Street and connects riders through downtown's Main Street Station with other regional routes. Transfer connections to 9 State Street through Main Street Station provide access to Boise State University, Downtown YMCA, Boise High School, Veterans Memorial Park, and a multitude of other destinations: employment, social services, housing options, healthcare, education, recreation, and more. Quality of life concerns are a driving force that have contributed to a strong, community-led vision for the corridor first expressed in 2002 neighborhood engagement efforts. Stakeholder input showed a motivation to find solutions for the corridor that respected the livability of adjacent neighborhoods and acknowledged that "business as usual" auto-centered solutions would not lead to a sustainable or desirable outcome for residents, businesses, or commuters.

The explosive growth and recent housing shortages are contributing to degradation in quality of life through increases in housing and transportation cost burdens that many residents struggle to meet. Adjacent neighborhoods reflect worse quality of life metrics compared to Ada County benchmarks. Median household income (\$61,569) is 15% lower than the county benchmark, and 14% of the population lives below the poverty level. Residents rent at

The neighborhoods near the State Street corridor include several affordable housing developments and are home to substantial refugee and low-income populations. The State Street project will remove barriers for people who need access to transit to live.

higher rates (54%) than the county benchmark, and both homeowners and renters are more likely to have no vehicles at a higher rate than the county benchmark. These populations rely more on transit and experience housing, and transportation cost burdens disproportionately.

A 2021 on-board survey showed transit is a critical service to support low-income workers' access to jobs and opportunities across the region, in particular along the State Street corridor. 70% of State Street transit riders have a household income of less than \$37,499, compared to 61% of transit riders systemwide. State Street riders also use transit to shop at higher rates (25%) than they systemwide total (14%). The transportation infrastructure investments in the grant are especially important to the mobility of State Street riders who are more diverse than other routes, with 28% of riders being non-white/Caucasian compared to 19% system wide. The survey also showed that 57% of State Street riders lack access to a car. This project will improve the travel experience and quality of life among the most diverse and resource-constrained population in the VRT system.

Investments identified in this project can become a catalyst and foundation for the community's vision and support improved quality of life through reduced travel times, improved safety, and new transit amenities. Analysis of the potential benefits from the project investments include travel and dwell time savings, as well as multi-modal level of service (MMLOS) and predictive crash reductions. The MMLOS results are shown in Figure 10 below.





Improved transit encourages its use and promotes TOD along the corridor. Faster and more efficient transit in close proximity to TOD improves neighborhood access to healthcare, groceries and recreation, factors known to improve community health outcomes. Better and more affordable transportation options reduce the housing and transportation cost burden, allowing people more reliable transportation options besides a personal vehicle.

Quality of life will also be improved for transit riders waiting at bus stops thanks to new shelters and benches that increase comfort and offer protection from weather. The proposed real time transit information reduces stress and provides reliable rider information, new ticking machines that will speed up boarding processes, and level boarding platforms will reduce trip hazards and make buses more accessible for ADA riders.

> With 13,000 people living within a quarter mile of this corridor, improvements to bus stops, transit electrification, and bike/pedestrian facilities on State Street bring myriad benefits to the area including economic opportunity, access to essential services and amenities, and increased livability. Danielle Sanders Executive Director, Good Samaritan Home



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Figure 8. Level of Service and Operations

Existing LOS

Multimodal Level of Service (MMLOS) analysis showed that the corridor performs poorly for active modes and transit with many ratings of C or below for bicycle, pedestrian and transit LOS. This reflects existing conditions where transit service is slower than optimal due to traffic congestion and access to transit is not optimal due to sidewalk and crossing conditions. This creates discomfort for cyclists and pedestrians on the corridor thanks to a lack of separation from high volumes of fast-moving vehicles that create unsafe conditions, real or perceived.

Operational & LOS Improvements

Investments along State Street will improve intersection and segment MMLOS ratings. The protected intersection at 23rd would improve conditions from LOS C to LOS A for both pedestrians and cyclists thanks to crossing facilities, increased separation and reduced turning conflicts. At other locations, the improvements to crossing conditions and the addition of bicycle lanes at intersections raise LOS from poor to good compared to the existing conditions.

Transit LOS will also improve to LOS B along the corridor thanks to improved access conditions and reduced delay. Cumulative time savings are significant, with dwelltime reduced at Main Street Station by 20 minutes due to off-board fare payment, while bus priority between 23rd and 28th will save a cumulative of 7 minutes of travel time over the course of a day.



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4.4 Mobility and Community Connectivity

The vast majority of VRT riders access transit stops and their ultimate destination on foot or by bicycle. The 2021 on-board survey found that 92% of all riders access transit by foot (87%) or by bicycle (5%), while 95% of all riders reach their final destination by foot (90%) or by bicycle (5%). This makes pedestrian and bicycle infrastructure a critical part of ensuring residents experience a safe and seamless travel on transit. Increasing transit and non-motorized infrastructure will expand the public's mobility and reduce congestion spillover impacts on other major corridors and transit lines, even as new development occurs. Figure 9 provides an example of non-motorized and transit treatments at the intersection of State Street and 23rd Street. These improvements will provide significant improvements in bicycle and pedestrian visibility and safety with improved connections to transit.



Figure 9. State Street TOA Improvements: State Street & 23rd Street

Investments made in reducing dwell-times, updating TSP, consolidating stops, and providing transit priority at key intersections will provide overall time saving benefits of 9% for daily operations almost immediately. For an individual bus operating during the PM peak period (3-6 p.m.), these savings will translate into approximately 1.4 minutes saved in travel time and 2.5 minutes saved in dwell or wait times. In 2035, with increased congestion and higher transit ridership, these savings will translate to 12.7% savings for daily operations, approximately 1.4 minutes of travel time, and 6 minutes of dwell time for an individual bus during the PM peak period. The improved operations make transit a more viable option for residents and commuters using the corridor through treatments like off-board payment, near level boarding, all-door boarding, stop consolidation, and far side stop placement. Updated TSP will provide a better integration between transit and traffic. Combined with the stop consolidation these improvements will making up 75% of the estimated travel time savings.





The project quantifiably improves mobility and expands connectivity. VRT measured the impact that the project's investments would have on multi-modal levels of service. All intersections identified for bicycle and pedestrian improvements (State and 23rd, State and 27th, State and Whitewater, State and Clover, Gary and Bunch and Saxton and State) show improved bicycle and pedestrian levels of service. These LOS improvements are due to investments that address intermodal disconnects by improving crosswalks, updating ADA ramps and sidewalks, adding bicycle lanes or separated paths, adding conflict markings and signage, and removing or reducing turning conflicts. Also, by providing bike and pedestrian connections away from vehicles and oriented to-and-through the transit stations, the project will greatly improve the safety and reduce vehicle and pedestrian conflicts. Each of these elements helps the transition between modes to be safer and more accessible, as well as improving intermodal connectivity between active transportation modes and transit.

4.5 Economic Competitiveness and Opportunity

Existing Residents

State Street provides much-needed access to the employment center of downtown Boise and to growing industrial centers in Canyon County. The corridor facilitates critical transit access for the entire region. However, like many highways connecting rural, suburban, and urban areas, State Street was designed to promote commerce, freight, and single occupant vehicles, often compromising safety and access for those who live and travel in the corridor.

The 9 State Street route is VRT's highest ridership route. Considering that employment along the corridor is anticipated to triple from 3,829 today to 12,595 in 2035, providing improved transit access to these job centers will provide more opportunities for better employment. The

project directly benefits the economic competitiveness of the corridor by making it more accessible and increases the opportunities available to current and future riders through the immediate and long-term benefits of reduced travel time, improved safety, and improved amenities making more affordable alternatives available throughout the corridor.

We strongly believe that this project will be a key economic catalyst for enhanced business development and investment in the corridor. Mary May Commission President, ACHD

The needs for at-risk neighborhoods were considered in the City of Boise's 2021 Community Development Analysis. The report broke out Census tracts determined to be most at-risk for poorer health outcomes based on a variety of data points related to social influencers of health, including safety, transit access, open space, and quality of housing. Four Census tracts along the State Street corridor are determined to be at-risk (Tracts 1, 3.02, 3.03, and 3.04) and will benefit from the improvements identified in the project. Specific investments from the project will address many of the areas called out in the report, including lack of sidewalk infrastructure, access to essential services, ADA compliance in public rights-of-way, lack of pedestrian crossings, and high-speed roads. In addition to the transportation barriers, 23% of renters and 28% of homeowners in these tracts are paying more than 30% of their income on housing costs.

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The project investments help reduce the transportation/housing cost burden by making more affordable transportation options available and convenient to all the neighborhoods along the corridor.

Redevelopment

The identified investments are a significant step enabling State Street to become the TODcentered multi-modal corridor the region envisions. Focusing development at TOD hubs is a key strategy to making this a reality, and improved transit operations are a key ingredient in making such development feasible. Land use co-sponsors to this project established strategies to enable growth in previously mentioned planning efforts, demonstrating local commitment to connecting land use and transportation to achieve better community outcomes and include more livable neighborhoods, environmental sustainability, and expanded opportunity for all.

It is anticipated that increased public transportation services in the area will have a compound benefit, as redevelopment in the area will continue to provide additional jobs and housing options in the future. For example, a TOD market analysis was built upon a specific program the City of Boise established to realize the city's strategic goals around neighborhoods. The Energize Our Neighborhoods (EON) program focuses on individual neighborhoods through a framework of eight livability focus areas (children and youth, economic development, environment, health and community services, housing, placemaking, public safety, and

transportation) in order to better align the transit network and the TOD elements to the goals for healthy and thriving neighborhoods.

State Street TOD planning resulted in CCDC creating the State Street URD. One of the key purposes of this district is to help fund high-quality transit and non-motorized amenities to support redevelopment, investment, additional housing and employment along the corridor centered at transit-supportive TOD hubs. This project will directly support those efforts by matching urban renewal dollars for improved transit amenities along the corridor.

4.6 State of Good Repair

As a region, the Treasure Valley has prioritized federal funding to maintain existing assets. Ensuring we get the most out of our existing infrastructure is an important strategy to protect against building too much infrastructure that can't be maintained adequately. By pursuing the vision for a multi-modal corridor, the region has been able to avoid plans that would have expanded the corridor to nine lanes, focusing instead on limited lane expansions and accommodating alternate modes of travel that make better use of public right-of-way by separating transit/pedestrian/bicycle users from active vehicle traffic.

Transit infrastructure in the corridor is aging and inadequate. Current stops have inadequate loading/unloading space, and poor drainage at and around bus stops that can make some stops





inaccessible during weather events. Existing stops lack visibility and weather protection which reduces their safety and comfort.

This RAISE grant will address these deficiencies by modernizing existing transit infrastructure with more weather protection, lighting, benches, and real-time information. It will also address deficiencies in drainage, loading and unloading, waiting areas, curb ramps, crossings, and other bicycle and pedestrian infrastructure. By addressing deficiencies, modernizing infrastructure, and encouraging better use of existing infrastructure, the project will make alternative modes safer and more convenient to use.

4.7 Partnership and Collaboration

The State Street corridor has been the subject of focused planning efforts for nearly 20 years, starting with an initial State Street Strategic Corridor Plan adopted by the City of Boise and ACHD in 2004. Boise has a strong sense of place and identity that the community upholds and wishes to manifest in the places they build. This strong sense of place has continuously driven community involvement along the corridor and created a vision for a walkable and transit focused corridor that provides space for meaningful experiences.

Community Vision

That first State Street Strategic Corridor Plan gathered nearly one thousand touchpoints with community members and businesses along the corridor. Residents at that time expressed a strong desire for faster and more frequent transit service, improved bus stops, complete sidewalks, and safer pedestrian crossings. These types of improvements consistently scored in the top percentile of improvements residents desired for the corridor and established a strong desire for efficient transit connections to the surrounding neighborhoods. The community's expression of this vision resulted in a transit first approach for the corridor that continues to shape investments today.

Subsequent planning efforts added to the initial vision with an emphasis on transit-oriented development and affordable housing culminating in the State Street Corridor TOD Plan. Recent engagement efforts, including surveys, open houses, community forums and stakeholder meetings, gathered information from over 800 participants. Community feedback reinforced the desire for the corridor to grow and support a walkable and transit friendly environment while providing access to a blend of affordable housing. 69% of respondents wanted improved bike, walking and transit amenities while 59% wanted improved streetscapes and public spaces including street trees, landscaping, and public greenspace.





Partnerships

Realization of the vision for this corridor requires the coordination of roadway, transit, and development projects. A collaborative group of nine public jurisdictions and agencies work through an MOU framework, with the most current being executed in 2022. The MOU identifies the unique responsibilities of the land use agencies, highway districts, development

Together with the investments of electrification, these investments will enhance livability, economic opportunity, and increase safety along the State Street Corridor. Mayor Jason Pierce City of Eagle

corporations and transit agencies. The State Street MOU partners include VRT, ACHD, CCDC, COMPASS (the region's Metropolitan Planning Organization), the Idaho Transportation Department (ITD), Ada County, and the cities of Boise, Eagle, and Garden City.

Since forming in 2005, MOU partners have made many investments in the State Street corridor. Land use agencies have updated their comprehensive plans and permitted significant development in the corridor, even establishing a new urban renewal district to further catalyze development changes. ACHD has rebuilt multiple intersections, improving traffic flow and nonmotorized infrastructure at key intersections. They also worked with VRT to install transit signal priority in 2015 at intersections along the corridor. VRT has increased service levels, upgraded its on-board systems to allow for real-time information, launched mobile ticketing, and built a downtown multi-modal transit center with Main Street Station.

In 2018 the MOU partners re-energized coordination efforts by forming an Executive Team (ET), representing executive leadership from each of the organizations. The ET establishes an annual work plan for the collaborative work along the corridor and ensures that the governing board is effectively engaged in the activities respective to each organization. The ET is supported by a Technical Team (TT) made up of the technical staff from each organization. The TT meets frequently, both formally as projects teams for multi-modal projects and studies, and through informal consultations between the staffs of different organizations. Both the ET and TT are supported by VRT staff. Through this clearly defined and documented organizational structure, the work along the corridor continues to progress and issues that come up are addressed quickly and effectively.

Recognizing the need to effectively inform and engage the public regarding important work in and around the corridor, the MOU partners developed a joint, multi-faceted communication strategy for the corridor. Central to the strategy is a common brand and identity, which was represented by the development and launch of **Building a Better State Street website**. The website is a tool to message the collective work of the partners, help the public see the future of the corridor through the incremental progress being made, and keep the public informed about implementation projects.





At the community level, VRT and the City of Boise have developed extensive community partnerships to enable building out the community's vision. Among these is Energize Our Neighborhoods, a collaborative community organization that partners with local neighborhoods

Increased access to affordable and safe public transportation is one of the key elements of increasing housing affordability. Deanna Watson Executive Director, Boise City/Ada County Housing Authorities and groups to foster community connections, investments, and engagement activities. Partnerships also include those focused on redevelopment and increasing affordable housing such as the State Street URD and local affordable housing non-profits such as NeighborWorks Boise. These partner

organizations support and reinforce the community's vision for State Street and are actively engaged in implementing steps, both large and small, to see it come to fruition.

4.8 Innovation

This grant will advance innovative transportation strategies in several ways. In addition to implementing new technologies and financing methods, this project represents an innovation in how the region is planning to address mobility. By increasing the visibility of transit in the public infrastructure and coordinating transit priority along the corridor, the project will fulfill the region's vision of a multi-modal corridor with an emphasis on transit.

Innovative Technologies

The State Street Premium Corridor Infrastructure Project will include ticket vending machines for easier payment, real time bus arrival information to enhance reliability, and on-route vehicle charging to enable VRT to continue electrifying its entire fleet and extend the benefits of battery-operated buses throughout the entire service day. This represents the first on-route charging project for the region and stands to create a foundation for VRT sustainability efforts.

Innovative Project Delivery

The State Street Premium Corridor Infrastructure Project is one effort to transform the State Street corridor into a multi-modal corridor with a heavy transit emphasis. Although not explicitly called out in this project, one of the innovative ways the region is engaging the private sector in this vision is through development processes. VRT is working with each jurisdiction to ensure the transit and non-motorized infrastructure needs can be accommodated through redevelopment as much as possible.

In addition to leveraging the development processes, VRT has partnered with the City of Boise, Boise State University, and other institutions to create a transportation demand management (TDM) organization called City Go. One of City Go's objectives is to increase alternative transportation use in the Boise area. The innovative technologies being deployed by this project will extend City Go's ability to develop residential and employer pass programs along the corridor. Many of the benefits of this grant are dependent on increased alternative transportation





use and VRT and its partners are continuing to find innovative ways to drive people to alternative transportation that will strengthen the investments in this project.

Innovative Financing

As part of the regions ongoing coordinated planning along State Street, CCDC has established the State Street URD, which covers much of the RAISE grant project area. This URD will use tax increment financing to fund improvements along the corridor, including the transit infrastructure identified in this grant. The transit and non-motorized infrastructure are a key part of the district's investments. These amenities are to be catalysts for further private investment in the corridor.

5.0 Project Readiness

5.1 Project Schedule

The following project schedule illustrates how this RAISE grant will extend the work that is already underway. With the pre-RAISE activities already complete or underway, VRT will be able to begin activities funded by the RAISE grant immediately.

VRT has worked to ensure that all elements of this project are ready to begin final design, including stakeholder coordination. Pending project design, VRT anticipates minimal, if any, acquisition of right of way. The proposed schedule below will ensure that we are able to meet all obligation requirements before they expire and account for unexpected hurdles.

	Activity	Date
	State Street TOA project start	April 2021
Pre-RAISE	FTA NEPA and project coordination	November 2021
	Preliminary design complete, begin NEPA review	May 2022
	CATEX submitted to FTA	September 2022
	Final design, ACHD ROW permitting	Early Spring 2023
RAISE	Procurement and RFB, award contractor	Late Spring 2023
	Initiate construction	Summer of 2024
	Complete construction	Summer of 2026
	Construction end/opening	Fall 2026

Table 5. Project Schedule





5.2 Required Approvals

The project will require multiple permits and approvals as a part of the NEPA process, including a documented Categorical Exclusion document (see Table 6).

Aspects of the project will require work within the right of way permits from ACHD and ITD. These permits certify that design standards, traffic control measures, and public safety during construction are established. Corridor-wide support for the project and letters of support can be found in Section 7.0, Supporting Documentation.

Table 6. Required NEPA Permits and Studies

Approval	Agency	Status	Anticipated
Documented Categorical Exclusion	FTA	A documented Categorical Exclusion environmental document will be prepared for this project; CFR 771.118	September 2022
Section 404/401 Permit	U.S. Army Corps of Engineers	Coordination for exempt project or Nationwide JAFP	September 2022
Threatened and Endangered Species	Idaho Fish and Game, U.S. Fish and Wildlife Service	No listed threatened or endangered species or designated critical habitats are known to exist in the project area	N/A
Section 106	Idaho State Historic Preservation Office	No adverse effects to historic properties anticipated	September 2022
Contaminated materials review	Idaho Department of Environmental Quality	Complete hazardous materials review	September 2022

Environmental Permits and Reviews

The proposed project is advanced in the preliminary design phase as a result of the State Street TOA. A NEPA and design consultant has been identified to complete the documented Categorical Exclusion to begin in May 2022. Environmental risks and mitigations have been identified as follows:

NEPA status of the project

NEPA review for sites identified in this RAISE application is underway by VRT Staff. Staff will have consultant support starting May 2022, following VRT Board approval. Initial FTA





coordination and determination of project action (CE) began in December 2021. Anticipated date of completion is May 2023, milestones, and schedule of NEPA determination can be tracked in Table 6.

Agency Permitting

- <u>Historic Resources</u>: The Idaho State Historic Preservation Office is likely to be consulted at the discretion of the FTA. Historic resources are known to occur within the project limits and have been previously documented. Special care has been taken when identifying transit station location and actions. One canal is anticipated to be buried in a pipe for approximately 1000-feet of its many miles of length resulting in a likely *de minimis* impact. A determination of "no adverse effect" is anticipated from FTA and SHPO, which is likely to take between three and nine months of review time.
- <u>Natural Resources</u>: The project is located in a fully constructed urban area featuring several recent intersection projects and rapid redevelopment. Additional pavement may result in new or updated stormwater infrastructure adjustments, increased stormwater pipes and inlets, and sub-surface seepage beds where storm drains are not present. Limited vegetation will be impacted, and landscaping will be used to retain stormwater runoff and water quality improvements where possible. The design team will evaluate and consider stormwater treatments to minimize project footprints and still meet Agency requirements.
- <u>Community Resources</u>: The community has expressed their transportation needs go beyond improving transit stations along this roadway. As VRT partners with ACHD to complete preliminary design, the project will begin an outreach program in June 2022 to engage neighborhoods and businesses along the corridor. The preliminary designs do not acquire rights of way and do not relocate businesses while implementing the needs identified in over 12 years of corridor plans. Without the RAISE grant, the project is underfunded to meet the transit, pedestrian, and infrastructure safety needs on State Street that go beyond the state of good repair. VRT will need to balance funding constraints, funding opportunities, stakeholder expectations, project benefits and costs before finalizing the project design for construction.

Corridor Maintenance and Upkeep of Investment

Elements of the proposed improvements such as drainage, signals, sidewalk clearing, and pavement maintenance will be taken upon by ACHD and adjacent businesses as shared responsibilities. Elements directly related to transit service, such as enhanced technology, fare payments, benches, shelters, trash cans, and snow removal within the transit stations will be provide by VRT; these discussions will continue and influence decision making as the project progresses.





5.3 Assessment of Project Risks and Mitigation Strategies

Financial Risks

Current inflation trends present a very real risk to current project cost estimates. We have addressed the financial risks of continued inflation by including higher escalation assumptions than is standard practice. Each project element also has a built-in contingency. Through stakeholder coordination and regional planning, the region has identified this project as the most important transit project in the region and the partners are committed to seeing it to completion, even in the event of unanticipated expenses.

Environmental Risk

VRT has carefully scoped this project with stakeholder coordination to avoid project elements with high environmental risks. For example, staff selected proposed projects with the greatest benefits while remaining within the existing public right-of-way to the extent possible. VRT anticipates minimal, if any, right of way impacts. However, in the event of unforeseen right of way impacts that arise during final design, VRT would work closely with ACHD, who is very experienced in right of way acquisition and management to quickly resolve those issues.

VRT has also been working with FTA to keep the agency apprised of planning activities on State Street and is confident in a streamlined approval through a documented Categorical Exclusion, which we anticipate submitting to FTA in September 2022 with approval in or around March 2023.

Project Delivery Risk

This project involves input and coordination across multiple jurisdictions. Through the State Street MOU and State Street Executive Team, VRT and the project co-sponsors have developed the organization framework necessary for addressing issues that may come up through the implementation of this project.

Public Involvement Risk

The State Street corridor has included significant planning efforts over the last decade. Each of these planning efforts have involved the public through surveys, community advisory groups, and more. Many active neighborhood associations along the State Street corridor have been a part of and support the multi-modal vision of State Street. A community engagement summary can be found with Supporting Documentation in Section 7.0.

6.0 Benefit-Cost Analysis

A summary of relevant data and calculations used to derive the benefits and costs of the project are shown in the Benefit-Cost Analysis (BCA) model (in 2020 dollars[1]). Based on the analysis presented in the rest of this document, the project is expected to generate \$17.8 million in discounted benefits and \$6.9 million in discounted costs using a 7% real discount rate for all benefit categories, with CO2 benefits discounted at 3% (per US DOT guidance). Therefore, the project is expected to generate a net present value of \$11.0 million and a benefit-cost ratio of 2.57. In other words, for each dollar spent in project costs, approximately \$2.57 worth of benefits





will be generated by the improvements. The project will especially benefit the non-driving populations including the elderly, youth, students, lower income individuals and other disadvantaged populations.

In addition to the monetized benefits, the project would generate benefits that are more difficult to quantify. These include construction of charging stations for electric buses, that will enable the transition to electric buses along the route, eliminate local emissions and reduce noise. Other non-quantifiable benefits include the pedestrian experience improvement from a wider sidewalk in a section of State Street, signaled crossings at busy intersections, and cycling benefits resulting from building bike share stations in some bus stations to improve transit access. These improvements will also improve intermodal connectivity between active transportation modes and transit.

Table 7. Overall Results, Benefit-Cost Analysis (Millions of 2020 Dollars)

Project Evaluation Metric	Constant 2020 \$	Discounted 2020 \$
Total Benefits	\$83.65	\$17.81
Total Costs	\$9.72	\$6.92
Net Present Value	\$73.93	\$10.89
Benefit-Cost Ratio	8.61	2.57
Payback Period (years)	8 years	8 years

With a 7% general discount rate the \$6.9 million investment would result in \$17.8 million in total benefits and a benefit-cost ratio of 2.57.

^[1] The benefits and costs in this Technical Appendix are expressed in constant dollars of 2020 and have been discounted to the year 2020.

7.0 Supporting Documentation

Documents and materials that support this project and are referenced in this grant application can be found at: **buildabetterstatestreet.org/raise**.