Twin Falls Transit Study Final Report

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About the Western Transportation Institute

The Western Transportation Institute (WTI) was founded in 1994 by the Montana and California Departments of Transportation, in cooperation with Montana State University. WTI concentrates on rural transportation research; as stewards and champions of rural America, WTI also has a strong interest in sustainability. WTI research groups create solutions that work for clients, sponsors, and rural transportation research partners. WTI Research Centers include the Montana Local Technical Assistance Program, the National Center for Rural Road Safety, the Small Urban, Rural and Tribal Center on Mobility, the Federal-Public Lands Transportation Institute, and the West Region Transportation Workforce Center.

Disclaimer and Acknowledgments

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1. Overview

Planning and evaluation are processes of reflection: what does Twin Falls want to start, stop, and continue doing?

The purpose of this project is to provide the Idaho Transportation Department and the City of Twin Falls with guidance to inform future investments in public transportation. This study provide an opportunity to support Twin Falls as it prepares for its anticipated transition from the rural (i.e. 5311) to small urban (i.e. 5307) federal formula funding stream for public transportation, as well as an opportunity to assess the performance of the current public transportation system and explore affordable and innovative investments to improve public transportation offerings.

Over the course of this study, the research team has evaluated existing conditions, learned about community values and guiding principles, visited Twin Falls to meet with community leaders and view on-the-ground conditions, and collected information about the latest innovations in public transportation service through interviews with public officials and vendors. The project timeline is summarized in **Figure 1**. The research team has benefited from the insights provided by the 2016 Transit Development Plan commissioned by and prepared for the City of Twin Falls, including its recommendations for building a foundation to support fixed route transit. This final report offers an assessment of public transportation service types available for immediate implementation and provides practical guidance readily usable in a transit pilot program. It is also intended to serve as a useful foundation for ongoing consideration of transportation challenges and travel flows throughout the Twin Falls region.

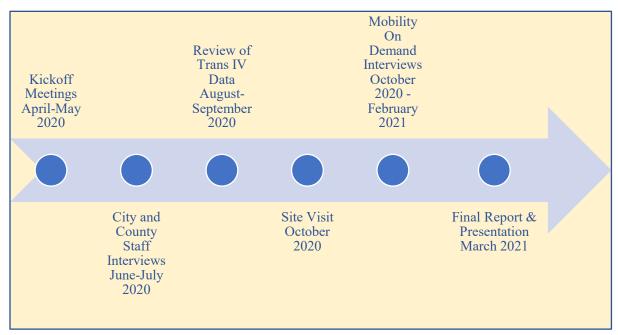


Figure 1. Project Timeline

2. Existing Conditions and Market Analysis

"While the need for individual mobility is equal in rural and urban areas, the expenses for its provision in rural regions are highly increased" (Sörensen, Bossert, Jokinen, & Schlüter, 2020).

"Specialized [paratransit or demand-responsive] services struggle to be efficient in terms of capital and operating expenditures per passenger trip or passenger mile due to the lower density of demand and the need for providing curb-to-curb services or special accommodations" (Polzin, 2016).

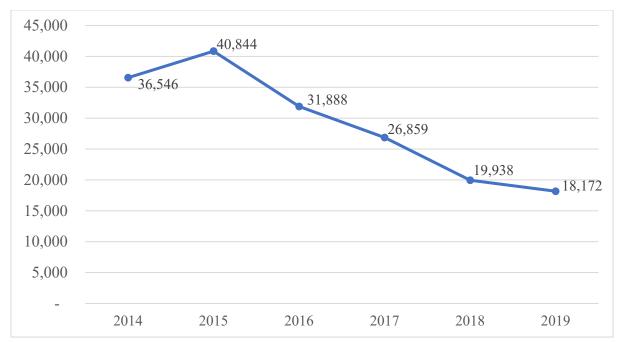
"When considering a change, understand that the concepts of passenger transportation and logistics still apply and most of all productivity matters" (Hosen, 2021).

2.1. Existing Service

The 2018 Twin Falls Community Strategic Plan (City of Twin Falls, 2018) Accessible Community Focus Area acknowledges the "minimal investment" made so far in public transportation and describes the current Trans IV bus system as "inadequate for current needs" and not well-suited for "system expansion, with even current service levels in question with available resources." Given this level of investment, seniors and "other transit dependent groups remain unserved by the current system" and "critical access needs" remain "unfulfilled."

The College of Southern Idaho introduced the Trans IV bus system in 1979 as a public service. Trans IV offers a Dial-A-Ride form of Demand Response Transit (DRT-DAR). Service has primarily been provided to senior citizens and persons with disabilities, although the system is open to the general public. The service runs weekdays, requires an appointment at least a day in advance, and is run by a staff comprised of a Director as well as a small team of dispatchers, drivers, and mechanics, most of whom work part-time. Significant challenges for the Trans IV system have included changes in the administration of non-emergency medical transportation, as well as limited local public funding.

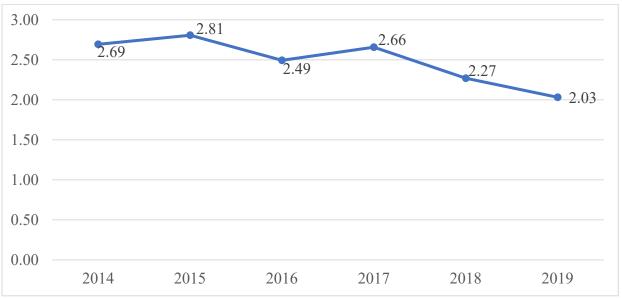
The research team reviewed key performance metrics for 2014-2019 reported by Trans IV to the Federal Transit Administration and made available through the National Transit Database's Annual Agency Profiles (Federal Transit Administration, 2014-2019), as well as Routematch system data used for Trans IV system management and accessed with permission. Over this period (prior to the COVID-19 pandemic, which has only exacerbated the following trends), the Trans IV system has struggled and contracted. The total number of trips on the system declined by more than half, from 36,546 in 2014 to 18,172 in 2019 (Figure 2).



Source: Prepared by WTI using the National Transit Database Annual Agency Profiles for Trans IV (Federal Transit Administration, 2014-2019).

Figure 2. Annual Unlinked Passenger Trips for Trans IV (2014-2019)

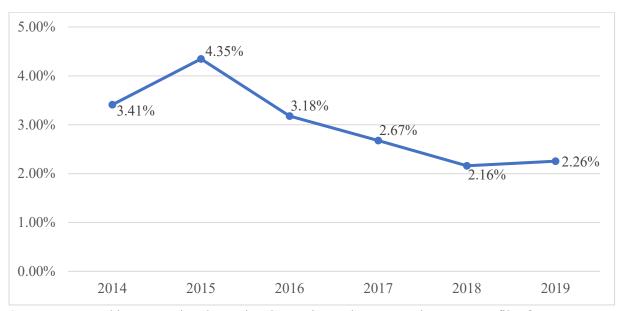
The number of unique customers also declined, from 499 in 2014, to 263 in 2019 (53% as high) (TransIV Routematch Database, 2014-2019). Trips per hour also declined, from 2.7 in 2014 to 2.0 in 2019 (Figure 3).



Source: Prepared by WTI using the National Transit Database Annual Agency Profiles for Trans IV (Federal Transit Administration, 2014-2019).

Figure 3. Unlinked Trips per Vehicle Revenue Hour for Trans IV (2014-2019)

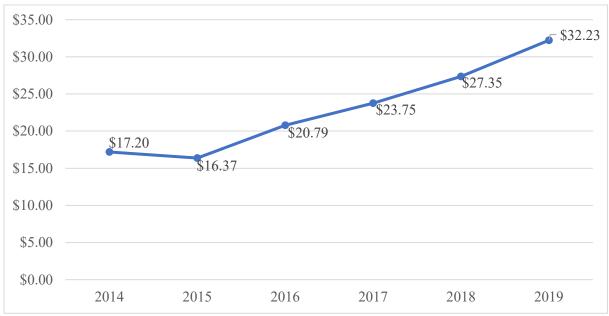
As expected, vehicles operated at maximum service has declined, from 14 in 2014 to 9 in 2019 (Federal Transit Administration, 2014-2019). The share of operating expenses covered by fare revenues has declined, from 3.4% in 2014 to 2.3% in 2019 (**Figure 4**).



Source: Prepared by WTI using the National Transit Database Annual Agency Profiles for Trans IV (Federal Transit Administration, 2014-2019).

Figure 4. Ratio of Fare Revenues to Operating Expenses for Trans IV (2014-2019)

Meanwhile, the cost per trip has increased, from \$17.20 in 2014 to \$32.23 in 2019 (Figure 5).



Source: Prepared by WTI using the National Transit Database Annual Agency Profiles for Trans IV (Federal Transit Administration, 2014-2019).

Figure 5. Operating Expenses per Unlinked Passenger Trip for Trans IV (2014-2019)



Likewise, the cost per hour of service has increased, from \$46.31 to \$65.48 (Figure 6).

Source: Prepared by WTI using the National Transit Database Annual Agency Profiles for Trans IV (Federal Transit Administration, 2014-2019).

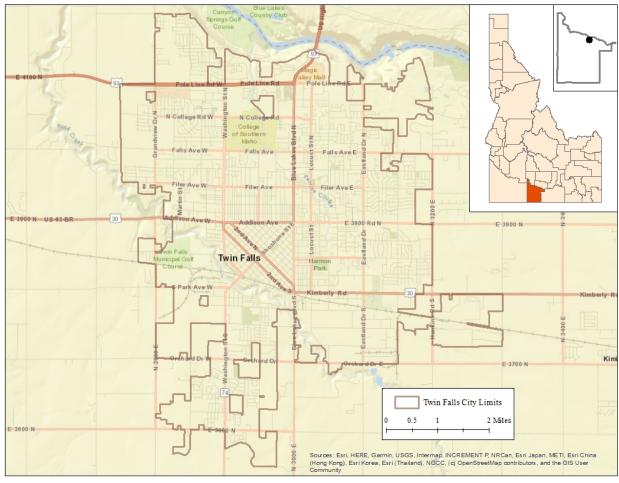
Figure 6. Operating Expenses per Vehicle Revenue Hour for Trans IV (2014-2019)

The loss per trip (as measured by the difference between fare revenues and operating expenses across all trips) increased from \$16.61 in 2014 to \$31.50 in 2019 (Federal Transit Administration, 2014-2019). These service efficiency and effectiveness measures are all trending in the direction of declining performance and indicate that an adjustment in service is warranted and urgently needed.

2.2. Community Overview

2.2.2. City of Twin Falls

The study area for this project is the City of Twin Falls, which is located in the Magic Valley in south-central Idaho adjacent to the Snake River (**Figure 7**).



Source: Prepared by WTI using ESRI base map.

Figure 7. Map of the Study Area (City of Twin Falls and Twin Falls County)

The population of Twin Falls is currently estimated at 48,951, and is expected to pass 50,000 with certification of the 2020 Census. Twin Falls contains 58% of the Twin Falls County population, and is the 8th largest city in Idaho (U.S. Census Bureau, 2015-2019). Since 2010, the population of the City of Twin Falls has grown faster (13.6%) than both Twin Falls County (11.7%) and Idaho (10.5%). At its current rate of growth, Twin Falls is on pace to have over 75,000 citizens by 2050.

Twin Falls is served by a robust network of roads. Like many cities in the West, the roads in Twin Falls are laid out largely in a north-south hierarchical grid pattern, with major roads one mile apart and minor connecting roads running at right angles in between. In historic downtown Twin Falls, the road layout shifts to a northeast-to-southwest and northwest-to-southeast pattern. US Highways 30 (Kimberly Road/2nd Avenue/Addison Avenue), 93 (Pole Line Road West), and

¹ According to existing definitions, which are currently under debate as part of the deliberations surrounding reauthorization of the federal surface transportation bill, this would shift Twin Falls from the rural (i.e. 5311) to small urban (i.e. 5207) designation for the purposes of federal formula funds for public transportation.

Business 93 (Blue Lakes Boulevard) are major roadways. Interstate 84 passes just north of the city; traffic between I-84 and Twin Falls runs across the Snake River on the Perrine Memorial Bridge on Highway 93, which has been identified as a congestion point affecting the local commute.

Due to its size and location, the City of Twin Falls serves as a regional hub for agricultural commerce, food production, and medical services for south-central Idaho and parts of northeastern Nevada. Large numbers of commuters flow between Twin Falls and surrounding communities on a daily basis, including communities as distant as Jackpot, a resort in Nevada over 40 miles away. Twin Falls County contains a number of notable natural attractions, including Hagerman Fossil Beds National Monument and part of Sawtooth National Forest, which draw tourists to the area.

2.2.3. Twin Falls County

The City of Twin Falls is the county seat and most populous city in Twin Falls County. Other communities in the county include the cities of Buhl (pop. 4,345), Kimberly (3,759), Filer (2,736), and Hansen (1,451), as well as the smaller unincorporated communities of Castleford, Murtaugh, Rogerson, and Hollister. The county has an estimated population of 84,860, making it the 6th most populous county in Idaho. Twin Falls County is rural, with a population density of just 43.5 people per square mile; many southern and western parts of the county are largely uninhabited.

2.3. Demographic Predictors of Transit Demand

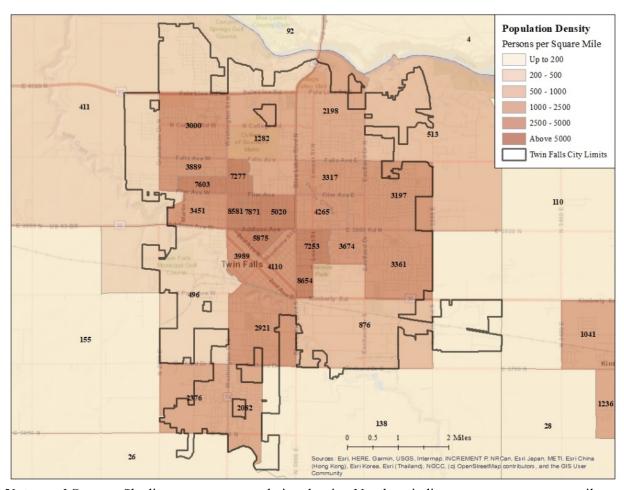
Transit demand is influenced by a variety of factors, including total population and population density, the concentration of populations at risk of transportation disadvantage (or isolation), land use patterns, and the supply and price of parking. Populations considered to be at risk for transportation disadvantage include senior citizens, individuals with disabilities, low-income families, and households without vehicles.² The following sections assess these key factors to gain a better understanding for where transit-dependent groups live within Twin Falls.

2.3.1. Population

Population density is positively associated with the demand for public transportation, and highest in Twin Falls north of US 30 (including the 2nd Avenue bend), east of Washington Street North, south of Falls Avenue, and west of Eastland Drive North **Figure 8**.

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² This is consistent with ITD's Idaho Transit Propensity Index (Public Transportation Office, 2018, see Figure 18), which assessed concentrations of older adults, people with disabilities, people living in poverty, and households without private vehicles.

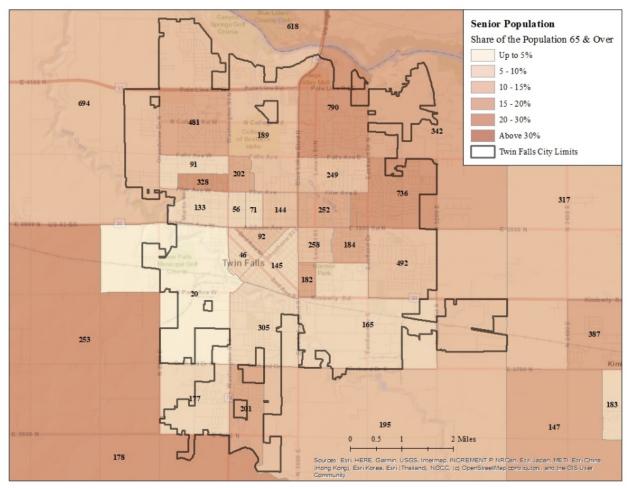


Notes and Source: Shading represents population density. Numbers indicate persons per square mile estimates in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

Figure 8. Population Density (Persons per Square Mile) for the City of Twin Falls

2.3.2. Senior Citizens

Older age is positively associated with the demand for public transportation, as senior citizens may have physical or financial limitations impacting their ability to drive. **Figure 9** summarizes the share of senior citizens across Twin Falls. In total, 13.5% of the population is aged 65 or older (6,518 persons) compared to 14.9% for Twin Falls County and 15% for Idaho. The concentration and total numbers of senior citizens are both highest in the Block Group east of US 93/Blue Lakes Boulevard, north of Falls Avenue East, and west of Eastland Drive North, just south of the Snake River. The Bridgeview Estates skilled nursing and rehabilitation facility is located within this area.

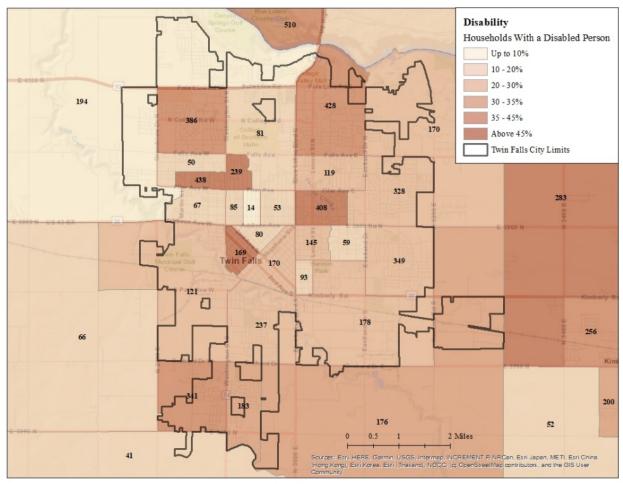


Notes and Source: Shading represents share of the population aged 65 and over. Numbers indicate total estimate of Seniors in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

Figure 9. Share of Population Aged 65 and Over for the City of Twin Falls

2.3.3. Persons with Disabilities

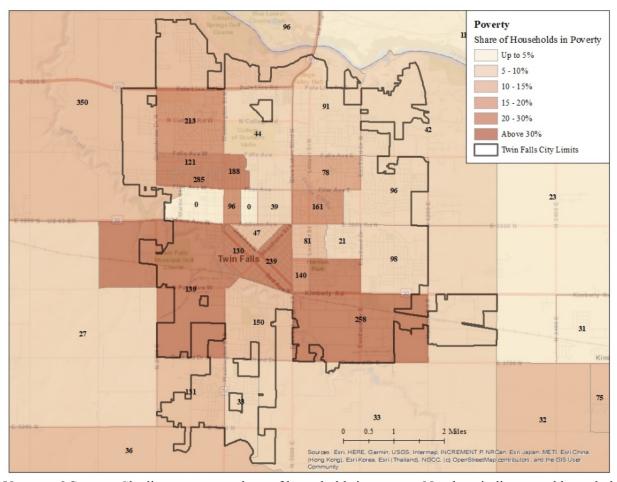
The share of persons with disabilities is positively associated with the demand for public transportation. In Twin Falls, 12.9% of residents (6,099 persons) have a disability (see **Figure 10**). Of these, an estimated 1,479 persons are between the ages of 18-64 and employed. Disability rates in Twin Falls are consistent with the rates in Twin Falls County (13.5%) and Idaho (13.3%).



Notes and Source: Shading represents share of households with a disabled person. Numbers indicate total estimate of households with 1 or more disabled persons in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018). **Figure 10. Share of Households with 1 or More Disabled Persons for the City of Twin Falls**

2.3.4. Income and Poverty

Income tends to be negatively associated with transit use, especially outside of large cities, due to the costs associated with driving. The median household income in Twin Falls is \$48,876, slightly lower than the levels for Twin Falls County (\$50,778) and Idaho (\$53,089). **Figure 11** summarizes the share of households in poverty in Twin Falls. 11.9% of families are in poverty (1,433 out of 12,013), with the highest concentrations on the south and west sides of the community.

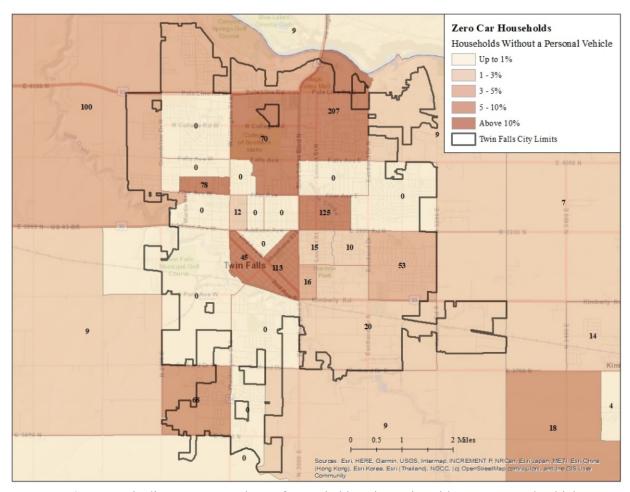


Notes and Source: Shading represents share of households in poverty. Numbers indicate total households estimated to be in poverty in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

Figure 11. Share of Households in Poverty for the City of Twin Falls

2.3.5. Vehicle Ownership

Access to a personal vehicle is negatively associated with the demand for public transportation. Overall, vehicle ownership is high in Twin Falls; 94.8% of households own one or more personal vehicles. The share of occupied housing units in Twin Falls without a personal vehicle is summarized in **Figure 12**; 932 out of 18,047 households do not own a vehicle. There are six Block Groups where the share of zero-car households exceeds 10%.



Notes and Source: Shading represents share of occupied housing units without a personal vehicle. Numbers indicate total occupied housing units estimated to be without a personal vehicle in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

Figure 12. Share of Occupied Housing Units without a Personal Vehicle for the City of Twin Falls

2.3.6. Transit Propensity Index

Composite indices based on multiple predictors for transit demand have been developed in a variety of contexts, and are referred to using various labels (e.g., Transit Propensity Index, Mobility Needs Index, Transportation Needs Index). As previously mentioned, the Idaho Department of Transportation developed a statewide Transit Propensity Index (Public Transportation Office, 2018) at the Census Tract level based on four measures: older age, disability, poverty, and vehicle access. This index identified Twin Falls as the area of highest transit propensity within the eight-county region designated as District 4. The plan emphasizes that the TPI is meant to inform future planning efforts and that "further analysis such as surveys and stakeholder outreach, transit provider service level changes, tourism, gas prices, parking costs, and other factors" would inform determinations of regional transit needs.

WTI used the ITD TPI as the basis for a TPI focused on Twin Falls at the Census Block Group level; along with older age, disability, poverty, and vehicle access, the research team incorporated population density as well. The research team modified the approach used for a statewide analysis of North Dakota at the zip code level by Mattson and Hough (2015) to compare the predictors of transit demand at the Census Block Group level to the countywide averages for Twin Falls County.

The TPI calculation was a four-step process. In the first step, the ratio of Block Group to Twin Falls County levels were taken for each transit predictor.³ Second, these ratios were ranked from lowest to highest. Third, Block Groups were assigned a quintile based on their ranking; Block Groups in the lowest 20% were assigned a value of 1, while those in the highest 20% were assigned a value of 5. Fourth, a simple average was taken for the quintile assignments from each of the five factors.⁴ This average value was interpreted as the TPI value for each Block Group. The TPI ranges from 1 to 5, with higher values corresponding to a higher predicted demand for transit relative to Twin Falls County.

```
\frac{BG \ Share \ of \ Older \ Persons}{County \ Share \ of \ Older \ Persons} \Rightarrow \text{Ranking of Block Groups} \Rightarrow \text{Quintile Assignment}
\frac{BG \ Share \ of \ HHs \ w/ \ Person \ with \ Disability}{County \ Share \ of \ HHs \ w/ \ Person \ with \ Disability} \Rightarrow \text{Ranking of Block Groups} \Rightarrow \text{Quintile Assignment}
\frac{BG \ Share \ of \ HHs \ in \ Poverty}{County \ Share \ of \ HHs \ in \ Poverty} \Rightarrow \text{Ranking of Block Groups} \Rightarrow \text{Quintile Assignment}
\frac{BG \ Share \ of \ HHs \ w/o \ a \ Private \ Vehicle}{County \ Share \ of \ HHs \ w/o \ a \ Private \ Vehicle} \Rightarrow \text{Ranking of Block Groups} \Rightarrow \text{Quintile Assignment}
\frac{BG \ Population \ Density}{County \ Population \ Density} \Rightarrow \text{Ranking of Block Groups} \Rightarrow \text{Quintile Assignment}
```

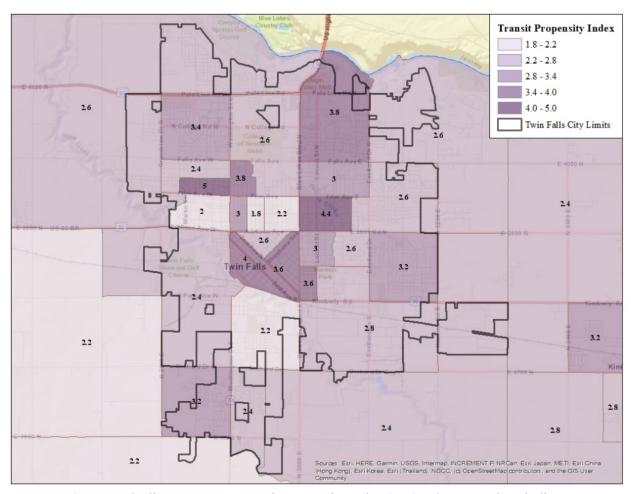
Average of All 5 Quintile Assignments = TPI Value for the Block Group

Figure 13. Transit Propensity Index Method

³ A ratio below 1 indicates a Block Group has less predicted transit demand based on that factor compared to the county as a whole, while a ratio above 1 indicated a Block Group has more predicted demand based on that factor compared to the county as a whole.

⁴ This method weights the five predictors of transit demand equally. There is debate on whether to weight some of the factors more heavily than others, but the research team found no consensus and therefore determined to maintain equal weighting.

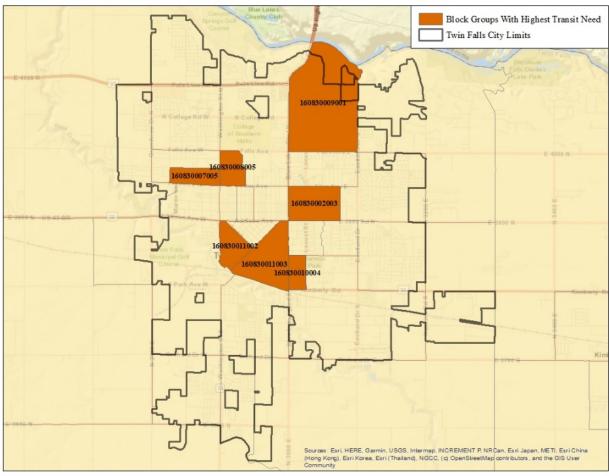
Figure 14 presents the TPI for the City of Twin Falls. The spatial pattern of the TPI indicates predicted demand for transit to be high the city core. In particular, Block Groups in the historic downtown area, east of Blue Lakes Boulevard, and north of Filer Avenue show the highest propensities for transit. Block Groups outside the city limits tend to have lower TPI values.



Notes and Source: Shading represents Transit Propensity Index (TPI) values. Numbers indicate TPI values for each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

Figure 14. Transit Propensity Index for the City of Twin Falls

Based on the above analyses, **Table 1** and **Figure 15** summarize the Block Groups with the highest predicted transit demand within the City of Twin Falls.



Note and Source: Numbers indicate the Census Block Group identifier. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018). Figure 15. Block Groups in the Twin Falls Core with the Highest Predicted Transit Demand

Table 1. Census Block Groups with the Highest Predicted Transit Demand

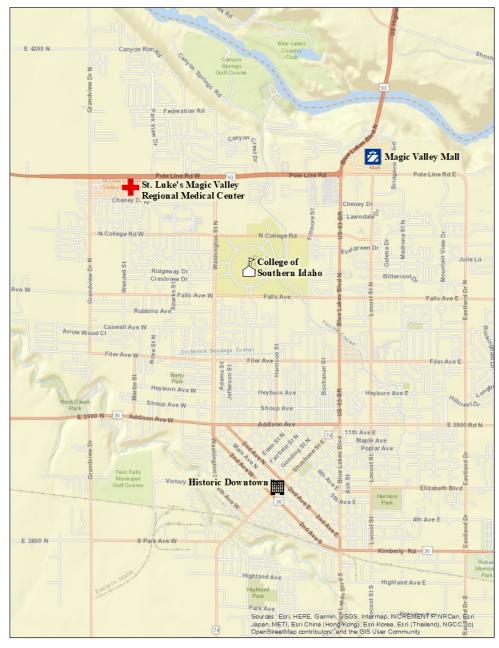
Block Group	TPI	Population	Pop.	Seniors	Households	Zero Vehicle	Apartments
			Density		in Poverty	Housing Units	
160830007005	5.0	1,321	7,603	328	285	78	439
160830002003	4.4	1,608	4,265	252	161	125	242
160830011002	4	839	3,989	46	130	45	169
160830008005	3.8	1,298	7,277	202	188	0	263
160830009001	3.8	3,102	2,198	790	91	207	272
160830011003	3.6	2,018	4,110	145	239	113	209
160830010004	3.6	1,094	8,654	182	140	16	102

Source: Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates (U.S. Census Bureau, 2014-2018).

2.4. Twin Falls Community Anchors

Major community anchors in the City of Twin Falls include St. Luke's Magic Valley Regional Medical Center, the College of Southern Idaho, the Magic Valley Mall, and the historic downtown area (**Figure 15**). These anchors offer key services, employment, shopping and

commercial opportunities, and places for gathering. As a result, they are important generators of travel activity and key trip origins and destinations. Investments in public transportation improvements should prioritize access to these community anchors.



Source: Prepared by WTI using ESRI base map. **Figure 16:** Twin Falls Community Anchors

2.4.1. St. Luke's Magic Valley Medical Center

St. Luke's Magic Valley Medical Center is the largest employer in Twin Falls and an important provider of medical services for patients from throughout southern Idaho and northern Nevada. Its footprint in Twin Falls includes 59 medical services across 17 different locations, ranging

from general family care to specialized surgery and cancer treatment; the main hospital is located on Pole Line Road in the northwest part of the city. Many patients visit St. Luke's for recurring treatments and not all own or are able to operate a personal vehicle.

2.4.2. College of Southern Idaho

The College of Southern Idaho (CSI) is a 2-year community college located in the north-central part of Twin Falls. CSI has approximately 1,250 full-time students, and 11,000 part-time students. With a single residence hall housing approximately 250 students, most students commute to campus. As mentioned above, CSI operates Trans IV Buses, the Dial-A-Ride bus service in Twin Falls.

2.4.3. Magic Valley Mall

The Magic Valley Mall is a shopping center with 67 different stores on the northeastern edge of the city near Highway 93 and the Perrine Memorial Bridge. Several large retailers, including Costco, Target, Home Depot, and a WinCo supermarket, are located adjacent to the mall. As a result, this area of Twin Falls serves as an important shopping destination, but also as a high concentration of retail and restaurant service sector jobs.

2.4.4. Downtown Twin Falls

Historic downtown Twin Falls is identifiable by its distinct northeast-to-southwest and northwest-to-southeast street pattern, which contrasts with the layout of the rest of the city. This roughly one square mile area was the original settlement of the City of Twin Falls, dating back to 1904, and is bounded by Addison Avenue to the north, Blue Lakes Boulevard to the east, Washington Street to the west, and Minidoka Avenue and Rock Creek Canyon to the south. The historic downtown is home to a concentration of shops and destinations, including the Twin Falls Courthouse, Magic Valley High School, and Twin Falls City Park.

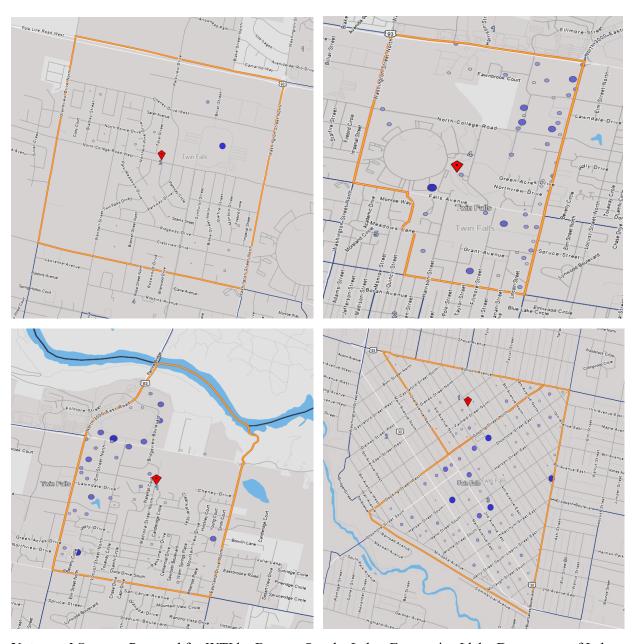
2.4.5. Employment in the Community Anchors

These community anchors are important sources of employment. The Idaho Department of Labor prepared by request the following information (**Table 2**) regarding employment occurring within the Census Block Groups in which the community anchors occur (**Figure 17**).

Table 2. Total Primary Jobs Occurring in the Census Block Groups Containing Twin Falls Community Anchors

Community Anchor	Primary Jobs
St. Luke's Magic Valley Medical Center	580
College of Southern Idaho	3,664
Magic Valley Mall	2,617
Downtown Twin Falls	4,103

Source: Prepared for WTI by Bonang Seoela, Labor Economist, Idaho Department of Labor.



Notes and Source: Prepared for WTI by Bonang Seoela, Labor Economist, Idaho Department of Labor. St. Luke's Magic Valley Medical Center (upper left); College of Southern Idaho (upper right); Magic Valley Mall (lower left); Downtown Twin Falls (lower right). Shaded dots represent employment concentrations.

Figure 17. Census Block Groups Containing Twin Falls Community Anchors

2.3. Employment, Major Industries and Employers, and Commute Flows

2.3.1. Employment

According to the most recent American Community Survey 5-Year estimates, there are approximately 24,882 individuals (age 16 and above) in the Twin Falls labor force (U.S. Census Bureau, 2015-2019). Twin Falls has an estimated unemployment rate (3.0%) slightly higher than

the state level (2.7%) but significantly lower than the national rate (5.3%) (U.S. Census Bureau, 2015-2019).

2.3.2. Major Industries and Employers

According to information compiled by the U.S. Bureau of Labor Statistics (Western Information Office, 2019), the Twin Falls Metropolitan Statistical Area has concentrations of employment above the national average in the following occupational groups:

- Life, physical, and social science
- Farming, fishing, and forestry
- Construction and extraction
- Installation, maintenance, and repair
- Production
- Transportation and material moving

In particular, occupations within the production group were found in above-average concentrations (10.5% compared to the national average of 6.2%), such as packaging and filling machine operators (Western Information Office, 2019). Meanwhile, the mean hourly wage in Twin Falls is \$19.31, 25% lower than the United States average of \$25.72; none of the mean wages for Twin Falls in the 22 major occupational groups are higher than the national average (Western Information Office, 2019).

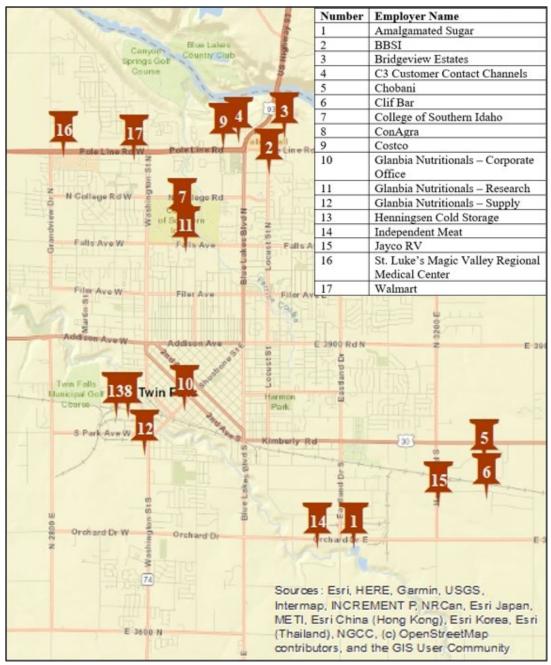
Food production, agriculture, and healthcare are key industries for the Twin Falls economy; as the Twin Falls Area Chamber of Commerce summarizes, "Twin Falls is one of the top food producers in all of the United States" (Twin Falls Area Chamber of Commerce, 2021). **Table 3** summarizes major employers in the region.

Table 3: List of Major Employers in Twin Falls

Employer Name	Industry	
Amalgamated Sugar	Food Production	
BBSI	Staffing	
Bridgeview Estates	Healthcare	
C3 Customer Contact Channels	Customer Service	
Chobani	Food Production	
Clif Bar	Food Production	
College of Southern Idaho	Education	
ConAgra	Agriculture	
Costco	Retail	
Glanbia Nutritionals	Food Production	
Henningsen Cold Storage	Warehousing/Storage	
Independent Meat	Food Production	
Jayco RV	Recreation/Leisure	
St. Luke's Magic Valley Regional Medical Center	Healthcare	
Walmart	Retail	

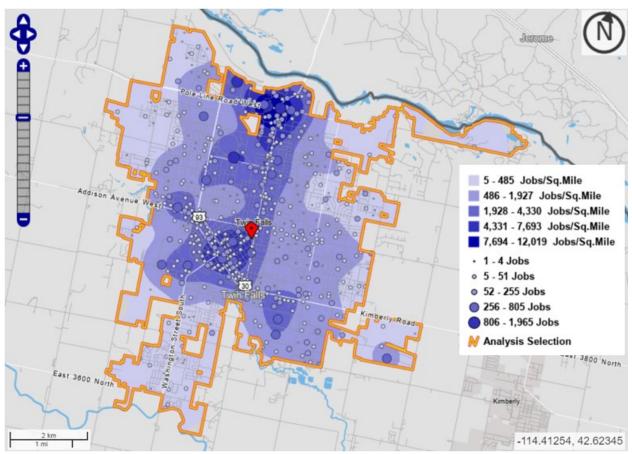
Sources: Twin Falls Area Chamber of Commerce (2021); Southern Idaho Economic Development (2021).

Figure 18 summarizes the spatial clustering of major employers in the north, historic downtown, and southeast portions of the city.



Sources: Prepared by WTI using ESRI base map and information regarding major employers from the Twin Falls Area Chamber of Commerce (2021) and Southern Idaho Economic Development (2021). **Figure 18:** Location of Major Employers in the City of Twin Falls

The "Work Area Profile Analysis" compiled by the U.S. Census Bureau's Center for Economic Studies (2018), which depicts the location and density of all primary jobs, confirms this spatial clustering of employment in the northern, historic downtown, and southeastern areas of the city



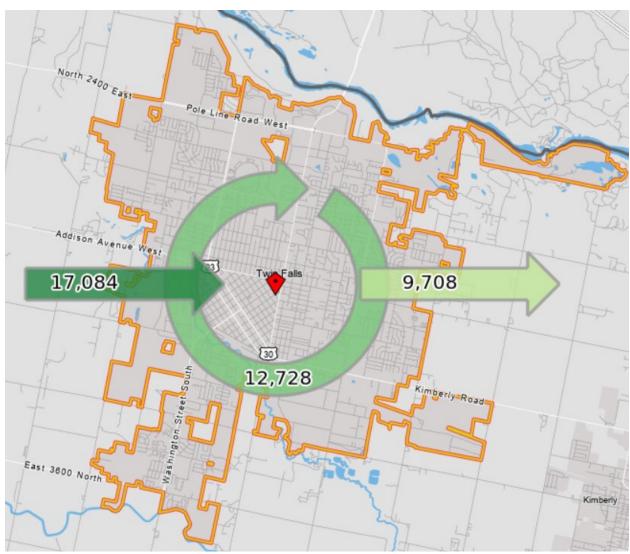
(Figure 19). There is also a high concentration of jobs around Blue Lakes Boulevard, which connects the northern and downtown clusters.

Notes and Source: Prepared by WTI using the OnTheMap! tool provided by the U.S. Census Bureau's Center for Economic Studies (2018); data from 2018 are the latest available.

Figure 19: Job Location and Job Density in the City of Twin Falls (2018)

2.3.3. Commute Flows

Approximately 43% (12,728 out of 29,812) of Twin Falls jobs are held be residents of the city, while the remaining 57% are held by workers who commute into Twin Falls from elsewhere; meanwhile, Twin Falls residents occupy 9,708 jobs located outside of the city (**Figure 20**).



Notes and Source: Prepared by WTI using the OnTheMap! tool provided by the U.S. Census Bureau's Center for Economic Studies (2018); data from 2018 are the latest available.

Figure 20: Twin Falls Workforce Inflow/Outflow Analysis (2018)

Commuters in the Twin Falls area drive alone at rates above the state average; 81.7% of Twin Falls residents and 84.0% of workers rely on single occupancy vehicles for commuting (U.S. Census Bureau, 2015-2019). Meanwhile, the commute mode shares of public transportation, walking and bicycling, and working from home are below the state average. Employment in food production, agriculture, and healthcare, key industries for Twin Falls, may preclude working from home. A future study could further examine the magnitude and impact of regional commute flows as well as strategies to make commute alternatives (e.g. vanpools and commuter buses) to driving alone more viable.

Table 4. Commute Mode Shares for the Twin Falls Area (City, Metropolitan Statistical Area, Neighboring Communities) and State of Idaho

	City of Twin Falls		Twin Falls				
			Metropolitan		Jerome		
	Residents	Workers	Statistical Area	Filer	city	Kimberly	Idaho
Drove Alone	81.7%	84.0%	81.6%	81.2%	80.8%	88.8%	78.5%
Carpooled	10.1%	9.2%	9.8%	14.2%	13.4%	5.2%	9.9%
Public Transportation	0.2%	0.2%	0.3%	0.0%	0.9%	0.0%	0.7%
Walked or Bicycled	2.2%	1.8%	2.5%	2.2%	3.1%	0.0%	3.5%
Taxicab, Motorcycle,							
Other	1.0%	1.0%	0.9%	0.4%	0.3%	1.1%	1.1%
Worked from Home	4.8%	3.8%	4.8%	2.0%	1.5%	5.0%	6.2%

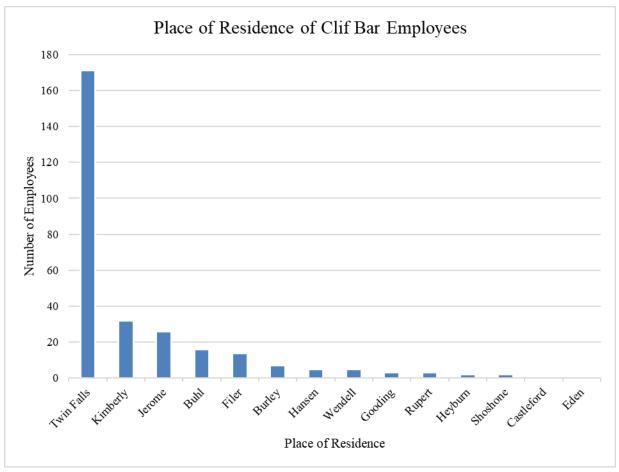
Source: Prepared by WTI using the American Community Survey 2015-2019 5-Year Estimates (U.S. Census Bureau, 2015-2019).

To further investigate the flow of commuters in the Twin Falls region, the research team analyzed data provided by request from one of the area's major employers, Clif Bar & Company. The production facility in the southeast portion of Twin Falls employs approximately 300 workers. As summarized in **Table 5** and **Figure 21**, out of 288 total employees in the dataset, 171 (59.4%) live in Twin Falls, 32 in Kimberly, 26 in Jerome, 16 in Buhl, and 14 in Filer. The remaining 10% of workers live in additional cities and unincorporated communities in the greater Twin Falls region.

Table 5: Distribution of Clif Bar & Company Employees by Place of Residence

Place of Residence	Number of Employees	Percent
Twin Falls	171	59.4%
Kimberly	32	11.1%
Jerome	26	9.0%
Buhl	16	5.6%
Filer	14	4.9%
Burley	7	2.4%
Hansen	5	1.7%
Wendell	5	1.7%
Gooding	3	1.0%
Rupert	3	1.0%
Heyburn	2	0.7%
Shoshone	2	0.7%
Castleford	1	0.3%
Eden	1	0.3%
Total	288	100%

Notes and Source: Places of residence were assigned based on the major community to which an employee's zip code of residence belongs. Prepared by WTI using data provided by Clif Bar & Company Twin Falls Plant Management.



Source: Prepared by WTI using data provided by Clif Bar & Company Twin Falls Plant Management. **Figure 21:** Breakdown of Clif Bar Employees by Place of Residence

2.4. Land Use Patterns

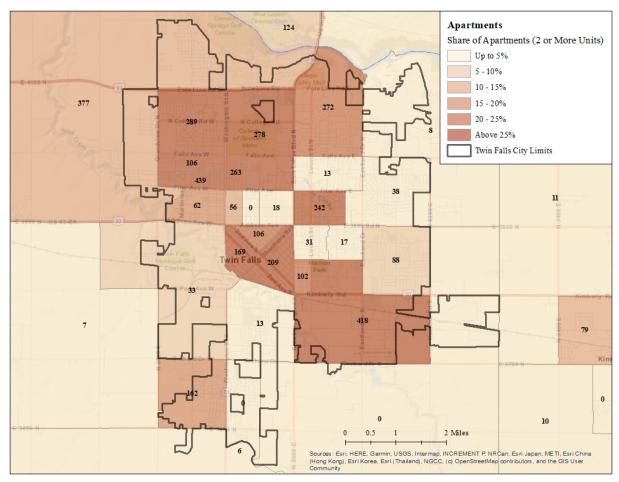
Land use patterns are associated with the demand for public transportation, as they impact the quality and length of travel between origins and destinations. Housing density, walkability, and parking are all important factors in understanding a community's land use patterns. As one of the largest cities in a rural state, Twin Falls has housing density above the state average but below the national average.

Table 6. Housing Density in the City of Twin Falls Compared to the County, State, and National Levels

	Twin Falls city	Twin Falls county	Idaho	US
1 Unit Detached	71.7%	77.0%	74.2%	62.7%
1 Unit Attached	4.5%	2.8%	3.3%	6.0%
2 or More Apartments	20.5%	13.7%	14.6%	25.5%
Mobile or Other Home Type	3.2%	6.5%	7.8%	5.6%

Source: Prepared by WTI using the American Community Survey 2015-2019 5-Year Estimates (U.S. Census Bureau, 2015-2019).

Figure 21 summarizes the distribution of higher density (apartment) housing in Twin Falls. There is a cluster of denser housing on the northwest side of the city, as well as around the historic downtown and south side of Twin Falls.

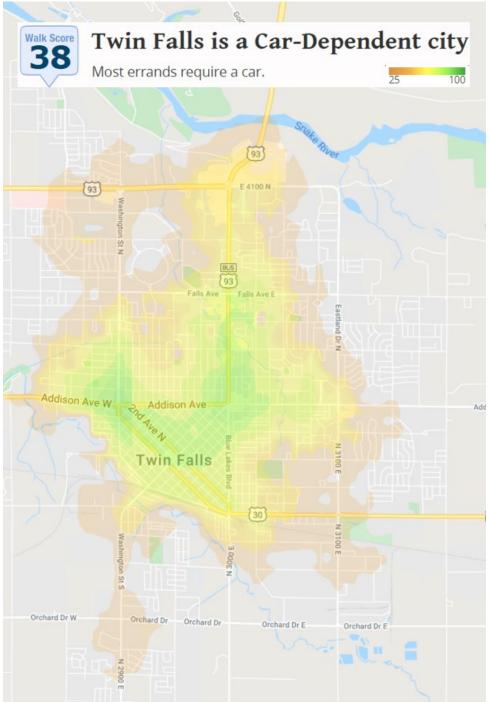


Notes and Source: Shading represents share of occupied housing units comprised of apartments (2 or more units). Numbers indicate total housing units estimated to be apartments in each Block Group. Prepared by WTI using the American Community Survey 2014-2018 5-Year Estimates. Figure 22. Share of Total Housing Units Comprised of Apartments in the City of Twin Falls

While the Twin Falls Community Strategic Plan describes "sparked [interest] among private developers in providing urban density housing in the areas adjacent to downtown" (City of Twin Falls, 2018), efforts to increase housing density in Twin Falls have faced opposition. For example, a plan for two 56-unit five-story downtown apartment buildings failed to receive approval after concerns regarding street parking and neighborhood aesthetics were raised (Sutphin, 2020).

Walkability is related to housing density and is also positively associated with the demand for public transportation. Conversations with leaders in Twin Falls revealed concerns regarding the Twin Falls pedestrian network; one leader suggested the "need to fix our pedestrian problems before we fix the bus problems" while another suggested that, "everyone here has a car because you must have one. It's a self-perpetuating situation."

Confirming these impressions, Twin Falls has a "Car-Dependent" Walk Score © of 38, suggesting most errands require a private vehicle (**Figure 23**). The highest scores in the city are found in around the historic downtown, Addison Avenue, and Blue Lakes Boulevard.



Notes and Source: Walk Score © is a general measure of walkability and development patterns. Value for Twin Falls collected by WTI using the online database (2021).

Figure 23: Twin Falls Walk Score

Finally, a community's approach to parking management impacts its development patterns and the demand for public transportation. Car parking is free and plentiful in most parts of Twin Falls, and parking management over the past decade has been relatively accommodating of travel by automobile. Parking is free at community anchors such as the College of Southern Idaho and the St. Luke's Magic Valley Medical Center, as well as along the street in downtown. Parking meters were removed from the downtown area in 2012, after the Downtown Parking Task Force recommended their removal and Community Development Director Mitch Humble concluded that "free parking should help downtown businesses be successful" (City of Twin Falls, 2011). There are seven publicly owned parking lots within nine square blocks in downtown (City of Twin Falls, 2021), and in 2018, a parking pass cost \$2 per day and \$220 per year, or less than a dollar per weekday. At the September 22, 2020 State of the City Address, City Manager Travis Rothweiler indicated that growth in downtown traffic could be accommodated with structured parking (Brasil, 2020). There is also no residential parking permit system in place, meaning residents may park an unlimited number of private vehicles on public streets without charge. When parking is priced and less plentiful, the demand for transit tends to increase. In the case of Twin Falls, parking does not exert strong pressures to substitute away from travel by automobile.

3. Identification of Guiding Principles

"While envisioning the future of their transit systems, transit operators need not only to seek creative approaches to improve operation efficiency and adjust its service models, but also to carefully evaluate the preferences among their constituents"

(Yan, Zhao, Han, Van Hentenryck, & Dillahunt, 2019).

The research team identified guiding principles for the Twin Falls community from the following sources:

- 2018 Twin Falls Community Strategic Plan
- 2020 Twin Falls County Comprehensive Plan Update
- Conversations with City and County Staff as well as the Business Community
- Review of public statements by community leaders

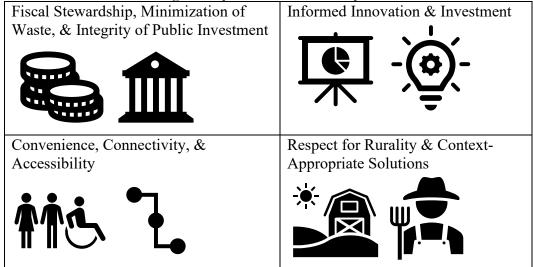
The 2018 Twin Falls Community Strategic Plan (City of Twin Falls, 2018) identified eight focus areas, each accompanied by goals and initiatives: Healthy, Learning, Secure, Accessible, Environmental, Prosperous, Responsible, and Internal Organization (of the City government). The Accessible Community Focus Area has the most direct relevance for this study and describes a 2030 vision of "a modern public transportation system" characterized by "long-term integrity of public investments" and maximum "convenience of those dependent upon the proper functioning of these systems." Given dispersed development and limited local, state, and federal funding, the Plan calls for "innovative solutions." From this Plan, the research team identified three guiding principles: public investment integrity, convenience, and innovation.

In 2020, the County of Twin Falls commenced an 18-month process to update the County's Comprehensive Plan (County of Twin Falls, 2021); the final draft of the plan was made available in March 2021. As part of that effort, the County conducted a Community Survey. At least 40% of respondents identified the county's rural character, open space and recreational opportunities, and agricultural economy as among its greatest assets. Meanwhile, at least 40% of respondents identified road congestion and lack of connectivity, as well as lack of multi-modal infrastructure (e.g. sidewalks, bike lanes, or transit options) among its greatest weaknesses. Nearly half (48.9%) of respondents identified public transit as a type of multimodal connectivity that would "promote greater connectivity and safer travel options." In addition, localized services to assist senior citizens (including transportation for appointments) were identified as not plentiful enough by 42.3% of respondents. Transportation ranked 9th out of 17 components required by state law to be addressed in the plan, with property rights and population growth ranked 1st and 2nd. Finally, when asked about what respondents valued most about living in Twin Falls County, the rural, small town feel, and clean water and air received the highest average rankings. From this Community Survey, the research team identified three guiding principles: connectivity, accessibility, and services suitable for the rural context.

Finally, the research team reviewed public comments by community leaders to help identify additional core guiding principles. For example, in reference to public transportation, Deputy City Manager Mitch Humble reasoned that, "if we're paying for something that nobody uses, we're a failure" (Kennison, 2018). In the most recent State of the City Address on September 22, 2020, City Manager Travis Rothweiler shared that his greatest concern with regard to public transportation is the running of empty buses because, "while public transportation is absolutely important," there is "a balance of what is the appropriate taxation of our community" (Brasil, 2020). Additional conversations with City and County staff, as well as business leaders, affirmed a desire to manage taxpayer dollars judiciously and avoid employing strategies toward public transportation that have failed in the past. Based upon these insights, the research team identified three final guiding principles: fiscal stewardship, avoidance of wasteful services, and investments informed by prior failures (and successes).

Taken together, the research team identified four multifaceted guiding principles to inform our evaluation of the suitability of service scenarios for the Twin Falls community context (Table 7).

Table 7. Twin Falls Guiding Principles for Public Transportation

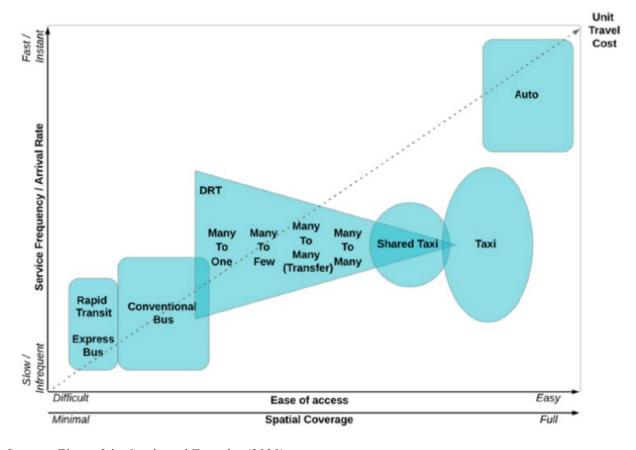


4. Service Types

"Since Mobility on Demand services are expected to grow in significance, public transit agencies should actively seek opportunities to engage with them in order to keep transit being attractive to a wider population[. . .] Faced with many uncertainties, public transit needs to develop a vision for its future and look for creative ways to improve the service quality and operation efficiency in order to stay competitive" (Yan et al., 2019).

"Technology enables improved logistics for these services and potentially enables a spectrum of service providers to be engaged in paratransit services, in which economies of scale and spectrum of vehicles and service providers can more optimally match the unique needs of various travel markets" (Polzin, 2016).

When considering new public transportation investments, it can be helpful to consider the spectrum of public transportation services. This spectrum spans across service frequency (from slow/infrequent to fast/frequent), ease of access (from difficult to easy), spatial coverage (from minimal to widespread), and unit travel cost (from low to high) (Figure 24).



Source: Figure 2 in Currie and Fournier (2020).

Figure 24. The Spectrum of Public Transportation Across Service Frequency, Ease of Access, Spatial Coverage, and Unit Travel Costs

Not all services are realistically available in all places; population size and density as well as resource availability and community values influence the types of services that may be suitable for consideration. In the context of Twin Falls, the current Trans IV bus system falls within the realm of "Many to Many" Demand Response Transit (i.e. the system picks up from and drops off to many locations), characterized by easier access and more spatial coverage, the potential for a higher arrival rate, and higher unit travel costs than fixed route transit (e.g. conventional bus).

4.1. Service Type Descriptions

The research team identified and evaluated five service types for consideration in Twin Falls, as summarized in **Table 8**.

Table 8. Summary of Public Transportation Service Types

Taxi Voucher or Ride-hailing Subsidy (TVRS) programs are an approach to public transportation based upon partnership with one or more traditional taxi companies or ride-hailing apps characterized by an effort to group rides when possible (e.g. Lyft Line, Uber Pool). Subsidies may either be set as a fixed amount per trip (variable cost for the rider) or as a variable amount per trip (fixed cost for the rider). Providers include Lyft, Uber, local taxi companies. Microtransit provider Via also offers software-enabled brokering with local taxi companies.

Demand Response Transit with Traditional Technology (e.g., Dial-A-Ride)

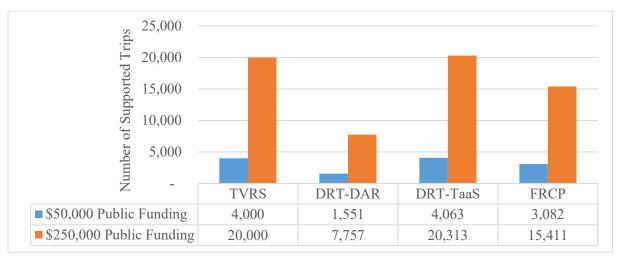
(DRT-DAR) is an approach to public transportation based upon service provided across a defined service area and set service hours characterized by an effort to group rides when possible. Subsidies are typically set at a variable amount per trip (fixed cost for the rider). Service is typically accessed by telephone or email, and operations (scheduling and dispatching) is relatively labor-intensive (i.e. more manual inputs and assessments). In the Twin Falls context, this represents the status quo.

Demand Response Transit with Technology Platform Upgrade (Microtransit Software as a Service) (DRT-SaaS) is an approach to public transportation based upon service provided across a defined service area and set service hours characterized by an effort to group rides when possible. Subsidies are typically set at a variable amount per trip (fixed cost for the rider). Service is typically accessed by an app or website, and operations (scheduling and dispatching) rely on licensed technology platforms that use algorithms, making it less labor-intensive. Providers include DemandTrans, Mobisoft Infotech, Pantonium, RideCell, RideCo, ShareMobility, SpareLabs, TransLoc, TripSpark, Uber Transit (Routematch by Uber), and Via.

Demand Response Transit with Turnkey/All-in-One Vendor Operation (Microtransit Transportation as a Service) (DRT-TaaS) is an approach to public transportation based upon service provided across a defined service area and set service hours characterized by an effort to group rides when possible. Subsidies are typically set at a variable amount per trip (fixed cost for the rider). Service is typically accessed by an app or website, and operations (scheduling and dispatching) rely on licensed technology platforms that use algorithms, making it less labor-intensive. Additionally, a vendor operates all aspects of the service, requiring less public staff time (limited to contract oversight and service evaluation and adjustment recommendations). To the best of the research team's knowledge, Via is the only domestic provider of this option.

Fixed Route Transit with Complementary Paratransit (FRCP) is an approach to public transportation based upon service provided along set routes during a set schedule. Subsidies are typically set at a variable amount per trip (fixed cost for the rider). Service is typically accessed by an online or paper schedule and travel to a fixed pickup/drop-off location (i.e., bus stop). Agencies typically employ all operations staff (managers, drivers, maintenance). Service adjustments to routes and schedules are relatively infrequent. Additionally, complementary paratransit service provision is required under the Americans with Disabilities Act for persons whose disabilities prevent them from using the fixed route system (within ¾ mile along and at either end of a fixed route) (National Rural Transit Assistance Program, 2020).

Cost per passenger (or per trip) is a key performance measure for comparing service types. **Figure 25** provides an estimate of the number of trips that could be supported annually based on two levels of public funding (\$50,000 and \$250,000). Across both levels of funding, the research team estimates that a DRT-DAR system would support the lowest number of trips while a TVRS program would support more trips than both DRT-DAR and FRCP. The number of supported trips is estimated to be slightly higher for DRT-TaaS compared to TVRS, but average trip cost estimates are very similar (\$12.31 for DRT-TaaS versus \$12.50 for TVRS). Another important consideration is the overall scale or magnitude of the investment in public transportation. TVRS would enable the lowest investment, while FRCP for a city the size of Twin Falls would generally cost at least \$1 million annually (**Table 9**).



Notes and Source: Estimates prepared by WTI. The TVRS estimate is based upon an average trip cost of \$12.50, which was derived from the \$11.00-\$14.00 average trip cost range provided in a recent report on Uber's public transportation programs (Uber Transit, 2021). The DRT-DAR estimate is based upon an average trip cost of \$32.23, the operating expenses per unlinked passenger trip reported by Trans IV to the National Transit Database for 2019 (Federal Transit Administration, 2014-2019). The DRT-TaaS estimate is based upon an average trip cost of \$12.31, which assumes an annual cost of \$400,000 and approximately 125 trips per day. The FRCP estimate is based upon an average trip cost of \$16.22, which assumes 75% of system trips on the fixed route service at \$9.84 per trip and 25% of system trips on the paratransit service at \$35.37 per trip. WTI derived these base average costs for the FRCP by adjusting for inflation average trip costs for 2010 cited in a government assessment of ADA Paratransit Services (U.S. Government Accountability Office, 2012). An estimate for DRT-SaaS was not provided due to the complexity of the calculation, which would incorporate the difference in cost between existing routing and dispatching methods and a new technology platform.

Figure 25. Estimated Number of Trips Local Funding Could Support by Service Type

Table 9. Estimated Annual Costs for Twin Falls Public Transportation Service

Service Type	Estimated Annual Cost
TVRS	\$0 and up (fully customizable/no minimum)
DRT-DAR	\$500,000-\$600,000
DRT-TaaS	\$300,000-\$600,000
FRCP	\$1,000,000-\$1,200,000

Notes and Source: Estimates prepared by WTI, based upon information collected from Trans IV, TVRS, and microtransit providers, as well as prior experience with fixed route system design.

Based upon the estimated amount of public funding available for local match to leverage federal formula funds (in the approximate range of \$50,000-\$250,000), only two of the five service types are recommended to be considered for near-term implementation in Twin Falls: taxi vouchers/ride-hailing subsidies (TVRS), and Demand Response Transit with the Transportation as a Service turnkey operations (DRT-TaaS). TVRS offers a fully customizable (and, if desired, minimal) public investment to provide support for the mobility and accessibility of the most vulnerable members of the community. DRT-TaaS offers a more robust public investment to support the most vulnerable members of the community while also providing a conservative and incremental step toward the "modern public transportation system" envisioned for 2030 in the 2018 Twin Falls Community Strategic Plan (City of Twin Falls, 2018). Demand Response Transit with traditional Dial-a-Ride technology (DRT-DAR) is not recommended as it has struggled from a performance perspective and does not support the value placed upon innovation by the community. Relatedly, Demand Response Transit with a technology platform upgrade (DRT-SaaS) is also not recommended, as this would entail building upon the existing organizational structure of Trans IV, which has limited interest and capacity for continuing its transit service. Finally, fixed route service with complementary paratransit (FRCP) is financially unrealistic in the current fiscal environment.

Table 10. Assessment of Service Types Based Upon Twin Falls Guiding Principles for Public Transportation

Guiding Principle	Assessment of Service Types in Relation to Outcome Metrics
Fiscal Stewardship, Minimization of Waste, & Integrity of Public Investment	Outcome metrics of this Guiding Principle include the share of public funding allocated to public transportation and subsidy per trip. Minimization or elimination of empty transit vehicles is also valued by community leaders. TVRS performs best on these outcome metrics, as a taxi company or ride-hailing app partnership could be arranged in which a minimal level of public funding is set aside to support the most vulnerable members of the population. No public funds would go to running empty vehicles or subsidizing those who fall outside the most vulnerable members of the population.
Informed Innovation & Investment	Outcome metrics of this Guiding Principle include the record of success of any entity considered for a vendor contract or company partnership, and utilization of high performing modern technology. TVRS and DRT-TaaS perform best on these outcome metrics, as they could utilize state-of-the-art apps for mobility and accessibility support, and both offer potential partners and vendors with a proven track record of success.
Convenience, Connectivity, & Accessibility	Outcome metrics of this Guiding Principle include the ease of use and service offered to all members of the community, including persons with disabilities. TVRS and DRT-TaaS perform well on these metrics, as both inhabit the "on demand" space that has emerged with modern ICT capabilities. Both TVRS and DRT-TaaS can be set up to ensure the provision of service for persons with disabilities.
Respect for Rurality & Context-Appropriate Solutions	Outcome metrics of this Guiding Principle include alignment of public transportation services with the rural and small town character of Twin Falls and the surrounding region, and minimal disruption to existing traffic patterns (e.g. along Blue Lakes Boulevard/US 93). While FRCP would pose the potential of disruption due to the servicing of bus stops, both TVRS and DRT-TaaS could operate within the existing traffic network relatively seamlessly. These service types would be less visible and not require dedicated space for bus stops or large vehicle storage.

4.2. A Home state Innovator: Idaho's Valley Regional Transit Mobility On Demand Programs

Valley Regional Transit (VRT) is the Regional Public Transportation Authority for Ada and Canyon Counties in the southwest region of Idaho, a region which includes the state's three largest cities (Boise, Meridian, and Nampa). Since 2019, VRT has launched programs that serve as a helpful home state reference as Twin Falls considers its public transportation investments.

Taxi Voucher/Ride-hailing Subsidy: VRT partners with the Lyft ride-hailing company for first mile/last mile connections to fixed route transit service via the Lyft Transit Connection program (Figure 26), which offers a \$2 ride to many VRT bus stops for trips up to 2 miles (Valley Regional Transit, 2021a). In addition, VRT also partners with Lyft for its Late Night program (Figure 27), which provides low-income workers in Boise, Garden City, and Nampa with "a safe and reliable alternative for work trips" during the overnight period when VRT fixed route buses are not in service (Valley Regional Transit, 2021b). Late Night fares are arranged as a set cost for riders (\$3 per ride) and variable cost for VRT (with a maximum trip subsidy of \$17). Eligibility for the Late-Night program is based upon the federal poverty level and determined by referral from a human service agency, Health and Welfare benefit documentation, or paystub verification.

Demand Response Transit-SaaS: In October 2020, VRT launched its VRT OnDemand program (**Figure 28**), which replaced three fixed routes with microtransit service (Valley Regional Transit, 2021c). VRT contracted with Via to provide the service. VRT Principal Planner Stephen Hunt recently discussed the launch of this program as a featured presenter for a webinar on "Lessons Learned from On-Demand Transit RFPs" (Pantonium, 2021).



Source: Image sourced from Valley Regional Transit (2021a).

Figure 26, Bus Stop and Service Area for Valley Regional Transit's L.

Figure 26. Bus Stop and Service Area for Valley Regional Transit's Lyft Transit Connection Program

A low-income job access transportation program that operates afterhours. In partnership with Lyft, Valley Regional transit will offer \$3 Lyft rides to and from work for qualifying riders.

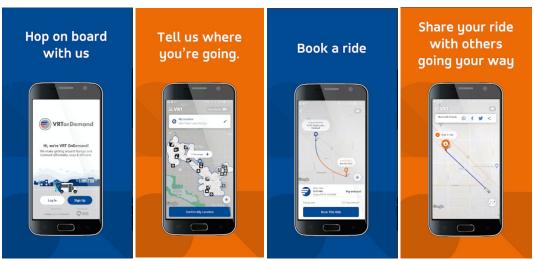


For more information and how to qualify call 208-345-7433 or visit

http://www.valleyregionaltransit.org/ridesharing-services/vrt-late-night/

Notes: Image sourced from Cenizal (2020).

Figure 27. Program Information and Service Map for Valley Regional Transit's Late Night Program



Source: VRT OnDemand App from Via Transportation, Inc. (2021d).

Figure 28. Mobile Application for Valley Regional Transit's OnDemand Program

4.3. A Scan of Newly Designated Small Urban MPOs

To further inform recommendations for Twin Falls, the research team reviewed the public transportation offerings provided within the service areas of the most recently designated Metropolitan Planning Organizations (Table 11). Eight out of these ten MPOs provide FRCP, while one provides no public transportation (Lake Havasu in AZ) and one provides countywide DRT-DAR (Grand Island in NE). Given the Guiding Principles identified for Twin Falls, especially surrounding innovation and convenience, as well as the estimated level of public funding available to match federal formula funds, the research team does not recommend Twin Falls model its public transportation investments on the offerings provided in these most recently designated small urban MPOs.

Table 11. List of the Most Recently Designated Small Urban MPOs

MPO	State	Major City
Southeast Metropolitan Planning Organization (SEMPO) (SEMPO)	МО	Cape Girardeau
Danville Area Transportation Study (DATS)	IL	Danville
Albany Area Metropolitan Planning Organization (AAMPO)	OR	Albany
New Bern Area MPO	NC	New Bern
Middle Rogue MPO (MRMPO)	OR	Grants Pass
Walla Walla Valley MPO		Walla Walla
Sierra Vista Metropolitan Planning Organization		Sierra Vista
Lake Havasu Metropolitan Planning Organization		Lake Havasu City
Lewis-Clark Valley MPO (LCVMPO)	ID	Asotin
Grand Island Area Metropolitan Planning Organization (GIAMPO)	NE	Grand Island

Notes and Source: Prepared by WTI using the USDOT MPO Database (Federal Highway Administration, 2020). Includes MPOs with populations under 60,000 designated since 2000.

5. Conclusions and Recommendations

5.1. Conclusions

This study has provided an opportunity to review the existing conditions and market for public transportation in the City of Twin Falls, identify guiding principles for public transportation, review public transportation service types and assess their fit in relation to the guiding principles and available local public funding, and recommend the best fit for a transit pilot program. Based on the analysis, the taxi voucher/ride-hailing subsidy (TVRS) service type as well as the Demand Response Transit-Transportation as a Service (DRT-TaaS) microtransit turnkey option are the most suitable for the current conditions in Twin Falls. Given the availability of approximately \$856,000 in CARES Act funding, Twin Falls could pursue a 1-2 year microtransit pilot program. This would provide an opportunity improve upon the existing Dial-a-Ride service, collect valuable information to inform future public transportation investments, and make progress toward the City of Twin Falls' 2030 vision of a "modern public transportation system" characterized by convenience, innovation, and high quality service.

5.2. Short-Range Recommendations

In the short range, the City of Twin Falls should determine the level of public funding it would like to allocate to support public transportation. This may be informed by the Twin Falls Guiding Principles for Public Transportation (Table 7) and the estimated number of trips various funding levels could support (Figure 25), as well as additional considerations and tradeoffs it faces during the annual budget cycle. Once a level of public funding is determined, a process should be set up to evaluate how those limited resources should be spent. Many programs, including the Valley Regional Transit Late Night partnership with Lyft, reserve subsidies for those experiencing poverty and are based upon the federal poverty level. However, subsidy eligibility for additional vulnerable groups could be considered as well, including persons with disabilities, individuals without access to a private vehicle, and senior citizens. Godavarthy et al. (2015) provide guidance on combining measures of need together with levels of service to prioritize service investments. Conceptually, the idea is to prioritize subsidies for those experiencing the highest need and the lowest level of service. By this reasoning, those experiencing the lowest need and highest level of service should be last in line for public subsidies. This guidance is consistent with that provided by Martens (2016), who argues that public subsidies should be reserved for those who fall into the "domain of justice" through the experience of both low accessibility and low mobility.

Finally, in the short range, Twin Falls should commit to a service type and implement a 1-2 year pilot program. Twin Falls could pursue a new service by investing in a TVRS program or DRT-TaaS service. Given approximately \$856,000 in CARES Act funding available to Twin Falls, which does not require a local match, the first recommendation would be to pilot the more robust DRT-TaaS service. Over the course of a 1-2 year pilot program, Twin Falls could regularly evaluate performance of the DRT-TaaS program. Such a pilot program would be a valuable opportunity to collect information to inform public investment decisions regarding public transportation once the CARES Act funding runs out. Compared to a TVRS program, DRT-TaaS

would also more fully and directly set Twin Falls up to achieve its 2030 vision of a "modern public transportation system."

5.3. Long Range

The Twin Falls community should continue to make progress on the recommendations provided in the 2016 Transit Development Plan. These include increasing mixed-use zoning and development, improving active transportation facilities, revisiting parking management policies, developing a corridor plan for Blue Lakes Boulevard/US-93, developing regional partnerships, leveraging existing partners and resources, and developing commute-oriented programs. As community priorities, land-use and development patterns, parking management, and other factors related to public transportation develop over time, Twin Falls can assess the degree to which its public transportation investments align with and support its Strategic Plan and accompanying goals for the community. In addition, Twin Falls may consider opportunities to partner with other communities and providers in the region to introduce and expand upon context-appropriate services, such as employment-focused vanpools and coordinated service for access to medical appointments.

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