COMPASS
COMMUNITY PLANNING ASSOCIATION
of Southwest Idaho

Working together to plan for the future

Treasure Valley Annual Congestion Management System Report, 2023

11-2024

August 2024

Table of Contents

Executive Summary

This Congestion Management Annual Report measures and summarizes how well the transportation system in Ada and Canyon Counties is operating and highlights strategies transportation agencies are using to help mitigate congestion. Travel time data provide the basis for the information in this report and are used by the Community Planning Association of Southwest Idaho (COMPASS) in its transportation planning activities, including prioritizing projects for funding, analyzing progress toward meeting the goals of the regional long-range transportation plan, and assisting member agencies with their planning processes.

2023 Highlights:

- Ada and Canyon Counties continued to experience significant population growth. Population estimates for 2023 for the two-county area exceeded 800,000 people – up from 726,027 counted in the 2020 Census. The number of residential building permits issued increased by 10% from 2022 to 2023 for the two-county area.
- Highly and moderately congested miles on the interstate and state highway system (Tier 1) decreased from 129 miles in 2022 to 103 miles in 2023. The arterial and collector system (Tier 2) saw an increase in congested miles, from 36 miles in 2022 to over 48 miles in 2023. Neither the Tier 1 or Tier 2 systems have surpassed 2019 pre-COVID levels of high and moderate congestion.
- US Highway 20/26 in Canyon County and the western portion of Ada County (Chinden Boulevard), I-84 on the west end of Canyon County, and State Highway 44 (State Street) have had the most significant growth in traffic volumes over the last five years (Appendix). Several capacity projects have been completed on these corridors over the past few years. Development activity on the western end of the valley is impacting these corridors.
- Five of the top ten most congested segments on the Tier 1 system were located on US 20/26 (Chinden Boulevard). These locations are located near the intersections of State Highway 16 and State Highway 55 (Eagle Road). Construction on US 20/26 (Chinden Boulevard) and of a new section of State Highway 16, along with high levels of development activity in these locations, have contributed to high levels of congestion.
- COMPASS' FY2024-2030 Transportation Improvement program (TIP) includes nearly $1 billion dollars programmed to support congestion management. The most common congestion management strategies in the program are improvements to active transportation infrastructure (Travel Demand Management) and roadway capacity. Roughly 70% of the funds are allocated towards roadway capacity improvements (Table 8). Many of the projects in the TIP incorporate more than one congestion management strategy. For example, many roadway capacity projects also include the addition of, or upgrades to, bicycle and pedestrian infrastructure.
- The region is meeting 5 of 7 congestion management targets:
  - ✗ The region is not meeting its target of 15 days or fewer with excessive commute times on I-84 during the AM and PM peak hours from Caldwell to Boise (both directions). There were 32 days in 2023 where the AM or PM commute was 30% greater than the average commute for the year.
  - ✓ The region is meeting both targets for travel time reliability on the National Highway System (> 70%) and interstate (> 90%).
  - ✗ The Truck Travel Time Reliability score on I-84 in 2023 was 1.55, not meeting the established statewide target of no greater than 1.3. Major construction on I-84 between the Cities of Caldwell and Nampa has contributed to this unsatisfactory performance.
  - ✓ The region is meeting targets for both of the federally required congestion measures, Person Hours of Excessive Delay per Capita (< 13.0) and Percent of Non-Single Occupancy Vehicle travel (> 22%), that are reported for the Boise Urban Area (as defined by the census).
  - ✓ The region is meeting its target of less than 8% of Tier 1 roadways considered highly congested (travel time index > 2.0).

Background and Introduction

What is the Congestion Management Process?

The congestion management process (CMP) is a systematic approach for analyzing, identifying, monitoring, and managing congestion. This Congestion Management Annual Report uses data to show trends in congestion, measure progress toward meeting congestion-related performance measures, and recommend strategies to mitigate congestion in Ada and Canyon Counties, Idaho – the Treasure Valley. These two counties comprise the planning area for the region's metropolitan planning organization, the Community Planning Association of Southwest Idaho (COMPASS). A CMP is federally required for areas with populations exceeding 200,000, known as Transportation Management Areas. While only a portion of COMPASS' planning area is subject to this requirement (the Boise Urban Area), COMPASS' CMP covers its entire planning area.

The CMP is used as a tool to identify congestion mitigation needs and support the development of COMPASS' long-range transportation plan, *Communities in Motion*, and its regional transportation improvement program (TIP). The process identifies measures and targets for monitoring progress toward mitigating congestion, as well as management strategies to reduce congestion on the transportation system. The Congestion Management Systems Process[1], adopted by the COMPASS Board of Directors in 2022, details how COMPASS implements the congestion management process and a provides "toolbox" of mitigation strategies.

What is Congestion?

Congestion occurs when a roadway has reached its capacity or incurs a temporary reduction in capacity resulting in slower travel times. There are two types of congestion: recurring and non-recurring. Recurring congestion is caused by predictable day-to-day traffic patterns and is usually the result of insufficient capacity and/or a surge in demand on the transportation system. Recurring congestion most often occurs during morning and evening commute periods. Non-recurring congestion is temporary and often unpredictable. Non-recurring congestion is often caused by road construction, crashes, inclement weather, special events, and emergencies.

Growth Measures

Growth in the Treasure Valley

The Treasure Valley continues to grow at a rapid pace. COMPASS estimates population on a yearly basis for cities and counties in its planning area. From 2010 through 2023, the population grew by over 37% (Figure 1). This increase in population has created additional demand on the transportation system, which is one of the causes of congestion. COMPASS and its member agencies are planning for growth and identifying, prioritizing, and securing funding for transportation projects to manage demand and mitigate congestion. Visit the COMPASS demographics web page[2] for more information.

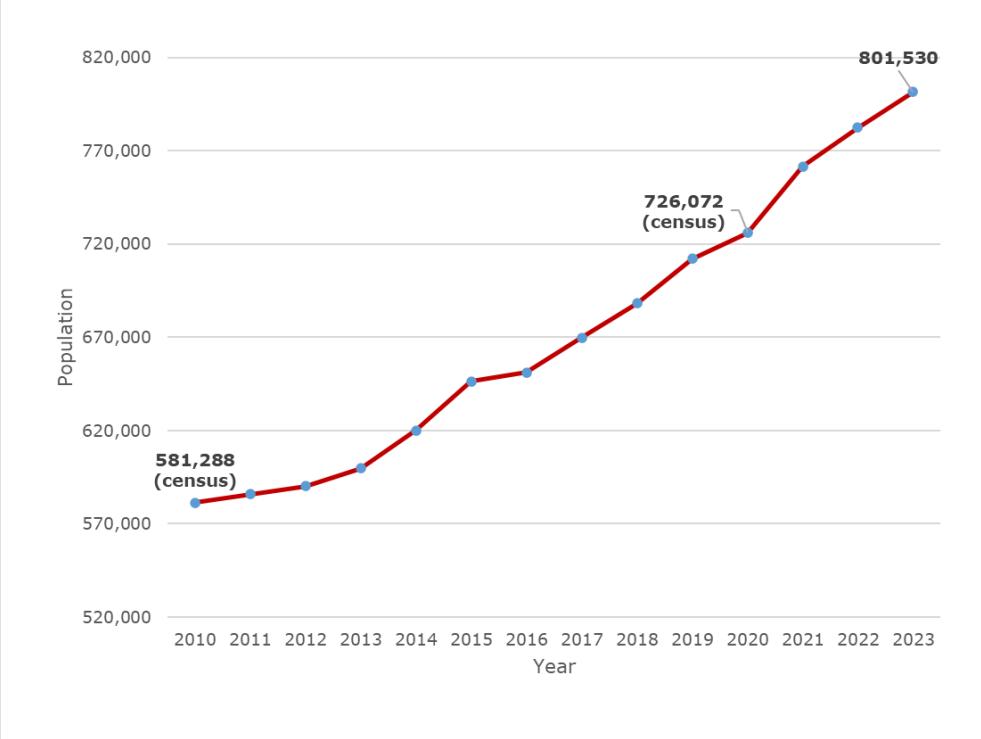

Figure 1: Ada and Canyon Counties' Population (2010 – 2023)

[1] https://compassidaho.org/wp-content/uploads/2022CongestionManagementSystemTechnicalDocument.pdf

[2] https://compassidaho.org/demographics/

Development and Congestion

Increases in population and development activity can impact travel patterns and performance of the transportation system. The total number of building permits issued in the region increased by 10% from 2022 to 2023 (Figure 2). Identifying locations with high concentrations of development activity can help pinpoint which corridors in the area might experience the greatest changes in traffic volumes and congestion due to new construction (Figure 3, Figure 4, and Figure 5). This information can also help to identify appropriate locations for congestion mitigation strategies, such as providing public transportation services on corridors with concentrations of multi-family unit development or operational improvements on corridors with single-family home development. Visit the COMPASS development monitoring web page[3] for more information.

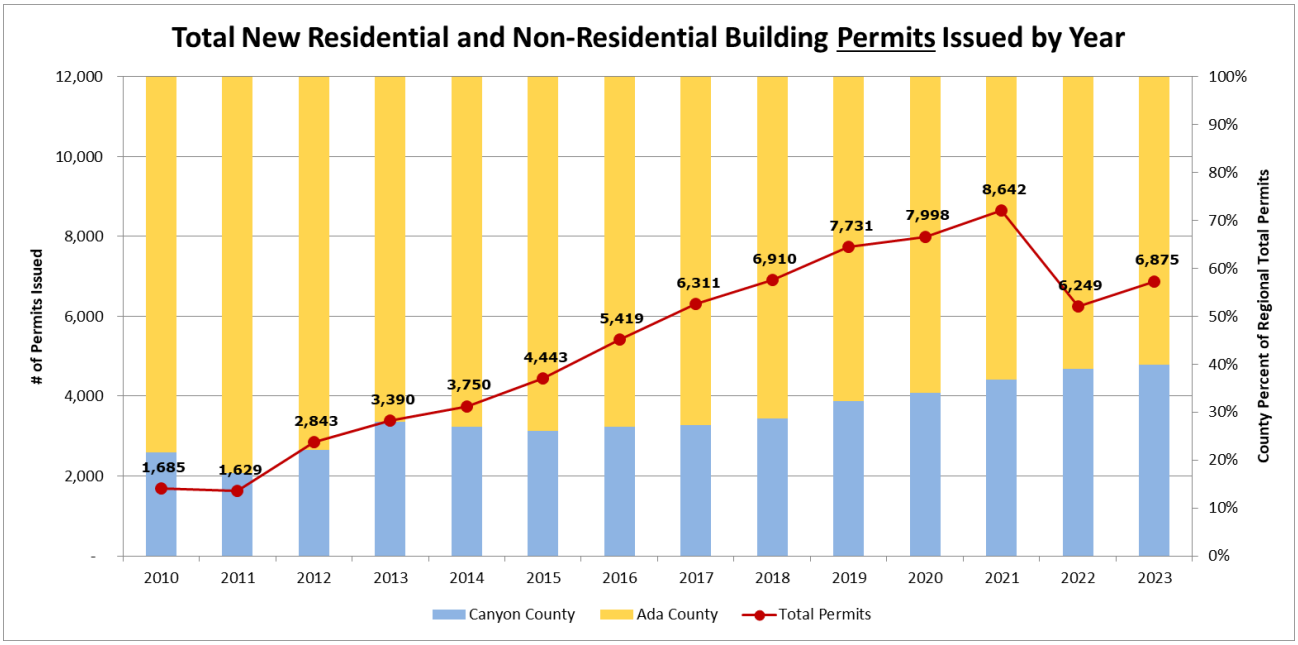

Figure 2: Total New Construction Permits Issued by Year (2010 – 2023)

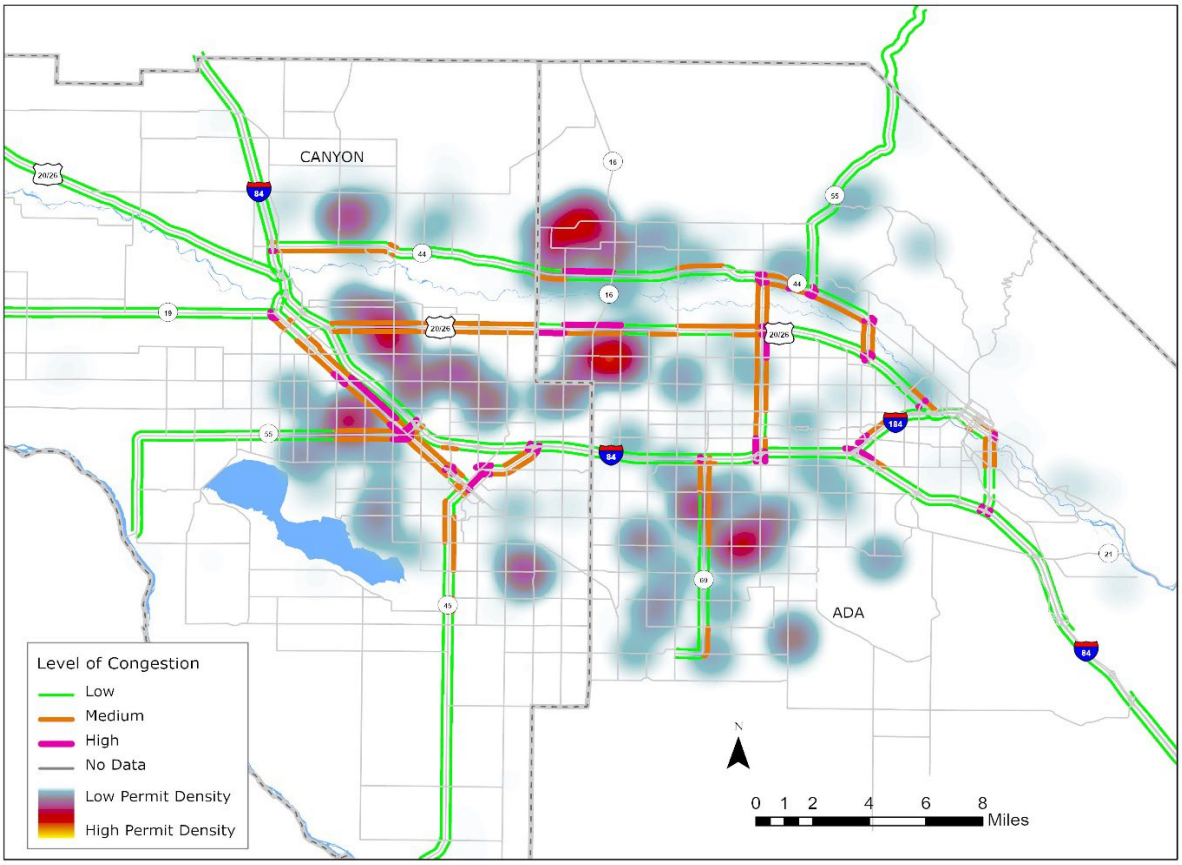

Figure 3: Number of Single-Family Units Permitted and Levels of Highest Peak Hour Congestion (2023)

[3] https://compassidaho.org/development-monitoring-report/

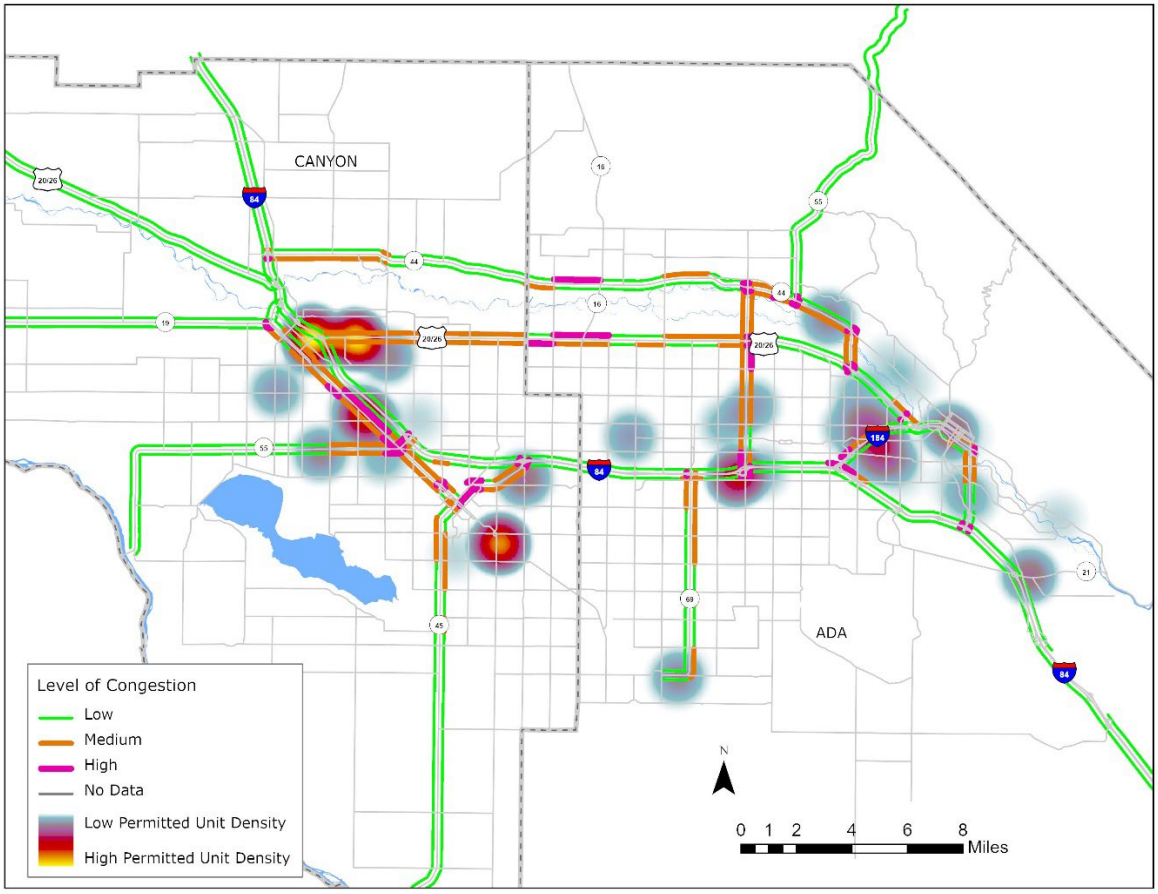

Figure 4: Number of Multi-Family Units Permitted and Levels of Highest Peak Hour Congestion (2023)

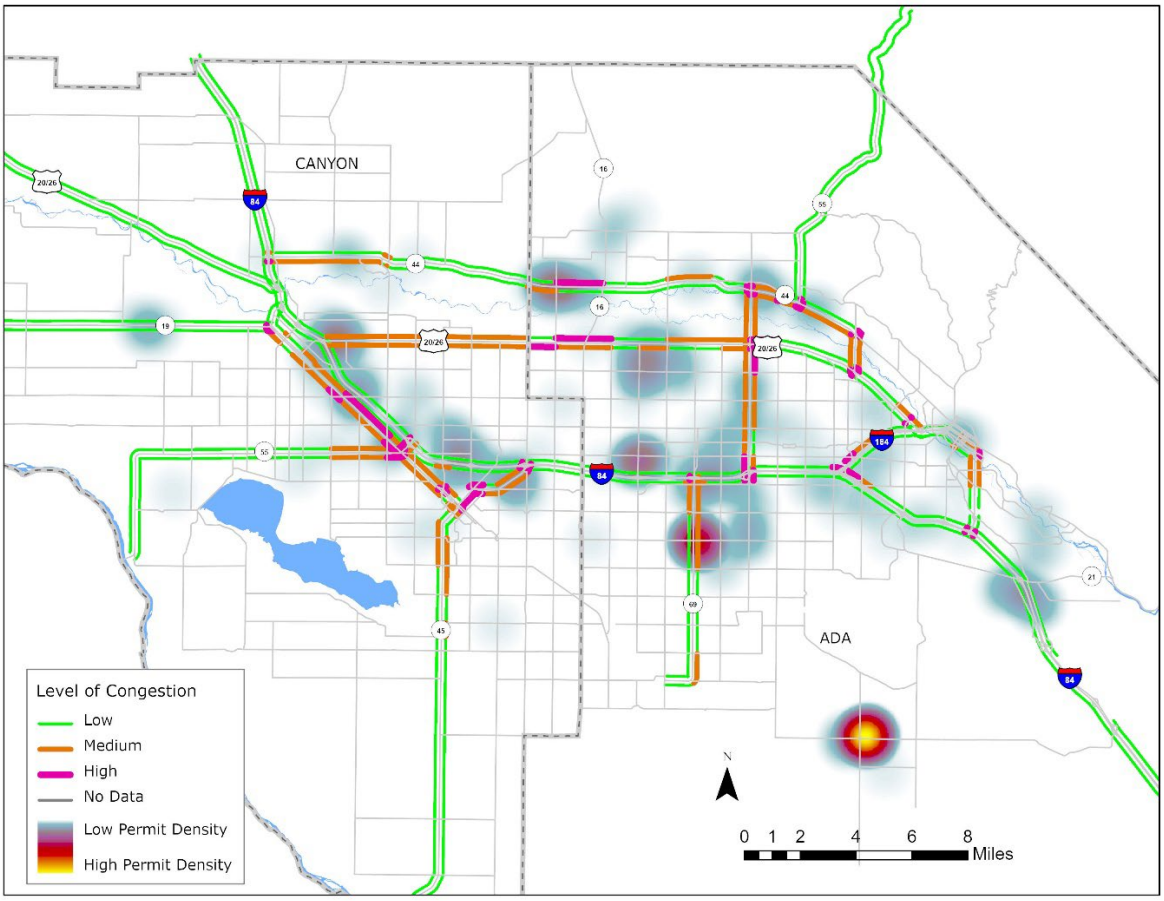

Figure 5: Number of Commercial/Retail Building Permits and Levels of Highest Peak Hour Congestion (2023)

Travel Time Data

COMPASS uses the National Performance Management Research Data Set (NPMRDS) to analyze and identify congestion. The NPMRDS is a vehicle probe-based speed and travel time data set that covers portions of the National Highway System. The Congestion Management Plan and annual reports refer to this as the Tier 1 network. It is procured by the Federal Highway Administration and made available to state and local governments to assist with performance measure reporting. The dataset is composed of travel time records averaged in five-minute intervals for segments of roads, or "Traffic Message Channels," on the National Highway System collected from millions of connected vehicles, trucks, and mobile devices that supply location and movement data. The NPMRDS is the primary source for travel time data used in this report and is used to calculate system reliability, the Travel Time Index (TTI), and commute travel times on the Tier 1 network. These data are used to develop corridor-level analyses of average speeds, traffic volumes, and causes of congestion; these analyses can be found in the Appendix of this report.

Travel Time Index

TTI is the ratio of the ideal free flow travel time to the actual measured travel time. For example, a TTI value of 3 means that it takes three times longer to drive a segment at a particular time than it would under free-flow conditions. Free flow is considered the 85th percentile travel time at non-peak hours. TTI is a good measure to show the severity of congestion on the transportation system and how congestion impacts travel times. COMPASS uses the TTI to classify roadway segments into high, medium, and low levels of congestion (Table 1). TTI is averaged for morning (6am-9am), midday (9am-3pm), evening (3pm-7pm), and weekend (6am-8pm) peak periods; the highest TTI value for each roadway segment is used to designate the level of congestion for that segment. The percentage of miles of highly congested roadway segments barely increased from 2022 to 2023 (Table 2). The percentages of medium congested roadway in 2023 decreased 5% from 2022.

Table 1: Travel Time Index Thresholds

High	Medium	Low
TTI > 2.0	TTI 1.5 – 2.0	TTI < 1.5

Table 2: Tier 1 Network Congestion Summary, Based on Max Average TTI Thresholds for CMP Time Periods

Year	High		Medium		Low		Total Miles
	Miles	Percent	Miles	Percent	Miles	Percent	
2023	18.2	4.1%	84.3	19.1%	339.1	76.8%	**441.6**
2022	18.2	4.0%	110.7	24.1%	329.8	71.9%	**458.7**
2021	23.0	5.0%	96.9	21.0%	341.9	74.0%	**461.8**
2020	15.1	3.2%	89.8	18.7%	374.5	78.1%	**479.4**
2019	30.6	6.5%	108.5	23.2%	329.5	70.3%	**468.6**

The ten most congested roadway segments according to the NPMRDS show that the worst congestion in the valley in 2023 was concentrated in three main areas: along the US 20/26 (Chinden Boulevard) corridor, in Nampa on Nampa/Caldwell Boulevard, and State Highway 55 (Eagle Road) (Table 3 and Figure 6).

Table 3: Ten Most Congested Tier 1 Network Segments > 0.5 Miles (2023)

Rank	Road	Description	Miles	Direction	TTI	Peak Period	Peak Hour Delay	Avg. Speed
1	US 20/26 (Chinden Blvd)	SH 16/McDermott Rd to Star Rd	0.96	Westbound	3.28	PM	2 min 59 sec	19 mph
2	US 20/26 (Chinden Blvd)	Cloverdale Rd to SH 55 (Eagle Rd)	0.93	Westbound	3.03	PM	2 min 38 sec	20 mph
3	Nampa/Caldwell Blvd	Lake Ave to Ustick Rd	0.54	Eastbound	2.97	Midday	1 min 46 sec	20 mph
4	SH 55 (Eagle Rd)	Franklin Rd to I-84 Westbound On Ramp	0.51	Southbound	2.56	PM	1 min 26 sec	15 mph
5	US 20/26 (Chinden Blvd)	Can Ada Rd to Star Rd	0.98	Eastbound	2.42	AM	1 min 44 sec	28 mph
6	US 20/26 (Chinden Blvd)	Black Cat Rd to SH 16	1.03	Westbound	2.35	PM	1 min 54 sec	24 mph
7	SH 44 (State St)	SH 16 to Star Rd	1.67	Westbound	2.16	PM	3 min 25 sec	18 mph
8	Nampa/Caldwell Blvd	Middleton Rd to Ustick Rd	2.17	Westbound	2.14	PM	3 min 55 sec	23 mph
9	SH 55 (Karcher Rd)	Middleton Rd to Nampa/Caldwell Blvd	0.52	Eastbound	2.12	Midday	1 min 24 sec	14 mph
10	SH 55 (Eagle Rd)	McMillan Rd to US 20/26 (Chinden Blvd)	0.98	Northbound	2.10	PM	1 min 31 sec	25 mph

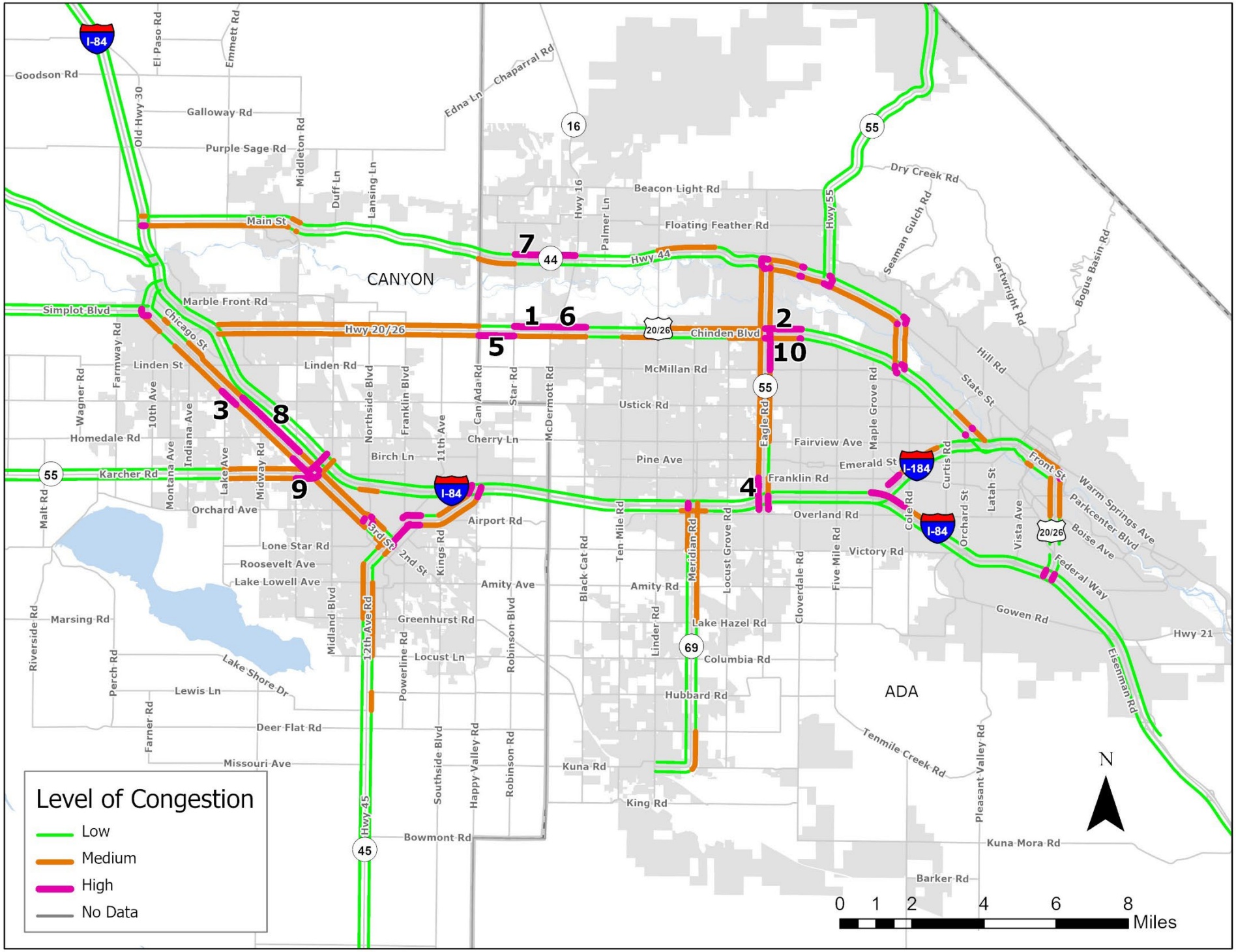

Figure 6: Top Ten Congested Tier 1 Network Segments > 0.5 Miles (Peak period maximum, 2023)

Tier 2 Supplemental Travel Time Data and Analysis

The Idaho Transportation Department (ITD) purchased additional travel time data in 2023 to supplement the NPMRDS. These data provide the ability to analyze conditions on the Tier 2 network — arterials and other major roadways not included in the Tier 1 network. The same methodology (TTI) that is used to analyze congestion using the NPMRDS was applied to the Tier 2 travel time data set (Table 4,
Table 5, Table 6, Figure 7, Figure 8). Some of the segments on the Tier 2 network experience low traffic volumes; as a result, recorded actual travel times for the entire year are not available. The data vendor uses imputed data, calculated by using historic averages or free flow speeds, to fill voids in the dataset when no vehicles are detected. The analysis and calculations of travel time done for this report use only records where actual recorded travel times are available; this can result in variations of total miles measured from year to year. In 2023, the Tier 2 network saw an increase in medium and a decrease in highly congested roadways from what was observed in 2022.

Table 4: Tier 2 Network Congestion Summary, Based on Weekday Average TTI Thresholds (*excludes low confidence road segments)

Year	High		Medium		Low		Total Miles*
	Miles	Percent	Miles	Percent	Miles	Percent	
2023	3.97	0.2%	44.39	2.5%	1,706.36	97.3%	1,754.72
2022	5.04	0.3%	31.52	1.9%	1,598.26	97.8%	1,634.82
2021	1.50	0.1%	17.40	1.4%	1,210.00	98.5%	1,228.90
2020	7.05	0.6%	26.60	2.1%	1,232.43	97.3%	1,266.08
2019	15.88	1.6%	49.45	4.9%	950.58	93.5%	1,015.91

Table 5: Top Ten Congested Tier 2 Network Segments in Canyon County > 0.1 Miles (2023)

Rank	Road	Description	Miles	Direction	TTI	Peak Period	Delay/Speed
1	I-84 Exit 25 Off Ramp	I-84 Exit 25 Off Ramp (SH 44 / City of Middleton)	0.34	Eastbound	1.81	AM	26 sec/23 mph
2	Midland Blvd	W St Lukes Dr to Karcher Bypass	0.37	Southbound	1.72	PM	35 sec/15 mph
3	Middleton Rd	Laster St to Nampa/Caldwell Blvd	1.00	Southbound	1.71	PM	75 sec/22 mph
4	Idaho Center Blvd	Terra Linda Way to Cherry Ln	0.50	Northbound	1.70	PM	37 sec/23 mph
5	I-84 Exit 25 Off Ramp	I-84 Exit 25 Off Ramp (SH 44 / City of Middleton)	0.23	Westbound	1.68	PM	17 sec/22 mph
6	Linden Rd	Santa Ana Ave to Middleton Rd	0.50	Westbound	1.67	PM	30 sec/28 mph
7	Middleton Rd	Spruce St to Linden Rd	0.50	Northbound	1.67	PM	29 sec/29 mph
8	Idaho Center Blvd	Franklin Rd to E Gate Blvd	0.20	Southbound	1.64	PM	16 sec/19 mph
9	I-84 Exit 33 Off Ramp	I-84 Off Ramp at Exit 33 (Karcher Rd)	0.41	Westbound	1.63	PM	25 sec/25 mph
10	I-84 Exit 27 Off Ramp	I-84 Exit 27 Off Ramp (Centennial Way)	0.22	Westbound	1.57	Midday	16 sec/19 mph

Table 6: Top Ten Congested Tier 2 Network Segments in Ada County > 0.1 Miles (2023)

Rank	Road	Description	Miles	Direction	TTI	Peak Period	Delay/Speed
1	I-84 Exit 0 On Ramp (I-184)	Wye Interchange (I-184/Franklin Blvd)	0.50	Westbound	2.63	PM	45 sec/38 mph
2	I-84 Exit 44 On Ramp	I-84 Exit 44 On Ramp (Meridian Rd)	0.40	Eastbound	2.41	AM	41 sec/28 mph
3	I-84 Exit 42 On Ramp	I-84 Exit 42 On Ramp (Ten Mile Rd)	0.64	Eastbound	2.28	AM	50 sec/40 mph
4	Franklin Rd	Touchmark Way to Eagle Rd (SH 55)	0.33	Westbound	1.98	PM	34 sec/20 mph
5	Cole Rd	Century Way to I-84 Exit 50B On Ramp	0.26	Northbound	1.95	PM	32 sec/16 mph
6	Meridian Rd	Corporate Dr to Waltman Ln	0.13	Southbound	1.92	PM	12 sec/19 mph
7	SH 16	Phyllis Canal to US 20/26 (Chinden Blvd)	0.48	Southbound	1.87	PM	35 sec/26 mph
8	Ustick Rd	Records Way to Eagle Rd (SH 55)	0.23	Westbound	1.80	PM	25 sec/16 mph
9	S Eagle Rd	Goldstone Dr to Overland Rd	0.34	Northbound	1.78	PM	30 sec/20 mph
10	S Eagle Rd	Overland Rd to I-84 Exit 46 On Ramp	0.13	Northbound	1.77	PM	12 sec/19 mph

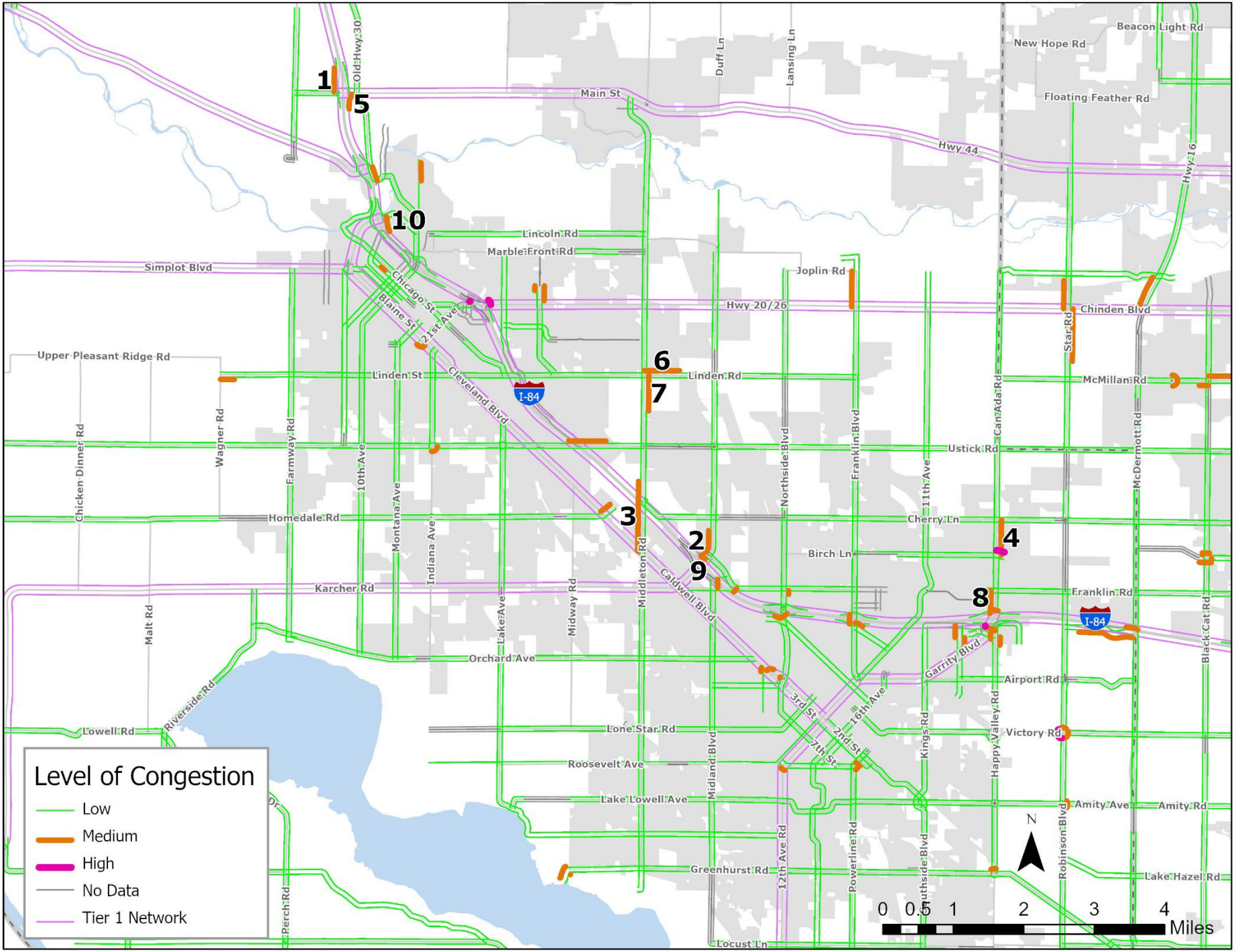

Figure 7: Top Ten Tier 2 Congested Roadways > 0.1 miles in Canyon County (Peak period maximum, 2023)

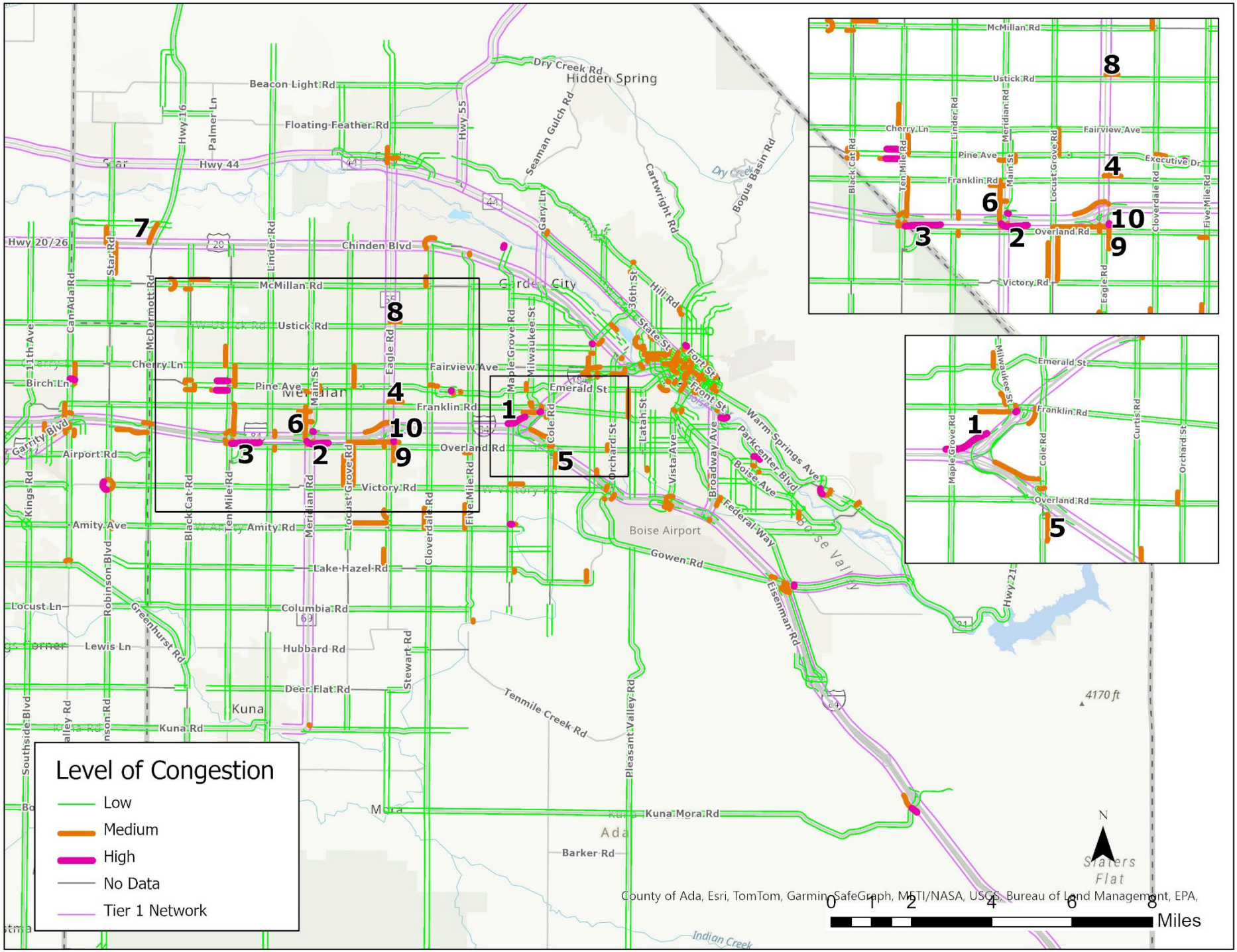

Figure 8: Top Ten Tier 2 Network Segments > 0.1 miles in Ada County (Peak period maximum, 2023)

Peak Hour Commute Times in the Treasure Valley

Recurring congestion in the Treasure Valley occurs primarily during the morning (AM) and evening (PM) commute times. Depending on the route, travelers can expect to add a significant amount of time to their commute due to congestion (Figure 9). In Figure 9, the free flow travel time is show in green, the travel time added to the commute due to congestion is shown in yellow, and the total average weekday commute (free flow + congested travel time) is displayed in black bold font. For example, under free flow conditions the travel time on I-84 eastbound from the City of Caldwell to the City of Boise takes around 23 minutes; during the morning commute 6 minutes are added to the travel time, for an average weekday morning commute travel time of 29 minutes.

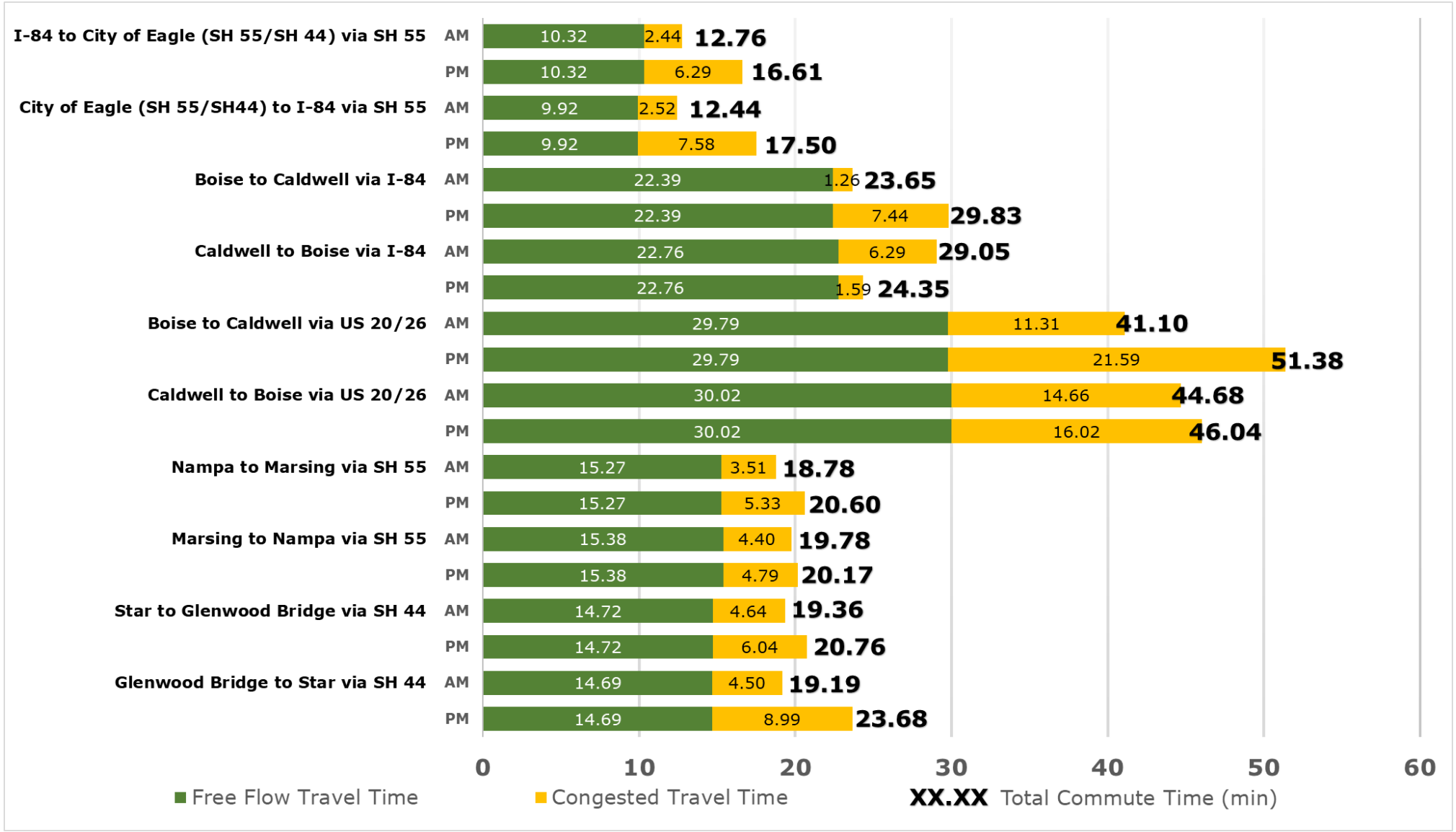

Figure 9: Average Weekday AM and PM Peak Period Commute Travel Times for Select Routes in the Treasure Valley (2023)

Number of "Event" Days on the Interstate

COMPASS tracks the number of weekdays in a year in which congestion on I-84/I-184 between Caldwell and Boise experiences AM or PM peak hour commutes that are 30% greater than the yearly average – these are referred to as "event" days (**Figure *10***). This analysis is performed using the NPMRDS. This measure is useful to gauge how non-recurring congestion events on the interstate are affecting commuters. Transportation system management and operations strategies aim to mitigate the impacts of non-recurring congestion events.

32 "Event" Days on the Interstate

Does not meet target of <15 days

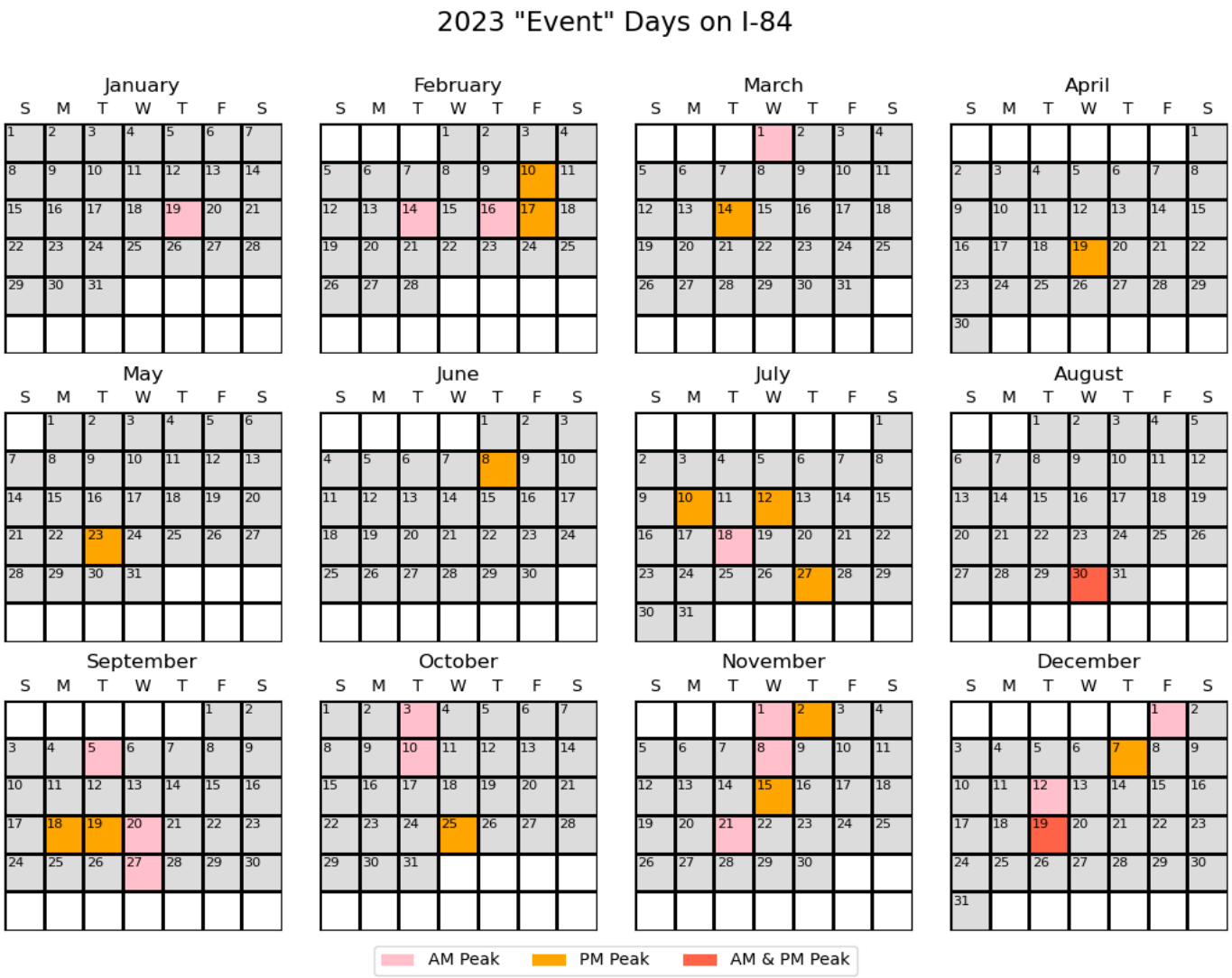

Figure 10: "Event" Days on the Interstate (2023)

Federal System Performance Measures

The Infrastructure Investment and Jobs Act (IIJA) extended provisions requiring state transportation agencies and metropolitan planning organizations such as COMPASS to report performance measures and set targets for safety, infrastructure, system performance, and congestion for their planning areas. These measures, described below, show how predictable or consistent travel times are for passenger and freight vehicles, how much delay travelers experience each year.

System Reliability Measures: Tier 1 Roadways in Ada and Canyon Counties

83.6% Interstate Reliable — Does not Meets target of ≥90% reliable

85.0% Non-Interstate Roads Reliable — Meets target of ≥70% reliable

1.55 Truck Travel Time Reliability — Does not meet target score of <1.3

COMPASS has adopted ITD's statewide targets for these measures.

Level of Travel Time Reliability (LOTTR)

Travel time reliability measures are used to tell how consistent travel time is from one point to another, from one day to the next. Factors such as weather, events, construction, or crashes can make it difficult to predict how long it can take to travel from one destination to another. Many commuters understand that congestion is unavoidable on their commute, but by being able to effectively budget enough commute time can offset some of the inconveniences caused by everyday congestion. Therefore, reliability goals and targets focus on the predictability of travel time (Figure 11, Figure 12).

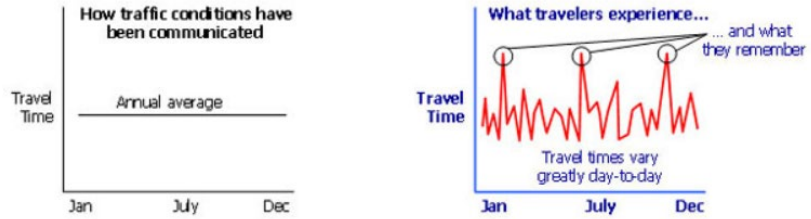

Figure 11: Average Commute Times Typically Do Not Reflect What Travelers Experience

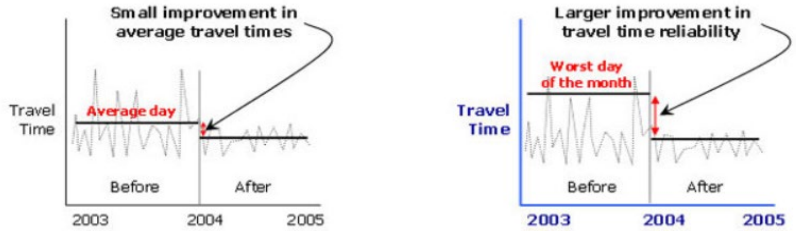

Figure 12: Reliability of Commute Times Better Reflect What Travelers Experience

LOTTR is defined as the ratio of a longer travel time (80th percentile) to a "normal" travel time (50th percentile). A LOTTR score of 1.5 means that it takes 50% longer to travel a segment of roadway at times of some of the highest levels of congestion than during non-congested times. Roadways with LOTTR scores greater than 1.5 are considered unreliable. The overall system reliability is calculated by weighting each segment by person miles traveled (PMT). A percentage of reliable PMT on the system is used as an overall rating of the system reliability. COMPASS has adopted ITD's statewide targets of greater than 90% of PMT reliable on interstates and greater than 70% PMT reliable on the non-interstate system for performance measurement in Ada and Canyon Counties. COMPASS is not meeting its interstate reliability measure at 83.6% of the interstate PMT reliable and but meeting its target for non-interstate roads at 89.4% PMT reliable (Figure 13).

Truck Travel Time Reliability (TTTR)

TTTR is a metric used to measure how efficiently freight is moving through the transportation system. TTTR is similar to LOTTR except the 95th percentile travel time is used as the longer travel time in the equation, TTTR is only calculated for the interstate system, and it is presented as a weighted average. ITD has set a statewide target of a TTTR of less than 1.3 and COMPASS has adopted this target for its performance measurement. The COMPASS planning area is not hitting this target, with a TTTR score of 1.55 (Figure 14). This is likely due to issues cause by non-recurring congestion from weather, construction, and traffic incidents on the interstate.

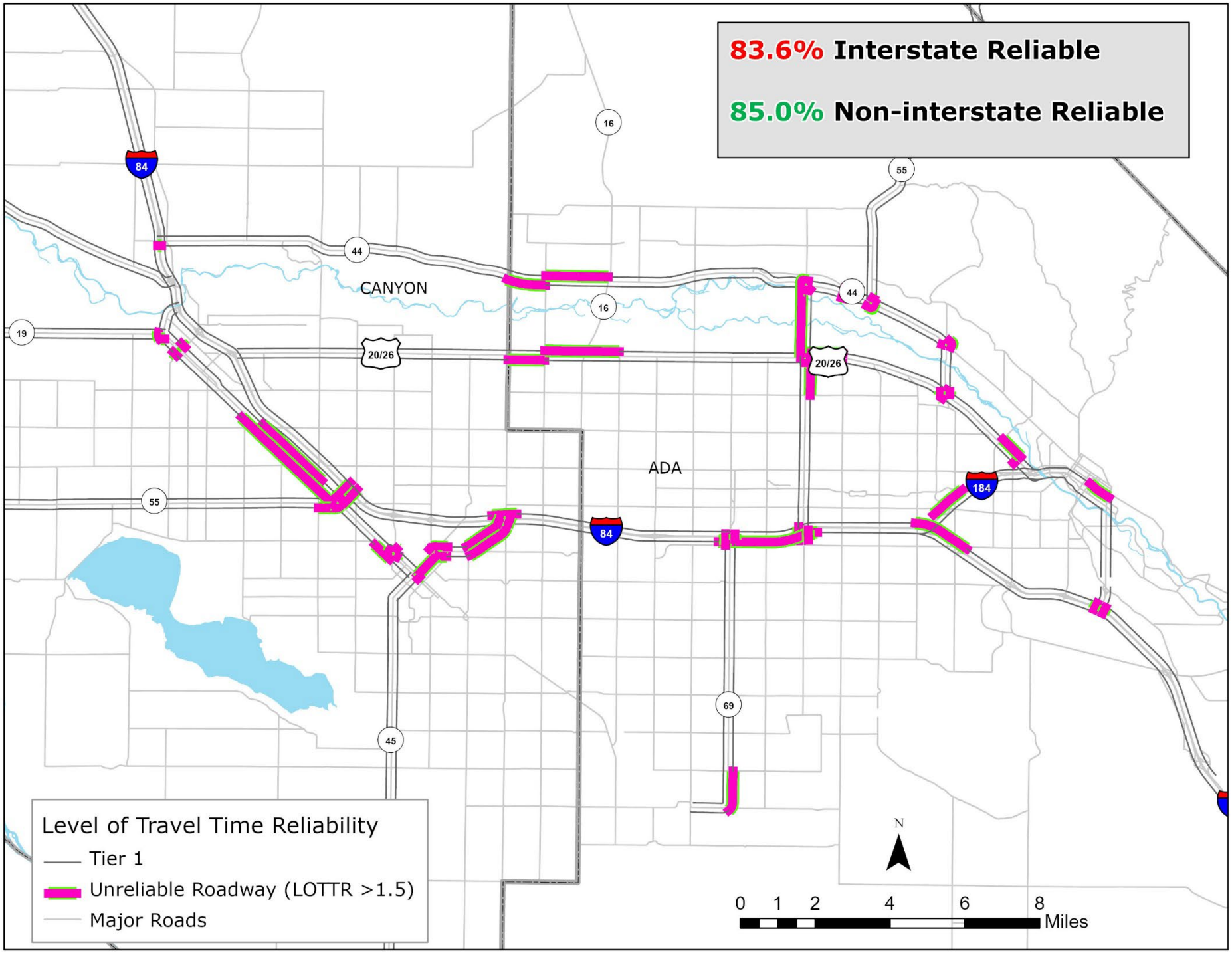

Figure 13: Level of Travel Time Reliability (2023)

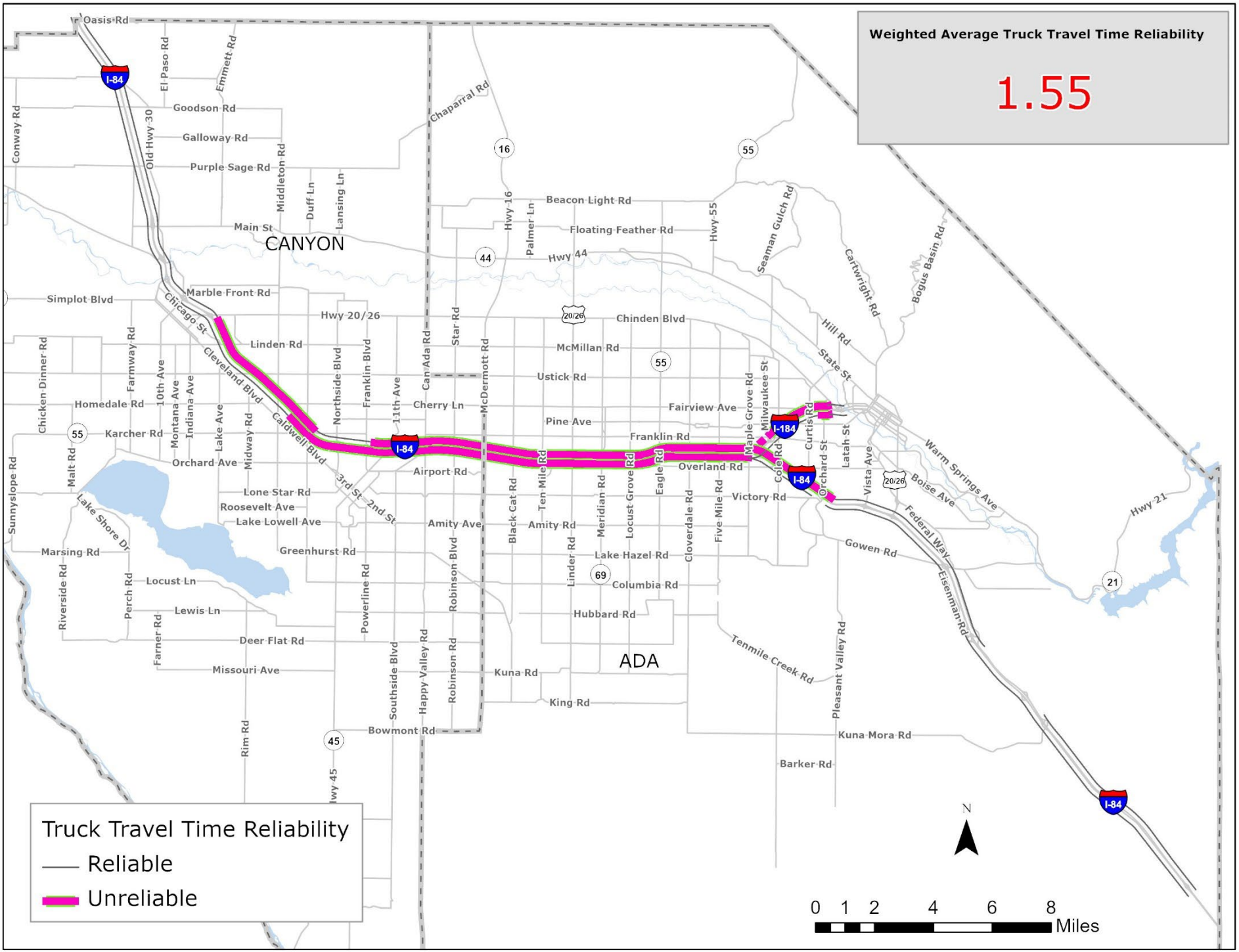

Figure 14: Truck Travel Time Reliability (2023)

Congestion Performance Measures: Tier 1 Roadways in the Boise Urban Area

4.8 Annual Peak Hours Excessive Delay per Capita
Meets target of < 13

24.3% of Non-Single Occupancy Vehicle (SOV) Travel
Meets target of > 23.5

In addition to the travel time reliability measures included in the IIJA, urban areas with populations over 200,000 people in a nonattainment or maintenance area for ozone, carbon monoxide, or particulate matter are required to report annual peak hour of excessive delay (PHED) per capita and percent non-single-occupancy vehicle (SOV) travel. Northern Ada County, within COMPASS' planning area, was designated a maintenance area for coarse particulate matter and carbon monoxide until 2024. Though the requirement to report these measures will expire in the near future, COMPASS will continue to report PHED and percent non-SOV travel and may choose to continue using these measures to monitor congestion.

PHED is calculated using the NPMRDS travel time data to calculate the number of hours during peak AM and PM travel that speeds fall to below 20 MPH or less than 60% of the posted speed limit. Delay is calculated for each roadway segment in the NPMRDS that falls within the Boise Urban Area and volumes and occupancy rates are used to quantify how many people were impacted by these delays. These data are summarized as a total amount of delay for the year and then divided by the population of the urban area to determine annual PHED per capita. This measure helps contextualize how much time the average commuter spends in excessive traffic for the year on state highways and the interstate within the Boise Urban Area.

Percent non-SOV travel is the percentage of commuters who use any mode other than a SOV, including carpool, transit, bike, walk, telecommuting, and other modes to access work. Data are for the Boise Urban Area and are from the US Census Bureau, American Community Survey, 5-year estimates. This measure is helpful in assessing how transit, active transportation, and transportation demand management strategies are performing. Choosing alternatives to SOV can help to maximize vehicle capacity during peak hours of travel and maximize person throughput.

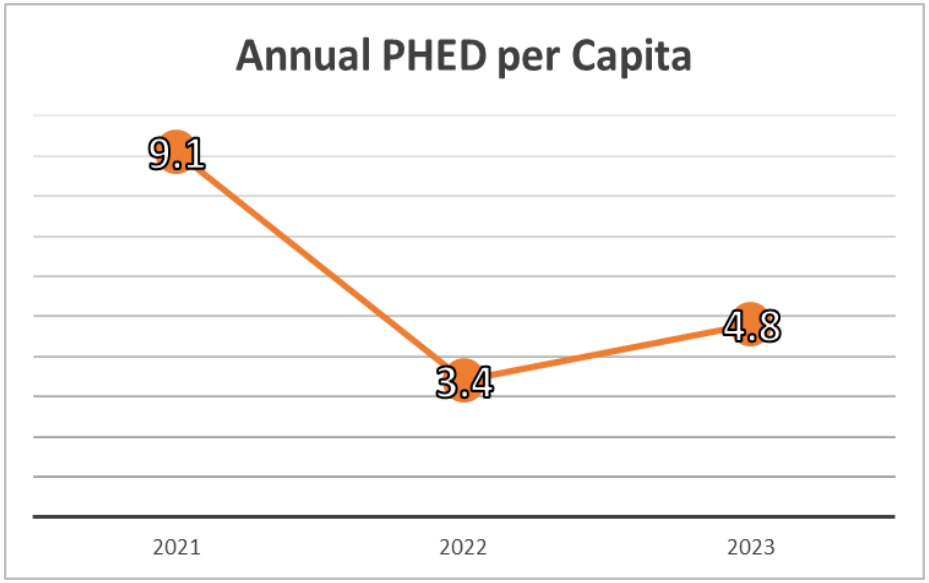

Figure 15: Annual Peak Hours of Excessive Delay per Capita (2021-2023)

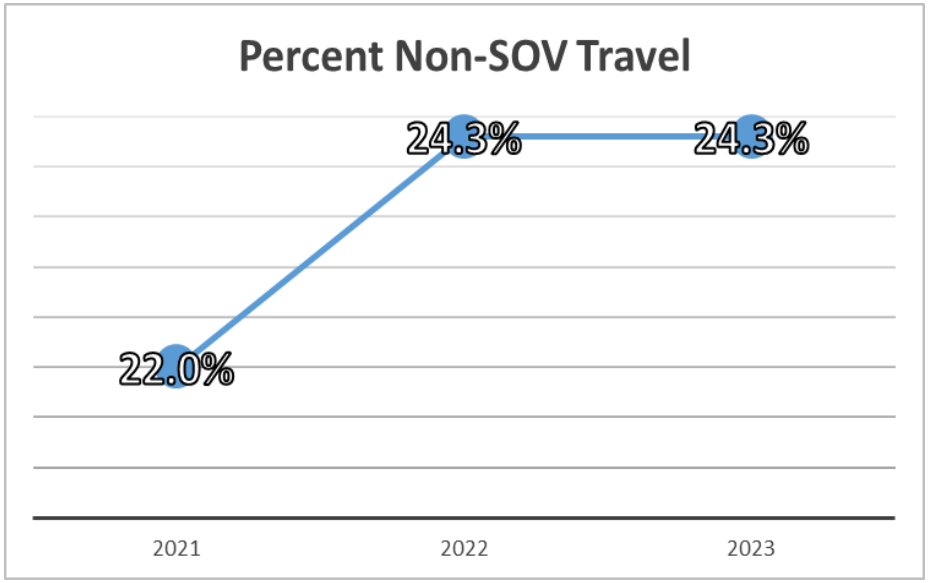

Figure 16: Percent Non-Single Occupancy Vehicle Travel (2021-2023)

Additional Regional Performance Measures

COMPASS Change in Motion Scorecard

COMPASS publishes the *Change in Motion Scorecard*[4] on a biennial basis to report on the progress made toward achieving the goals established in *Communities in Motion*, the long-range transportation plan for Ada and Canyon Counties. The transportation related measures reported in the scorecard reflect the multimodal transportation network and are reported at the regional scale. Targets are established for each of the measures in the scorecard to determine how well the strategies, policies, and projects implemented by COMPASS and its member agencies are impacting the region. There are several measures reported in the *Change in Motion Scorecard* related to the congestion management strategies listed in the CMP. By tracking the progression of these measures over time, it can be determined which strategies are performing to expectations and which strategies might need to be reassessed.

Strategies and Implementation Program

Congestion Mitigation Strategies

Congestion mitigation strategies are grouped into five categories (Table 7), as identified in the Federal Highway Administration's *Congestion Management Process: A Guidebook*[5]. These strategies are defined in further detail in *COMPASS' Congestion Management System Process – Technical Document*[6]. COMPASS and its member agencies implement these strategies to mitigate congestion through projects included in the long-range transportation plan (*Communities in Motion*) and TIP.

Table 7: Congestion Mitigation Strategies

Strategy	Description	Examples
Transportation Demand Management (TDM)/Active Transportation	Providing travelers with more options of how and when they commute to reduce the number of trips during congested hours	• Pedestrian/bicycle infrastructure • Ridesharing • Flexible work arrangements • Transit Oriented Development
Transportation System Management and Operations/Intelligent Transportation Systems (TSMO/ITS)	Implementing improvements focused on optimizing the current transportation infrastructure	• Optimized signal timing • Improved intersections • Transit signal priority
Transit Operations Improvements	Improving transit operations, access, and services to encourage more usage to reduce the number of vehicles on the road	• Bus Rapid Transit • Expanded frequency/hours of service • Expanded public transportation system
Additional System Capacity	Expanding capacity by adding lanes or new roads	• Additional travel lanes • Filled gaps in the street network • New overpasses/underpasses
Freight and Goods Mobility	Implementing strategies to move freight and goods more efficiently on the transportation system	• Freight signal priority • Improved intersections • Designated loading, unloading, and parking zones

[4] https://compassidaho.org/change-in-motion-reports/

[5] https://www.fhwa.dot.gov/planning/congestion_management_process/cmp_guidebook/cmpguidebk.pdf

[6] https://compassidaho.org/wp-content/uploads/2022CongestionManagementSystemTechnicalDocument.pdf

Strategy Highlight: Signal Timing Optimization

In 2023 the City of Nampa identified degrading performance and heavy PM peak hour queuing on Northside Boulevard southbound from Karcher Road to 3rd Street. Traffic operations staff at the City of Nampa identified a signal timing modification as a strategy to improve operations. Using travel time data from INRIX, COMPASS was able to analyze the effects the signal timing modifications had on average travel speeds of the troubled segment of Northside Boulevard. Figure 17 demonstrates significant improvements in average travel speeds (orange line) after signal timing modifications were performed. This demonstrates that low-cost operational adjustments can have significant impacts on congestion.

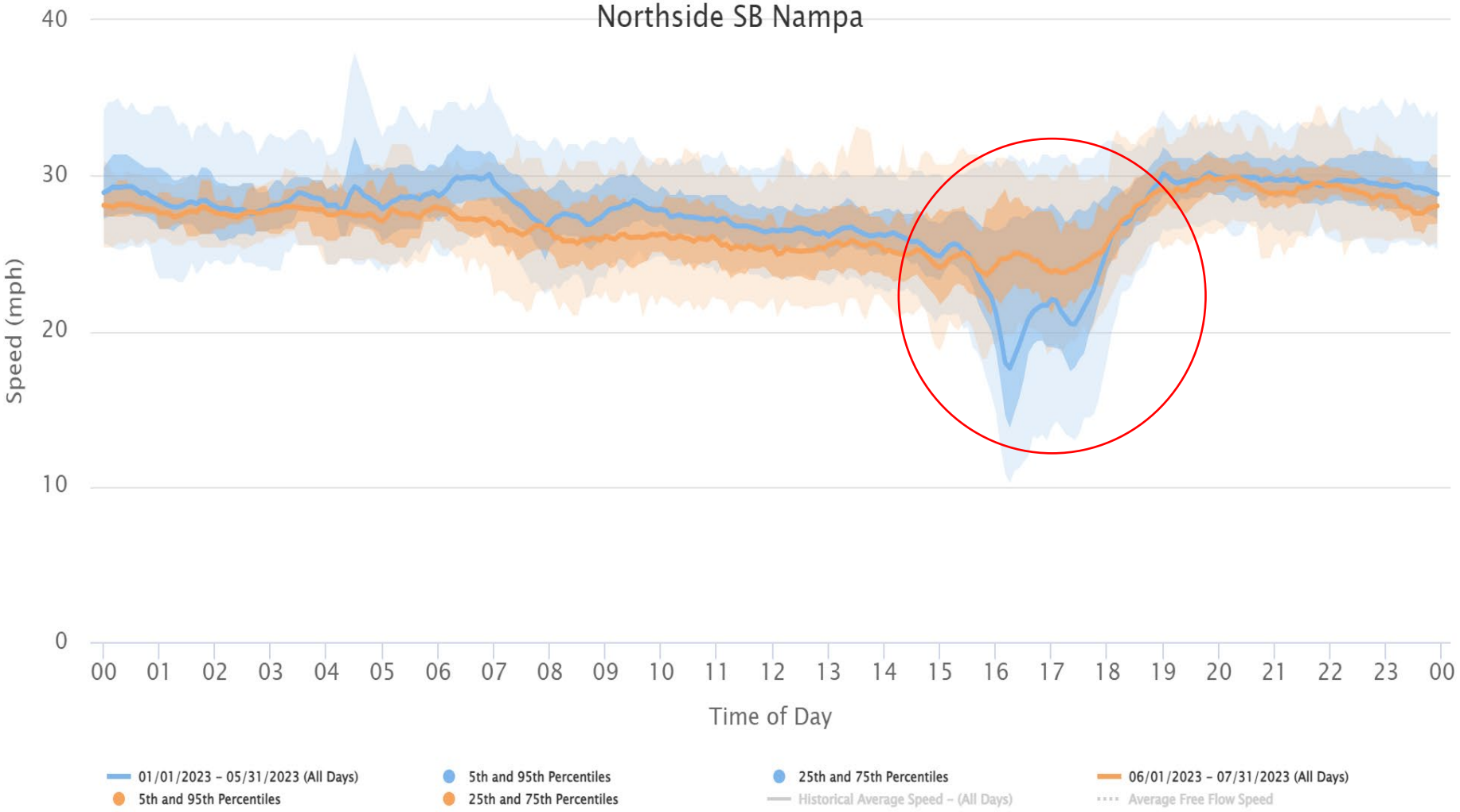

Figure 17: Before and After Effects of Signal Timing Modifications on Average Travel Speeds on Southbound Northside Boulevard from Karcher Road to 3rd Street. (2023)

Programmed (Budgeted) Congestion Reduction/Mitigation Projects

The TIP is a collection of projects selected by COMPASS to benefit the transportation system in Ada and Canyon Counties. Multiple projects programmed (budgeted) in the FY2024-2030 TIP are designed to help mitigate congestion (Figure 18 and Table 8). The current program includes nearly $1 billion aimed at managing congestion. The most common congestion management strategies in the program are improvements to active transportation infrastructure (Travel Demand Management) and roadway capacity. Roughly 70% of the funds are allocated towards roadway capacity improvements (Table 8). Many of the projects in the TIP incorporate more than one congestion management strategy. The impacts of large-scale congestion mitigation projects on the transportation network will be evaluated in subsequent CMP reports. You can find the most current TIP with detailed project information and archived TIPs at https://compassidaho.org/transportation-improvement-program/.

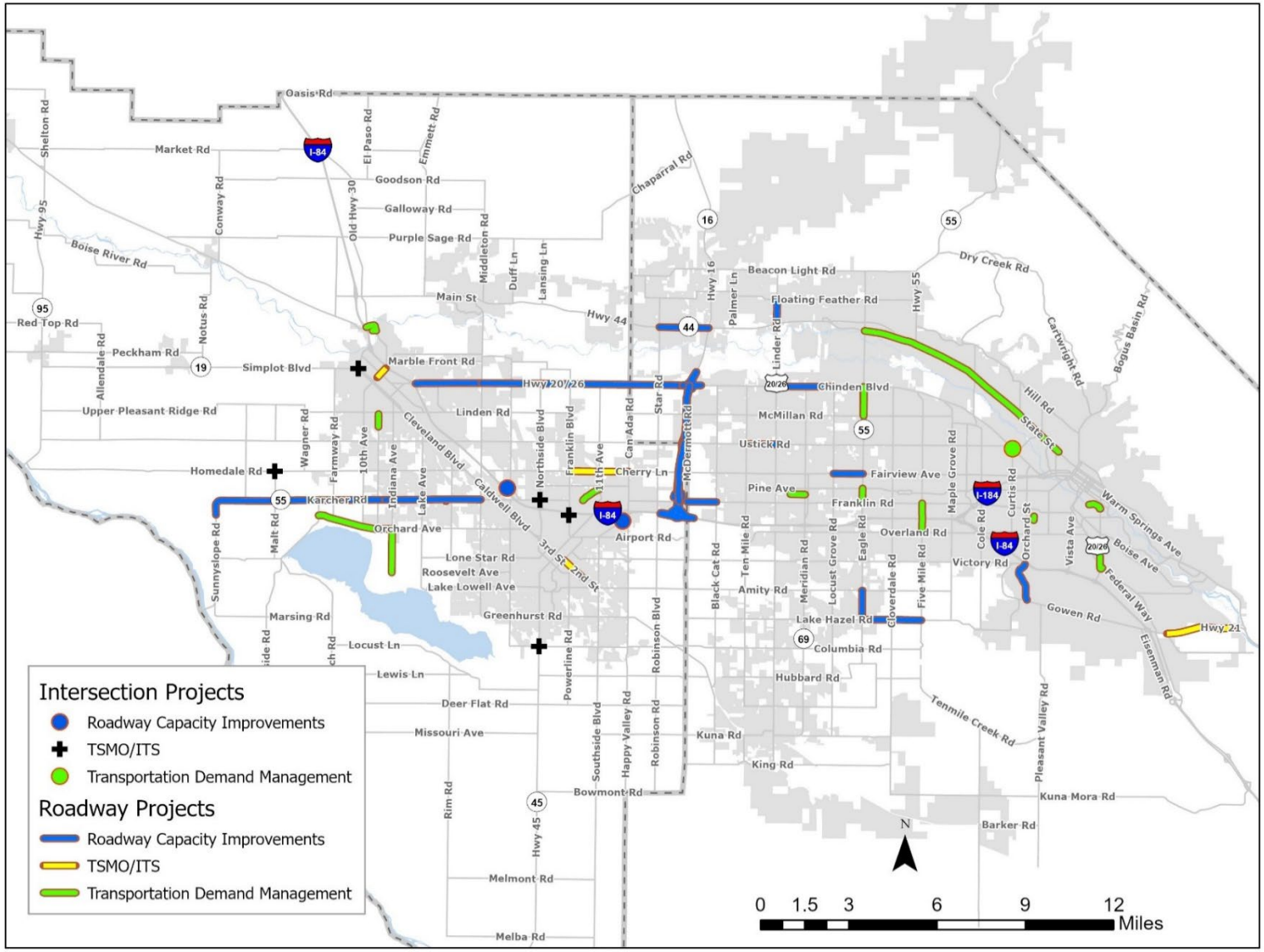

Figure 18: Programmed Congestion Mitigation Projects, FY2024-2030 TIP (*several capacity improvements also include TDM and TSMO/ITS strategies)

Table 8: Number of Projects and Programmed Dollars in the FY2024-2030 TIP for Congestion Management Strategies

Congestion Management Strategy*	Number of Projects Supportive of Strategy**	Dollars programmed in the FY2024-2030 TIP
Roadway Capacity Improvements	38	$694,530,000
Transit Operation Improvements	16	$83,404,000
TDM/Active Transportation	43	$120,151,000
TSMO/ITS	13	$95,939,000
Freight and Goods Mobility	1	$2,685,000
Total		$996,709,000

*Many projects include multiple congestion management strategies; programmed dollars are divided equally across each strategy where this is applicable.

**Total number of projects that are supportive of specific congestion management strategy; not all projects in the FY2024-2030 TIP include congestion management strategies.

Appendix
Detailed Corridor Congestion Analyses

I-84

I-84 Speed Profiles

Over the past five years of data, the speed trends on I-84 have remained consistent, but average speeds have increased from the Centennial Way interchange in the City of Caldwell and the Flying Wye interchange with I-184 in the City of Boise (Figure 19 and Figure 20). In 2023, the average speed was about 55 mph during the morning (eastbound) and about 57 mph during the evening (westbound) commutes. Speeds have likely increased due to completed capacity improvements on the interstate.

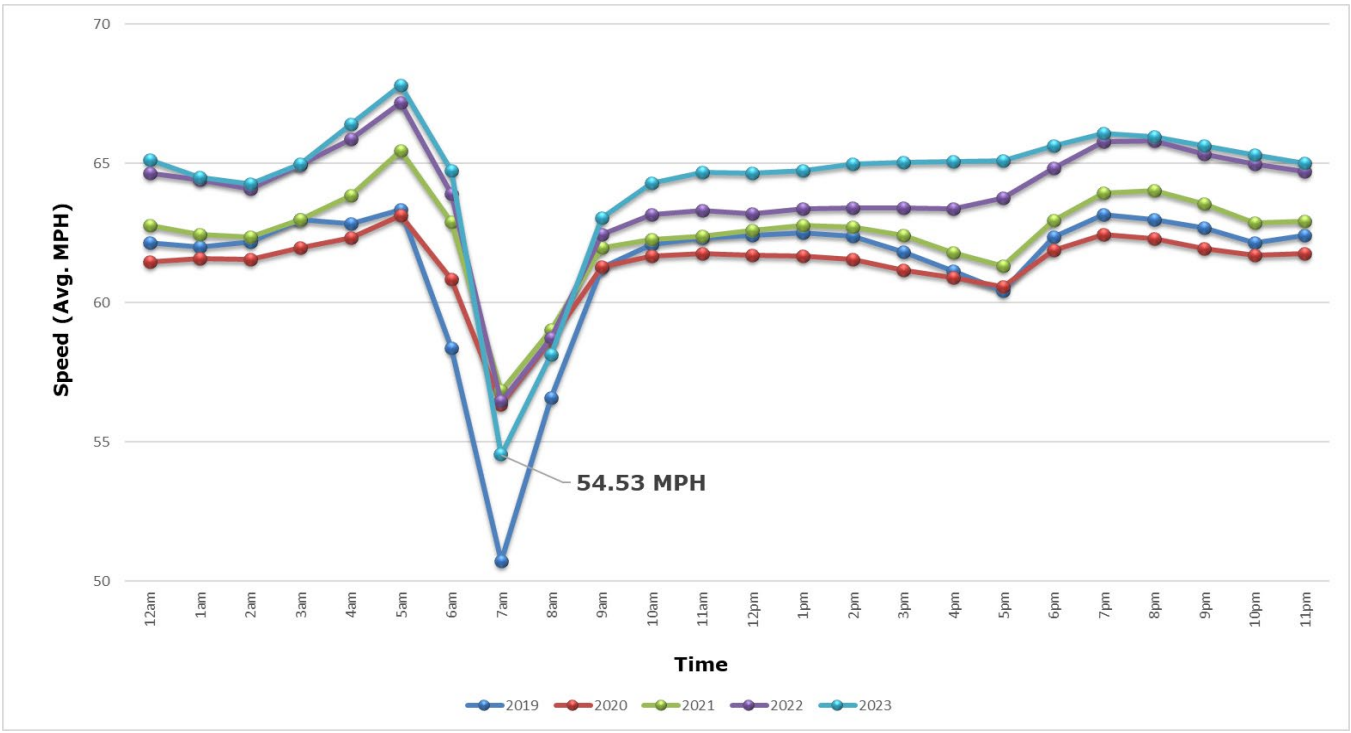

Figure 19: I-84 Eastbound (Centennial Way Interchange to Flying Wye Interchange I-184), Average Weekday Speeds (2019 – 2023)

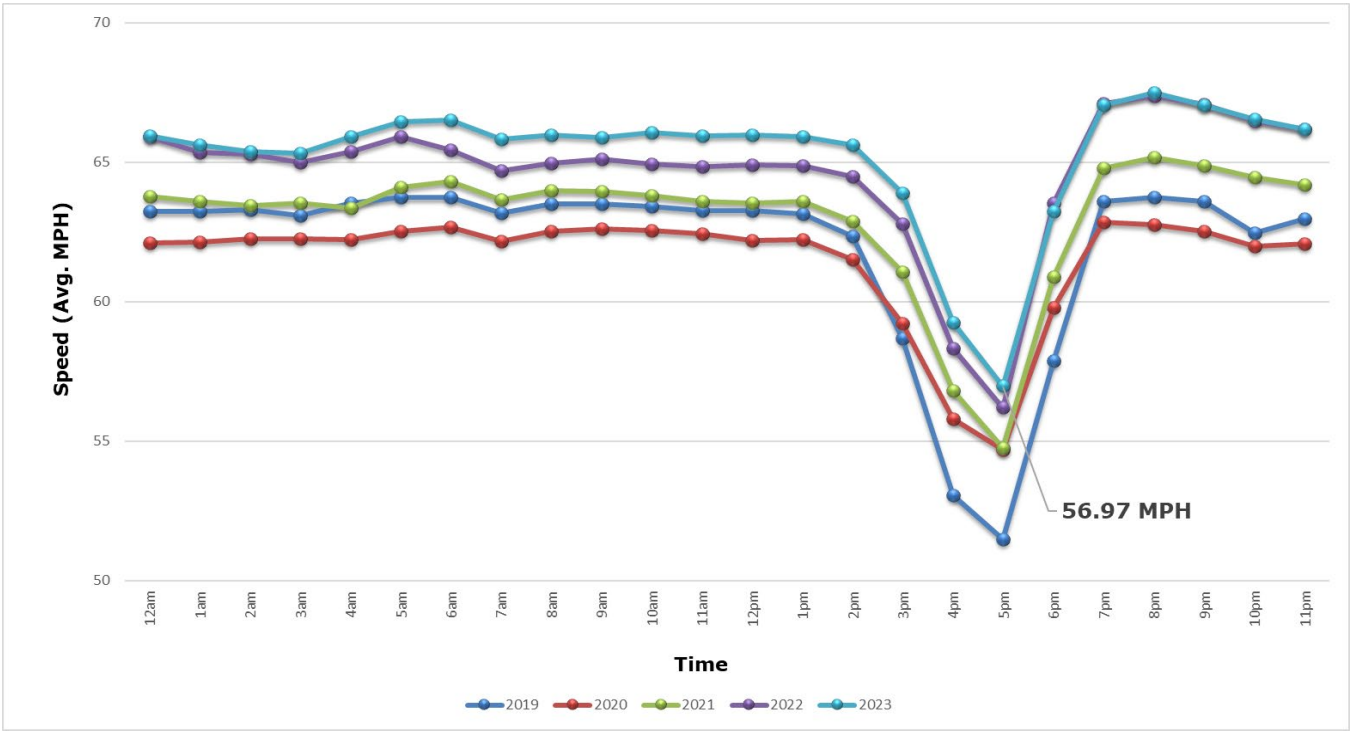

Figure 20: I-84 Westbound (Flying Wye Interchange I-184 to Centennial Way Interchange), Average Weekday Speeds (2019 – 2023)

I-84 Congestion Analysis and Congestion Mitigation Strategies

I-84 has seen a modest average growth rate in traffic volumes over the past five years. Speed profiles, TTI, and level of reliability measures show that overall I-84 performed well in 2023. I-84 experiences most of its congestion issues near the City of Nampa between the Karcher Road interchange and the Garrity Boulevard interchange and at the Wye interchange with I-184 (Figure 21). One probable cause of congestion in the Nampa area is a large construction project to add additional capacity that began in 2020 and still underway. The programmed and planned projects for this section of I-84 are highlighted in Table 9.

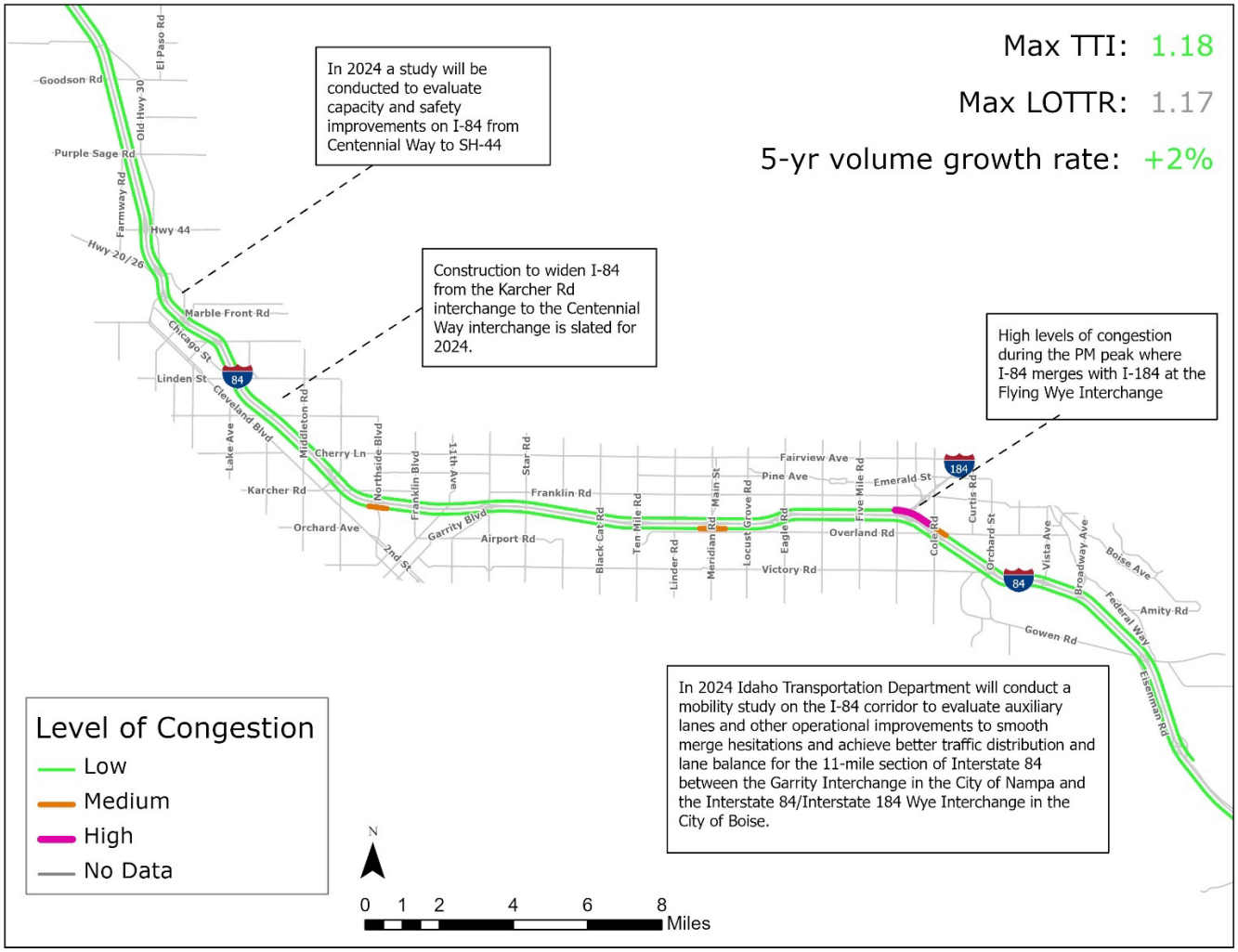

Figure 21: I-84 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2023)

Table 9: I-84 Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management	✓ ACHD Commuteride		
TSMO/ITS	✓ I-84 Mobility Study		
Public Transportation Improvements			✓ New and extended services
Additional System Capacity	✓ Widen I-84 to 3 lanes in each direction between Karcher Rd interchange (Exit 33) and Franklin Blvd interchange (Exit 27)		✓ Widen I-84 to 3 lanes in each direction between Centennial Way (Exit 27) and SH 44 (Exit 25)

I-184

I-184 Speed Profiles

The average weekday speed profiles for the section of I-184 from the Flying Wye to its terminus about one mile west of the 15th / Front Street intersection show speeds decrease during the morning (eastbound) and evening (westbound) peak hours (Figure 22 and Figure 23).

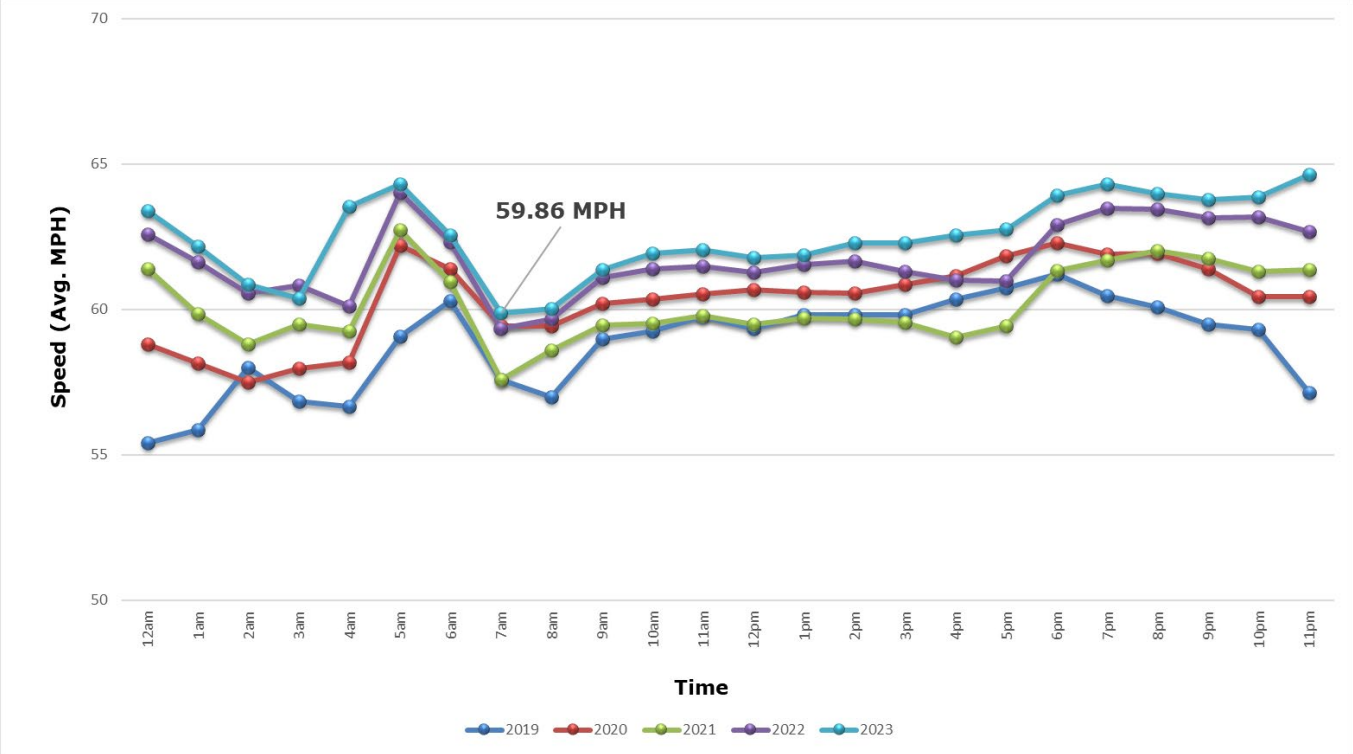

Figure 22: I-184 Eastbound, Average Weekday Speeds (2019 – 2023)

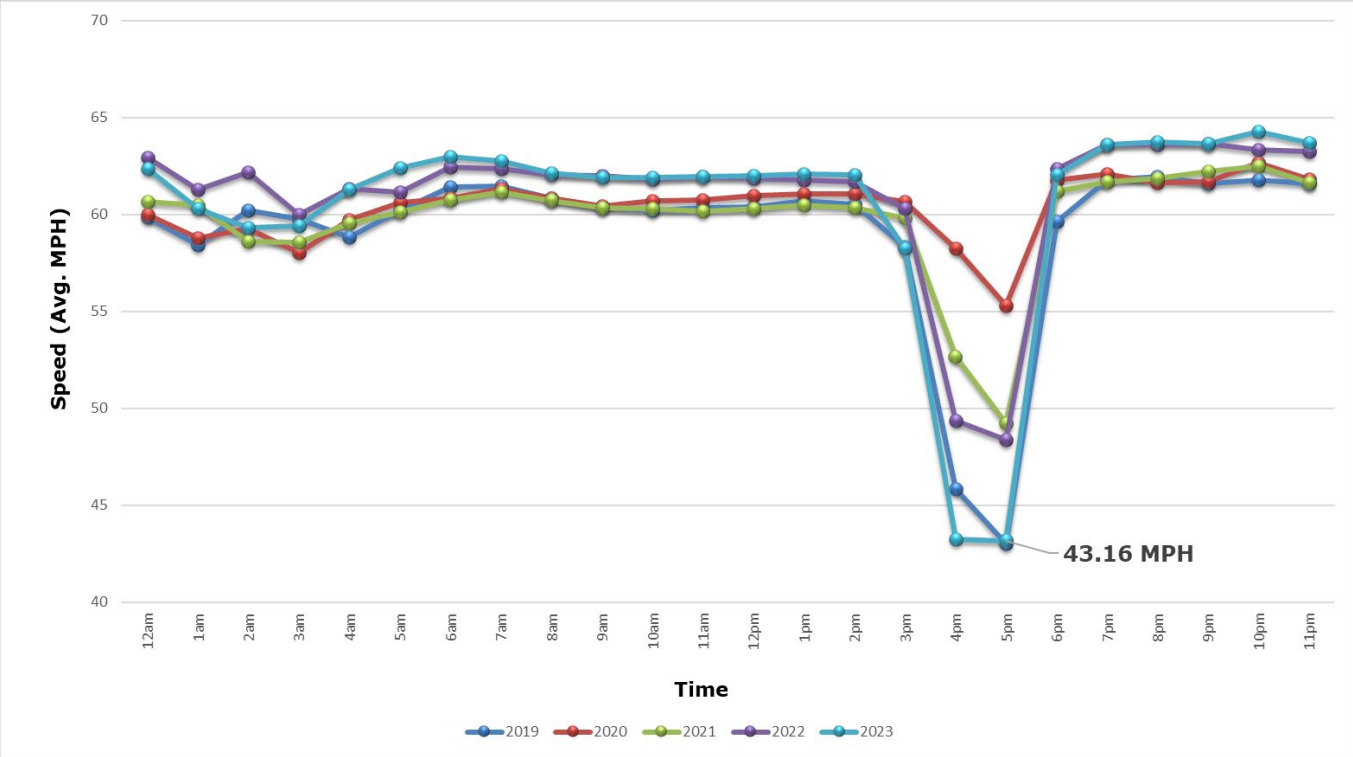

Figure 23: I-184 Westbound, Average Weekday Speeds (2019 – 2023)

I-184 Congestion Analysis and Congestion Mitigation Strategies

Congestion on I-184 typically occurs in the westbound direction during the evening commute where I-184 merges with I-84 (Figure 24). This is caused by commuters leaving the City of Boise at the end of the work day. I-184 was the only corridor in this report that has a decreasing five-year average growth rate; speed profiles show that there were overall higher average speeds throughout the day in 2022 and 2023. The programmed and planned projects for I-184 are highlighted in Table 10.

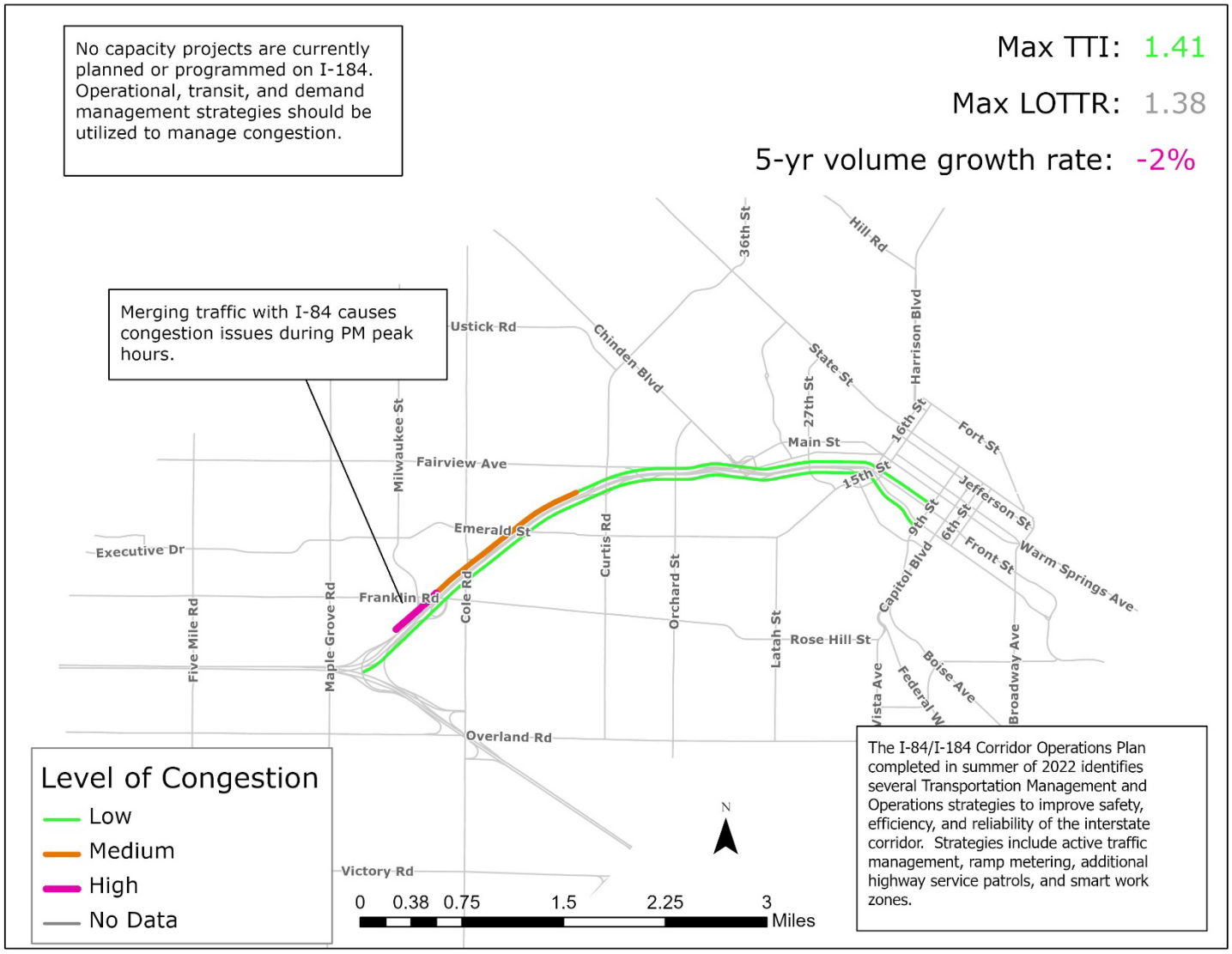

Figure 24: I-184 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2023)

Table 10: I-184 Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management	✓ ACHD Commuteride		
TSMO/ITS			
Public Transportation Improvements			✓ Planned new and extended services
Additional System Capacity			

US 20/26

US 20/26 Speed Profiles

The US 20/26 speed profiles are broken into five different sections to account for different roadway characteristics along the corridor. The sections below are shown in order from west to east.

US 20/26: I-84 (Exit 29) to State Highway 55 (Eagle Road)

US 20/26 from I-84 (Exit 29) to State Highway 55 (Eagle Road) exhibits predictable morning and afternoon slowdowns. The speed trends match the typical AM eastbound and PM westbound commute patterns seen across the region (Figure 25 and Figure 26). In 2023 speeds on average were slightly slower than those observed in 2022.

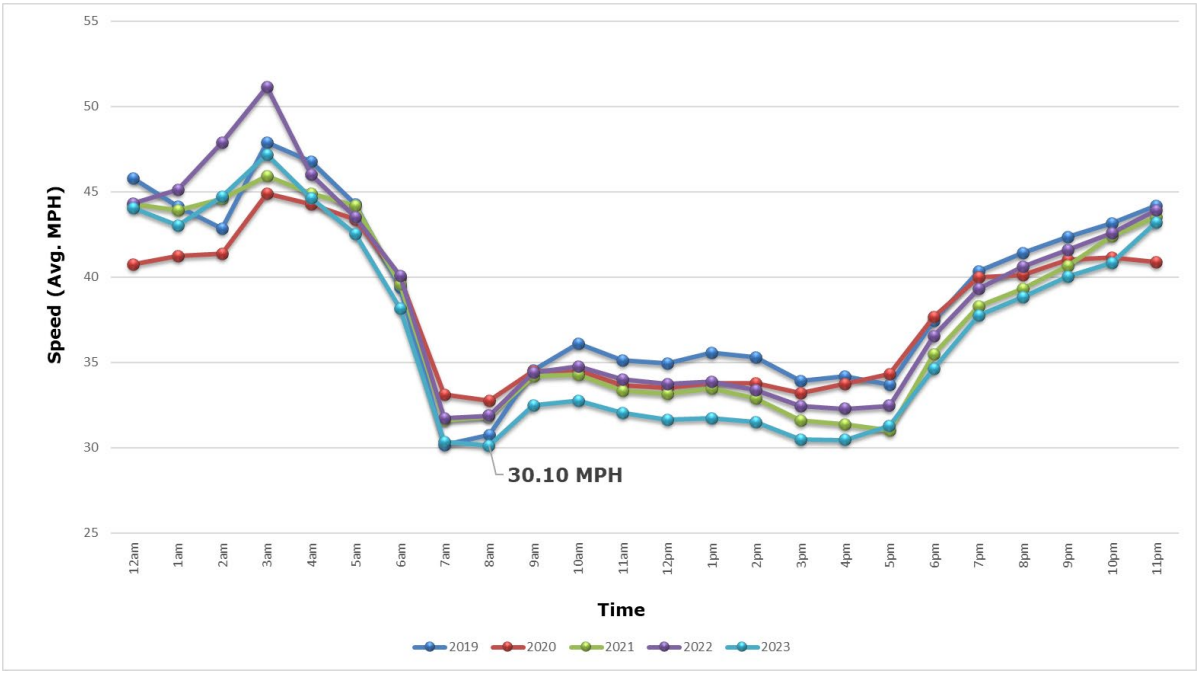

Figure 25: US 20/26 (I-84 to State Highway 55 [Eagle Road]) Eastbound, Average Weekday Speeds (2019 – 2023)

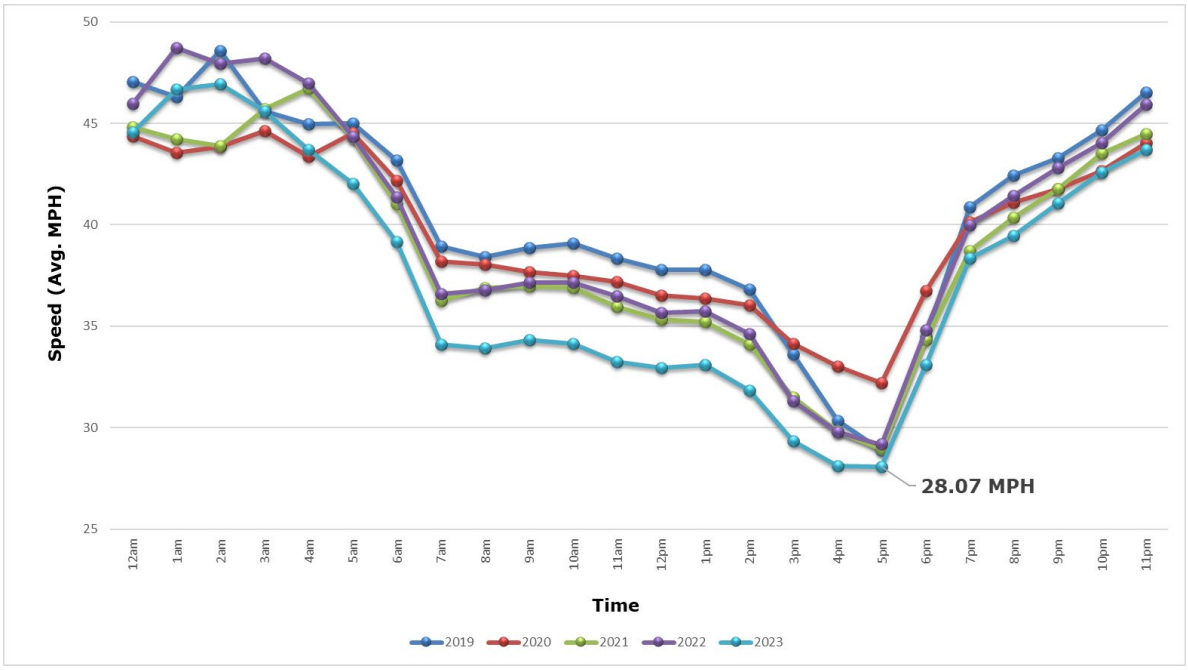

Figure 26: US 20/26 (State Highway 55 [Eagle Road] to I-84) Westbound, Average Weekday Speeds (2019 – 2023)

US 20/26 (Chinden Boulevard): State Highway 55 (Eagle Road) to Glenwood Street

The section of US 20/26 between State Highway 55 (Eagle Road) and Glenwood Street heading eastbound experiences a reduction in speeds beginning with the morning commute and continuing throughout typical business hours (Figure 27). The westbound direction sees the typical evening peak hour slowdown associated with an increase in commuters on the road (Figure 28). Also, the posted speed limit changes from 50 mph (west) to 35 mph (east) 0.25 miles west of Glenwood Street, which contributes to the overall average speed hovering near 30 mph.

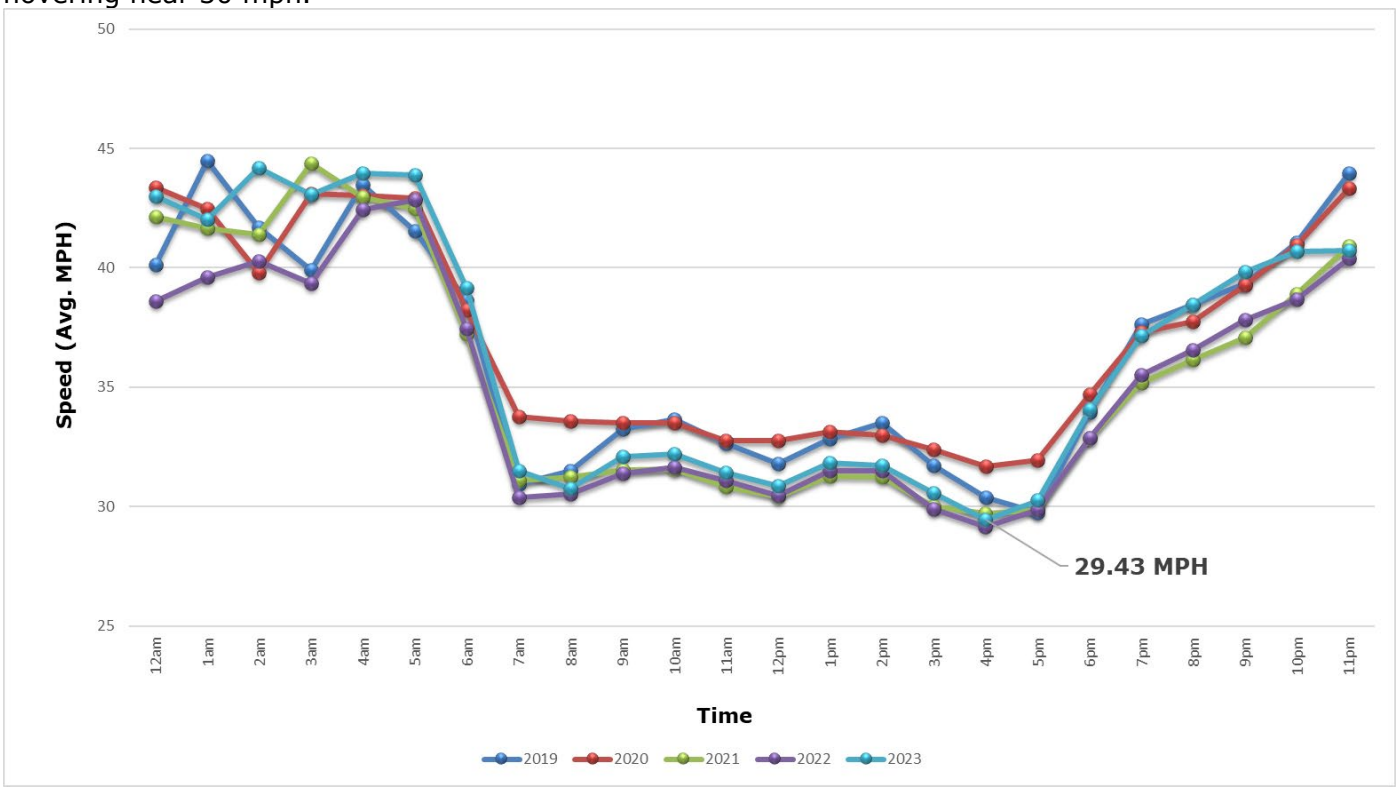

Figure 27: US 20/26 (State Highway 55 [Eagle Road] to Glenwood Street) Eastbound, Average Weekday Speeds (2019 – 2023)

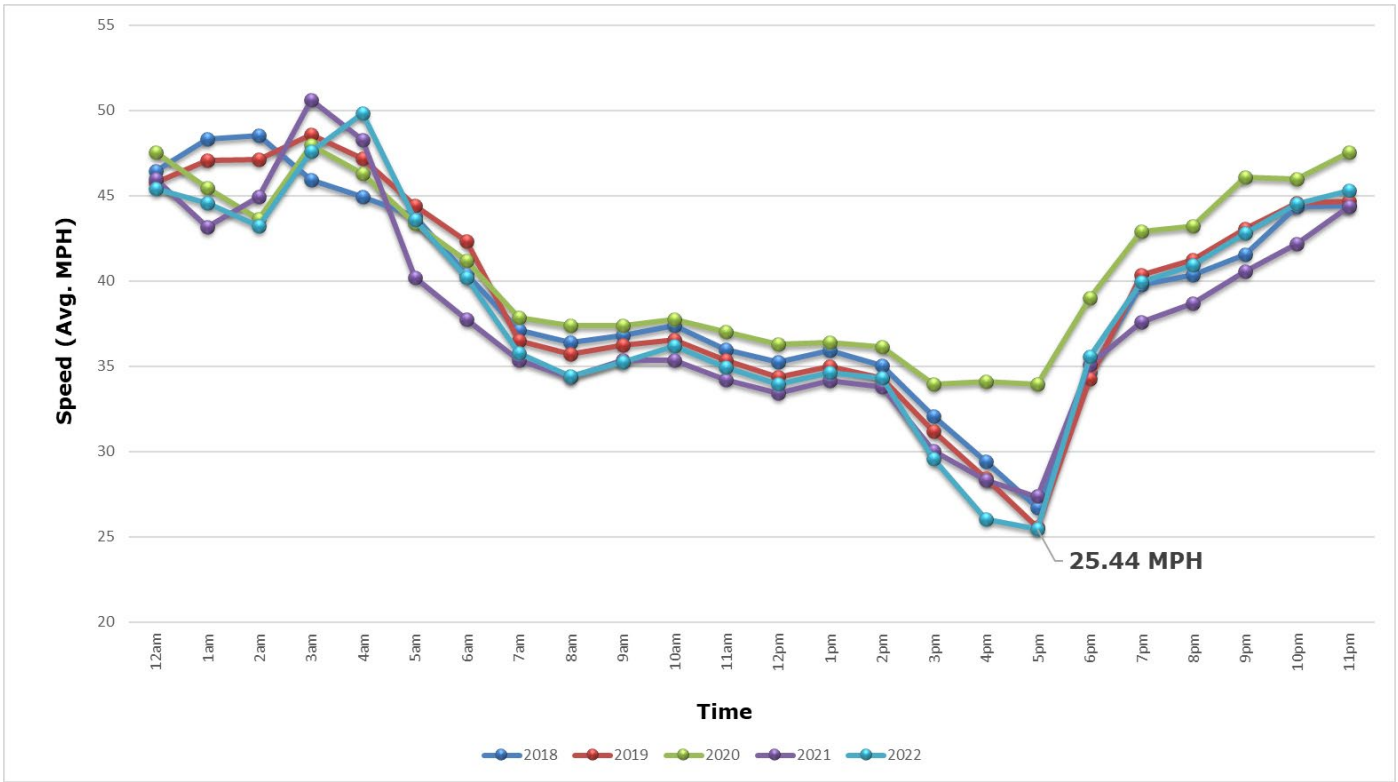

Figure 28: US 20/26 (Glenwood Street to State Highway 55 [Eagle Road]) Westbound, Average Weekday Speeds (2019 – 2023)

US 20/26 (Chinden Boulevard): Glenwood Street to I-184

The section of US 20/26 between Glenwood Street and I-184 heading eastbound sees a degradation in speeds starting with the morning commute and continuing through typical business hours (Figure 29). The westbound direction experiences the most dramatic slowdown, bottoming out at 22 mph, during the 4-5 pm hours (Figure 30).

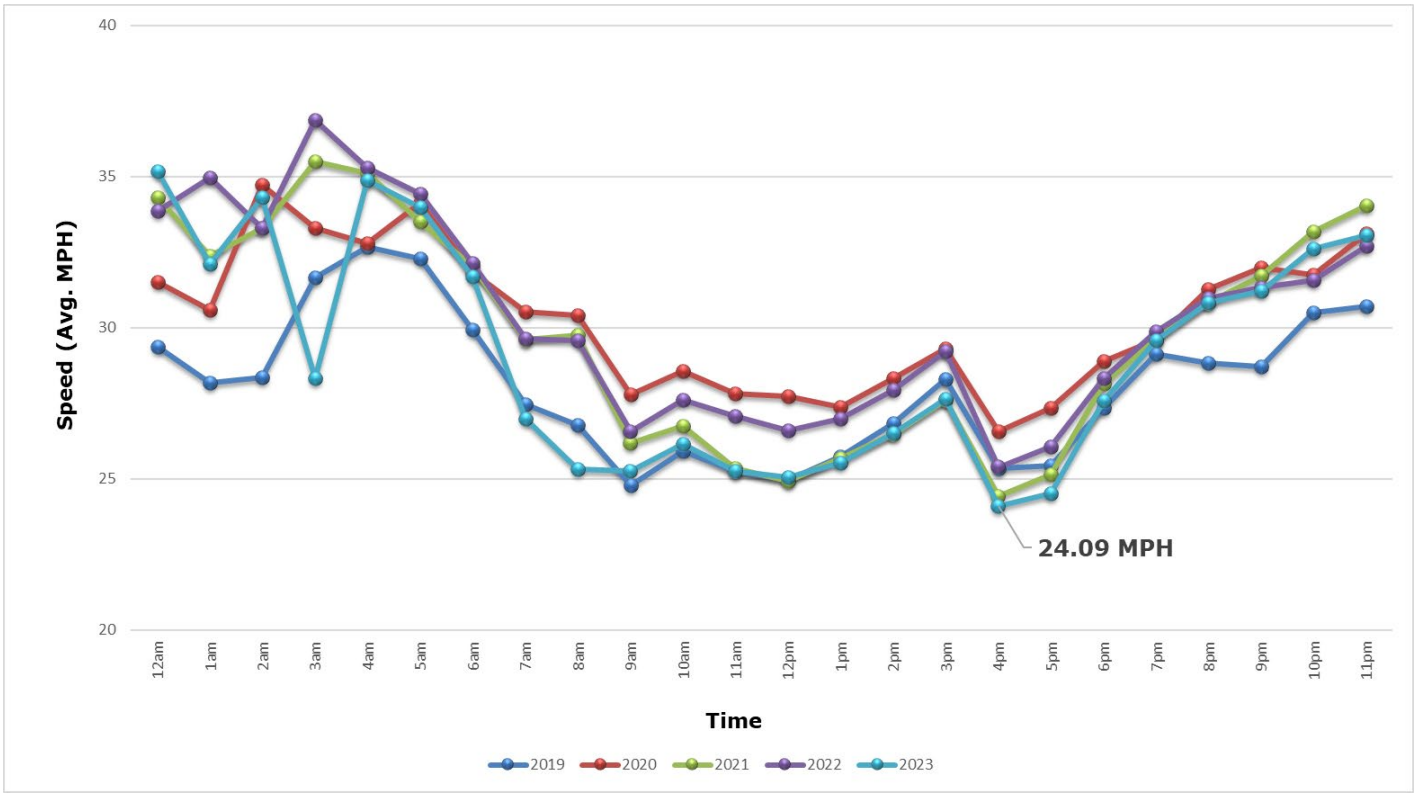

Figure 29: US 20/26 (Glenwood Street to I-184) Eastbound, Average Weekday Speeds (2019 – 2023)

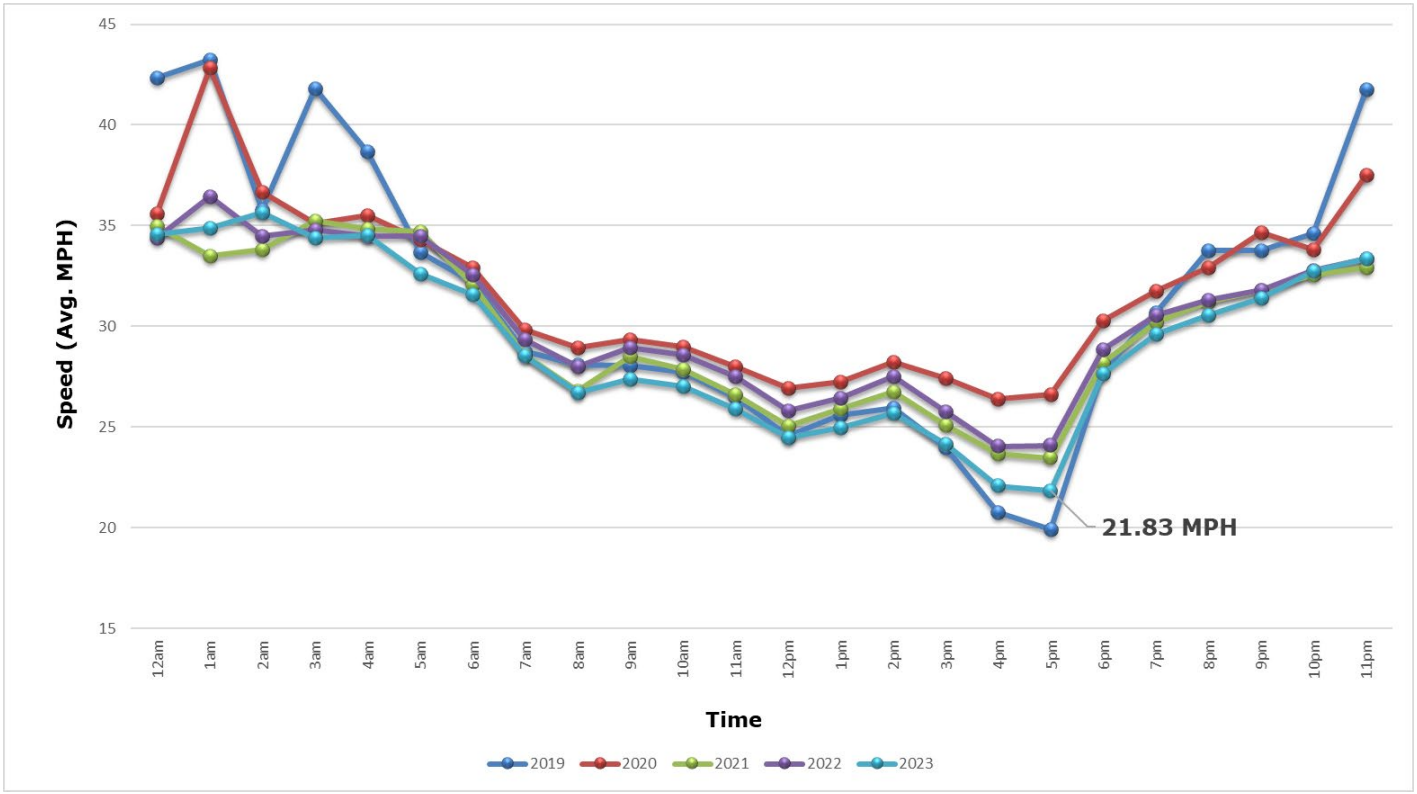

Figure 30: US 20/26 (I-184 to Glenwood Street) Westbound, Average Weekday Speeds (2019 – 2023)

US 20/26 (Front and Myrtle Streets): I-184 to Broadway Avenue

The section of US 20/26 through the urban center of the City of Boise tends to see a speed decrease during the morning peak hours that continues until after peak evening hours in the eastbound direction; westbound, this section experiences a gradual decrease in speed until reaching its slowest speeds at 4 pm (Figure 31 and Figure 32). The speed profiles in 2023 showed overall slower average speeds than 2022. The highway in this section is divided into two separate one-way thoroughfares providing access to downtown Boise. The fluctuations in speed are likely due to an increased volume during typical business hours and typical commute patterns of eastbound in the morning and westbound in the evening.

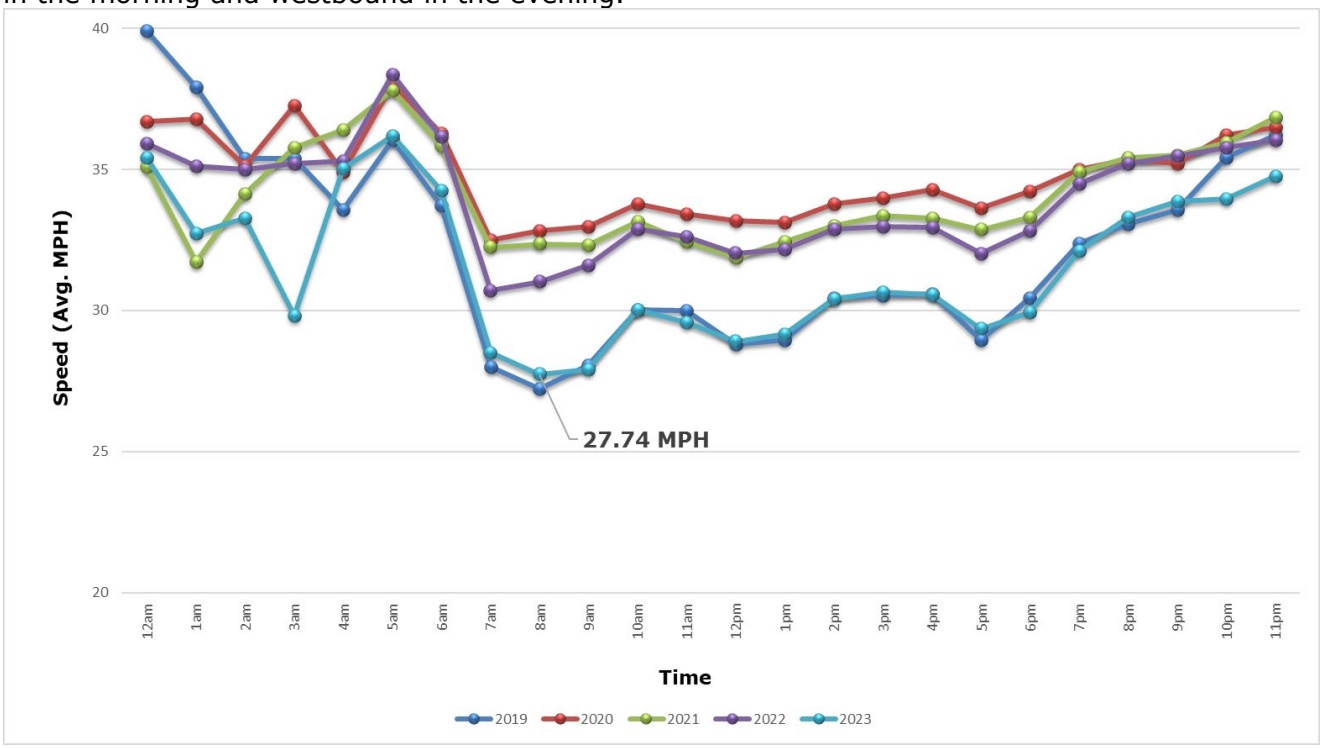

Figure 31: US 20/26 (I-184 to Broadway Avenue via Myrtle Street) Eastbound, Average Weekday Speeds (2019 – 2023)

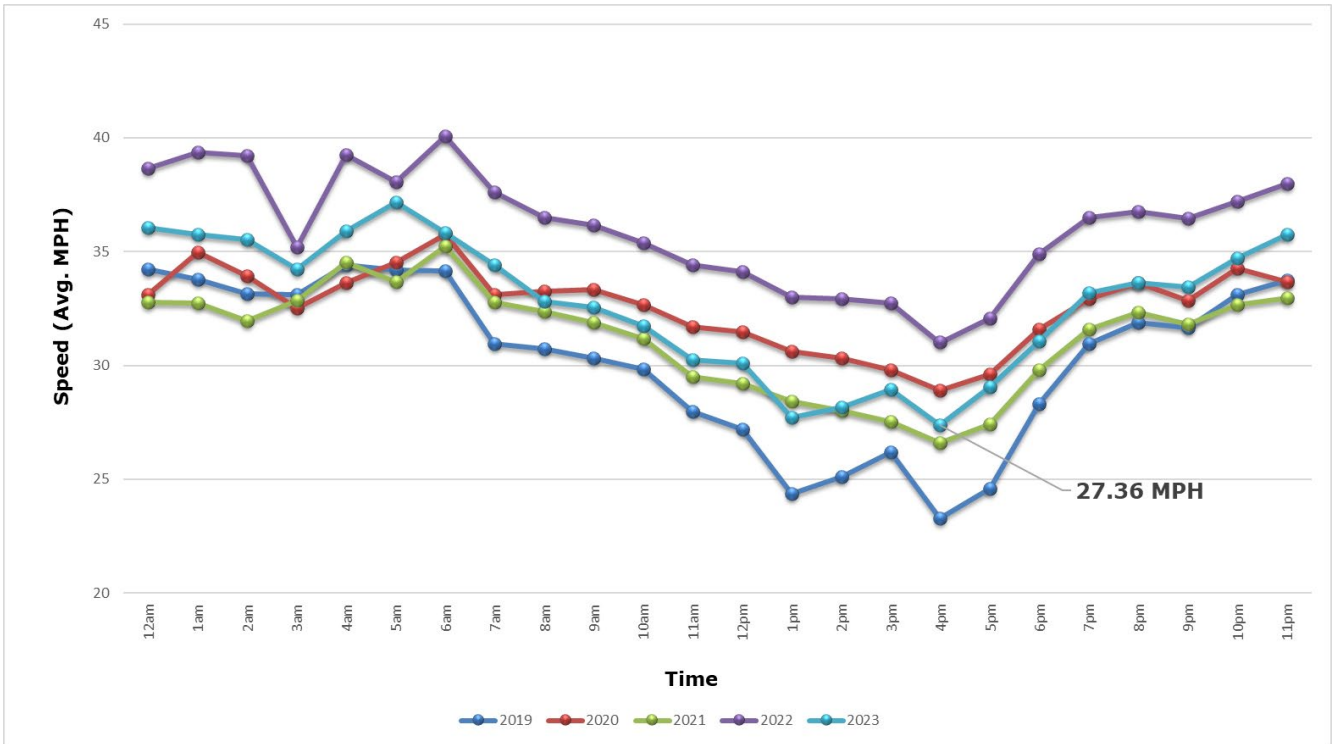

Figure 32: US 20/26 (Broadway Avenue to I-184 via Front Street) Westbound, Average Weekday Speeds (2019 – 2023)

US 20/26 (Broadway Avenue): Myrtle/Front Streets to I-84

US 20/26 (Broadway Avenue) from Front/Myrtle Streets to I-84 sees a slight drop in speeds from 8 am to 5 pm (Figure 33 and Figure 34). In a typical year there are minor slowdowns along the roadway during peak travel hours that are likely due congestion caused by commuters headed to some of the area's larger employers – St. Luke's Regional Medical Center and Boise State University. In 2023 the speed profiles show that the 3 pm hour typically experienced the slowest speeds in both directions. Overall, average speeds were slightly slower throughout the day in 2023, as compared to 2022.

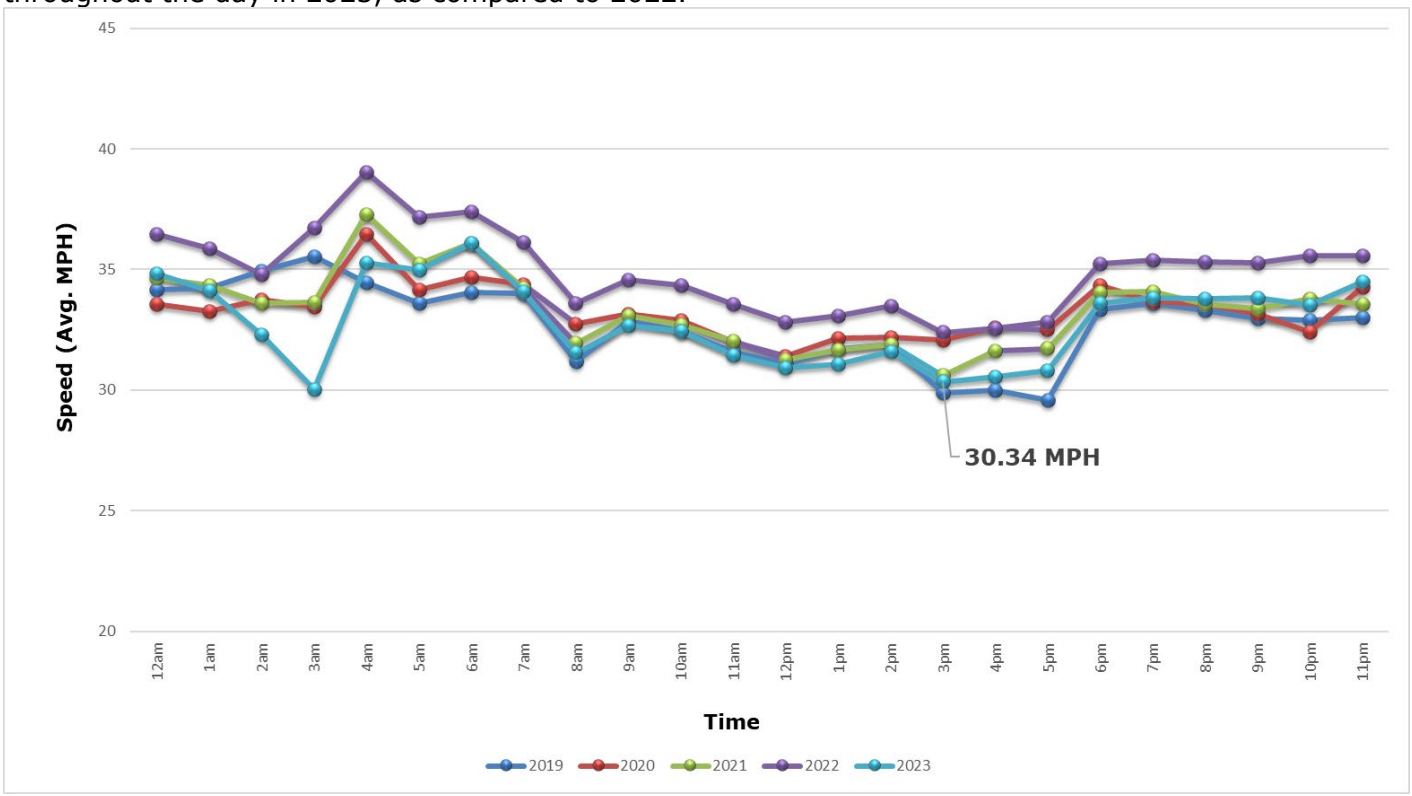

Figure 33: US 20/26 (Myrtle Street to I-84) Southbound, Average Weekday Speeds (2019 – 2023)

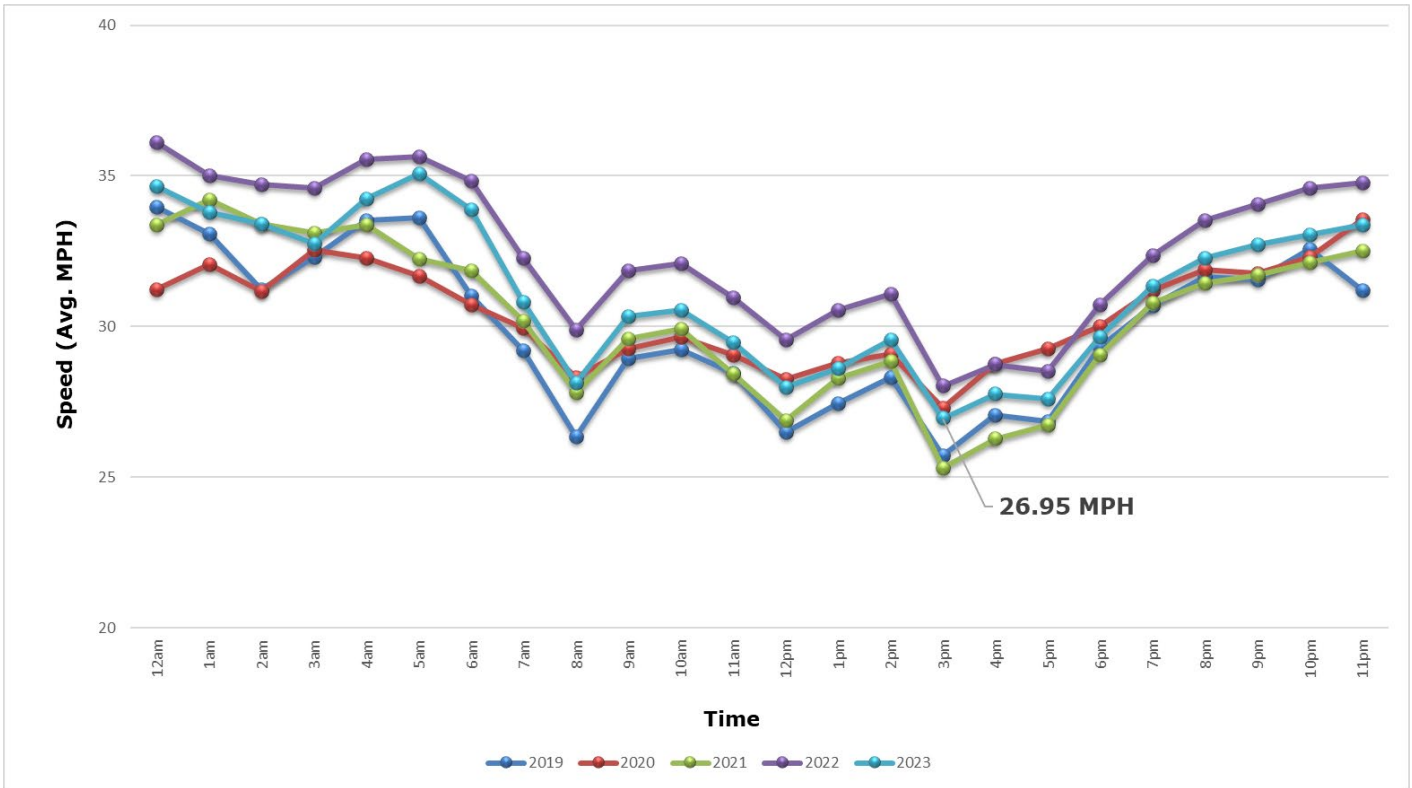

Figure 34: US 20/26 (I-84 to Front Street) Northbound, Average Weekday Speeds (2019 – 2023)

US-20/26 Congestion Analysis and Congestion Mitigation Strategies

US 20/26 is a main east/west thoroughfare in Ada and Canyon Counties. The corridor has capacity issues, high volume intersections, access management issues, and areas with heavy commercial/industrial land use, all of which contribute to congestion throughout the length of the corridor (Figure 35). The speed profiles show degradation in performance, especially on the west end of the corridor. Travel time index and reliability measures indicate moderate congestion is present throughout the corridor. COMPASS has identified a mix of congestion mitigation stratgies to apply on this complicated corridor. Programmed and planned projects are highlighted in Table 11.

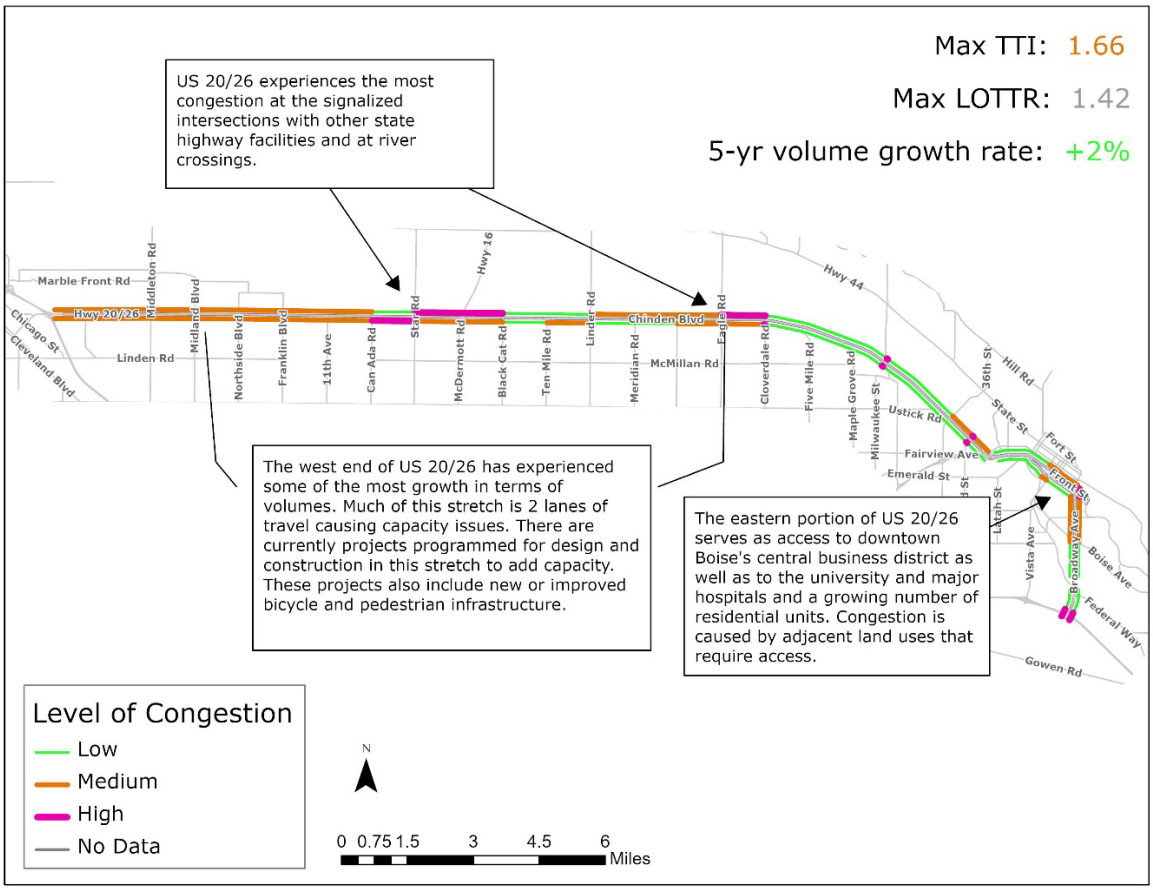

Figure 35: US 20/26 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2023)

Table 11: US 20/26 Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management	✓ ACHD Commuteride Active transportation improvements included in capacity projects		
TSMO/ITS		✓ Intersection improvements in Ada and Canyon Counties	
Public Transportation Improvements			✓ Planned new and extended services
Additional System Capacity	✓ Widening from 2 to 5 lanes from Middleton Road to Star Road	✓ Widening from 4 to 6 lanes from Middleton Road to Eagle Road	

State Highway 55 (Eagle Road)

State Highway 55 (Eagle Road) Speed Profiles

State Highway 55 (Eagle Road) experiences a steady decrease in speeds throughout the workday (Figure 36 and Figure 37). The slowest speeds are during the midday and evening peak hours in both directions. These dips are telling signs that this corridor serves as both a commuter corridor and a commercial corridor. The speed profile has remained consistent throughout the five-year period despite significant development activity along the corridor.

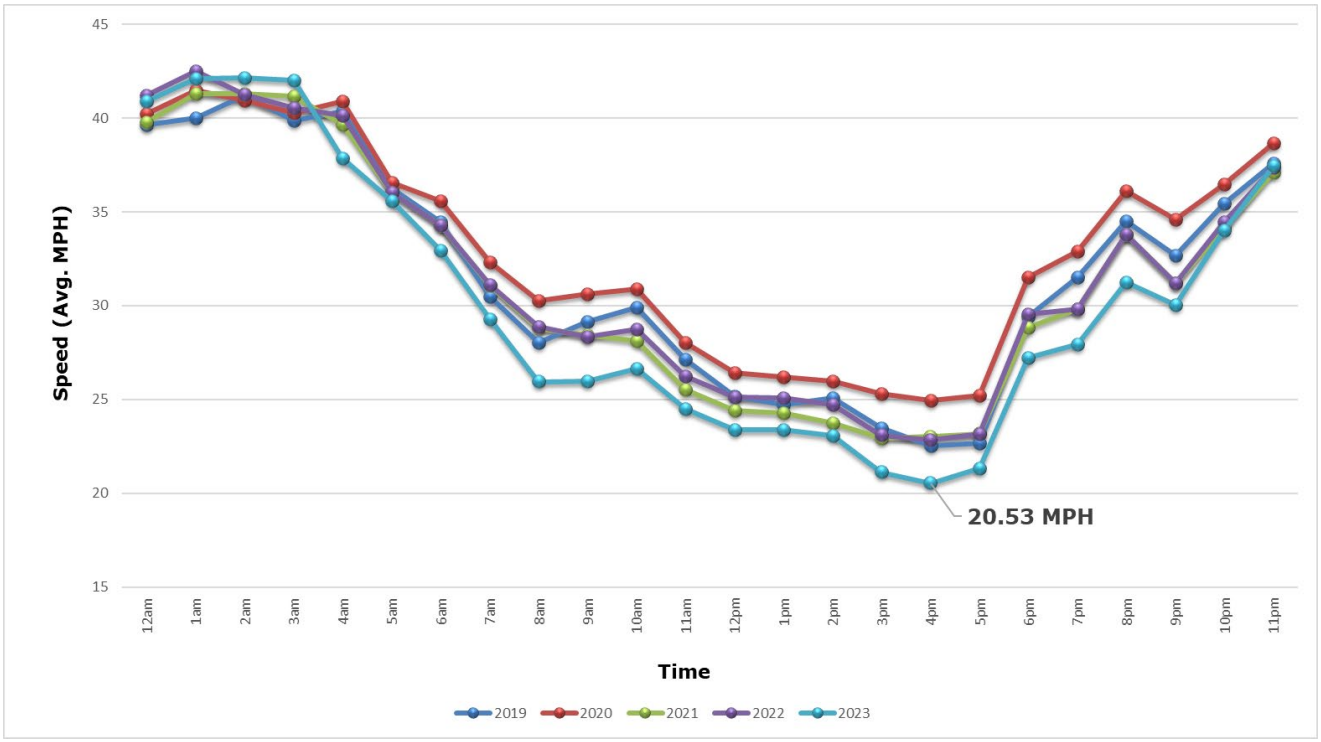

Figure 36: State Highway 55 (Eagle Road) Northbound, Average Weekday Speeds (2019 – 2023)

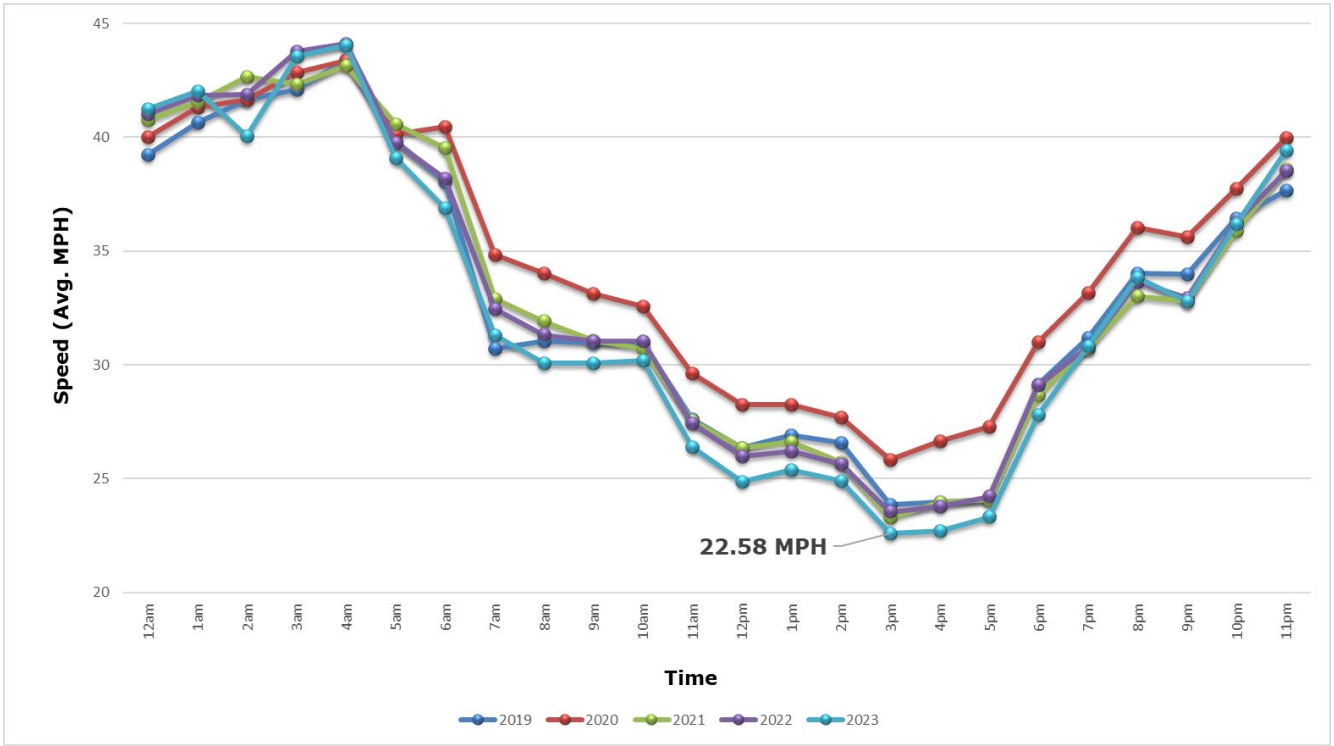

Figure 37: State Highway 55 (Eagle Road) Southbound, Average Weekday Speeds (2019 – 2023)

State Highway 55 (Eagle Road) Congestion Analysis and Congestion Mitigation Strategies

The State Highway 55 (Eagle Road) corridor experiences high levels of congestion caused by high traffic volumes, a variety of land uses, high volume intersections, and access management issues (Figure 38). This corridor has the overall highest intensity of congestion of the corridors analyzed as indicated via the TTI. The speed profiles also demonstrate a degradation in performance during the PM peak hours. Programmed and planned projects are highlighted in Table 12.

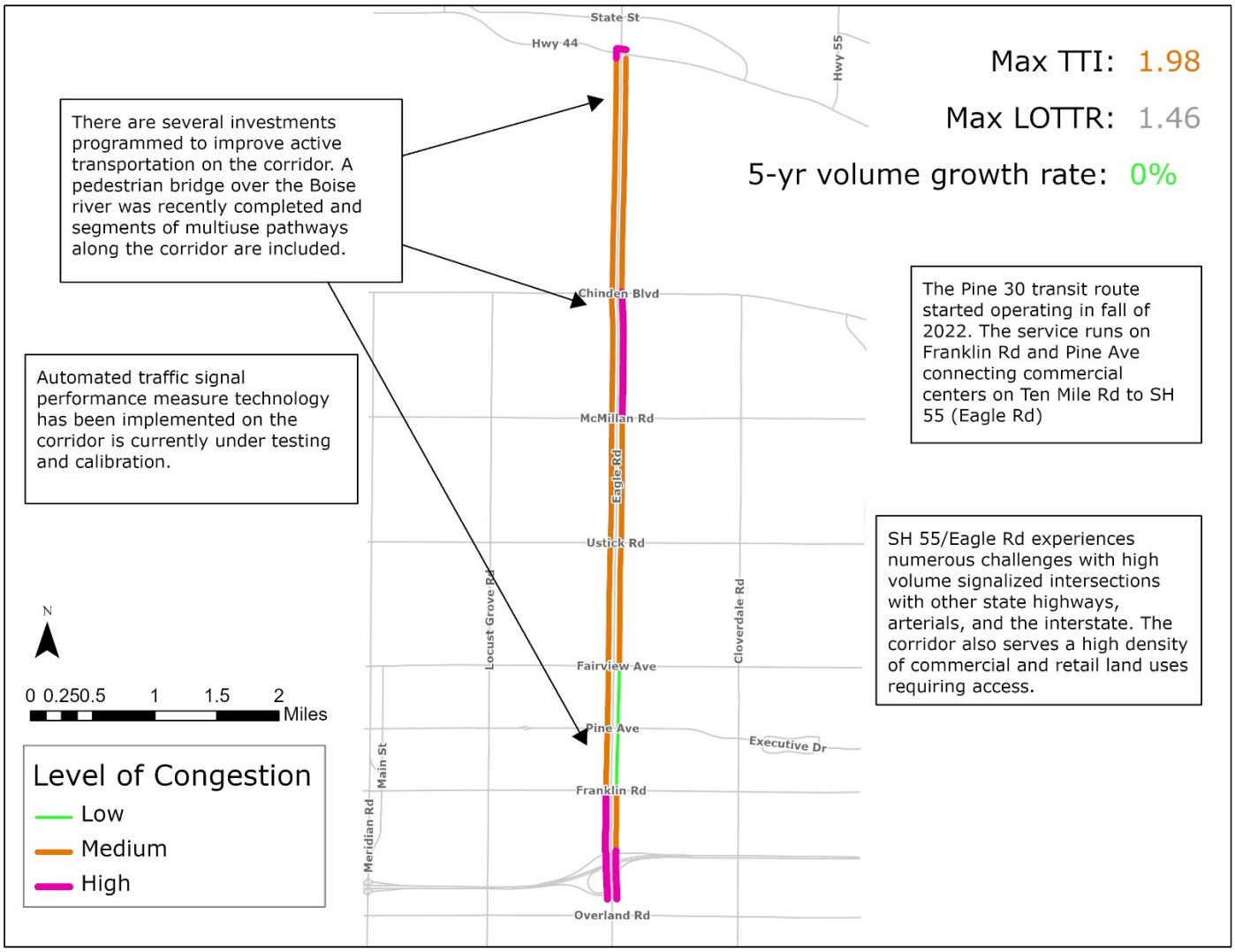

Figure 38: State Highway 55 (Eagle Road) Levels of Peak Hour Congestion, Causes of Congestion and Management Strategies (2023)

Table 12: State Highway 55 (Eagle Road) Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management	✓ ACHD Commuteride ✓ Pedestrian improvements from Franklin Rd to Pine Ave and McMillan Rd to US 20/26		
TSMO/ITS			
Public Transportation Improvements			✓ Planned new and extended services
Additional System Capacity			

State Highway 55 (Karcher Road)

State Highway 55 (Karcher Road) Speed Profiles

State Highway 55 (Karcher Road) experiences normal morning and evening peak hour travel delays. There is also a noticable drop in average speed throughout the workday (Figure 39 and Figure 40). The speed trends align with the prevailing commute pattern of people traveling eastbound in the morning and westbound in the evening.

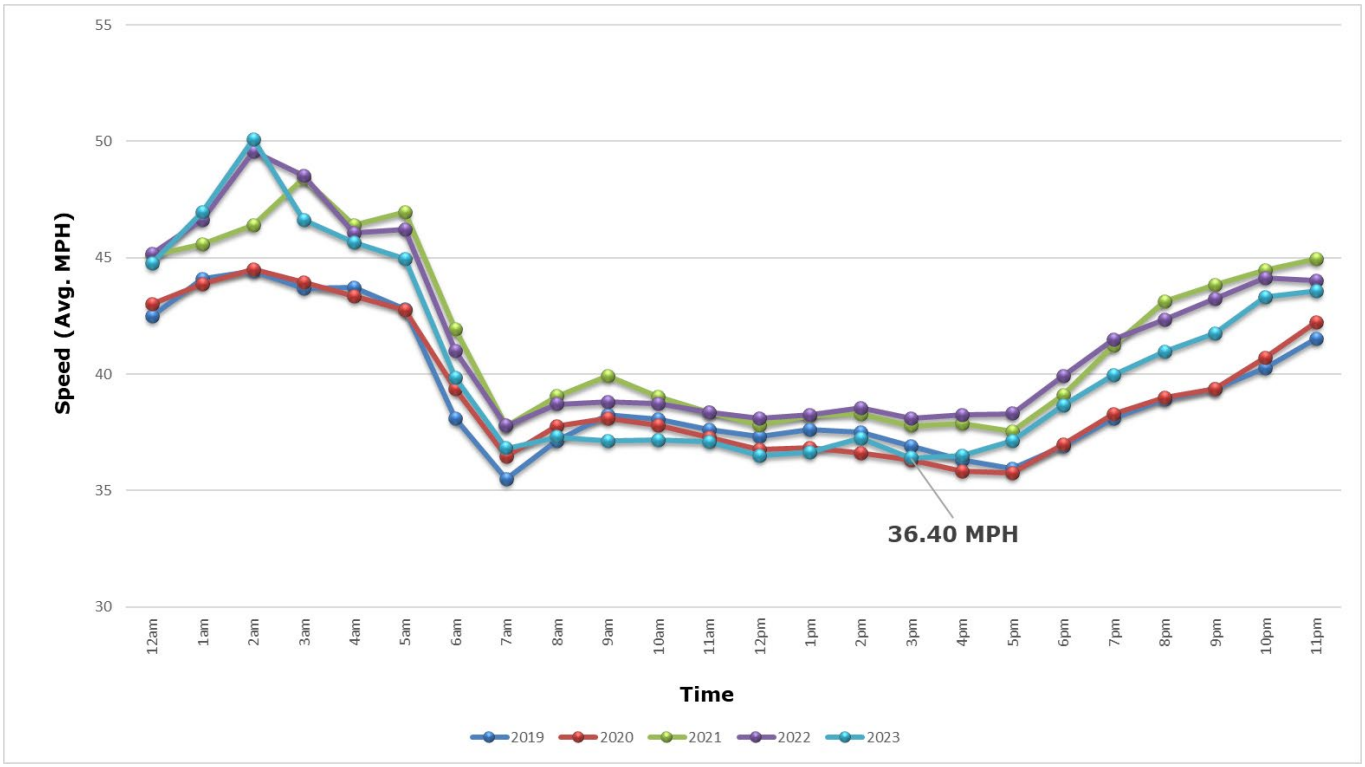

Figure 39: State Highway 55 (Karcher Road) Eastbound, Average Weekday Speeds (2019 – 2023)

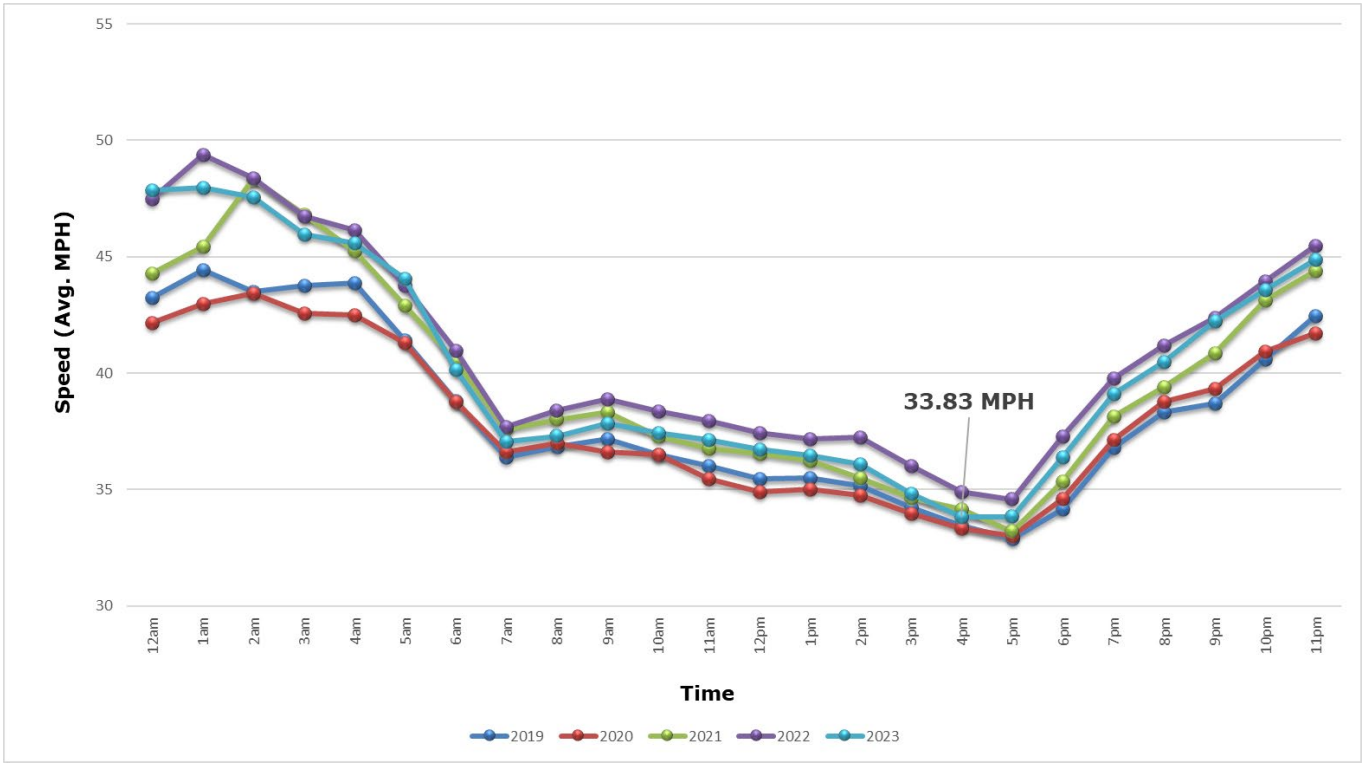

Figure 40: State Highway 55 (Karcher Road) Westbound, Average Weekday Speeds (2019 – 2023)

State Highway 55 (Karcher Road) Congestion Analysis and Congestion Mitigation Strategies

State Highway 55 (Karcher Road) experiences high peak hour congestion mainly in the urban areas surrounding the City of Nampa (Figure 41). The issues stem from a reduction in travel lanes from four to two at Middleton Road, commercial/retail land uses, and high-volume intersections at Nampa/Caldwell Boulevard and the I-84 interchange. This corridor has experienced a steady growth in traffic volume over the past five years. Programmed and planned projects are highlighted in Table 13.

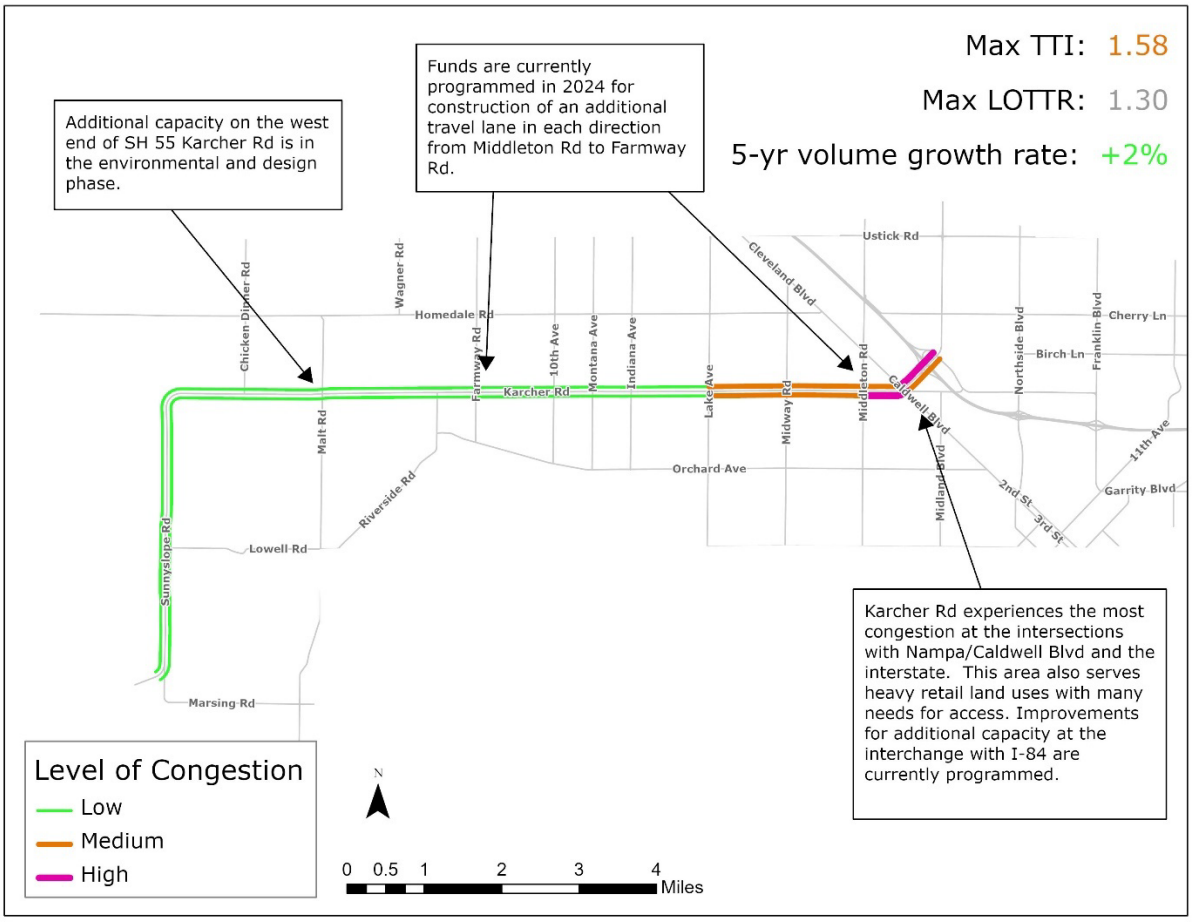

Figure 41: State Highway 55 (Karcher Road) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2023)

Table 13: State Highway 55 (Karcher Road) Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management			
TSMO/ITS			
Public Transportation Improvements			✓ Planned services
Additional System Capacity	✓ Add an additional lane in each direction on SH 55 (Karcher Rd) from Farmway Rd to Middleton Rd Design and right-of-way to widen Karcher interchange on I-84.	✓ Widen from 2 to 4 lanes from Pear Ln to Farmway Rd	

State Highway 44 (State St)

State Highway 44 (State Street)

The State Highway 44 (State Street) speed profiles are broken into two different sections to account for different roadway characteristics along the corridor. The sections below are shown in order from east to west. NPMRDS data on the corridor from Glenwood Street to downtown Boise were not available in 2023.

State Highway 44 (State Street): Glenwood Street to State Highway 16 Speed Profiles

This section of State Highway 44 (State Street) experiences a noticable drop in average speed throughout the workday (Figure 42 and Figure 43). The average speeds in 2023 were very on average slower than 2022.

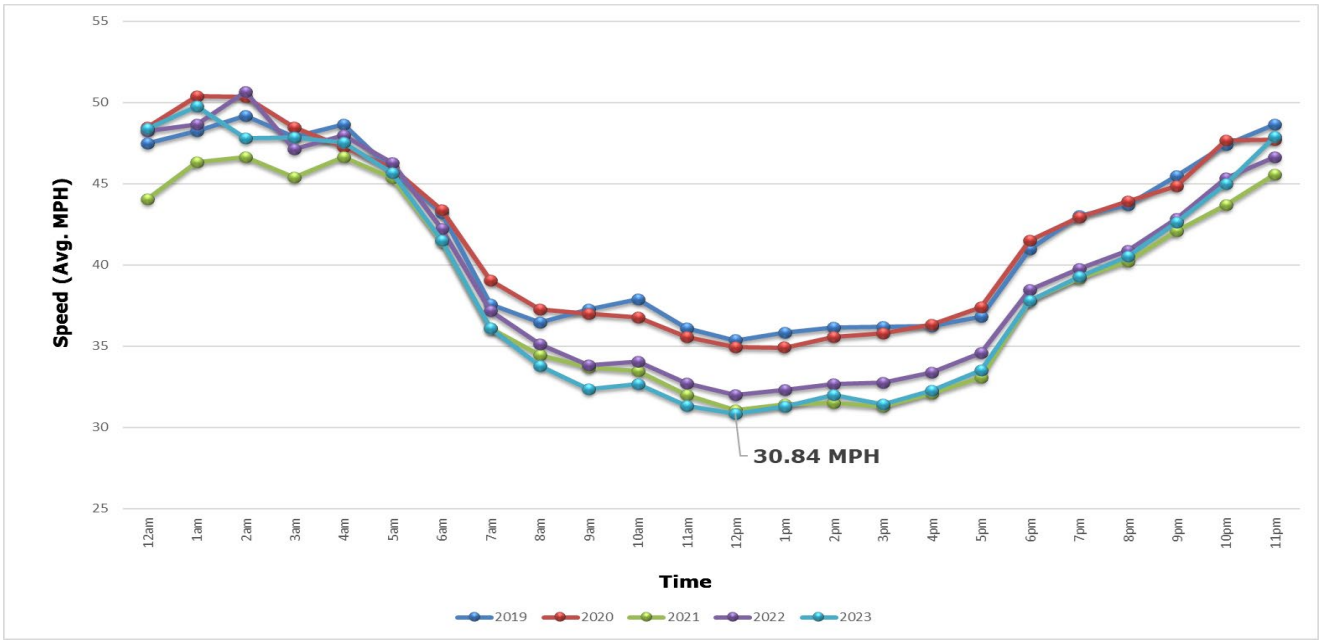

Figure 42: State Highway 44 (Glenwood Street to State Highway 16) Westbound, Average Weekday Speeds (2019-2023)

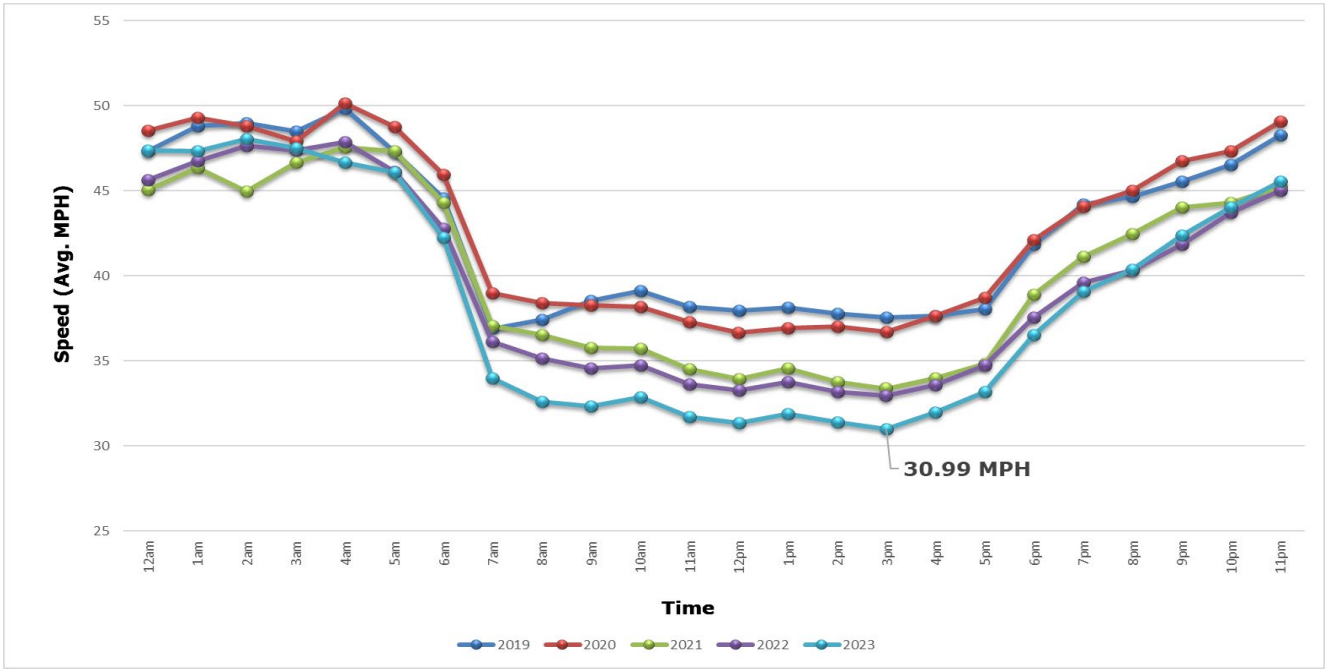

Figure 43: State Highway 44 (State Highway 16 to Glenwood Street) Eastbound, Average Weekday Speeds (2019-2023)

State Highway 44: State Highway 16 to I-84 Speed Profiles

This section of State Highway 44 (State Street) experienced slower speeds in 2023 than 2022, but demonstrated a similar trend with dips in speed during the morning/evening peak hours (Figure 44 and Figure 45).

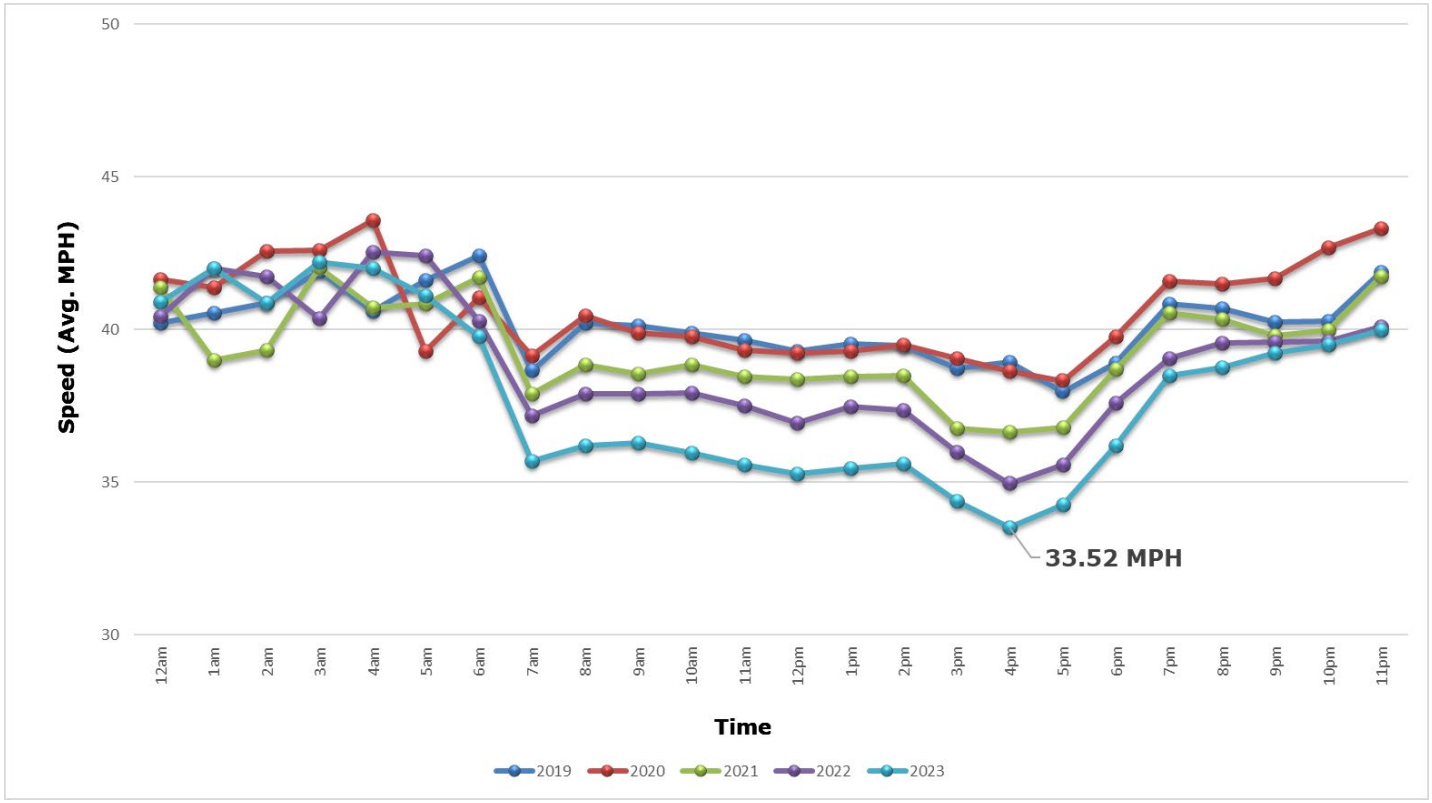

Figure 44: State Highway 44 (State Highway 16 to I-84) Westbound, Average Weekday Speeds (2019-2023)

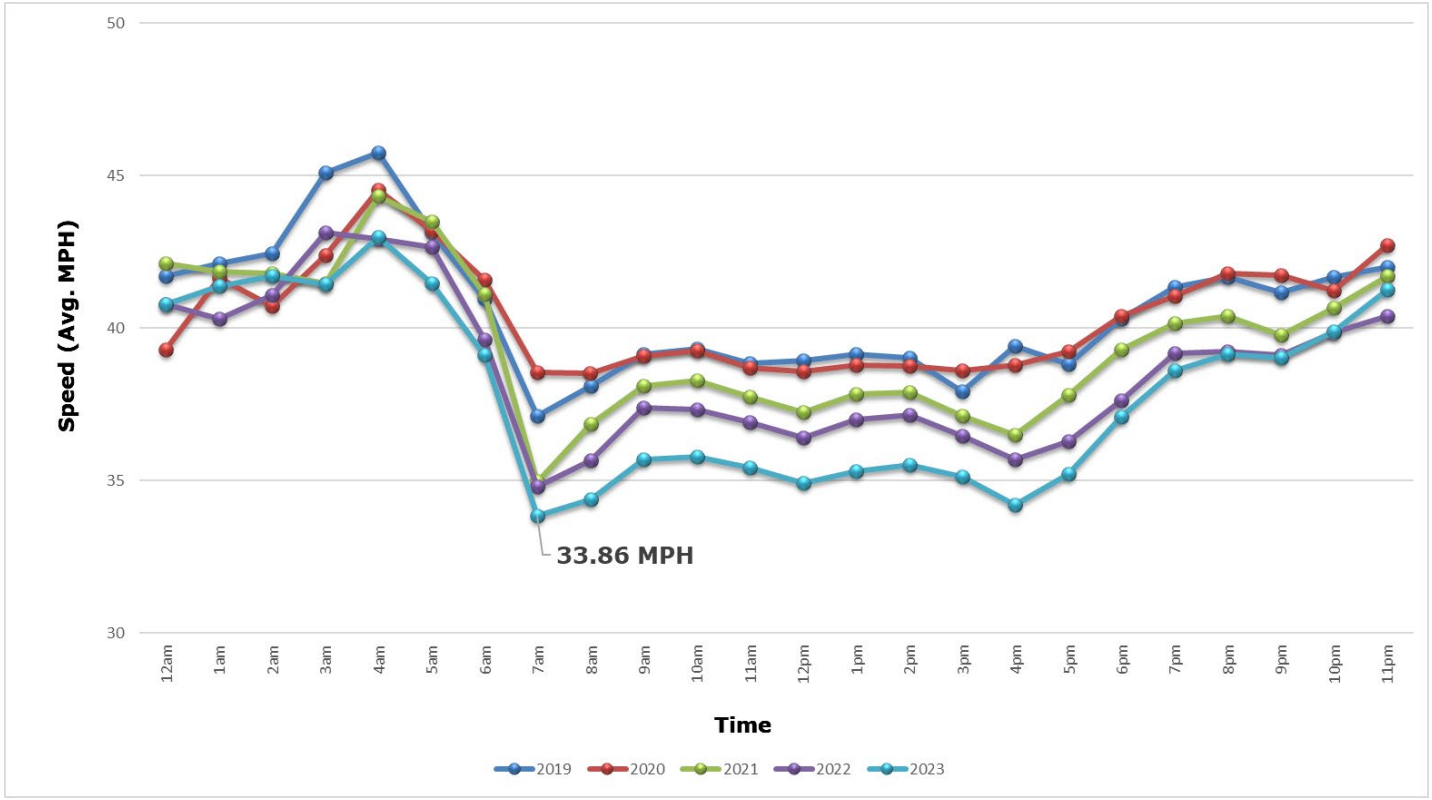

Figure 45: State Highway 44 (I-84 to State Highway 16) Eastbound, Average Weekday Speeds (2019-2023)

State Highway 44 (State Street) Congestion Analysis and Congestion Mitigation Strategies

State Highway 44 (State Street) experiences high peak hour congestion at the Star Road and Middleton Road intersections (Figure 46). The congestion issues on State Highway 44 stem from a high concentrations of commercial/retail land uses, high volume intersections at the river crossings and with state highways, and lane reductions from four to two travel lanes at Linder Road. The speed profiles for the west end of State Highway 44 show noticeable degradation from prior years. The TTI indicates moderate congestion overall on the corridor. Programmed and planned projects are highlighted in Table 14.

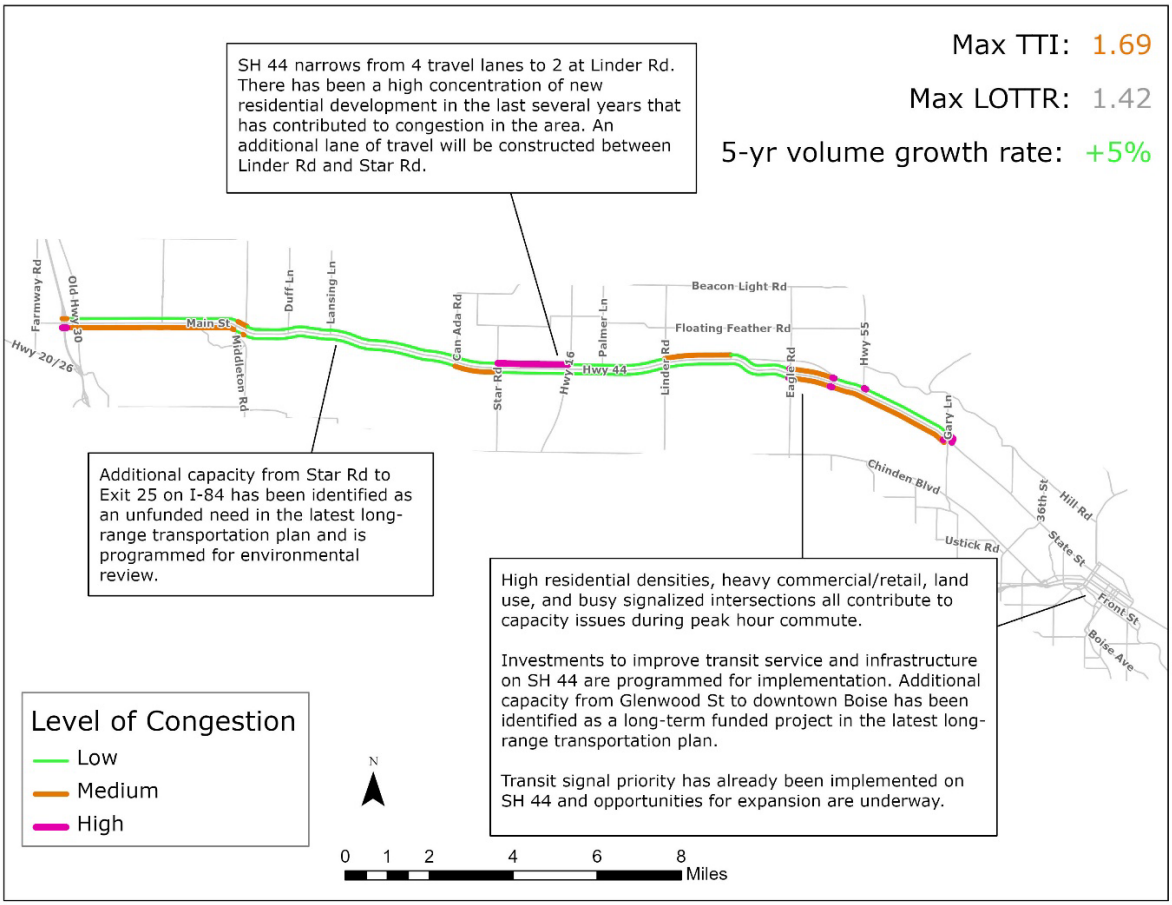

Figure 46: State Highway 44 (State Street) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2023)

Table 14: State Highway 44 (State Street) Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management			
TSMO/ITS		✓ Replace/modify signals and reconstruct approaches at intersection of SH 44 and Star Rd	
Public Transportation Improvements	✓ Improve transit and active transportation infrastructure per the State Street Premium Corridor Plan		✓ Bus Rapid Transit from Glenwood Bridge to downtown Boise; expanded services
Additional System Capacity	✓ Widen from 2 to 4 lanes from Star Rd to SH-16 Widen SH 44 from Hertford Way to Ellens Ferry	✓ Widen from 5 to 7 lanes from Glenwood St to 27th St	✓ Widen from 2 to 4 lanes from I-84 to Star Rd

State Highway 69 (Meridian Road)

State Highway 69 (Meridian Road): Swan Falls Road to Overland Road, Speed Profiles

On State Highway 69 (Meridian Road), speeds decrease during both the morning and evening peak hours (Figure 47 and Figure 48). Average speeds throughout most of the day were slower in 2023 than prior years.

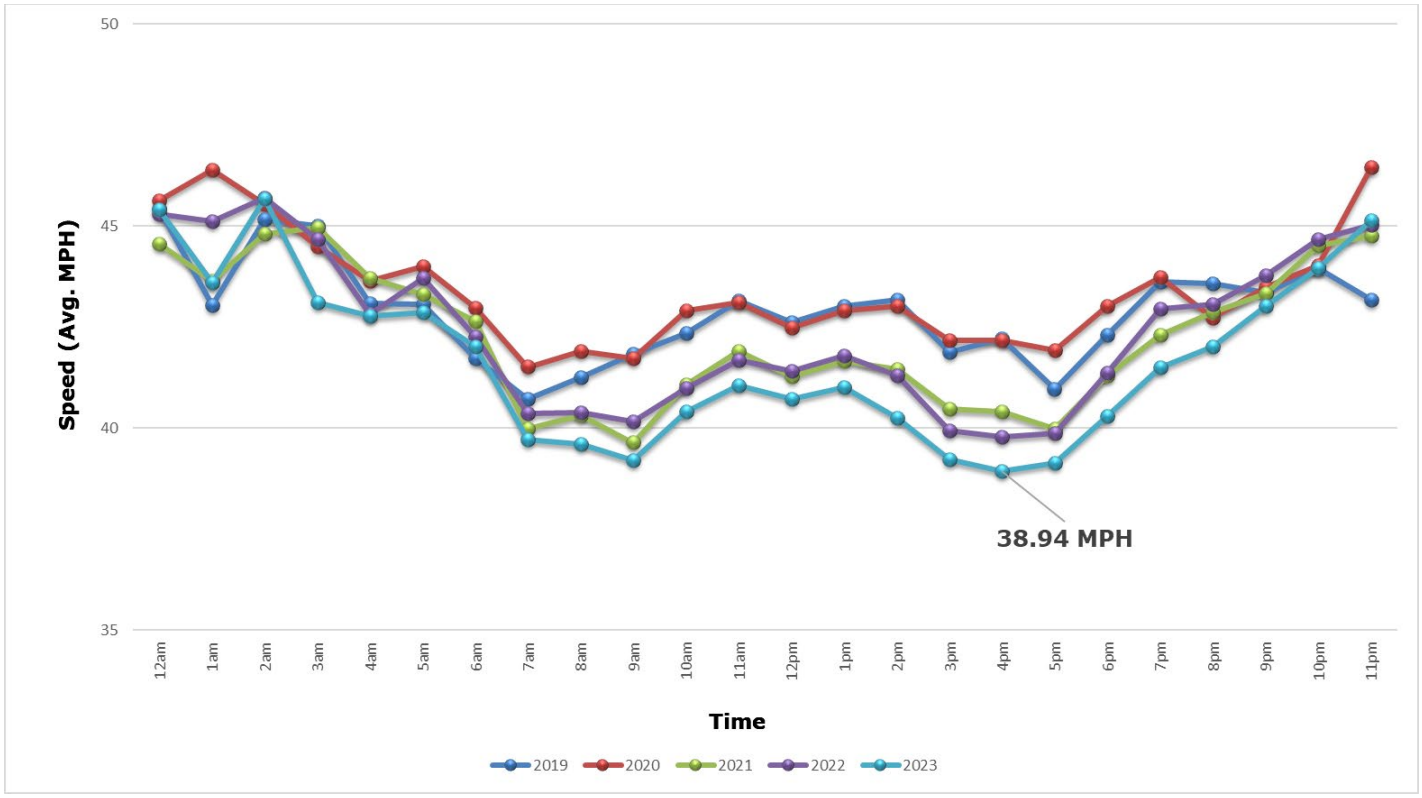

Figure 47: State Highway 69 (Meridian Road) Northbound, Average Weekday Speeds (2019-2023)

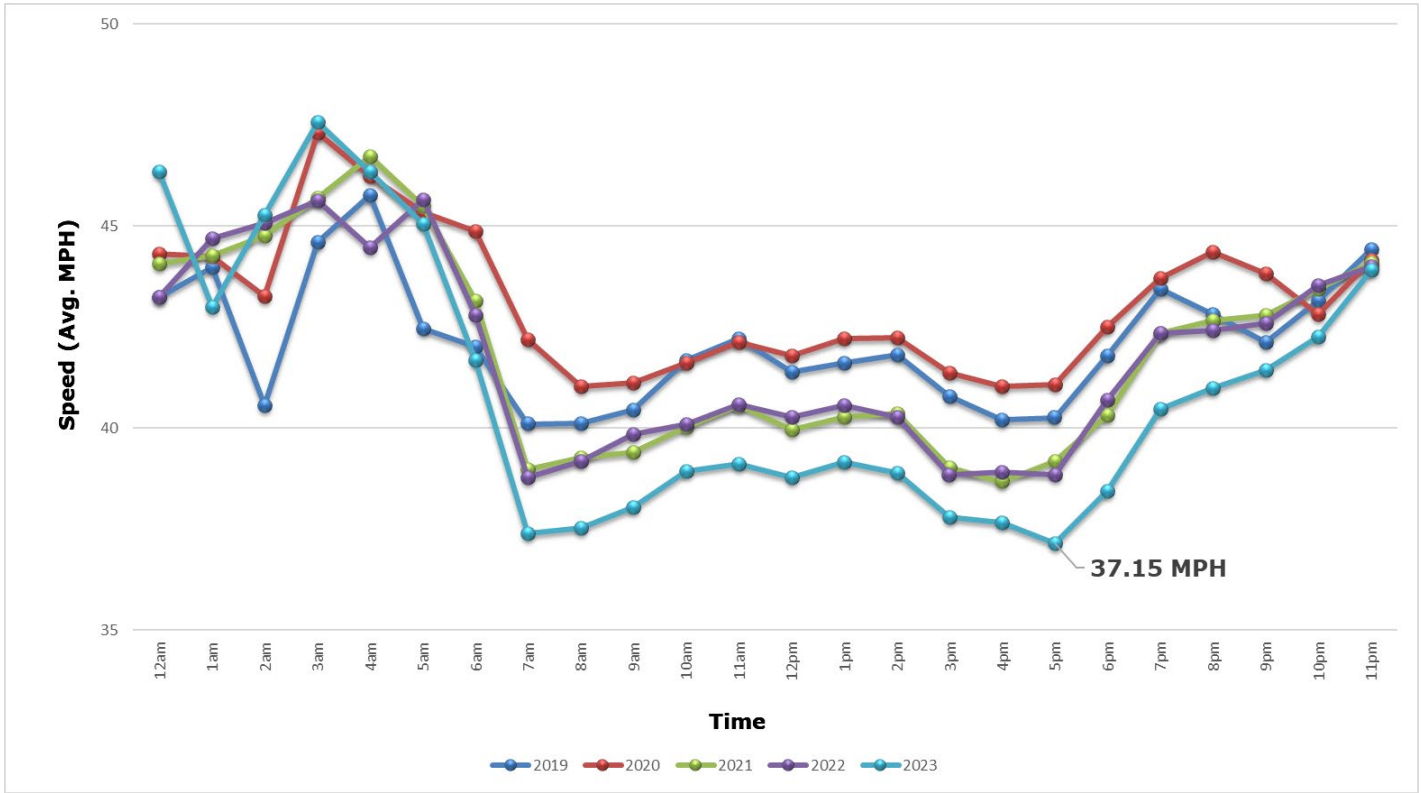

Figure 48: State Highway 69 (Meridian Road) Southbound, Average Weekday Speeds (2019-2023)

State Highway 69 (Meridian Road) Congestion Analysis and Congestion Mitigation Strategies

State Highway 69 (Meridian Road) experiences high peak hour congestion mainly near the busy signalized intersections with Overland Road and I-84 (Figure 49). Speed profiles indicate a degradation in performance from prior years. The TTI indicates moderate congestion on the corridor along with a steady average traffic volume growth rate over the past five years. Programmed and planned projects are highlighted in Table 15.

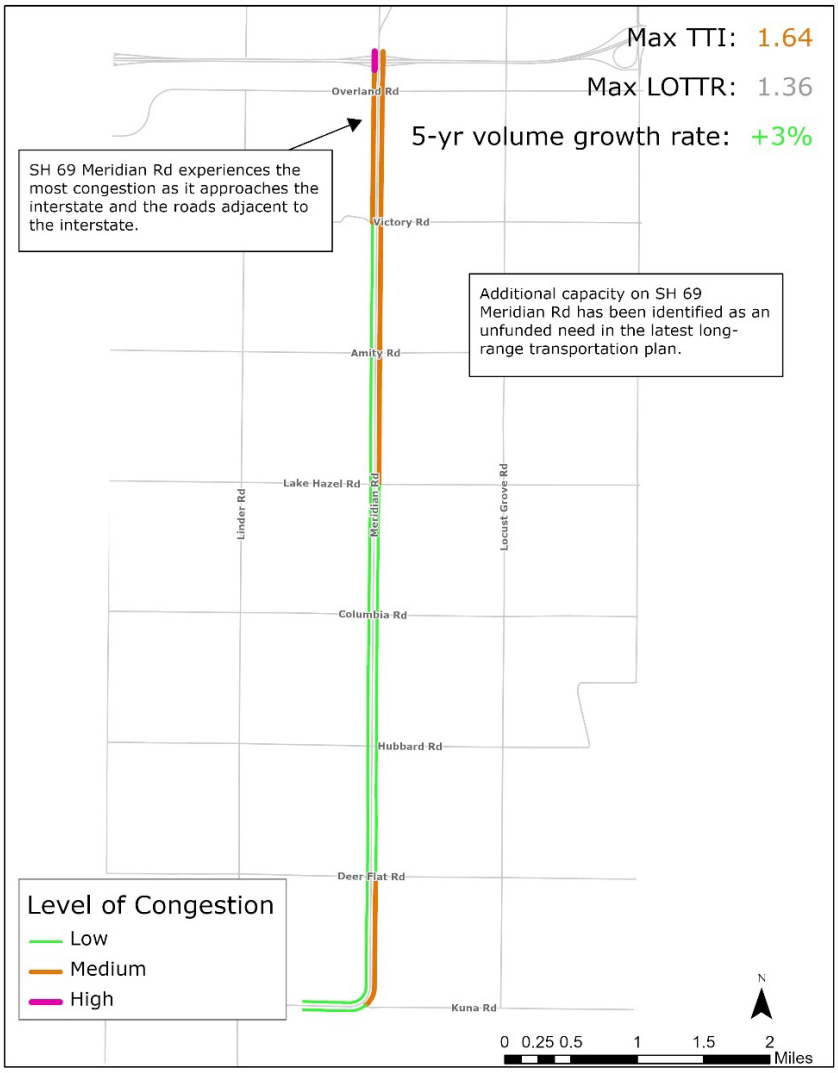

Figure 49: State Highway 69 (Meridian Road) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2023)

Table 15: State Highway 69 (Meridian Road) Congestion Mitigation Projects

Strategy	Programmed Projects (FY2024-2030)	Planned Funded Projects (FY2031-2050)	Planned Unfunded Projects
Transportation Demand Management			
TSMO/ITS			
Public Transportation Improvements			✓ Planned services
Additional System Capacity			✓ Additional capacity identified as a long-term need

Regional Average Annual Weekday Traffic Volumes (2019-2023)

The average annual growth rates for the past five years indicate that traffic volumes on I-84 in Canyon County have seen the highest rates of annual growth over the last five years (Table 16). This is due to the completion of a series of capacity projects that have been completed. State Highway 44 on the west end of Ada County also has experienced high annual growth due to the recent completion of capacity projects and new residential development.

I-184 and US 20/26 (Chinden Boulevard) heading toward downtown Boise have seen negative average growth rates over the past five years, but have seen an uptick in traffic volumes from 2022. The decreasing rates can likely be attributed to lasting changes in work commute patterns as a result of the COVID-19 pandemic.

For more information on traffic counts visit COMPASS' traffic count webpage[7].

Table 16: Regional Average Annual Weekday Traffic Volumes (2019-2023)

Road	Location	Direction	2019	2020	2021	2022	2023	Annual Average Growth Rate
SH 44	e/o Palmer Lane	East	10895	11171	11683	12040	14044	7%
I-84	w/o Beg EB Off Ramp Franklin Blvd IC (Exit 36)	East	44304	N/A	53393	52382	56468	6%
SH 44	e/o Palmer Lane	West	11277	11682	12202	12581	14189	6%
I-84	nw/o Franklin Rd Interchange (Exit 29)	Northwest	29076	28978	31971	N/A	36570	6%
I-84	w/o Beg EB Off Ramp Franklin Blvd IC (Exit 36)	West	43236	N/A	50518	50025	54022	6%
US 20/26	1.6 miles e/o Jct I-84 IC #29 (e/o KCID Rd)	East	6467	6125	7343	7633	N/A	6%
I-84	se/o Ustick Road Overpass (Caldwell)	East	32248	31501	31973	31808	39455	5%
I-84	0.4 miles nw/o US 20/26 (Exit 26)	East	19268	19587	22172	22358	23456	5%
State St	nw/o 23rd St	Southeast	11604	10165	11497	11548	14061	5%
I-84	w/o 11th Ave Overpass	West	48112	45547	52778	55493	58286	5%
I-84	0.4 miles nw/o US 20/26 (Exit 26)	West	18872	19211	21573	21436	22822	5%
I-84	2.0 miles se/o Black Canyon IC	Southeast	12829	13132	14999	14807	15375	5%
Chinden Blvd (US 20/26)	w/o McDermott Rd	East	9985	9196	10962	11432	N/A	5%
Chinden Blvd (US 20/26)	w/o McDermott Rd	West	10160	9307	11119	11631	N/A	5%
I-84	2.0 miles se/o Black Canyon IC	Northwest	12850	13120	14994	14758	15335	5%
I-84	1.8 miles se/o Sand Hollow IC	Southeast	13181	13454	15453	15190	15599	4%

[7] https://compassidaho.org/traffic-counts/

Road	Location	Direction	2019	2020	2021	2022	2023	Annual Average Growth Rate
US 20/26	1.6 miles e/o Jct I-84 IC #29 (e/o KCID Rd)	West	6634	6172	7370	7495	N/A	4%
I-84	w/o 11th Ave Overpass	East	51638	48359	55257	57539	60269	4%
Meridian Rd (SH 69)	e/o Sailer Pl (Kuna)	East	5871	5885	6208	6404	6761	4%
I-84	1.8 miles se/o Sand Hollow IC	Northwest	13163	13479	15444	15267	15113	4%
I-84	nw/o 10th Ave Interchange (Exit 28)	Southeast	27215	27215	30912	29822	30978	3%
I-84	se/o Ustick Road Overpass (Caldwell)	West	31482	30758	30973	30978	35600	3%
Meridian Rd (SH 69)	e/o Sailer Pl (Kuna)	West	5962	5965	6310	6583	6738	3%
I-84	nw/o 10th Ave Interchange (Exit 28)	Northwest	26250	26466	30977	28824	29660	3%
State St	nw/o 23rd St	Northwest	11679	9955	11194	11615	13117	3%
I-84	1.4 miles se/o Gowen Rd IC	Southeast	13386	12566	14677	14577	15011	3%
I-84	1.5 miles nw/o Blacks Creek IC	Southeast	13263	12187	13981	13985	14844	3%
I-84	3.7 Miles e/o of Simco Rd Overpass	East	12588	11978	13737	13828	13950	3%
I-84	1.5 miles nw/o Blacks Creek IC	Northwest	13134	11836	13528	13948	14540	3%
SH 55 (Karcher Rd)	s/o Lowell Rd	North	3311	3260	3636	3591	3656	3%
SH 55 (Karcher Rd)	0.14 miles n/o I-84B (Caldwell-Nampa Blvd)	Northeast	24995	23207	26607	26764	27577	2%
I-84	1.4 miles se/o Gowen Rd IC	Northwest	13403	12528	14547	14485	14786	2%
SH 55 (Karcher Rd)	s/o Lowell Rd	South	3229	3178	3558	3484	3557	2%
US 20/26	0.38 miles nw/o Mink Rd	Northwest	3869	3824	4178	4158	4260	2%
I-84	3.7 Miles e/o of Simco Rd Overpass	West	12297	11559	13291	13328	13532	2%
I-84	0.5 miles e/o Jct I 84B (Hammett)	West	8348	7738	9042	9093	9173	2%
I-84	0.7 miles e/o Robinson Rd overpass	East	60582	56611	63004	63744	66544	2%
Meridian Rd (SH 69)	s/o Hubbard Rd	North	9772	9742	10576	11018	10733	2%
Meridian Rd (SH 69)	s/o Hubbard Rd	South	9965	9920	10598	11134	10944.5	2%
I-84	0.61 miles w/o WB On Ramp IC 44 (Meridian)	West	63183	58991	66171	67025	69296	2%
I-84	0.5 miles e/o Jct I 84B (Hammett)	East	8804	8223	9317	9598	9648	2%
US 20/26	0.38 miles nw/o Mink Rd	Southeast	4020	3962	4343	4333	4400	2%
US 20/26	w/o Apple Valley Rd	West	2554	2488	2691	2669	2792	2%
I-84	0.61 miles w/o WB On Ramp IC 44 (Meridian)	East	64801	60504	67990	68440	70757	2%
US 20/26	w/o Apple Valley Rd	East	2620	2545	2748	2756	2826	2%

Road	Location	Direction	2019	2020	2021	2022	2023	Annual Average Growth Rate
I-84	w/o Locust Grove Overpass	East	71518	66052	74021	74481	77116	2%
SH 55 (Karcher Rd)	0.25 miles e/o Indiana Ave	West	9025	8755	9609	9482	9704	2%
SH 55 (Karcher Rd)	0.25 miles e/o Indiana Ave	East	9682	9507	10371	10127	10368	2%
I-84	w/o Locust Grove Overpass	West	70523	64517	71573	72480	75237	2%
I-84	0.74 miles w/o EB Off Ramp Gowen Rd (Exit 57)	East	25260	22447	25453	25931	26921	2%
I-84	0.74 miles w/o EB Off Ramp Gowen Rd (Exit 57)	West	25633	22803	25927	26339	27308	2%
Chinden Blvd (US 20/26)	0.14 miles nw/o Five Mile Ext.	Southeast	13736	11156	13132	14191	14608	2%
I-84	1.2 miles w/o I 184 IC (Five Mile)	East	74983	66597	74334	75269	77636	1%
I-84	0.7 miles e/o Robinson Rd overpass	West	57026	53340	59590	59648	58811	1%
Chinden Blvd (US 20/26)	0.14 miles nw/o Five Mile Ext.	Northwest	14049	11667	13547	14109	14467	1%
Broadway Ave	s/o Myrtle (River Crossing)	North	14845	12774	14770	14987	15209	1%
I-84	0.6 miles w/o Broadway Ave IC	East	39904	35117	39255	39532	40442	0%
SH 55 (Karcher Rd)	0.14 miles n/o I-84B (Caldwell-Nampa Blvd)	Southwest	22431	20823	22815	22309	22725	0%
I-84	0.8 miles w/o Orchard IC	Southeast	49928	44076	48686	49237	50478	0%
I-84	0.3 miles w/o Cole/Overland Interchange (Boise)	Northwest	42789	36595	40712	42381	43075	0%
Eagle Rd	0.3 miles s/o SH 44 (River Crossing)	North	22538	20854	22381	22163	22580	0%
I-84	0.4 miles w/o Vista Ave IC	East	48403	41266	46346	47083	48379	0%
I-84	0.3 miles w/o Cole/Overland Interchange (Boise)	Southeast	58715	49529	55189	57417	58654	0%
Eagle Rd	0.3 miles s/o SH 44 (River Crossing)	South	21709	19889	21312	21118	21686	0%
I-84	nw/o Franklin Rd Interchange (Exit 29)	Southeast	30338	30239	33371	N/A	30238	0%
I-84	0.8 miles w/o Orchard IC	Northwest	51504	44914	49509	50178	51211	0%
I-84	0.6 miles w/o Broadway Ave IC	West	42811	37177	41310	41660	42519	0%
I-84	1.2 miles w/o I 184 IC (Five Mile)	West	78373	69681	76418	76106	77614	0%

Road	Location	Direction	2019	2020	2021	2022	2023	Annual Average Growth Rate
I-84	0.4 miles w/o Vista Ave IC	West	50811	42242	47288	48095	49440	-1%
I-184	WB Off Ramp to Cole Rd	West	4812	3774	4556	4580	4560	-1%
I-184	1.4 miles ne/o I 84 IC (Emerald Overpass)	Northeast	46030	36882	40883	41830	43453	-1%
I-184	1.4 miles ne/o I 84 IC (Emerald Overpass)	Southwest	47567	38796	43278	44102	44898	-1%
I-184	0.4 miles e/o Boise River (Connector WB)	West	37498	28340	32462	34673	35280	-2%
Broadway Ave	s/o Myrtle (River Crossing)	South	15610	12070	13847	14307	14507	-2%
Chinden Blvd (US 20/26)	w/o 32nd St	Northwest	14235	10937	12124	12774	13164	-2%
I-184	0.4 miles e/o Boise River (Connector EB)	East	44665	33301	36966	40335	41270	-2%
Eagle Rd	n/o Sedona St	North	21248	19258	20064	19932	N/A	-2%
Eagle Rd	n/o Sedona St	South	20598	18822	19761	19262	N/A	-2%
Chinden Blvd (US 20/26)	w/o 32nd St	Southeast	15169	11340	12282	13029	13385	-3%