Working together to plan for the future

Treasure Valley Annual Congestion<br>Management System Report, 2022<br>1-2024<br>October 2023

Table of Contents
Executive Summary ..... 2
Background and Introduction ..... 3
What is the Congestion Management Process? ..... 3
What is Congestion? ..... 3
Growth Measures ..... 3
Growth in the Treasure Valley ..... 3
Development and Congestion ..... 4
Congestion Performance Measures ..... 6
Travel Time Data ..... 6
Travel Time Index ..... 6
Tier 2 Supplemental Travel Time Data and Analysis ..... 8
Peak Hour Commute Times in the Treasure Valley ..... 11
System Reliability ..... 12
Federal System Performance Measures ..... 12
Additional Regional Performance Measures ..... 15
COMPASS Change in Motion Scorecard ..... 15
Strategies and Implementation Program ..... 15
Programmed (Budgeted) Congestion Reduction/Mitigation Projects ..... 16
Appendix ..... 18
I-84 ..... 19
I-184 ..... 21
US 20/26 ..... 23
State Highway 55 (Eagle Road) ..... 29
State Highway 55 (Karcher Road) ..... 31
State Highway 44 (State St) ..... 33
State Highway 69 (Meridian Road) ..... 37
Regional Average Annual Weekday Traffic Volumes (2018-2022) ..... 39

This Congestion Management Annual Report summarizes how well the transportation system in Ada and Canyon Counties is serving users and what transportation agencies are doing 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.

2022 Highlights:

- Ada and Canyon Counties continued to experience significant population growth. Population estimates for 2022 for the two-county area exceeded 780,000 people - up from 726,027 counted in the 2020 Census. The number of residential building permits issued was down over $25 \%$ from 2021 for the two-county area; Canyon County saw an increase from $37 \%$ of the total issued permits in 2021 to 39\% in 2022.
- Highly and moderately congested miles on the interstate and state highway system (Tier 1) increased from 120 miles in 2021 to 129 miles in 2022. The arterial and collector system (Tier 2) saw an increase in congested miles as well, from 20 miles in 2021 to over 36 miles in 2022. 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 69 (Meridian Road) have had the most significant growth in traffic volumes over the last five years (Appendix).
- The COMPASS planning area is meeting two of its three targets for travel time reliability on the National Highway System. The Truck Travel Time Reliability score on the Interstate 84 in 2022 was 1.54; not meeting the established statewide target of 1.3. Major construction on I-84 between the Cities of Caldwell and Nampa contributed to this performance.
- Segments of State Highway 55 (Karcher Road), Nampa/Caldwell Boulevard, and Garrity Boulevard comprised five of the top ten most congested segments of the Tier 1 system. These locations are all near or within the City of Nampa. The Nampa area has experienced significant residential development activity, with over 1,000 residential permits issued each year from 2019 to 2022. The ongoing construction on I-84 between the Cities of Caldwell and Nampa also likely contributed to the congestion on these segments.
- COMPASS' FY2023-2029 Transportation Improvement program (TIP) includes over \$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.


## 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 Urbanized 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 high 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 2022, the population grew by over 34\% (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 (2010-2022)

[^0]
## 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 decreased by over $25 \%$ from 2021 to 2022; Canyon County saw an increase in the percentage of all new permits over the same time period (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 (2012-2022)


Figure 3: Number of Single-Family Units Permitted and Levels of Highest Peak Hour Congestion (2022)

[^1]

Figure 4: Number of Multi-Family Units Permitted and Levels of Highest Peak Hour Congestion (2022)


Figure 5: Number of Commercial/Retail Building Permits and Levels of Highest Peak Hour Congestion (2022)

## 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, 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

T I 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 $85^{\text {th }}$ percentile travel time at non-peak hours. TII 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). TII is averaged for morning ( 6 am-9am), midday ( $9 \mathrm{am}-3 \mathrm{pm}$ ), evening ( $3 \mathrm{pm}-7 \mathrm{pm}$ ), and weekend ( $6 \mathrm{am}-8 \mathrm{pm}$ ) 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 decreased from 2021 to 2022 (Table 2). The percentages of medium congested roadway in 2022 increased and surpassed pre-COVID percentages.

Table 1: Travel Time Index Thresholds

| High | Medium | LoW |
| :---: | :---: | :---: |
| $\Pi \mathrm{II}>2.0$ | TI $1.5-2.0$ | $\Pi \mathrm{I}<1.5$ |

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 |  |
| 2022 | 18.2 | $4.0 \%$ | 110.7 | $24.1 \%$ | 329.8 | $71.9 \%$ | $\mathbf{4 5 8 . 7}$ |
| 2021 | 23.0 | $5.0 \%$ | 96.9 | $21.0 \%$ | 341.9 | $74.0 \%$ | $\mathbf{4 6 1 . 8}$ |
| 2020 | 15.1 | $3.2 \%$ | 89.8 | $18.7 \%$ | 374.5 | $78.1 \%$ | $\mathbf{4 7 9 . 4}$ |
| 2019 | 30.6 | $6.5 \%$ | 108.5 | $23.2 \%$ | 329.5 | $70.3 \%$ | $\mathbf{4 6 8 . 6}$ |
| 2018 | 22.8 | $6.2 \%$ | 81.6 | $22.3 \%$ | 261.3 | $71.5 \%$ | $\mathbf{3 6 5 . 6}$ |

The ten most congested roadway segments according to the NPMRDS shows that the worst congestion in the valley in 2022 was concentrated in three main areas: at State Highway 55 and Nampa/Caldwell Boulevard in Nampa, in the City of Nampa on Garrity Boulevard and I-84, and on along the US 20/26 (Chinden Boulevard) corridor (Table 3 and Figure 6).

Table 3: Ten Most Congested Tier 1 Network Segments > 0.5 Miles (2022)

| 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 | 2.91 | PM | 2 min 17 sec | 22 mph |
| 2 | Nampa/Caldwell Blvd | SH 55 (Karcher Rd) to Middleton Rd | 0.70 | Westbound | 2.84 | PM | 2 min 40 sec | 13 mph |
| 3 | US 20/26 (Chinden Blvd) | Cloverdale Rd to SH 55 (Eagle Rd) | 0.93 | Westbound | 2.54 | PM | 1 min 59 sec | 22 mph |
| 4 | SH 55 (Eagle Rd) | Franklin Rd to I-84 Westbound On Ramp | 0.51 | Southbound | 2.50 | PM | 1 min 17 sec | 16 mph |
| 5 | I-184 | I-84 merge at Wye Interchange | 0.53 | Westbound | 2.45 | PM | 39 sec | 47 mph |
| 6 | $11^{\text {th }}$ Ave | Garrity Blvd to $2^{\text {nd }}$ St | 0.72 | Southbound | 2.37 | PM | 1 min 54 sec | 16 mph |
| 7 | $11^{\text {th }}$ Ave | $2{ }^{\text {nd }}$ St to Garrity Blvd | 0.72 | Northbound | 2.34 | PM | 1 min 45 sec | 19 mph |
| 8 | SH 55 (Karcher Rd) | Middleton Rd to Nampa/Caldwell Blvd | 0.52 | Eastbound | 2.29 | Midday | 1 min 17 sec | 17 mph |
| 9 | US 20/26 (Chinden Blvd) | Can Ada Rd to Star Rd | 0.98 | Eastbound | 2.24 | AM | 1 min 22 sec | 30 mph |
| 10 | Nampa/Caldwell Blvd | Orchard Ave to Northside Blvd | 0.53 | Eastbound | 2.23 | PM | 1 min 23 sec | 16 mph |



Figure 6: Top Ten Congested Tier 1 Network Segments $>\mathbf{0 . 5}$ Miles (Peak period maximum, 2022)

## Tier 2 Supplemental Travel Time Data and Analysis

The Idaho Transportation Department (ITD) purchased additional travel time data in 2022 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 2022, the Tier 2 network saw an increase in high and medium congested roadways from what was observed in 2021.

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 |  |
| 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 |
| 2018 | 7.22 | 0.7\% | 46.74 | 4.8\% | 926.50 | 94.5\% | 980.46 |

Table 5: Top Ten Congested Tier 2 Network Segments in Canyon County > 0.1 Miles (2022)

| Rank | Road | Description | Miles | Direction | TTI | Peak Period | Delay/Speed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Middleton Rd | Laster St to Nampa/Caldwell Blvd | 1.00 | Southbound | 2.13 | PM | $95 \mathrm{sec} / 18 \mathrm{mph}$ |
| 2 | I-84 Exit 35 Off Ramp | I-84 Off Ramp at Exit 35 (Northside Blvd) | 0.33 | Eastbound | 1.97 | PM | $25 \mathrm{sec} / 22 \mathrm{mph}$ |
| 3 | Idaho Center Blvd | Franklin Rd to I-84 On Ramp | 0.34 | Southbound | 1.95 | PM | $34 \mathrm{sec} / 13 \mathrm{mph}$ |
| 4 | I-84 Exit 27 Off Ramp | I-84 Exit 27 Off Ramp (Centennial Way) | 0.26 | Westbound | 1.88 | Midday | $25 \mathrm{sec} / 19 \mathrm{mph}$ |
| 5 | Midland Blvd | W St Lukes Dr to Karcher Bypass | 0.37 | Southbound | 1.84 | PM | $40 \mathrm{sec} / 14 \mathrm{mph}$ |
| 6 | I-84 Exit 25 Off Ramp | I-84 Exit 25 Off Ramp (SH 44 / City of Middleton) | 0.23 | Westbound | 1.82 | PM | $21 \mathrm{sec} / 19 \mathrm{mph}$ |
| 7 | I-84 Exit 33 Off Ramp | I-84 Off Ramp at Exit 33 (Karcher Rd) | 0.30 | Westbound | 1.80 | PM | $28 \mathrm{sec} / 19 \mathrm{mph}$ |
| 8 | Skyway St | Freedom Ave to Smeed Pkwy | 0.19 | Eastbound | 1.69 | PM | $20 \mathrm{sec} / 16 \mathrm{mph}$ |
| 9 | Midland Blvd | Park Centre Way to Nampa/Caldwell Blvd | 0.19 | Southbound | 1.68 | PM | $17 \mathrm{sec} / 15 \mathrm{mph}$ |
| 10 | Idaho Center Blvd | Birch Ln to Cherry Ln | 0.50 | Northbound | 1.65 | PM | $33 \mathrm{sec} / 24 \mathrm{mph}$ |

Table 6: Top Ten Congested Tier 2 Network Segments in Ada County > 0.1 Miles (2022)

| Rank | Road | Description | Miles | Direction | TTI | Peak Period | Delay/Speed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | I-84 Exit 44 On Ramp | I-84 Exit 44 On Ramp (Meridian Rd) | 0.39 | Eastbound | 2.35 | AM | $38 \mathrm{sec} / 25 \mathrm{mph}$ |
| 2 | I-84 Exit 0 On Ramp (I-184) | Wye Interchange (I-184/Franklin Blvd) | 0.50 | Westbound | 2.28 | PM | $37 \mathrm{sec} / 36 \mathrm{mph}$ |
| 3 | I-84 Exit 42 On Ramp | I-84 Exit 42 On Ramp (Ten Mile Rd) | 0.65 | Eastbound | 1.98 | AM | $38 \mathrm{sec} / 42 \mathrm{mph}$ |
| 4 | Cole Rd | Century Way to I-84 Exit 50B On Ramp | 0.26 | Northbound | 1.92 | PM | $32 \mathrm{sec} / 16 \mathrm{mph}$ |
| 5 | Franklin Rd | Touchmark Way to Eagle Rd (SH 55) | 0.33 | Westbound | 1.89 | PM | $32 \mathrm{sec} / 20 \mathrm{mph}$ |
| 6 | E Yamhill Rd | Federal Way to E Lake Forest Dr | 0.34 | Eastbound | 1.89 | AM | $32 \mathrm{sec} / 15 \mathrm{mph}$ |
| 7 | Meridian Rd | Franklin Rd to I-84 Exit 44 Interchange | 0.79 | Southbound | 1.86 | PM | $59 \mathrm{sec} / 16 \mathrm{mph}$ |
| 8 | Star Rd | Ledgerwood Ln to Chinden Blvd (US 20/26) | 0.75 | Northbound | 1.85 | PM | $55 \mathrm{sec} / 27 \mathrm{mph}$ |
| 9 | Ustick Rd | Records Way to Eagle Rd (SH 55) | 0.23 | Westbound | 1.78 | PM | $26 \mathrm{sec} / 15 \mathrm{mph}$ |
| 10 | I-184 Exit 1A Off Ramp | I-184 Exit 1A Off Ramp (Franklin Rd / Boise) | 0.14 | Eastbound | 1.77 | PM | $13 \mathrm{sec} / 18 \mathrm{mph}$ |



Figure 7: Top Ten Tier 2 Congested Roadways $\mathbf{>} 0.1$ miles in Canyon County (Peak period maximum, 2022)


Figure 8: Top Ten Tier 2 Network Segments $\mathbf{>} 0.1$ miles in Ada County (Peak period maximum, 2022)

## 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 almost 29 minutes.


Figure 9: Average Weekday AM and PM Peak Period Commute Travel Times for Select Routes in the Treasure Valley (2022)

## Federal System Performance Measures

The Infrastructure Investment and Jobs Act extended provisions requiring state transportation agencies and metropolitan planning organizations such as COMPASS to report performance measures and set targets for safety, infrastructure, and system performance for their planning areas. System performance is reported as reliability: Level of Travel Time Reliability and Truck Travel Time Reliability. These measures, described below, show how predictable or consistent travel times are for passenger and freight vehicles along the Tier 1 network.

## Federal Performance Measures: Tier 1 Roadways in Ada and Canyon Counties

$\mathbf{9 5 . 3} \%$ Interstate Reliable<br>Meets target of $\geq 90 \%$ reliable<br>91.2\% Non-Interstate Roads Reliable<br>1.54 Truck Travel Time Reliability

## 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 10, Figure 11).


Figure 10: Average Commute Times Typically Do Not Reflect What Travelers Experience


Figure 11: Reliability of Commute Times Better Reflect What Travelers Experience

LOTTR is defined as the ratio of a longer travel time ( $80^{\text {th }}$ percentile) to a "normal" travel time ( $50^{\text {th }}$ 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 meeting its interstate reliability measure at $95.3 \%$ of the interstate PMT reliable and its target for non-interstate roads at 91.2\% PMT reliable (Figure 12).

## 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 $95^{\text {th }}$ percentile travel time is used as the longer travel time in the equation, TTR is only calculated for the interstate system, and it is presented as a weighted average. ITD has set a statewide target of a TTR 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 TTR score of 1.54 (Figure 13). This is likely due to issues cause by non-recurring congestion from weather, construction, and traffic incidents on the interstate.


Figure 12: Level of Travel Time Reliability (2022)


Figure 13: Truck Travel Time Reliability (2022)

## 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 from year to year, 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 four categories, as identified in the Federal Highway Administration's Congestion Management Process: A Guidebook ${ }^{5}$ (Table 7). 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/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 <br> - Ridesharing <br> - Flexible work arrangements <br> - Transit Oriented Development |
| TSMO/ITS | Implementing improvements focused on optimizing the current transportation infrastructure | - Optimized signal timing <br> - Improved intersections <br> - 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 <br> - Expanded frequency/hours of service <br> - Expanded public transportation system |
| Additional System Capacity | Expanding capacity by adding lanes or new roads | - Additional travel lanes <br> - Filled gaps in the street network <br> - New overpasses/underpasses |
| Freight and Goods Mobility | Implementing strategies to move freight and goods more efficiently on the transportation system | - Freight signal priority <br> - Improved intersections <br> - Designated loading, unloading, and parking zones |

[^2]
## Programmed (Budgeted) Congestion Reduction/Mitigation Projects

The TIP is a collection of projects selected by COMPASS to benefit the transportation system Ada and Canyon Counties. Multiple projects programmed (budgeted) in the FY2023-2029 TIP are designed to help mitigate congestion (Figure 14 and Table 8). The current program includes over $\$ 1$ billion aimed toward managing congestion. 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-procram/.


Figure 14: Programmed Congestion Mitigation Projects, FY2023-2029 TIP (*Several capacity improvements include TDM and TSMO/ITS strategies)

Table 8: Number of Projects and Programmed Dollars in the FY2023-2029 TIP for Congestion Management Strategies

| Congestion Management Strategy* | Number of Projects Supportive of Strategy** | Dollars programmed in the FY2023-2029 TIP |
| :---: | :---: | :---: |
| Roadway Capacity Improvements | 39 | \$811,984,000 |
| Transit Operation Improvements | 18 | \$83,897,000 |
| Transportation Demand Management/Active Transportation | 41 | \$102,405,000 |
| TSMO/ITS | 19 | \$119,615,000 |
| Freight and Goods Mobility | 3 | \$7,416,000 |
| Total | 120 | \$1,125,317,000 |

*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 this strategy; not related to total number of projects in the FY2023-2029 TIP.

## 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 I184 in the City of Boise (Figures 15 and 16). In 2022, the average speed was about 56 mph during the morning (eastbound) and about 56 mph during the evening (westbound) commutes. Speeds have likely increased due to completed capacity improvements on the interstate.


Figure 15: I-84 Eastbound (Centennial Way Interchange to Flying Wye Interchange I-184), Average Weekday Speeds (2018-2022)


Figure 16: I-84 Westbound (Flying Wye Interchange I-184 to Centennial Way Interchange), Average Weekday Speeds (2018-2022)

## I-84 Congestion Analysis and Congestion Mitigation Strategies

I-84 has seen a moderate 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 2022. 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 17). One probable cause of congestion in the Nampa area is a large construction project to add additional capacity that began in 2020 and continued through 2022.
The programmed and planned projects for this section of I-84 are highlighted in Table 9.


Figure 17: I-84 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2022)

Table 9: I-84 Congestion Mitigation Projects

| Strategy | $\begin{aligned} & \text { Programmed } \\ & \text { Projects } \\ & \text { (FY2023-2029) } \end{aligned}$ | Planned Funded Projects <br> (FY2030-2050) | Planned Unfunded Projects |
| :---: | :---: | :---: | :---: |
| Transportation Demand Management | ACHD Commuteride |  |  |
| TSMO/ITS |  |  |  |
| 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 36) | Widen I-84 to 3 lanes in each direction between Centennial Way (Exit 27) and City of Caldwell (Exit 29) | 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 $15^{\text {th }} /$ Front Street intersection show speeds decrease during the morning (eastbound) and evening (westbound) peak hours (Figure 18 and Figure 19).


Figure 18: I-184 Eastbound, Average Weekday Speeds (2018-2022)


Figure 19: I-184 Westbound, Average Weekday Speeds (2018-2022)

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 20). 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. The programmed and planned projects for I-184 are highlighted in Table 10.


Figure 20: I-184 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2022)

Table 10: I-184 Congestion Mitigation Projects

| Strategy <br> Srammed <br> Projects <br> (FY2022-2028) | Planned Funded <br> Projects <br> (FY2029-2050) | Planned Unfunded <br> Projects |  |
| :--- | :---: | :---: | :---: |
| Transportation Demand <br> Management | ACHD Commuteride |  |  |
| TSMO/ITS |  |  | $\sqrt{\text { Planned new and }}$extended services |
| Public Transportation <br> Improvements |  |  |  |
| 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 21 and Figure 22). 2022 speeds were nearly identifycal to those observed in 2021.


Figure 21: US 20/26 (I-84 to State Highway 55 [Eagle Road]) Eastbound, Average Weekday Speeds (2018-2022)


Figure 22: US 20/26 (State Highway 55 [Eagle Road] to I-84) Westbound, Average Weekday Speeds (2018-2022)

## 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 23). The westbound direction sees the typical evening peak hour slowdown associated with an increase in commuters on the road (Figure 24). 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 23: US 20/26 (State Highway 55 [Eagle Road] to Glenwood Street) Eastbound, Average Weekday Speeds (2018-2022)


Figure 24: US 20/26 (Glenwood Street to State Highway 55 [Eagle Road]) Westbound, Average Weekday Speeds (2018-2022)

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 25). The westbound direction experiences the most dramatic slowdown, bottoming out at 24 mph , during the $4-5 \mathrm{pm}$ hours (Figure 26).


Figure 25: US 20/26 (Glenwood Street to I-184) Eastbound, Average Weekday Speeds (2018-2022)


Figure 26: US 20/26 (I-184 to Glenwood Street) Westbound, Average Weekday Speeds (2018-2022)

## 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 27 and Figure 28). The speed profiles in 2022 still showed overall faster speeds conditions than 2019. 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 27: US 20/26 (I-184 to Broadway Avenue via Myrtle Street) Eastbound, Average Weekday Speeds (2018-2022)


Figure 28: US 20/26 (Broadway Avenue to I-184 via Front Street) Westbound, Average Weekday Speeds (2018-2022)

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 29 and Figure 30). 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 2022 the speed profiles show that the 3 pm hour typically experienced the slowest speeds in both directions. Overall, average speeds were up throughout the day in 2022, as compared to previous years.


Figure 29: US 20/26 (Myrtle Street to I-84) Southbound, Average Weekday Speeds (2018-2022)


Figure 30: US 20/26 (I-84 to Front Street) Northbound, Average Weekday Speeds (2018-2022)

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 31). 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 31: US 20/26 Levels of Peak Hour Congestion, Causes of Congestion, and Management Strategies (2022)
Table 11: US 20/26 Congestion Mitigation Projects

| Strategy | Programmed Projects (FY2023-2029) | Planned Funded Projects <br> (FY2030-2050) | Planned Unfunded Projects |
| :---: | :---: | :---: | :---: |
| Transportation Demand Management | ACHD Commuteride <br> Active transportation improvements included in capacity projects |  |  |
| TSMO/ITS | Intersection improvements in Ada and Canyon Counties | Intersection improvements in Ada and Canyon Counties |  |
| Public Transportation Improvements |  |  | Planned new and extended services |
| Additional System Capacity | Widening from 2 to 4 lanes from Star Road to Eagle Road <br> Widening from 4 to 6 lanes from I-84 to Smeed Parkway and 2 to 6 lanes from Smeed Parkway to Middleton Road | Widening from 4 to 6 lanes from Middleton Road to Eagle Road <br> Widening from 2 to 5 lanes from Middleton Road to Star 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 32 and Figure 33). 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 fairly consistent throughout the five-year period despite significant development activity along the corridor.


Figure 32: State Highway 55 (Eagle Road) Northbound, Average Weekday Speeds (2018-2022)


Figure 33: State Highway 55 (Eagle Road) Southbound, Average Weekday Speeds (2018-2022)

## 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 34). 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 34: State Highway 55 (Eagle Road) Levels of Peak Hour Congestion, Causes of Congestion and Management Strategies (2022)

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

| Strategy | Programmed <br> Projects <br> (FY2023-2029) | Planned Funded <br> Projects <br> (FY2030-2050) | Planned Unfunded <br> Projects |
| :--- | :---: | :---: | :---: |
| Transportation Demand <br> Management | ACHD Commuteride <br> Pedestrian <br> improvenents from <br> Franklin Rd to Pine <br> Ave and MCMillan Rd <br> to US 20/26 |  |  |
| TSMO/ITS |  |  | Planned new and <br> extended services |
| Public Transportation <br> Improvements |  |  |  |
| 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 35 and Figure 36). The speed trends align with the prevailing commute pattern of people traveling eastbound in the morning and westbound in the evening.


Figure 35: State Highway 55 (Karcher Road) Eastbound, Average Weekday Speeds (2018-2022)


Figure 36: State Highway 55 (Karcher Road) Westbound, Average Weekday Speeds (2018-2022)

## 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 37). 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. The speed profiles demonstrate some performance improvement from 2021, but the TTI indicates moderate congestion. Programmed and planned projects are highlighted in Table 13.


Figure 37: State Highway 55 (Karcher Road) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2022)

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

| Strategy | Programmed <br> Projects <br> (FY2023-2029) | Planned Funded <br> Projects <br> (FY2029-2050) | Planned <br> Unfunded <br> Projects |
| :--- | :--- | :--- | :--- |
| Transportation Demand <br> Management |  |  |  |
| TSMO/ITS |  | Planned services |  |
| Public Transportation <br> Improvements | Add an additional lane in <br> each direction on SH 55 <br> (Karcher Rd) from Farmway <br> Rd to Middleton Rd | Widen from 2 to 4 <br> lanes from Pear Ln <br> to Farmway Rd |  |
| Additional System Capacity | $\sqrt{\text { Design and right-of-way to }}$widen Karcher interchange <br> on I-84. |  |  |

## State Highway 44 (State St)

## State Highway 44 (State Street)

The State Highway 44 (State Street) speed profiles are broken into three different sections to account for different roadway characteristics along the corridor. The sections below are shown in order from east to west. No data for this corridor were provided in the in the NPMRDS data set for 2018.

## State Street: $\mathbf{1 5}^{\text {th }}$ Street to Glenwood Street Speed Profiles

This section of State Highway 44 (State Street) experiences the most delay during the evening peak hours in both directions. There is also a noticable drop in average speed throughout the workday (Figure 38 and Figure 39).


Figure 38: State Highway 44 (15th Street to Glenwood Street) Westbound, Average Weekday Speeds (2019-2022)


Figure 39: State Highway 44 (Glenwood Street to $\mathbf{1 5}^{\text {th }}$ Street) Eastbound, Average Weekday Speeds (2019-2022)

## 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 40 and Figure 41). The average speeds in 2022 were very similar to those in 2021.


Figure 40: State Highway 44 (Glenwood Street to State Highway 16) Westbound, Average Weekday Speeds (2019-2022)


Figure 41: State Highway 44 (State Highway 16 to Glenwood Street) Eastbound, Average Weekday Speeds (2019-2022)

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

This section of State Highway 44 (State Street) experienced slower speeds in 2022 than 2021, but demonstrated a similar trend with dips in speed during the morning/evening peak hours (Figure 42 and Figure 43).


Figure 42: State Highway 44 (State Highway 16 to I-84) Westbound, Average Weekday Speeds (2019-2022)


Figure 43: State Highway 44 (I-84 to State Highway 16) Eastbound, Average Weekday Speeds (2019-2022)

## 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 44). 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 44: State Highway 44 (State Street) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2022)

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

| Strategy | Programmed Projects <br> (FY2023-2029) | Planned Funded Projects <br> (FY2030-2050) | 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 Linder Rd <br> Widen SH 44 from Hertford Way to Ellens Ferry | Widen from 5 to 7 lanes from Glenwood St to $27^{\text {th }} \mathrm{St}$ | 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 45 and Figure 46). Average speeds throughout most of the day were similar to those in 2021. No data for this corridor were provided in the in the NPMRDS data set for 2018.


Figure 45: State Highway 69 (Meridian Road) Northbound, Average Weekday Speeds (2019-2022)

38.84 MPH


Figure 46: State Highway 69 (Meridian Road) Southbound, Average Weekday Speeds (2019-2022)

## 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 47). 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 47: State Highway 69 (Meridian Road) Levels of Peak Hour Congestion, Cause of Congestion, and Management Strategies (2022)

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

| Strategy | Programmed <br> Projects <br> (FY2022-2028) | Planned Funded <br> Projects <br> (FY2029-2050) | Planned Unfunded <br> Projects |
| :--- | :--- | :--- | :--- |
| Transportation Demand <br> Management |  |  |  |
| TSMO/ITS |  |  | Planned services |
| Public Transportation <br> Improvements |  | Additional <br> capacity identified <br> as a long-term <br> need |  |
| Additional System Capacity |  |  | ( |

# Regional Average Annual Weekday Traffic Volumes (2018-2022) 

The average annual growth rates for the past five years indicate that traffic volumes in Canyon County have seen the most growth (Table 16). I-84 and US 20/26 in Canyon County saw average growth rates of over 5\%. The highest growth rate in Ada County was State Highway 69 (Meridian Road) at $5 \%$.

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 2021. 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 ${ }^{6}$.

Table 16: Regional Average Annual Weekday Traffic Volumes (2018-2022)

| Road | Location | Direction | 2018 | 2019 | 2020 | 2021 | 2022 | Annual Average Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-84 | 0.4 miles nw/o US 20/26 (Exit 26) | East | 17,328 | 19,268 | 19,587 | 22,172 | 22,358 | 7\% |
| US 20/26 | 1.6 miles e/o Jct I-84 IC \#29 (e/o KCID Rd) | East | 6,012 | 6,467 | 6,125 | 7,343 | 7,633 | 6\% |
| I-84 | 1.8 miles se/o Sand Hollow IC | Southeast | 12,458 | 13,181 | 13,454 | 15,453 | 15,190 | 5\% |
| I-84 | 1.8 miles se/o Sand Hollow IC | Northwest | 12,528 | 13,163 | 13,479 | 15,444 | 15,267 | 5\% |
| Meridian Rd (SH 69) | s/o Hubbard Rd | North | 9,150 | 9,772 | 9,742 | 10,576 | 11,018 | 5\% |
| Chinden Blvd (US 20/26) | w/o McDermott Rd | West | 9,664 | 10,160 | 9,307 | 11,119 | 11,631 | 5\% |
| Chinden Blvd (US 20/26) | w/o McDermott Rd | East | 9,524 | 9,985 | 9,196 | 10,962 | 11,432 | 5\% |
| I-84 | 0.1 miles se/o Karcher Rd Interchange (Exit 33) | East | 42,236 | 42,830 | N/A | 49,851 | 50,697 | 5\% |
| Meridian Rd (SH 69) | s/o Hubbard Rd | South | 9,307 | 9,965 | 9,920 | 10,598 | 11,134 | 5\% |
| I-84 | w/o 11th Ave Overpass | West | 46,811 | 48,112 | 45,547 | 52,778 | 55,493 | 4\% |
| US 20/26 | 1.6 miles e/o Jct I-84 IC <br> \#29 (e/o KCID Rd) | West | 6,352 | 6,634 | 6,172 | 7,370 | 7,495 | 4\% |
| I-84 | w/o beg EB Off Ramp <br> Franklin Blvd IC (Exit 36) | West | 42,572 | 43,236 | N/A | 50,518 | 50,025 | 4\% |
| SH 55 (Karcher Rd) | 0.14 miles $\mathrm{n} / \mathrm{o}$ I-84B (Caldwell-Nampa Blvd) | Northeast | 23,088 | 24,995 | 23,207 | 26,607 | 26,764 | 4\% |
| I-84 | $\begin{aligned} & 0.4 \text { miles nw/o US } 20 / 26 \\ & \text { (Exit 26) } \end{aligned}$ | West | 18,632 | 18,872 | 19,211 | 21,573 | 21,436 | 4\% |
| I-84 | w/o 11th Ave Overpass | East | 50,099 | 51,638 | 48,359 | 55,257 | 57,539 | 4\% |
| SH 55 (Karcher Rd) | 0.25 miles e/o Indiana Ave | West | 8,256 | 9,025 | 8,755 | 9,609 | 9,482 | 4\% |
| I-84 | w/o Beg EB Off Ramp <br> Franklin Blvd IC (Exit 36) | East | 45,712 | 44,304 | N/A | 53,393 | 52,382 | 3\% |
| I-84 | nw/o 10th Ave Interchange (Exit 28) | Northwest | 25,192 | 26,250 | 26,466 | 30,977 | 28,824 | 3\% |
| I-84 | nw/o 10th Ave Interchange (Exit 28) | Southeast | 26,157 | 27,215 | 27,215 | 30,912 | 29,822 | 3\% |
| Meridian Rd (SH 69) | e/o Sailer PI (Kuna) | West | 5,778 | 5,962 | 5,965 | 6,310 | 6,583 | 3\% |
| SH 44 | e/o Palmer Lane | East | 10,606 | 10,895 | 11,171 | 11,683 | 12,040 | 3\% |

[^3]| Road | Location | Direction | 2018 | 2019 | 2020 | 2021 | 2022 | Annual Average Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SH 55 (Karcher Rd) | 0.25 miles e/o Indiana Ave | East | 8,946 | 9,682 | 9,507 | 10,371 | 10,127 | 3\% |
| I-84 | 3.7 Miles e/o of Simco Rd Overpass | East | 12,255 | 12,588 | 11,978 | 13,737 | 13,828 | 3\% |
| I-84 | nw/o Franklin Rd Interchange (Exit 29) | Northwest | 28,392 | 29,076 | 28,978 | 31,971 | N/A | 3\% |
| US 20/26 | 0.38 miles nw/o Mink Rd | Northwest | 3,693 | 3,869 | 3,824 | 4,178 | 4,158 | 3\% |
| US 20/26 | 0.38 miles nw/o Mink Rd | Southeast | 3,861 | 4,020 | 3,962 | 4,343 | 4,333 | 3\% |
| I-84 | 1.4 miles se/o Gowen Rd IC | Southeast | 13,039 | 13,386 | 12,566 | 14,677 | 14,577 | 3\% |
| I-84 | nw/o Franklin Rd Interchange (Exit 29) | Southeast | 29,912 | 30,338 | 30,239 | 33,371 | N/A | 3\% |
| I-84 | 0.1 miles se/o Karcher Rd Interchange (Exit 33) | West | 37,540 | 38,399 | N/A | 44,705 | 41,663 | 3\% |
| I-84 | 3.7 Miles e/o of Simco Rd Overpass | West | 12,014 | 12,297 | 11,559 | 13,291 | 13,328 | 3\% |
| Meridian Rd (SH 69) | e/o Sailer PI (Kuna) | East | 5,778 | 5,871 | 5,885 | 6,208 | 6,404 | 3\% |
| SH 44 | e/o Palmer Lane | West | 11,366 | 11,277 | 11,682 | 12,202 | 12,581 | 3\% |
| I-84 | 1.5 miles nw/o Blacks Creek IC | Northwest | 12,668 | 13,134 | 11,836 | 13,528 | 13,948 | 2\% |
| I-84 | 1.4 miles se/o Gowen Rd IC | Northwest | 13,164 | 13,403 | 12,528 | 14,547 | 14,485 | 2\% |
| I-84 | 0.61 miles w/o WB On Ramp IC 44 (Meridian) | West | 61,182 | 63,183 | 58,991 | 66,171 | 67,025 | 2\% |
| I-84 | 0.61 miles w/o WB On Ramp IC 44 (Meridian) | East | 62,683 | 64,801 | 60,504 | 67,990 | 68,440 | 2\% |
| I-84 | 0.7 miles e/o Robinson Rd overpass | East | 58,505 | 60,582 | 56,611 | 63,004 | 63,744 | 2\% |
| I-84 | 0.7 miles e/o Robinson Rd overpass | West | 55,304 | 57,026 | 53,340 | 59,590 | 59,648 | 2\% |
| US 20/26 | w/o Apple Valley Rd | East | 2,569 | 2,620 | 2,545 | 2,748 | 2,756 | 2\% |
| I-84 | w/o Locust Grove Overpass | East | 69,480 | 71,518 | 66,052 | 74,021 | 74,481 | 2\% |
| State St | nw/o 23rd St | Southeast | 10,776 | 11,604 | 10,165 | 11,497 | 11,548 | 2\% |
| SH 55 (Karcher Rd) | 0.14 miles n/o I-84B (Caldwell-Nampa Blvd) | Southwest | 20,866 | 22,431 | 20,823 | 22,815 | 22,309 | 2\% |
| Broadway Ave | s/o Myrtle (River Crossing) | North | 14,066 | 14,845 | 12,774 | 14,770 | 14,987 | 2\% |
| US 20/26 | w/o Apple Valley Rd | West | 2,509 | 2,554 | 2,488 | 2,691 | 2,669 | 2\% |
| SH 55 (Karcher Rd) | s/o Lowell Rd | South | 3,286 | 3,229 | 3,178 | 3,558 | 3,484 | 1\% |
| SH 55 (Karcher Rd) | s/o Lowell Rd | North | 3,390 | 3,311 | 3,260 | 3,636 | 3,591 | 1\% |
| I-84 | w/o Locust Grove Overpass | West | 68,616 | 70,523 | 64,517 | 71,573 | 72,480 | 1\% |
| I-84 | 1.5 miles nw/o Blacks Creek IC | Southeast | 13,266 | 13,263 | 12,187 | 13,981 | 13,985 | 1\% |
| State St | nw/o 23rd St | Northwest | 11,029 | 11,679 | 9,955 | 11,194 | 11,615 | 1\% |
| I-84 | 0.3 miles w/o Cole/Overland Interchange (Boise) | Northwest | 40,571 | 42,789 | 36,595 | 40,712 | 42,381 | 1\% |
| I-84 | 0.3 miles w/o Cole/Overland Interchange (Boise) | Southeast | 55,287 | 58,715 | 49,529 | 55,189 | 57,417 | 1\% |
| $\begin{aligned} & \text { Chinden Blvd (US } \\ & 20 / 26 \text { ) } \end{aligned}$ | 0.14 miles nw/o Five Mile Ext. | Southeast | 13,721 | 13,736 | 11,156 | 13,132 | 14,191 | 1\% |
| I-84 | se/o Ustick Road Overpass (Caldwell) | West | 30,210 | 31,482 | 30,758 | 30,973 | 30,978 | 1\% |
| I-84 | 0.74 miles w/o EB Off Ramp Gowen Rd (Exit 57) | West | 25,789 | 25,633 | 22,803 | 25,927 | 26,339 | 1\% |


| Road | Location | Direction | 2018 | 2019 | 2020 | 2021 | 2022 | Annual Average Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-84 | 0.74 miles w/o EB Off Ramp Gowen Rd (Exit 57) | East | 25,436 | 25,260 | 22,447 | 25,453 | 25,931 | 0\% |
| I-84 | se/o Ustick Road Overpass (Caldwell) | East | 31,378 | 32,248 | 31,501 | 31,973 | 31,808 | 0\% |
| I-84 | 1.2 miles w/o I-184 IC (Five Mile) | East | 74,278 | 74,983 | 66,597 | 74,334 | 75,269 | 0\% |
| Eagle Rd | 0.3 miles s/o SH 44 (River Crossing) | North | 21,995 | 22,538 | 20,854 | 22,381 | 22,163 | 0\% |
| Chinden Blvd (US 20/26) | 0.14 miles nw/o Five Mile Ext. | Northwest | 14,015 | 14,049 | 11,667 | 13,547 | 14,109 | 0\% |
| Eagle Rd | 0.3 miles s/o SH 44 (River Crossing) | South | 21,254 | 21,709 | 19,889 | 21,312 | 21,118 | 0\% |
| I-84 | $\begin{aligned} & 1.2 \text { miles w/o I-184 IC } \\ & \text { (Five Mile) } \end{aligned}$ | West | 76,620 | 78,373 | 69,681 | 76,418 | 76,106 | 0\% |
| I-84 | 0.6 miles w/o Broadway Ave IC | East | 39,937 | 39,904 | 35,117 | 39,255 | 39,532 | 0\% |
| I-84 | 0.8 miles w/o Orchard IC | Southeast | 49,763 | 49,928 | 44,076 | 48,686 | 49,237 | 0\% |
| I-84 | 0.8 miles w/o Orchard IC | Northwest | 51,263 | 51,504 | 44,914 | 49,509 | 50,178 | -1\% |
| Eagle Rd | $\mathrm{n} / \mathrm{o}$ Sedona St | South | 19,741 | 20,598 | 18,822 | 19,761 | 19,262 | -1\% |
| I-84 | 0.6 miles w/o Broadway Ave IC | West | 42,732 | 42,811 | 37,177 | 41,310 | 41,660 | -1\% |
| Eagle Rd | $\mathrm{n} / \mathrm{o}$ Sedona St | North | 20,459 | 21,248 | 19,258 | 20,064 | 19,932 | -1\% |
| I-84 | 0.4 miles w/o Vista Ave IC | East | N/A | 48,403 | 41,266 | 46,346 | 47,083 | -1\% |
| Broadway Ave | s/o Myrtle (River Crossing) | South | 14,713 | 15,610 | 12,070 | 13,847 | 14,307 | -1\% |
| I-84 | 0.4 miles w/o Vista Ave IC | West | N/A | 50,811 | 42,242 | 47,288 | 48,095 | -1\% |
| I-184 | 1.4 miles ne/o I-84 IC (Emerald Overpass) | Southwest | 46,894 | 47,567 | 38,796 | 43,278 | 44,102 | -2\% |
| I-184 | 0.4 miles e/o Boise River (Connector WB) | West | 37,265 | 37,498 | 28,340 | 32,462 | 34,673 | -2\% |
| I-184 | 1.4 miles ne/o I-84 IC (Emerald Overpass) | Northeast | 45,072 | 46,030 | 36,882 | 40,883 | 41,830 | -2\% |
| I-184 | 0.4 miles e/o Boise River (Connector EB) | East | 43,549 | 44,665 | 33,301 | 36,966 | 40,335 | -2\% |
| Chinden Blvd (US 20/26) | w/o 32nd St | Northwest | 14,473 | 14,235 | 10,937 | 12,124 | 12,774 | -3\% |
| I-184 | WB Off Ramp to Cole Rd | West | 5,210 | 4,812 | 3,774 | 4,556 | 4,580 | -3\% |
| $\begin{aligned} & \text { Chinden Blvd (US } \\ & 20 / 26 \text { ) } \end{aligned}$ | w/o 32nd St | Southeast | 15,610 | 15,169 | 11,340 | 12,282 | 13,029 | -4\% |


[^0]:    1 https://compassidaho.org/wp-content/uploads/2022CongestionManagementSystemTechnicalDocument.pdf
    2 https://compassidaho.org/demographics/

[^1]:    3 https://compassidaho.org/development-monitoring-report/

[^2]:    4 https://compassidaho.org/change-in-motion-reports/
    5 https://www.fhwa.dot.gov/planning/congestion_management_process/cmp_guidebook/cmpguidebk.pdf

[^3]:    6 https://compassidaho.org/traffic-counts/

