

THE COST OF CONGESTION

I-70 Mountain Corridor Impact Study 2026

Denver to Grand Junction

Quantifying the Economic, Workforce, and Quality-of-Life Impacts of Congestion Along Colorado's Most Critical East-West Corridor



WHY THIS REPORT MATTERS

I-70 serves as the primary connection between Metro Denver, the Mountain Resort Region, and the Western Slope. The performance of this corridor influences tourism, workforce mobility, freight movement, public safety, and overall economic efficiency.

Western Slope

226K residents

Reliable access to Front Range markets is essential for business operations, workforce mobility, and economic stability.

Mountain Resort Region

132K residents

Congestion influences tourism demand, employee access, housing affordability, and seasonal economic activity.

Metro Denver

3.3M residents

Congestion affects leisure travel, goods movement, and regional economic efficiency.

This report does not propose a solution for congestion-related challenges. Instead, it shows that as Colorado's economy grows, reliable, year-round corridor performance is critical to regional stability and statewide competitiveness.



KEY FINDINGS

\$47M

Annual Tourism Revenue at Risk

A 1% decline in tourism spending in the Mountain Resort Region.

\$319M

Value of Resident Time Lost

Value of personal time lost to I-70 delays across all three regions.

\$1.9B

GDP Impact from Productivity Loss

A 0.5% decline in worker productivity and business efficiency.

\$2M

Government Impact

Loss of sales tax revenue associated with a 1% decrease in tourism spending in the Mountain Resort Region.

\$2.25B

Total annual cost of congestion

- Up \$1.4 B from \$839M in 2005
- 53% real increase after adjusting for inflation.



KEY FINDINGS

\$2.3M/hr

Visitor spending at businesses in the Mountain Resort Region at risk due to corridor closure

Up from \$800K/hour in 2005.

\$2M

Added shipping costs for local mountain businesses due to I-70 congestion

Total added shipping costs due to congestion-related delays exceeds \$14M annually for the full I-70 corridor.

\$30B

Estimated capital improvement cost

Each year construction is delayed compounds this figure. Annual maintenance alone exceeds \$44M.

Extreme Weather Events

Extreme weather events including wildfires and floods can cause closures, delays, and safety risks that strain transportation infrastructure and alter travel patterns.

Housing Dynamics

Rising prevalence of second-homes and short-term rentals in Mountain Resort Region drive up housing costs and limit workforce housing availability, requiring many workers to commute longer distances on I-70 corridor.

Traffic Diversions

Closures along I-70 frequently divert traffic onto secondary routes that are not designed for high volumes, resulting in longer travel times, increased safety risks, and added strain on local infrastructure and communities.



SCOPE & METHODOLOGY

- This study updates the original 2007 report, maintaining the same analytical framework to ensure comparability across nearly two decades of economic growth, population change, and evolving travel behavior.
- Analysis quantifies the costs of inaction assuming no major capacity or operational improvements.
- Added analysis reflects emerging challenges including COVID impacts, housing constraints, STR dynamics, and climate/weather exposure.
- Both qualitative and quantitative impacts are assessed throughout.

Impact Categories Assessed



Tourism

Visitation patterns, travel behavior, recreation spending



Residential & Workforce

Commuting patterns, workforce accessibility, housing market dynamics



Business Community

Labor availability, freight reliability, business operating costs



Government

Emergency services, transportation operations, infrastructure demands



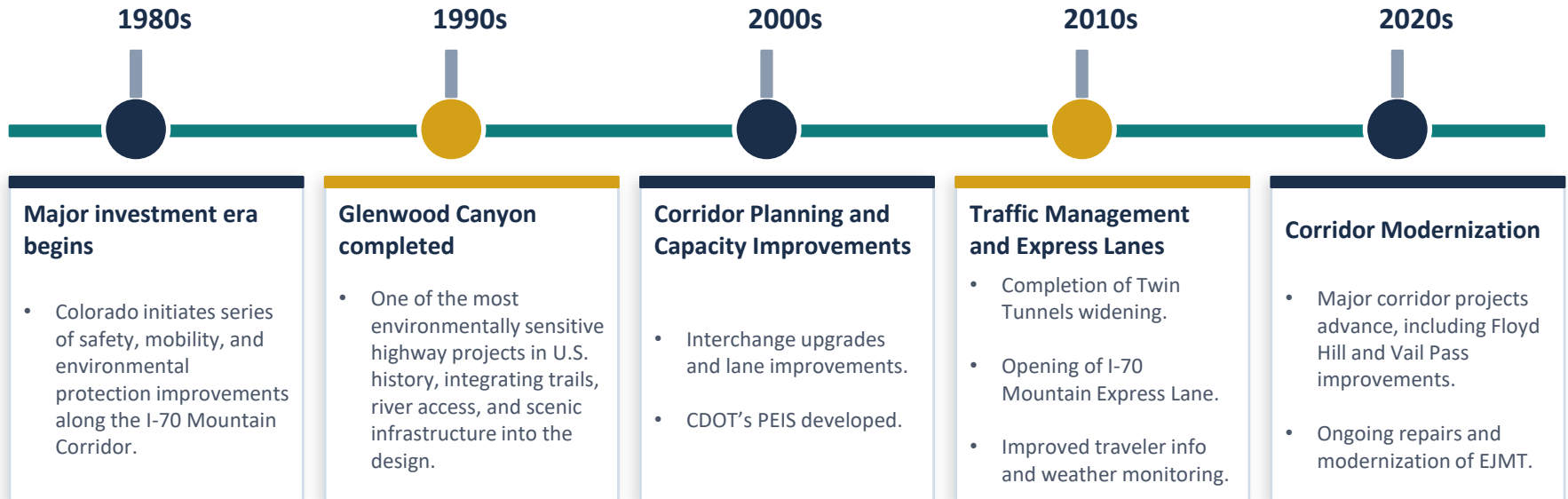
Construction & Infrastructure

Deferred improvement costs, escalating construction timelines



HISTORY OF THE I-70 CORRIDOR

Despite decades of investment, travel demand has grown faster than available capacity, leading to persistent and worsening congestion.



Policies aimed at improving transportation funding, safety, and operational reliability along major highway corridors

2017

HB17-1242

Statewide ballot measure for transportation revenue, including I-70 capacity relief.

2017

SB17-267

Authorized CDOT lease-purchase financing to accelerate capital-intensive corridor projects.

2018

SB18-001

Established recurring General Fund transfers for highway maintenance, bridges, and operations.

2021

SB21-260

Created dedicated transportation funding (\$5B+ over 10 years). Enabled Floyd Hill, tunnel work, and mountain corridor reliability investments.

2022

HB22-1074

Clarified enforcement of peak-period shoulder lanes and express lane use on I-70; civil penalties for improper use.

2024

SB24-100

Strengthened chain law and winter safety enforcement on I-70. Expanded CMV requirements Sept 1–May 31; stricter passenger vehicle traction laws.

2025

SB25-069

Created permit system for third-party vendors to sell and install chains at designated sites along the corridor.

2025

SB25-320

Updated CMV statutes for regulatory clarity and freight movement consistency on key corridors including I-70.



BASE TRAFFIC CONDITIONS: KEY MONITORING LOCATIONS

Three locations monitor traffic conditions along the I-70 Mountain Corridor, representing Metro Denver, the Mountain Resort Region, and the Western Slope. While volumes are highest near Metro Denver, the fastest growth has occurred on the Western Slope.

Idaho Springs (Twin Tunnels)

Metro Denver Segment

Highest absolute volume on the corridor. Key bottleneck for Front Range recreational traffic.

51,000

Avg Daily Traffic

+10.9%

Growth 2015–2025

+19.9%

Growth 2005–2025

1.0% / yr

Avg Annual Growth

Eisenhower–Johnson Memorial Tunnel

Mountain Resort Region Segment

Highest point on the U.S. Interstate System. Single-point failure risk and closures that affect the entire corridor.

34,000

Avg Daily Traffic

+7.0%

Growth 2015–2025

+20.6%

Growth 2005–2025

0.7% / yr

Avg Annual Growth

Glenwood Springs

Western Slope Segment

Fastest-growing location. Vulnerable to Glenwood Canyon closures, impacting the east-west route for most through-traffic.

19,000

Avg Daily Traffic

+20.7%

Growth 2015–2025

+22.1%

Growth 2005–2025

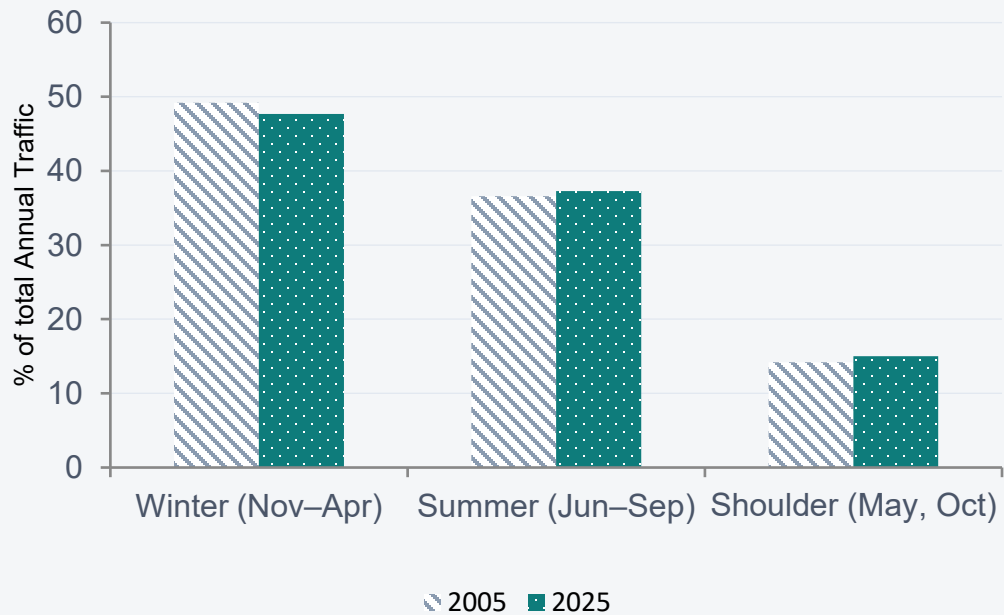
1.9% / yr

Avg Annual Growth

Source: CDOT.



BASE TRAFFIC CONDITIONS: SEASONAL PATTERNS



Source: CDOT.

Overall, daily traffic volumes are higher in summer, but the most severe congestion occurs in winter due to weather, ski travel concentration, and narrower time windows.

Winter · Nov – Apr

6M vehicles

+12.7% vs 2005 (+1M vehicles). Most severe congestion coincides with ski weekends, holidays & school breaks.

Summer · Jun – Sep

4.7M vehicles

+18.5% vs 2005. Driven by Front Range heat, outdoor recreation & holiday weekends (July 4th, Labor Day).

Shoulder · May & Oct

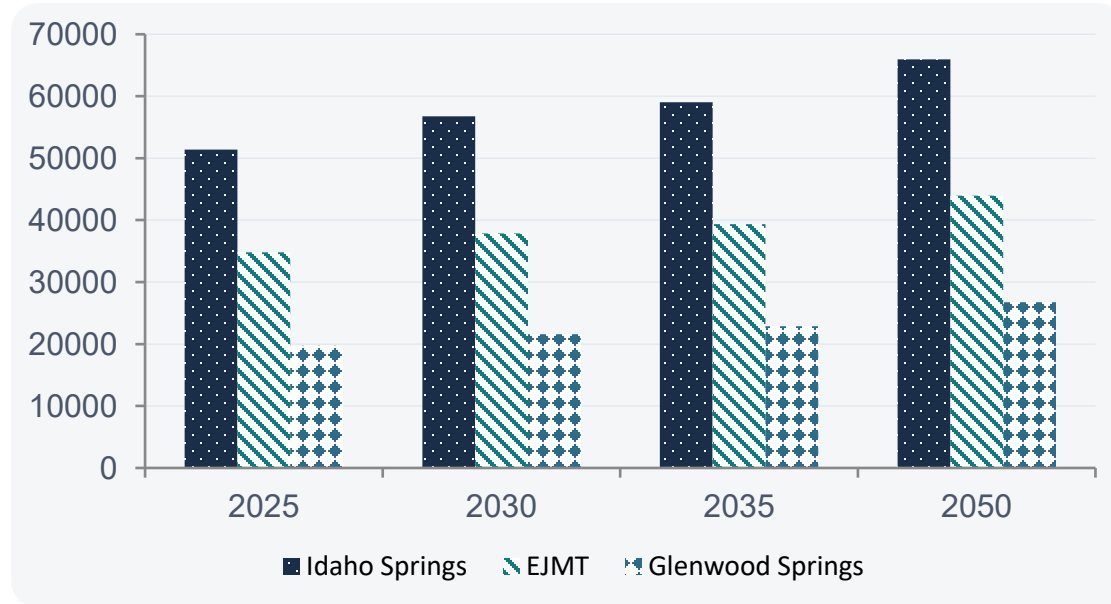
1.9M vehicles

+22.9% vs 2005 (the fastest-growing season). 30K vehicles/day, increasing year-round usage of the corridor.



BASE TRAFFIC CONDITIONS: FORECAST 2025–2050

Traffic volumes are projected to rise steadily through 2050 — with Glenwood Springs growing fastest (+35.5%) and Idaho Springs reaching 65,900 vehicles per day. Colorado's population is expected to grow by 1M+ by 2050, concentrated along the Front Range.



Average Daily Traffic by Location & Year (CDOT projections)

Projected Growth vs 2025 Baseline

Location	By 2030	By 2035	By 2050
Idaho Springs	+10.5%	+14.9%	+28.3%
EJMT	+8.7%	+13.1%	+26.3%
Glenwood Spgs	+9.2%	+15.8%	+35.5%

+40%

Regional vehicle miles traveled projected increase by 2050 (DRCOG travel demand model)

TOURISM IMPACT: VISITOR SPENDING, LODGING & TRAVEL ALTERNATIVES

\$29.5B

Total Colorado visitor expenditures (2024)

95.4M visitors statewide

\$4.7B

Visitor spending in Mountain Resort Region

16.5% of total Colorado visitor spending

\$780M

Visitor spending on the Western Slope

~3% of statewide travel spending

Lodging Costs & Congestion Effects

\$747 / night

Avg Vail winter lodging rate 2024–25 (+52% vs 2014)

27%

Share of domestic overnight spending on lodging (\$594/person/trip)

35.5%

Mountain Resort Region retail sales from visitor spending

⚠ Congestion has mixed lodging effects: may discourage day trips (reducing demand) but encourage overnight stays for those already in the region.

Travel Alternatives to I-70



Commercial Air

4 corridor airports. Fly-in visitors often stay longer & spend more, but only make up about 7% of overnight trips



Bustang / Snowstang / Local Transit

Bustang West Line carried 99,800 riders (2024, +11%). Snowstang transported ~8,000 skiers winter 2024.



Rail

Winter Park Express Ski Train: 43,919 riders in 2025 (+153% YoY). Amtrak Zephyr serves Glenwood Springs (36,853 riders, FY2024).

Alternatives ease pressure but cannot replace I-70. Personal vehicles account for 93% of overnight trips to Colorado.



RESIDENT IMPACTS

\$319M

Annual value of
personal time lost
to I-70 congestion

Regional Breakdown of Congestion Travel-Time Costs

Metro Denver

60 min delay/trip | \$43.22/hr | 6.8M persons/yr

\$293.5M

Mountain Resort Region

10 min delay/trip | \$31.14/hr | 3.9M persons/yr

\$20.2M

Western Slope

10 min delay/trip | \$28.58/hr | 1.1M persons/yr

\$5.4M

Plus: vehicle wear costs, sunk costs of cut-short recreation, and compounding losses from repeated peak delays.



\$1.9 Billion

Annual decline in Colorado GDP from just a 0.5% productivity loss due to congestion-related factors across 2 million employees

Labor & Productivity

- Unreliable commutes reduce productivity, increase fatigue, and drive turnover.
- Mountain Resort Region employers increasingly subsidize workforce housing as congestion widens the gap between job centers and affordable housing.

Freight & Supply Chain

- 159,000+ truck delay hours in 2024. Congestion adds \$14M in annual shipping costs (\$2M for mountain businesses).
- Mountain communities face acute supply disruptions. Limited storage capacity means frequent, time-sensitive deliveries are essential.

Talent Recruitment

- Colorado's mountain access is a key employer recruitment tool. Worsening congestion undermines this advantage, increasing pressure on wages, relocation packages, and employer-sponsored housing programs.

Mountain Resort Region tourism-related transactions: \$2.3M per workday hour. This economic impact is at risk with any reduction in reliable visitor flow.



GOVERNMENT IMPACT

Fiscal Impacts

8%

percent of state accidents that occurred along I-70 mountain corridor (2024)

34%

Research shows congestion increases peak-hour crashes by 34%

\$60.8M

Estimated cost to society of fatal crashes along I-70.

The Cost of Delay

\$2.3 Million

annual sales tax revenue loss from a 1% tourism spending decline

Congestion also burdens emergency services, workforce housing programs, and government employee recruitment along the corridor.



BEYOND THE NUMBERS

Emerging pressures compounding I-70 congestion impacts:

Housing Crisis

- 60% of Mountain Resort Region housing is second homes.
- Home prices are up 200–300% since 2000.
- Workers commute longer distances, worsening congestion in a feedback loop.

Diversion Risks

- I-70 closures push traffic onto US-40, CO-9, CO-13.
- These routes are not built for interstate volumes.
- Communities face sudden surges, safety risks, and infrastructure strain.

Climate & Weather

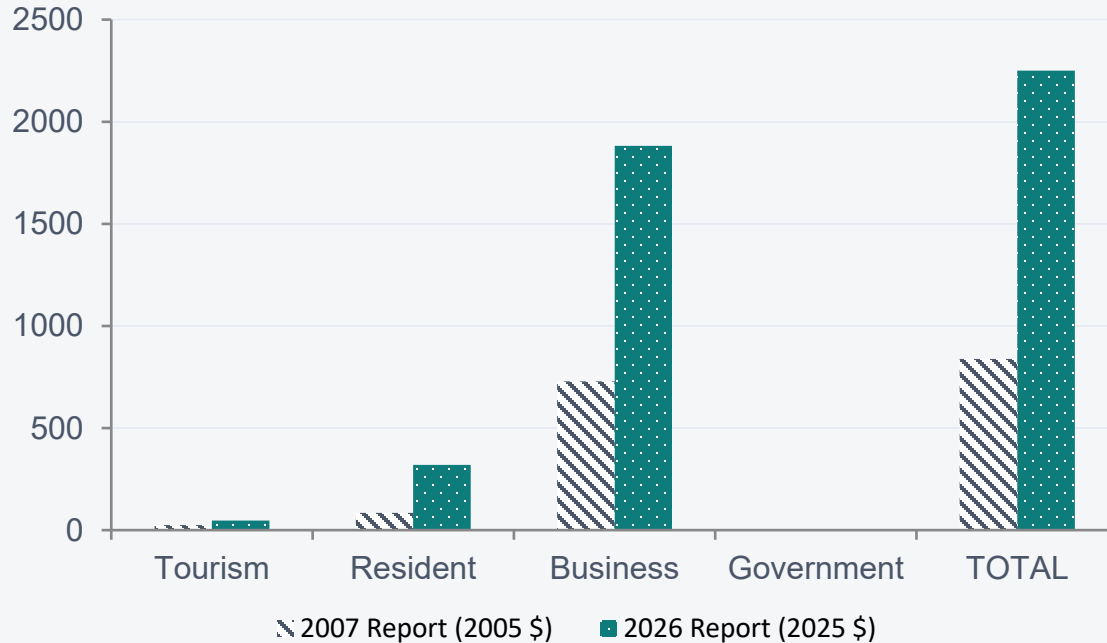
- Wildfires, floods, and low-snow years increasingly disrupt travel.
- Jan 2026 snowpack at 56% of median, concentrating ski season to a shorter window.
- Both extreme events and shifting weather trends alter corridor demand unpredictably.

Health & Environment

- Congestion raises in-vehicle pollutant exposure, emissions, and travel stress.
- CO2 and particulate matter worsen during stop-and-go conditions on mountain grades.



THEN VS. NOW: 2007 TO 2026



Annual Impact Estimates: 2007 vs 2026 (\$ millions)

Key Takeaways

+168%

Growth in total impact (not inflation-adjusted)

+88%

Increase in tourism impact

+275%

Resident time-loss costs more than doubled

+159%

Business impact increased substantially

Real costs — not just inflation — have grown. Higher wages, more travelers, greater freight volume, and longer/more frequent delays all drive the increase.



THEN VS. NOW (INFLATION ADJUSTED): 2007 TO 2026

Sector	2007 (2005 \$)	2007 (2025 \$)	2026 (2025 \$)
Tourism	\$25	\$44	\$47
Resident	\$85	\$149	\$319
Business	\$728	\$1,278	\$1,882
Government	\$1	\$2	\$2
TOTAL	\$839	\$1,473	\$2,250

Annual Impact Estimates: 2007 vs 2026 (\$ millions, 2025 \$)

Key Takeaways

+53%

Growth in total impact
(inflation-adjusted)

+7%

Increase in tourism impact

+114%

Resident time-loss costs
increased the most

+47%

Business impact increased
substantially



FINAL ANALYSIS

I-70 congestion is not merely a transportation inconvenience. It functions as an economic constraint with measurable consequences for every sector of Colorado's economy.

01

Congestion costs have grown in real terms, not just due to inflation. This increase largely reflects population growth, higher wages, and expanded tourism volumes.

02

The costs of delayed construction compounds over time. Construction estimates now reach \$30B.

03

Congestion is embedded in a broader system of structural challenges including housing, workforce, climate, and diversion pressures are all interlinked.

04

Reliable year-round corridor performance is increasingly central to Colorado's regional stability and statewide competitiveness.



BASE TRAFFIC CONDITIONS: SEASONAL PATTERNS – ALTERNATIVE TEXT

The chart compares the percentage of total annual traffic across three seasonal periods: winter (November to April), summer (June to September), and shoulder seasons (May and October) for 2005 and 2025.

- Winter (Nov–Apr) has the highest share in both years, at approximately 49.2% in 2005 and 47.7% in 2025, showing a slight decrease over time.
- Summer (Jun–Sep) represents the second-largest share, at around 36.6% in 2005 and 37.3% in 2025, with a small increase.
- Shoulder seasons (May, Oct) account for the smallest portion, at roughly 14.2% in 2005 and 15.0% in 2025, also showing a slight increase.

Overall, traffic distribution remains relatively stable across the two years, with winter continuing to dominate and only minor shifts toward summer and shoulder periods.

Source: CDOT.

Overall, daily traffic volumes are higher in summer, but the most severe congestion occurs in winter due to weather, ski travel concentration, and narrower time windows.

Winter · Nov – Apr

6M vehicles

+12.7% vs 2005 (+1M vehicles). Most severe congestion coincides with ski weekends, holidays & school breaks.

Summer · Jun – Sep

4.7M vehicles

+18.5% vs 2005. Driven by Front Range heat, outdoor recreation & holiday weekends (July 4th, Labor Day).

Shoulder · May & Oct

1.9M vehicles

+22.9% vs 2005 (the fastest-growing season). 30K vehicles/day, increasing year-round usage of the corridor.



BASE TRAFFIC CONDITIONS: FORECAST 2025–2050 – ALTERNATIVE TEXT

Traffic volumes are projected to rise steadily through 2050 — with Glenwood Springs growing fastest (+35.5%) and Idaho Springs reaching 65,900 vehicles per day. Colorado's population is expected to grow by 1M+ by 2050, concentrated along the Front Range.

The chart displays projected traffic volumes for three locations—Idaho Springs, EJMT, and Glenwood Springs across four years: 2025, 2030, 2035, and 2050.

- Idaho Springs shows the highest traffic in all years, increasing from 51,337 in 2025 to 56,754 in 2030, 59,049 in 2035, and reaching 65,934 by 2050.
- EJMT has the second-highest traffic levels, rising from 34,802 in 2025 to 37,836 in 2030, 39,366 in 2035, and 43,956 in 2050.
- Glenwood Springs consistently has the lowest traffic, increasing from 19,744 in 2025 to 21,560 in 2030, 22,860 in 2035, and about 26,760 in 2050.

All three locations show a steady upward trend over time. The gap between Idaho Springs and the other two locations remains consistent, with no major shifts in relative ranking.

Projected Growth vs 2025 Baseline

Location	By 2030	By 2035	By 2050
Idaho Springs	+10.5%	+14.9%	+28.3%
EJMT	+8.7%	+13.1%	+26.3%
Glenwood Spgs	+9.2%	+15.8%	+35.5%

+40%

Regional vehicle miles traveled
projected increase by 2050
(DRCOG travel demand model)

THEN VS. NOW: 2007 TO 2026 – ALTERNATIVE TEXT

The chart compares cost estimates across five categories: tourism, resident, business, government, and total between the 2007 report (in 2005 dollars) and the 2026 report (in 2025 dollars).

- Tourism costs increase from approximately 25 million dollars in the 2007 report to 47 million dollars in the 2026 report.
- Resident costs rise from about 85 million dollars to 319 million dollars, showing a moderate increase.
- Business costs show the largest category increase, growing from roughly 728 million dollars to 1.9 billion dollars.
- Government costs are minimal or near zero in both reports.
- Total costs increase substantially from around 839 million dollars in the 2007 report to 2.3 billion dollars in the 2026 report.

Overall, all categories show higher estimated costs in the 2026 report compared to the 2007 report, with business and total costs accounting for the majority of the increase.

Key Takeaways

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