

AFTON EXPRESS

ANNUAL REPORT 2025



**FEBRUARY
2025**

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EXECUTIVE SUMMARY

In 2025, the Afton Express marked four years of connecting communities across the Blue Ridge—and the strongest year yet. Ridership grew by 24% from the previous year, reaching 23,725 passenger trips and marking the fourth consecutive year of growth. Since launching service in September 2021, the Afton Express has demonstrated the vital role regional transit plays in connecting communities, supporting workforce mobility, and enhancing quality of life across the Central Shenandoah Valley and Greater Charlottesville region.

This sustained growth reflects both the essential nature of the service and a commitment to responsive, data-driven planning that adapts to evolving community needs. The defining achievement of 2025 was the comprehensive schedule optimization project undertaken to better serve riders and regional employers. Central Shenandoah Planning District Commission (CSPDC) transit staff facilitated a collaborative planning process with the service provider, regional partners, and a consultant throughout the summer and fall to develop a revised schedule to address evolving commuter patterns and rider requests. Following a public comment period and incorporating community feedback, the new schedule was successfully implemented on December 1, 2025. The revised schedule better aligns with employer shift times—particularly at the University of Virginia (UVA) and other major employment centers—removing barriers to ridership and expanding access to employment opportunities for residents across the region.

With improved schedule alignment, expanded awareness, and continued marketing efforts, ridership growth is anticipated to continue in 2026. The achievements detailed in this report reflect the collaborative efforts of CSPDC staff, our service provider Virginia Regional Transit (VRT), funding partners across five jurisdictions and UVA, and most importantly, the riders who choose the Afton Express as their commuting option. We are pleased to share this summary of our fourth year of service and look forward to building on this momentum in the years ahead.

PERFORMANCE METRICS

Ridership increased by 24% since last year, and 129% since the first full year of service in 2022. Like previous years, the most popular stop west of Afton Mountain is the Waynesboro Park and Ride lot, with the UVA Hospital West stop seeing the most utilization on the east side. Ridership remained consistent throughout the year, with predictable seasonal dips during summer and winter vacation and holiday periods. Ridership numbers reflect passenger counts - counted every time a person boards or exits the bus.

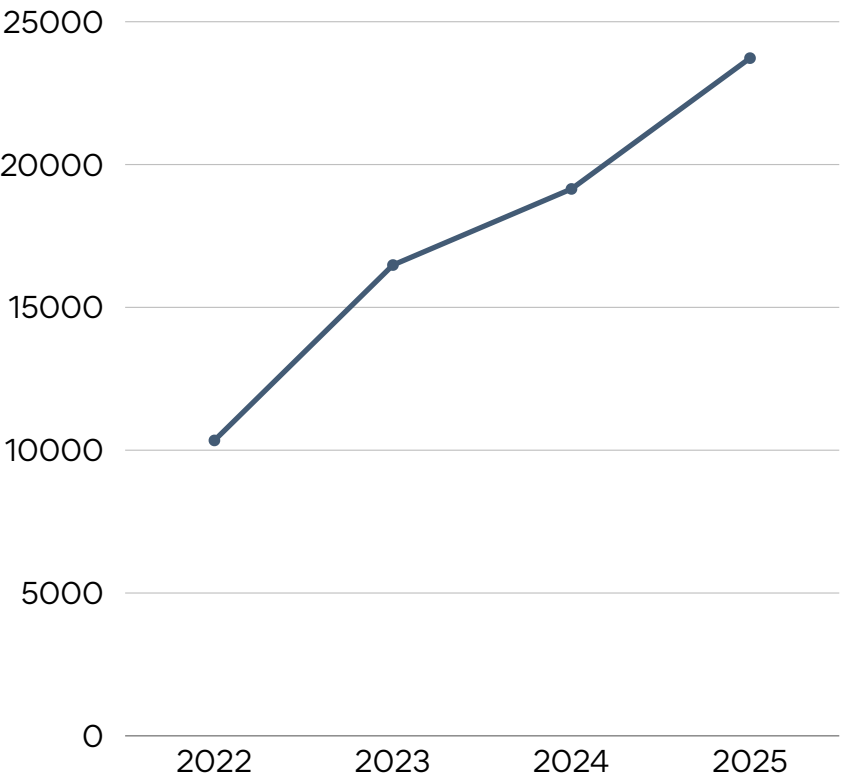
24%

Increase in ridership from 2024-2025

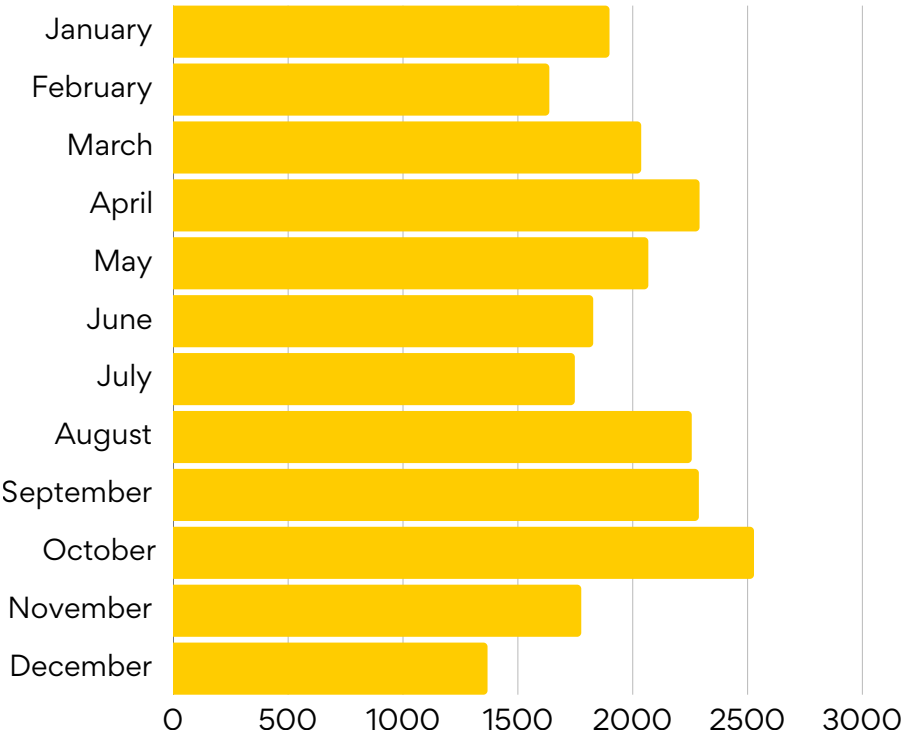
129%

Increase since first full year or service

● Figure 1. Annual Ridership



● Figure 2. Monthly Ridership



Number of passenger counts in 2025

23,725

Number of service days in 2025

242

STRATEGIC INITIATIVE: SCHEDULE OPTIMIZATION

The implementation of the revised Afton Express schedule on December 1, 2025, represents the culmination of a comprehensive planning process designed to better serve our region's commuters and employers. As the service approached the completion of its fourth full year of operation, CSPDC transit staff recognized the need to optimize the schedule to reflect post-pandemic work patterns, ridership trends, and evolving community needs.

Collaborative, Data-Driven Approach

CSPDC transit staff led the schedule optimization project in partnership with VRT, UVA's Parking and Transportation department, and consultant Whitman, Requardt and Associates, LLP (WRA). The project drew from comprehensive data analysis including ridership patterns since launch, travel demand by time of day, stop utilization rates, employer start and end times—particularly at major employment centers like UVA—and feedback from riders through our website, emails, and annual surveys.

Through an iterative design process, the team developed and refined numerous schedule scenarios before selecting a proposed schedule that best aligned with core objectives: improved alignment with employer schedules, more consistent service intervals, enhanced coverage during peak demand periods, and operational efficiency that supports long-term sustainability.



Community Engagement and Response

CSPDC released the proposed schedule for public comment in September 2025, with the comment period remaining open through October via the Social Pinpoint platform. The response was substantial and overwhelmingly positive. The public comment period generated 77 submissions, with 71 respondents providing numerical ratings averaging 3.8 out of 5 stars. Notably, 72% of respondents gave the changes a 4 or 5-star rating, with 5 stars being the most common rating (35 responses).

CSPDC staff carefully reviewed all feedback and made several adjustments based on public input. Most significantly, the 7:45 p.m. departure from UVA Hospital West was maintained rather than moving it to 7:40 p.m., after hospital staff overwhelmingly voiced that these five minutes are critical given the nature of their work. These modifications demonstrate CSPDC's commitment to balancing data-driven planning with responsiveness to individual rider needs.

SCHEDULE OPTIMIZATION

KEY SCHEDULE IMPROVEMENTS

The new schedule includes several strategic enhancements:



Enhanced Employer Alignment: Morning arrivals at UVA now correspond with common start times of 6:00 a.m., 7:00 a.m., 8:00 a.m., 8:30 a.m., and 9:00 a.m. Commuters starting at 8:00 a.m. now have two trip options, offering flexibility and capacity relief.



Improved Evening Coverage: Two pickup options at UVA at 5:10 p.m. and 5:40 p.m. ensure that if one bus reaches capacity, another arrives just 30 minutes later.



Additional Morning Trip: An extra morning departure expands capacity and provides more options for eastbound commuters during peak hours.



Express Service Efficiency: Two morning trips were converted to express routes between the Shenandoah Valley and UVA, reducing travel time and enabling the addition of a fifth morning trip.



Consistent Service Intervals: More evenly spaced trips throughout the day eliminate long gaps in service and create a more predictable, user-friendly timetable.

Looking Forward

As the new schedule stabilizes, CSPDC transit staff will monitor performance metrics including ridership, trip and stop utilization, and passenger feedback to assess effectiveness and identify opportunities for continuous improvement. The successful implementation of this schedule demonstrates our commitment to evolving with our communities' needs while maintaining the high-quality regional transit service that commuters depend on each year.

REGIONAL IMPACT

The Afton Express serves as critical regional infrastructure, connecting workforce, opportunities, and communities across the Central Shenandoah and Greater Charlottesville regions. By providing reliable transportation over Afton Mountain, the service generates measurable economic, environmental, and quality-of-life benefits that extend throughout the communities we serve.

ECONOMIC

The Afton Express delivers economic benefits at multiple levels, generating financial value for households, employers, and the region as a whole while supporting strong, resilient communities. By providing an effective commuter option across jurisdictions, the service strengthens regional connectivity and helps align housing locations with where employment opportunities are concentrated.

For riders, the Afton Express offers substantial financial savings by avoiding the “transportation tax” associated with fuel, vehicle wear, and parking costs—savings that can be equivalent to a \$5,500¹ annual raise for individual riders, with UVA parking passes alone averaging \$624² per year. Among those affiliated with the University, participation in the Wahoo Commute program produces additional annual savings, underscoring the value of employer investment in commuter benefits and sustainable transportation options such as public transit. In 2025, Afton Express service converted approximately \$437,152³ in mandatory vehicle-related expenses into discretionary income for rider households across the region, supporting both individual financial flexibility and the economic vitality of the Shenandoah Valley.

At the regional level, the Afton Express supports workforce recruitment and retention by expanding access to employment opportunities and enabling employers to draw from a broader labor pool without requiring workers to relocate. This enhanced access contributes to a more stable and competitive regional workforce.

In addition to workforce and household benefits, the Afton Express demonstrates sound economic stewardship by making better use of existing transportation assets. By shifting commuter trips away from single-occupancy vehicles, the service helps reduce wear and tear on the regional highway system and moderates demand for costly parking infrastructure at major employment centers, meeting commuter needs through shared service rather than expanded roadway or parking capacity.

\$5,489

Average annual rider savings

\$5,489 IS EQUIVALENT TO:



One year of tuition at Blue Ridge Community College⁴



13 months of groceries for a single adult and four months of groceries for a family of four⁵

\$437,152

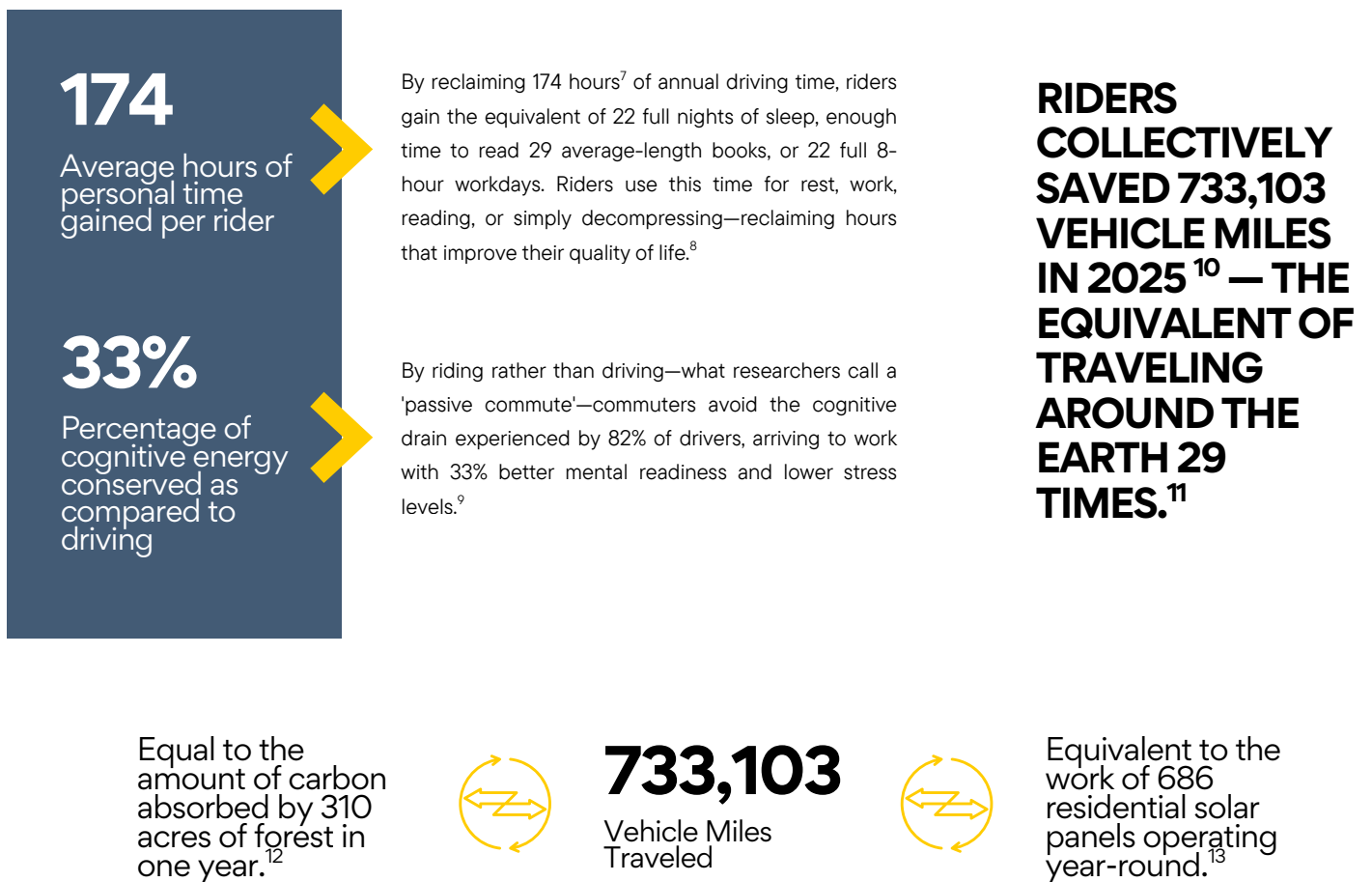
Estimated annual savings for riders in 2025

PUBLIC TRANSPORTATION IS A PROVEN ECONOMIC DRIVER. FOR EVERY \$1 INVESTED IN TRANSIT, COMMUNITIES SEE A \$5 RETURN IN ECONOMIC ACTIVITY. FURTHERMORE, LOCAL CONTRIBUTIONS LEVERAGE STATE AND FEDERAL GRANTS, TURNING EVERY \$1 OF LOCAL MATCH INTO \$20 IN TOTAL REGIONAL BENEFIT.⁶

REGIONAL IMPACT

ENVIRONMENT & INFRASTRUCTURE

Every passenger trip on the Afton Express represents one fewer single-occupancy vehicle traveling over Afton Mountain, reducing regional vehicle miles traveled and greenhouse gas emissions. This supports institutional and state sustainability goals, including UVA's aim of carbon neutrality by 2030. By supporting travel within the existing transportation network, the Afton Express reduces pressure for new roadway and parking expansion, helping to preserve open space, limit impervious surface growth, and promote more sustainable land-use patterns across the region. This approach helps ensure the regional transportation network remains functional, resilient, and capable of supporting long-term growth.



QUALITY OF LIFE

The Afton Express serves as a "time wealth" generator, allowing riders to reclaim 174 hours of personal time annually. Transitioning from driving to riding eliminates the stress and cognitive fatigue of a demanding daily commute, allowing residents to arrive at work prepared and to return home with their mental energy intact. For healthcare workers and others on extended shifts, the service provides a safe, reliable alternative to fatigued driving during early morning or late evening hours. By transforming an isolated mountain commute into a shared, productive experience, the Afton Express supports the overall well-being and safety of our regional workforce.

LOOKING AHEAD

As the Afton Express enters its fifth year of service, CSPDC transit staff will monitor the performance of the revised schedule implemented in December 2025. Tracking ridership patterns, trip utilization, and stop usage will provide the data necessary to assess the effectiveness of the schedule changes and identify opportunities for continuous improvement.

Ridership growth is anticipated to continue in 2026. The alignment of the new schedule with employer needs, expanded marketing efforts supported by a Virginia Department of Rail and Public Transportation (DRPT) grant, and four consecutive years of demonstrated demand position the service for sustained expansion. To support continued ridership growth and maintain service reliability, CSPDC will deploy a new and updated fleet to better meet evolving rider needs and future usage patterns.

CSPDC remains committed to fiscally responsible service planning and will continue to work collaboratively with funding partners and riders to deliver efficient, sustainable regional transit. The Afton Express has established itself as essential infrastructure connecting our communities, and will build on this foundation in the year ahead.



PARTNER SPOTLIGHT



The success of the Afton Express reflects the strength of regional collaboration. This service is made possible through the commitment and investment of our funding partners: the City of Charlottesville, Albemarle County, Augusta County, the City of Staunton, the City of Waynesboro, and the University of Virginia. Each partner recognizes that connecting our communities across the Blue Ridge creates value that extends beyond any single jurisdiction—expanding workforce access, supporting economic vitality, and enhancing quality of life throughout the region. Beyond our local partners, statewide leadership and support from the Virginia Department of Rail and Public Transportation make regional transit services like the Afton Express possible.

The Central Shenandoah Planning District Commission is proud to coordinate this service on behalf of our partner localities and the residents who rely on it. Together, we demonstrate what regional cooperation can accomplish when communities work toward shared goals. We look forward to continuing this partnership and building on the momentum of five successful years of service.



METHODOLOGY & DATA SOURCES

1 AVERAGE RIDER SAVINGS IN 2025

Average daily trip mileage per passenger: **61.7 miles**

MPG of on road fleet in US in 2025: **25 MPG** (Source: *Environmental Protection Agency (EPA)*)

Average Gallons Needed for 61.7 Mile Trip: $61.7 \div 25 =$ **2.47 gallons**

Average rider trips per week: 3-4 times a week (**3.5** times)

$3.5 \text{ trips/week} \times 52 \text{ weeks/year} = 182$

Average days off work per year = 33 days (holidays, paid-time off, and sick time counts estimated based on *U.S. Bureau of Labor Statistics (BLS)*, *National Compensation Survey (NCS)*, with a weighted average to reflect the higher proportion of riders who work in healthcare and academia

Average trips per rider in 2025: $182 - 33 =$ **149 trips**

Average price of gallon of gas in Virginia in 2025: **\$2.98** (Source: *U.S. Energy and Information Administration (EIP)* and *American Automobile Association (AAA)*)

Daily savings on gas: $2.47 \text{ gallons} \times \$2.98 = \$7.36$

Yearly savings on gas: $\$7.36 \times 149 \text{ trips} =$ **\$1,096.64**

Annual miles traveled per passenger: $61.7 \text{ miles} \times 149 \text{ trips} =$ **9,193.3 miles**

Annual cost of vehicle wear and tear: 0.41 cents / mile (includes 0.11 cents/mile for maintenance & repairs and 0.30 cents/mile for depreciation (Source: *AAA*): $\$0.41 \times 9,193.3 \text{ miles} =$ **\$3,768.43** per rider in 2025

Average cost of UVA parking pass = **\$624 / year** (See calculations in the following reference number)

Total savings per rider in 2025: $\$1,096.64 + \$3,768.43 + \$624 =$ **\$5,489.07**

2 AVERAGE PARKING PASS COST FOR UVA EMPLOYEE

This is a weighted average based on current UVA Academic and Health System permit rates and reflects the proportional distribution of across various permit tiers.

Remote Commuters (40%): \$28/month - Representing healthcare and academic staff who use the free remote shuttle lots or the basic surface lots

Standard Commuter (45%): \$45 - \$75/month - Representing academic faculty and medical staff who park in mid-tier lots or standard garages (like Emmet/Ivy or the 14th St. area)

Premier Commuter (15%): \$120 - \$150/month - Represents healthcare and executive staff who use high-demand hospital garages or reserved central grounds spaces

Cost per month: $(0.40 \times \$28) + (0.45 \times \$60) + (0.15 \times \$150) =$ **\$51-\$53**

Yearly cost: $\$52 \times 12 \text{ months} =$ **\$624**

3 COMBINED RIDER SAVINGS IN 2025

$\$7.36 \text{ (daily gas)} + \$25.30 \text{ (daily vehicle wear and tear (61.7 miles} \times \$0.41) + \$4.19 \text{ (daily parking } (\$624 \div 149 \text{ commuting days)} =$ **\$36.85 saved per round-trip commute**

$\$36.85 \times 11,863 \text{ round trip commutes} =$ **\$437,151.55 total savings**

4 BLUE RIDGE COMMUNITY COLLEGE (BRCC) TUITION RATES

Total tuition cost for one semester (12 credits) during Fall 2025 to Summer 2026 = **\$2,317.20**

$\$2,317.20 \times 2 \text{ semesters} =$ **\$4,634.40 total cost for one year**

5 AVERAGE GROCERY COST

Based on data from the *U.S. Department of Agriculture's (USDA) Food and Nutrition Services (FNS)*, moderate monthly grocery spending totals ~\$430/month (midpoint of \$394-\$467) for a single adult, and ~\$1,351 for a family of four.

$\$5,489 \div \$430 =$ **12.8 months**

$\$5,489 \div \$1,351 =$ **4.1 months**

6 ECONOMIC RETURN ON INVESTMENT

\$1 to \$5 ratio: the industry standard for measuring how transit spending circulates through the regional economy, accounting for direct effects (e.g., transit jobs and operations), indirect effects (e.g., employee retention), and induced effects (e.g., increased household spending by riders).

Source: *American Public Transportation Association (APTA)*, 2025 *Public Transportation Fact Book* and "Economic Impact of Public Transportation Investment".

\$1 to \$20 ratio is derived by compounding two distinct financial factors; in Virginia local jurisdictions typically provide approximately 20% of the local match to unlock the remaining 80% in combined state and federal funding. Applying the \$5 economic return for every \$1 of total budget results in a compounded 25:1 potential. To remain conservative and account for administrative variances, this report utilizes a 20:1 ratio

Source: *APTA and Virginia Department of Rail and Public Transportation (DRPT)*.

METHODOLOGY & DATA SOURCES

7 174 HOURS OF PERSONAL TIME

Average rider traveled for 35 minutes each way (from Staunton or Waynesboro to UVA stops) = **70 minutes / day**

70 minutes x 149 trips/year = 10,430 minutes/year

Annual hours gained in 2025: $10,430 \div 60$ (mins/hour) = 173.83 = **174 hours**

8 TIME CALCULATIONS

Sleep: $174 \text{ hours} \div 8 \text{ hours} = 21.75 =$
22 nights of sleep / year

Reading : average book length: ~90,000 words, average reading speed: ~250 words/minute (Source: Association of Authors' Representatives (AAR), *The Journal of Investigative Ophthalmology & Visual Science*)

Time per book= $90,000 \div 250 = 360$ minutes = 6 hours / book; $174 \div 6 =$ **29 books / year**

Work/admin: $174 \text{ hours} \div 8 \text{ hours / workday} = 21.75 =$
22 full 8-hour workdays

9 COGNITIVE LOAD

Source: Evans, G.W., & Wener, R.E. "Commuter Stress: The Role of Unpredictability and Control." *Journal of Public Transportation*; Legrain, S., et al. (2022). "Stress and the Commute: A Comparison of Modes." *Journal of Transport & Health (University of Montreal / McGill University)*; Martin, A., et al. (2014/updated 2023). "Does driving to work make you depressed? The impact of commuting on psychological wellbeing." *Health Economics (University of East Anglia)*.

According to this research, passive commuting via transit provides a dual benefit of lower physiological strain and higher mental performance. While the high-effort nature of solo driving causes an 82% higher rate of physical stress, passive commuters arrive at their destination with a **33% advantage** in concentration and cognitive energy

10 TOTAL VEHICLE MILES TRAVELED (VMT) IN 2025

Average mileage per trip: Staunton / Waynesboro stops to UVA stops (30.85 per trip) = **30.9 miles per trip**

Annual mileage total: $23,725 \text{ trips} \times 30.9 \text{ miles} =$
733,102.5 VMT in 2025

11 29 TRIPS AROUND THE EARTH

Circumference of Earth = 24,901 miles;
 $733,102.5 \text{ miles} \div 24,901 \text{ miles} = 29.44 =$
29 trips around Earth

12 FOREST ACREAGE

Total gas usage in 2025: $733,103 \text{ VMT} \div 25 \text{ MPG} =$
29,324.12 gallons of gas saved

Total emissions saved: $29,324.12 \times 0.008887^* =$
260.6 metric tons of carbon emissions saved

*0.008887 metric tons or 8,887 grams is the amount of carbon the average car emits per gallon of gas (Source: U.S Environmental Protection Agency (EPA))

The average acre of U.S. forest sequesters 0.84 metric tons of carbon dioxide per year (EPA)

$260.6 \text{ emissions saved} \div 0.84 \text{ metric tons} =$
310.2 acres

Source: EPA Greenhouse Gas Equivalencies / USDA Forest Service (2025 update).

13 SOLAR PANEL OUTPUT

One average residential solar panel (400W) offsets approximately 0.38 metric tons of CO₂ over its annual production cycle in a Mid-Atlantic climate. (Source: EPA Greenhouse Gas Equivalencies / NREL (National Renewable Energy Laboratory) PVWatts Data (2025))

$260.6 \text{ total emission} \div 0.38 =$ **685.8 solar panels**

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