

OUR MISSION: Provide essential value to our members and partners, advance Civil Engineering, and serve the public good.

News & Updates - November 26, 2024 | Volume 55, Number 1



ASCE Central PA Section Events Page - Link

- YMG Trivia Night 12/5/24
- Annual Hershey Bears Hockey Game
 12/14/24 RSVP by 12/2/24
- Happy Holidays to you and families

Central PA Section Events Link



ASCE NEEDS VOLUNTEERS LIKE YOU!

Please consider joining the ASCE
Central PA Section Board by contacting
Loujin Daher at
centralpa.asce@gmail.com

Open Board Positions Include:

Program Chair
Government Relations Chair
Treasurer (beginning 2025/2026 term)
Member of Various Committees

President's Message



East Pennsboro School District Greenhouse Project comes to life with assistance from ASCE Central PA Section! Read the full article here.



Student Awards were presented to four deserving recipients at November Dinner Meeting. 2024 is the 31st year the Central PA Section has made awards with the generous support of the Central PA Geotechnical Section. Click here to read the full article.







Economic Impacts of Status Quo Investment Across Infrastructure Systems

OVER THE NEXT 20 YEARS, AMERICA'S OVERDUE INFRASTRUCTURE BILL WILL COST THE AVERAGE AMERICAN HOUSEHOLD

• \$3,300 A YEAR

When we fail to invest in our infrastructure, we pay the price. Poor roads and airports mean travel times increase. An aging electric grid and inadequate water distribution make utilities unreliable. Problems like these translate into higher costs for businesses to manufacture and distribute goods and provide services. These higher costs, in turn, get passed along to workers and families.

The average AMERICAN HOUSEHOLD LOSES \$63 A WEEK due to CHRONIC UNDERINVESTMENT in infrastructure. What could you buy with \$63 a week, or \$275 a month?



TAKEOUT DINNER FOR A FAMILY OF FOUR EACH WEEK.



STARTING A COLLEGE FUND.



DOING A HOME RENOVATION PROJECT.

We are already paying the price, but IF WE FAIL TO ACT NOW, OUR COSTS WILL MOUNT EXPONENTIALLY.

Of the total economic impacts projected in our 20-year study, more than three-quarters occur during the second decade (2030-2039).

If we don't act, by 2039 we are forecasted to lose:

\$10.3 TRILLION in GDP from 2020-2039, nearly half of the ennual U.S. GDP in 2019.

\$2.4 TRILLION

n exports from 2020-2039 sc more then all of the Fortune 500 companies generated in profits in 2019 3 MILLION jobs, two times the number of Walmart

This study was conducted in 2020. The Infrastructure Investment and Jobs Act Secame law in November 2021, reversing federal underinvestment trends. The full impacts of the law aren't yet knows. However, it's already clear that while the \$1.2 trillion bipartisan infrastructure law is enormously helpful, it doesn't fully close our investment gas. This means American families and businesses are still paying the price for underperforming infrastructure.

LEARN MORE AT infrastructurereportcard.org/economicstudy

Inefficient, unreliable infrastructure is a drag on the U.S. economy and will hurt the GDP and create job losses.



47%

of the projected jobs lost in 2039 will be in high wage and high production jobs like manufacturing and healthcare.

The good news is we can ACT NOW to mitigate the harm to our GDP, trade volumes, and declines in personal income. Let's reverse the decade of underinvestment in our infrastructure and help all communities thrive.



York College ASCE
Student Chapter hosted
the October 2024 Dinner
Meeting at the Willman
Business Center, Yorkview
Hall. A case study
presentation of the Oil
Creek Restoration Project
was featured. The Penn
State Main Campus ASCE
Student Chapter attended
the dinner to show their
support. Great to see and
network with Students at
our Section events.

Save the Date - March 12, 2025 Dinner Meeting Presentation

US-340 Rockfall Mitigation Project-Presented by Bryan Radabaugh of Access Limited (GSI)

The US 340 Rockfall Mitigation project, located in Jefferson County, WV, addressed critical rockfall challenges in the Loudoun Heights region of Harper's Ferry National Historical Park. This high-traffic (>24,000 VPD) 2 lane corridor serving local, commuter, and truck traffic from and through West Virginia, Virginia, and Maryland. The corridor faces rockfall hazards due to cut slopes from 1950s construction and natural erosion along the Shenandoah River. The existing conditions pose threats to public safety, impacting emergency response times and requiring continuous maintenance by the West Virginia Division of Transportation (WVDOT). Additionally, the Loudon Heights includes a trail network and overlook at the top of the slope with

access from the Appalachian Trail. Agency collaboration between WVDOT, VDOT, MDOT, FHWA, and NPS were vital to the project planning and successful construction. The project included a 22-mile detour involving routes in WV and VA as well as impacting traffic flows into MD.

Access Limited Construction (ALC), a geohazard mitigation specialist, collaborated with Triton Construction, WVDOT, HDR Engineering (WVDOT's engineer of record), Ice Engineering (WVDOT's inspection Team) and Infinite Consulting and Engineering, respectively, to implement comprehensive rockfall protection and stabilization measures. ALC incorporated safety and maintenance scaling techniques and constructed advanced rockfall protection systems provided by GeoBrugg North America LLC on three slopes along US-340. Access Limited teamed with Infinite Engineering, LLC. to complete final design of rockfall systems. Rockfall slope drape, rockfall attenuator barrier, rockfall barrier, rock overhang removal and localized rock bolting were strategically deployed to stabilize slopes and mitigate the risk of potential rockfalls. The integration of technology, including horizontal drain installation, added an extra layer of protection.

The ALC and Triton Construction team ensured a seamless integration of geohazard expertise and construction proficiency. ALC completed approximately ½ mile of rockfall mitigation measures up to 300 feet above the roadway complimenting Triton's efforts to resurface the project limits, complete sign replacements and pavement markings all in less than 90 days. ALC successfully mitigated rockfall risks along the vital US 340 corridor on an accelerated schedule to enhance public safety.

American Concrete Pipe Association 2025 Trainings Available

Trygve W. Hoff, PE, ENV SP is the Director of Government Relations and Northeast Region Engineer for the American Concrete Pipe Association. Click **here** to see their 2025 course offerings.

Central Pennsylvania Engineers Week Council Awards

Nominations are now being accepted for the 2025 National Engineers Week Awards to be presented by the CPEWC at the banquet to be held during Engineers Week February 16-22, 2025. Click **here** for more information.



Job Postings from Our Sponsors

Click here to see more details at the ASCE Central PA Section website.











- Test results available as soon as 12-24
- hours after concrete placement Evaluates concrete quality inside and
- outside the reinforcing cage Reveals variations of shaft geometry, cage alignment, and concrete cover



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