Transportation Projects Subcommittee (TPS) Meeting

Wednesday, January 24, 2024 9:00 AM

In-Person: Edward H. Small Conference Room (438 Main St. Buffalo Suite 503)

Zoom:

https://us02web.zoom.us/j/89882591769?pwd=TW1ERVFxQUtHUFVCUmt3bVZoOTVuZz09

Meeting ID: 898 8259 1769
Passcode: 159211
Phone: (929) 205-6099 US (New York)

Agenda

- 1. Approval of December 19, 2023 TPS Meeting Summary
- 2. 2023-2027 TIP Action Requests
 - a. AdMod #51: PIN 5268.55 NY 240; Boston-Colden Rd to Ellicott Rd Cost Increase (NYSDOT)
 - b. AdMod #52: PIN 5764.25 Ewings Rd @ 18 Mile Creek (3329080) and PIN 5764.37 Quaker Rd @ Golden Hill Creek (3360430) Advance Let (Niagara County)
- 3. Old Business
 - a. Carbon Reduction Program (CRP) Funding Allocation
- 4. New Business
 - a. RPPM Action Report
 - b. Public Review Status
 - c. Federal Grant NOFO Summary
 - d. USDOT Progress Report: 2021-2023
 - e. Modular Electric Freight on Rail
- 5. Adjournment Next Meeting is Wednesday February 21, 2024, at 9:00 AM

TRANSPORTATION PROJECTS SUBCOMMITTEE (TPS) MEETING SUMMARY

Tuesday, December 19, 2023 9:00 A.M. in the GBNRTC Conference Room and via Zoom

Attendees: N. Skipper, N. Allen, D. Svilokos, K. Forma, A. Smith, D. Kempner, T. Richards, J. Boser, M. Finn, K. Stilwell, M. Grabau, A. Weymouth, K. Smith, and R. Guarino.

- 1. Approval of November 15, 2023 TPS Meeting Summary Motion for approval: Kempner/Svilokos. Approved.
- 2. 2023-2027 TIP Discussion
 - a. AdMod #48: PIN 5764.76 Village of Williamsville Main St Sidewalk Gap This is a NYSDOT request to modify an existing TAP/CMAQ TIP project. Due to delay in the consultant procurement, let will be delayed. The old let is 6/14/24 (FFY24) and the proposed let will be 2/26/25 (FFY25). Fiscal constraint is maintained as costs are unchanged. *Motion to approve the let date change as AdMod #48: Kempner/Svilokos. Approved.*
 - b. AdMod #50: PIN 5209.67 NY78 (Transit Rd); Roll/Klein Rds to N French Rd This is a NYSDOT request to modify an existing TIP project. Additional funding is needed for signal work, asphalt price increase, nighttime paving cost and signs. Construction & Construction Inspection Phases need to increase by \$1.004M. Fiscal constraint is maintained as funding will be transferred from three existing projects: PIN 5814.30 Signal Replacement; SFY 23/24 (\$0.500M), PIN 5B15.55 Pavt Maint Block Fund (\$0.223M), and PIN 5B20.11 HSIP CARDS/Ped Signal Block Fund (\$0.046M) & 100% SDF (\$0.235M). Motion to recommend these changes for approval to PCC as AdMod #50: Richards/Svilokos. Approved.

Old Business

a. Carbon Reduction Program (CRP) – Call for MPO Projects – There is approximately \$1.6M/year (for a total of approximately \$8.0M) in CRP funds available for programming region-wide (including Cattaraugus and Chautauqua Counties) for the current TIP period. NYSDOT R5 has suggested that primary consideration be given to utilizing the CRP funds to address funding needs on existing TIP/STIP projects, rather than to program new projects. NYSDOT R5 has recently identified approximately \$26.0M in expected funding shortfalls for CRP-eligible projects on our current NYSDOT R5 five-year program. This strategy is expected to help in obligating the funding more quickly, within the current program period, and in helping to mitigate current inflationary pressures. The distributed project proposals are all DOT-sponsored projects, but they each have a strong local stakeholder component – they include work on the local system, or the project is addressing long standing goals of the community where the project is located. This plan as presented also meets the 40% benefits goal for Disadvantaged Communities, and is expected to fully comply with the State's CRP strategy, currently in draft form. Note also that at this time, based on a number of considerations, the current proposal would invest all of the available funding within the MPO area, despite there being funding needs on CRP-eligible non-MPO-area STIP projects. Members were asked to review the proposal and suggest any other eligible projects. NFTA questioned NYSDOT whether all of the funds needed to be programmed now to avoid forfeiting any possible remaining funds.

New Business

- a. RPPM Change Report 1. PIN 5764.15 Abbott Rd, Fisher Rd to Buffalo City Line: PREDES and ROWINC Obligation Date Slipped from FFY 23 to FFY 24. There is no cost change. Approved 11/27/2023. 2. PIN 5308.42 US 62; Green Acres to ECL: ROW-A increased by \$0.027M. \$0.027M offset transferred from ROW-I of same project. Approved 11/29/2023. 3. PIN 5V24.42 NY Rt 391; from NY Rt 277 to Sunnyside Dr: Increased Construction by \$0.118M. \$0.118M offset transferred from PIN 5V24.11 Chip Seal NY Rt 98, from NY Rt 16 to NY Rt 243 in Cattaraugus County. Approved 12/18/2023.
- b. Public Review Status Three items completed public review on 12/16/2023. 1. Amendment #10 Four (4) State Rail Capital funded transit projects New Projects. 2. Amendment #11 PIN 5764.98 BNY Plaza Dr @ Bergholtz Creek New Project. 3. Amendment #12 PIN 5764.91 BNY Marshfield Rd @ N. Branch Creek New Project. Two items are currently in public review until 1/6/2024. 1. Amendment #13 Lockport Rd Bridge @ CSX New Project. 2. Amendment #14 BNY Seven (7) Bridge Projects New Projects.
- c. 24-26 UPWP Planning The Unified Planning Work Program (UPWP) defines the MPO staff work. MPO staff work builds towards the goals of the MTP and support member agencies. Work Plan Development will include MPO Federal and State requirements, MTP initiatives, Member initiative, and Call for Projects? Schedule: Nov 29, 2023 Draft released to members for review. Jan 3, 2024 PCC authorize release for public review. Feb 7, 2024 PCC Approval. Feb 2024 (TBD) Policy Approval. March 1, 2024 Approved UPWP due to DOT Main Office. GBNRTC UPWP 24-26 Scope of Work includes: MPO Compliance & Perpetual Work: 1. Required work non-perpetual: New TIP Development, MPO Recertification, IT System Upgrade & Data Management Upgrade, and NFTA On-Board Survey. 2. MTP Priority Implementation: SEMA Corridor Planning, Active Transportation Plan, Develop new regional transportation data, Regional Signal Communication Study, and Bike Master Plan Implementation. 3. Member priority: Exit 50 PEL Study, NF Road Scoring, and Buffalo ADA Transition Plan PM. 4. Grant Execution: Regional Climate Action Plan Development, SS4A, and TMIP/EMAT.
- d. Regional Bicycle Master Plan Implementation Program Call for Projects Scoring Results The goal is to fund needed planning efforts for trail and bikeway projects that improve bicycling accessibility and safety in the Buffalo Niagara region. Approximately \$100,000 is available for planning initiatives in 2024 with additional funding anticipated in future years. Current contract with GObike to assist local municipalities and others with bicycle and trail related planning activities consistent with the RBMP. Schedule: 1. Issue a Call for Projects (10/6/2023). 2. Call for Projects Webinar (10/18/2023): Regional Bicycle Master Plan overview, Online resources available, Eligible

project tasks, Project application form(online), Project evaluation criteria, and Selection process schedule. 3. Online project application form due (11/8/2023). Projects received:

- i. Niagara County Communities Joint Trail Outreach and Feasibility Study: Requesting Agency:
 Town of Pendleton. Project Type: Combination of both on-road and off-road. Project Limits:
 Empire State Trail and Canalway Trail at the City of Lockport Stevenson Street Bridge. Project
 Summary: Existing trails are partially developed in North Tonawanda, Wheatfield, Pendleton, and
 Lockport, but current gaps prevent a cohesive, connected trail network from the Niagara River to the
 City of Lockport. Several opportunities exist along on-road segments and abandoned railroad corridors
 that are highly feasible for planning and development of a connected corridor accessible to all.
- ii. Peanut Line Trail: Requesting Agency: Town of Amherst. Project Type: Off-road. Project Limits: Transit Road to North Forest Road in an existing/abandoned railway corridor in the northern part of Town. Project Summary: Trail would connect to the Clarence Pathway Trails on the east and Tonawanda Rails to Trails on the west. Is a regional gap that would connect to the Empire State and Shoreline Trails that extend to Albany and Erie, Pennsylvania.
- iii. Parker Blvd and Parkview Neighborhood Trail: Requesting Agency: Town of Tonawanda. Project Type: Combination of both on-road and off-road. Project Limits: Sheridan Drive, Ellicott Creek, Town of Amherst. Project Summary: Provides a parallel and comfortable route to Niagara Falls Blvd connecting to businesses along the vehicle-oriented neighborhood. Connection from Tonawanda Trail, through the Parker Blvd Complete Street Project to Ellicott Creek, connecting Lincoln Park, Brighton Park and Ellicott Creek Park. Re-connect an isolated Parkview Triangle by initiating the I-290 Path and providing a starting connection to the I-290 Path at Ellicott Creek Road.
- iv. Eighteen Mile Creek Greenway: Requesting Agency: Town of Hamburg. Project Type: Off-road. Project Limits: Eden Road to North Hampton Brook Drive and end at Hampton Brook Drive. Project Summary: Trail would expand on the substantial transportation improvements made in the Village of Hamburg in recent years, connecting the Village and the Anna Mae Bacon Bird Sanctuary to Eighteen Mile Creek. Most residents do not have an easily accessible vantage point to the Creek so this path will provide residents and visitors with an excellent way to navigate along the Creek.
- v. South Park Ave: Requesting Agency: Town of Hamburg. Project Type: On-road. Project Limits: South Park Ave from Sowles Road to Milestrip Road. Project Summary: The Town is applying for a TAP grant to construct the portion of South Park stretching between Sowles and Legion Drive/Clark Street. Recently completed a study for recommendations that would better connect the Village to shopping centers, Hilbert College, and up to the Village of Blasdell. Improve connectivity and create safer road conditions for the pedestrians and bicyclist along South Park Ave.

Evaluation Criteria: Regional Bicycle Master Plan consistency: Project identified in the Regional Bicycle Master Plan; Connectivity and Accessibility: Connects to other existing bicycle facilities in the network and/or meaningful destinations; Geographic Equity: Invests in disadvantaged communities or improve the accessibility of these communities; and Community and Political Support: Demonstrated community and/or political support for the proposed project.

Scoring Summary: Niagara County Communities Joint Trail Outreach and Feasibility Study, Town of Pendleton (10/10), Peanut Line Trail, Town of Amherst (9.5/10), Eighteen Mile Creek Greenway Trail, Town of Hamburg (8/10), Parker Blvd and Parkview Neighborhood Trail, Town of Tonawanda (7.5/10), and South Park Ave, Town of Hamburg (7.5/10).

5. Adjourn: The next TPS meeting will be held at 9 a.m. Wednesday January 17, 2024 – Format will continue to follow the hybrid model (Live and Zoom options). *Motion to adjourn: Svilokos/Kempner. Approved.*

Transportation Projects Subcommittee

January 24, 2024



1. Approval of 12-19-23 Minutes

2. Action Items

a. AdMod # 51 PIN 5268.55 NY 240 Boston-Colden Rd to Ellicott Rd

- This is a NYSDOT request to modify an existing project
- \$3.3M of federal STBG Flex will replace \$3.3M of state funds (SDF) originally programmed
- Construction phase will be increased by \$4.2M for needed for culvert and pavement work
- Fiscal constraint is maintained as the \$7.5M offset will be transferred from 5B1555 Pavt. Block Fund
- Let date remains unchanged (3/24)
- Today's TPS action would be to recommend the changes to PCC for approval on 2/7/24 (minor scope change/non-federal to federal and cost increase over \$500K)

- b. AdMod #52: PIN 5764.25 Ewings @ 18 Mi Crk (3329080) and PIN 5764.37 Quaker @ Golden Hill Crk (3360430)
 - This is a Niagara County request to modify two existing projects
 - Both projects will advance their let dates from FFY 25 to FFY 24
 - PIN 5764.25 Ewings @ 18 Mi Creek (3329080) 11/15/24 to 2/29/24
 - PIN 5764.37 Quaker @ Golden Hill Creek (3360430) 11/15/24 to 2/29/24
 - Fiscal constraint is maintained and there are no funding changes
 - Today's TPS action would be to approve these changes

3. Old Business

a. Carbon Reduction Program (CRP) Funding Allocation Discussion

NYSDOT R5 has proposed the following CRP funding plan:

Carbon Reduction Program (CRP) Candidates

Region 5 Carbon Reduction Program (CRP) Planning Target Funding:	\$8,090,190 5-Year Program Allocation
25% programming in Disadvantaged Communities	\$1,600,000
Note total allocation is for CRP LG URBAN (Population => 200,000)	\$1,618,038 Per Year (SFY 22/23 - SFY 26/27)

PIN	Project Description	Forecast/ Target Let Date	TIP/STIP Amount (Uninflated)	Current Estimate	the second second second second	NYSDOT Proposed CRP Funding
526854	NY 240 (ORCHARD PARK RD) 2 FISHER RD. INTERSECTION	8/8/2024	\$1,474,000	\$3,650,000	(\$2,176,000)	\$2,176,000
518110	NY 270 (CAMPBELL BLVD); N. FRENCH RD - NIAGARA COUNTY LINE	10/24/2024	\$4,476,000	\$6,500,000	(\$2,024,000)	\$2,024,000
581546	NY 952J ARMOUR DUELLS RD 2 MURPHY-DUERRS RD INTERSECTION	1/23/2025	\$2,038,000	\$3,300,000	(\$1,262,000)	\$0
581466	GOODELL ST, TUPPER & PEARL; NY 33 (KENSINGTON EXPWY) - NY 5 (MAIN ST)	5/8/2025	\$4,400,000	\$6,000,000	(\$1,600,000)	\$1,600,000
530844	US 62 (NIAGARA FALLS BLVD); MAVIS DR - SY RD	9/17/2026	\$12,886,000	\$15,500,000	(\$2,614,000)	\$654,114
505118	US 62 (NIAGARA FALLS BLVD) @ I-190 INTERCHANGE (TAP-CMAQ 2022)	5/6/2027	\$5,800,000	\$18,300,000	(\$12,500,000)	\$1,636,076
506437	NY 394 SUSTAINABILITY, VILLAGE OF LAKEWOOD, NY 474-JAMESTOWN WCL	1/23/2025	\$5,637,000	\$9,475,000	(\$3,838,000)	\$0
			Total		(\$26,014,000)	\$8,090,190

Geographical Breakdown of NYSDOT Proposed CRP Funding			
Disadvantaged Communities in MPO			
581466 GOODELL ST, TUPPER & PEARL; NY 33 (KENSINGTON EXPWY) - NY 5 (MAIN ST)	\$1,600,00		
Subtotal Disadvantaged Communities	\$1,600,00		
Other Projects in MPO Area			
518110 NY 270 (CAMPBELL BLVD); N. FRENCH RD - NIAGARA COUNTY LINE			
526854 NY 240 (ORCHARD PARK RD) 2 FISHER RD. INTERSECTION			
530844 US 62 (NIAGARA FALLS BLVD); MAVIS DR - SY RD			
505118 US 62 (NIAGARA FALLS BLVD) @ I-190 INTERCHANGE (TAP-CMAQ 2022)			
Subtotal Other Projects in MPO Area	\$6,490,19		
Suttotal - Projects in MPO Area	\$8,090,19		
Non-MPO Area Projects	- 4,574-7		
Suttotal - Non-MPO Area Projects	\$		
Total CRP Programming	\$8,090,19		

b. BRIDGE NY and TAP/CMAQ/CRP Update

- Bridge NY
 - Application deadline has passed
 - EC and NC review teams being formed
 - Waiting on R5 to transmit applications to begin reviews
- TAP/CMAQ/CRP
 - Application deadline has passed
 - Waiting on NYSDOT MO to transmit applications via Grants.gov for MPO to begin review

4. New Business

a. RPPM Action Report

- 1. PIN 5308.42 US 62; Green Acres to ECL
 - Moved FFY for DD from 23 to 24
 - Moved FFY for ROW-A from 22 to 24
 - Approved 1/2/24

b. Public Review Status - Close at COB on 2/5/24

- Amendment #15: PIN 5826.10 Purchase of BEBs & Charging Infrastructure
 - Project will provide for the purchase of 40-foot Battery Electric Buses and charging infrastructure that will replace life and mileage expired vehicles
 - The total project cost will be \$33.7M Offset will come from FFY23 FTA Low or No Emission Program (\$28.947M) and NFTA (\$4.737M)
 - The let will be 4/1/24
- American Falls Illustrative Project Addition to TIP and MTP
 - The project includes preservation of the existing stone façade, with replacement of the structural concrete arches and associated fill and topping surfaces
 - Estimated total project cost of \$62.5M
 - GBNRTC is not required to select or fund any illustrative project(s)
- SFY 24-26 UPWP
 - The scope of work that the GBNRTC will undertake for the State Fiscal Year (SFY) 24-26
 - There will be 2 public information meetings on Wednesday January 18, 2024

c. Federal Discretionary Grant Summary - Open

- Make Transit Stations Accessible for All
 - \$343 million is available for the All Stations Accessibility Program (ASAP) makes competitive funding available to assist in the financing of capital projects to repair, improve, modify, retrofit, or relocate infrastructure of stations or facilities for passenger use
 - The application deadline is January 30, 2024
- Rural Autonomous Vehicle Program
 - \$25 million is available for two awards to accredited non-profit institutions of higher education, or consortia thereof, as cooperative agreements on a competitive basis, to conduct research and to work with rural and Tribal communities to address the challenges of bringing the benefits of responsible integration of automated vehicles and associated technologies for air and surface mobility to rural and Tribal communities
 - The application deadline is March 13, 2024

Bridge Investment Program

- \$9.7 billion is available for "Planning" grants for planning, feasibility analyses, and revenue forecasting associated with the development of a project, and "Bridge Project" grants for bridge replacement, rehabilitation, preservation, and protection projects with total eligible costs of \$100 million or less
- The application deadline is March 19, 2024

c. Federal Discretionary Grant Summary – Coming Soon

- Prioritization Process Pilot Program (PPPP) Discretionary Grant
 - The vision of the PPPP is to fund the development and implementation of pilot prioritization processes
 that address and integrate the components of existing transportation programs and support projects
 that improve safety, climate change and sustainability, equity, and economic strength and global
 competitiveness
 - The program provides funding to develop and implement a publicly accessible, transparent prioritization process for the ranking and selection of projects for inclusion in short-range and long-range transportation plans for state or metropolitan areas, Statewide Transportation Improvement Programs (STIPs), and Transportation Improvement Programs (TIPs) in metropolitan areas
 - FHWA also seeks to award Projects that address environmental justice, barriers to opportunity, vulnerable users, transparent public involvement, complete streets, freight, and system condition and reliability
 - The program was funded with \$50 million for FY 2022 thru 2026 through the BIL
 - FHWA will award no more than \$10 million in total (\$2 million maximum per award) per year for eligible projects
 - For FY22, FY 23 and FY24, up to \$30 million is available
 - For more info, go to https://www.fhwa.dot.gov/planning/pppp/index.cfm
 - Applications must be submitted electronically through Grants.gov



Transportation Funding Opportunities Authorized Under BIL



\$82 BILLION to improve and expand public transit service



\$326 BILLION

to upgrade roads, bridges, and tunnels



\$63 BILLION

to improve safety and service on U.S. railroads



\$17 BILLION

to strengthen ports and supply chains



\$25 BILLION to

modernize airports and airfields





• \$15 BILLION

for a nationwide network of EV chargers and to support the EV revolution

- Reduced traffic fatalities five quarters in a row after they hit an all-time high in the first quarter of 2022
- Advanced an automatic emergency braking (AEB) rulemaking for passenger cars and for heavy trucks and buses.
- Conducted more than 7,500 focused inspections on hazmat rail routes
- Hired 1,500 air traffic controllers
- Funded the modernization of nearly 270 miles of community gas pipelines

Making Roads and Vehicles

Safer for All



Published the comprehensive NATIONAL ROADWAY SAFETY STRATEGY



Funded safety improvements for 4,515
INTERSECTIONS

Secured commitments from over 120 PARTNERS

in the public, private, and nonprofit sectors who responded to our

NRSS CALL TO ACTION



Advanced rules on AUTOMATIC EMERGENCY BRAKING

in cars and trucks that would save over

500 LIVES A YEAR

- Eliminating Dangerous Railroad Crossings and Improving Rail Infrastructure
- Raising Rail Safety Standards
- Supporting New Railway Safety Legislation
- Supporting Railroad Workers with paid sick leave for all rail workers
- Participating in the Confidential Close Call Reporting System



- Addressing Near Misses During Takeoff and Landing
- Hiring 1,500 Air Traffic Controllers
- Raising Aviation Safety Standards
 - Final rule requiring commercial aircraft to have a secondary barrier on the flight deck
 - Final rule requiring an increase from 8 to 10 consecutive hours of rest for all flight attendants after 14-hour shifts

Strengthening Consumer Protections for Air Travelers



\$2.5 BILLION

to hundreds of thousands of airline consumers.







Secured commitments from major airlines guaranteeing consumers' rights such as

FREE REBOOKING, HOTELS, AND MEAL VOUCHERS

when airlines cause a delay or cancellation



for extra bags, changes, and cancellations

- Funded \$3.3B through the Reconnecting Communities and Neighborhoods Grant Program to mitigate physical barriers to mobility and access
- Awarded over \$2 billion in direct procurement to small, disadvantaged businesses in FY23.
- Set goals to ensure that at least 40 percent of the benefits of 39 different USDOT programs flow to disadvantaged communities
- Awarded nearly \$700 million to retrofit rail and subway stations to be accessible to people with
- disabilities, adding elevators, ramps, and other improvements through the first-ever All Stations Accessibility Program
- Published the first-ever Airline Passengers with Disabilities Bill of Rights and required new singleaisle planes to have accessible bathrooms

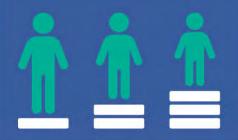
Advancing Equity

\$3.3
BILLION
to improve mobility
and access through the
RECONNECTING
COMMUNITIES AND
NEIGHBORHOODS
PROGRAM

\$686
MILLION
to improve accessibility at transit stations

\$2 BILLION

in direct procurement to small, disadvantaged businesses



Established

project labor agreements for 319 FHWA projects totaling \$9.9 BILLION, including \$3.2 billion with LOCAL HIRE PREFERENCES

- Raised fuel economy standards for new vehicles to save consumers money at the pump and reduce carbon emissions by 2.5 billion tons
- Funded more than 2,900 zero-emission and low-emission buses, more than doubling the number on America's roadways
- Funded the development of new aviation technologies that will reduce aviation industry fuel use by 36 billion gallons of fuel
- Provided more than \$8 billion in funding for climate resilience projects to protect our roads, bridges,
- and highways from extreme weather
- Set the nation on a path to deliver 500,000 electric vehicle chargers by 2030.

Achieving Net-Zero Carbon Emissions



Released the U.S. National Blueprint for Transportation Decarbonization to achieve **NET-ZERO CARBON EMISSIONS BY 2050**

\$9 BILLION
in funding for climate
resilience projects

resilience projects to protect infrastructure from extreme weather

Funding
SUSTAINABLE
AVIATION
FUEL and
technology
to reach carbon
neutral-aviation by 2050



RAISED FUEL ECONOMY STANDARDS

to save consumers money at the pump and reduce carbon emissions by 2.5 billion tons

- Building a Nationwide Electric Vehicle (EV)
 Charging Network to lay the groundwork for a national network of 500,000 EV chargers
- Reducing Congestion and Emissions from Idling Trucks at Ports
- Doubling the Number of Zero-Emission
 Transit Buses on America's Roadways

Building a Nationwide Electric Vehicle

Charging Network



The new standards will ensure everyone can use the network —no matter what EV you drive or which state you charge in.

Set the nation on the path to meet President Biden's vision of

BUILDING 500,000 CHARGERS BY 2030



Alternative
Fuel
Corridors to
79,000 MILES
of highways in all 50 States

PROVIDED MORE THAN \$2.2 BILLION

in funding to States and communities to build a nationwide EV charging network. This initial funding will electrify over

75,000 MILES OF ROADS



- Launching the Advanced Research Projects Agency
- Advanced Smart Community Technology Projects
- Launched the Intersection Safety Challenge
- Supported Universities That Train the Next Generation of Transportation Professionals
- Established a \$250 Million Open Research Initiative
- Advanced Automation Technologies in Transit
- Establishing NHTSA's Office of Automation
- Funded Technology Solutions
- Supported the Responsible Use of Uncrewed Aircraft Systems

Driving Innovation



Funded 59 SMART COMMUNITY

technology demonstration projects for the use of technologies such as connected and automated vehicles, advanced traffic signals, and uncrewed aircraft systems Launched the
ADVANCED RESEARCH
PROJECTS AGENCYINFRASTRUCTURE
(ARPA-I) to spur the
development of
game-changing
transportation
technologies

Awarded \$450 MILLION

to 34 university consortia to develop the next generation of transportation technology and professionals

Launched the

INTERSECTION SAFETY CHALLENGE



seeking ideas to transform intersection safety

e. Modular Electric Freight on Rail (TRB Presentation by G&W)

- Parallel Systems was founded in 2020 by a group of former SpaceX engineers
- Headquartered in Los Angeles, California, the company's mission is to decarbonize freight by building a cleaner, automated rail future.
- The company has created autonomous batteryelectric rail vehicles to move freight cleaner, faster, safer, and more cost effectively than traditional trains or trucks.
- The company aims to increase the utilization of today's rail network by converting some of the \$700 billion U.S. trucking business to rail.
- Currently being tested and reviewed by FRA
- To learn more, visit https://moveparallel.com

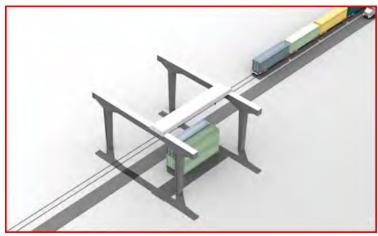




e. Modular Electric Freight on Rail (TRB Presentation by G&W)

- Rail is safer and 4x more efficient than trucks in moving freight
- Modular vehicle system creates new opportunities to ship containers by rail by enabling short-haul and point-to-point rail movements
 - Highly efficient using low-maintenance electric powertrain
 - Up to 500 mile range
 - Uses existing rail network
 - Each vehicle can carry a fully loaded shipping container Up to 70,000 lbs and can be unloaded using standard lifting equipment
 - Can be platooned up to 50 for additional efficiency
 - Vehicle status and location is uploaded in real-time, and data is made available to existing railroad train control and business systems





https://vimeo.com/854522315

Next Scheduled TPS Meeting

Wednesday February 21 @ 9:00 AM