







# NEW JERSEY STATE TRANSPORTATION INNOVATION COUNCIL

www.NJDOTtechtransfer.net/NJ-STIC

3<sup>rd</sup> Quarter Meeting September 27, 2023









### WELCOME

Michael Russo

Assistant Commissioner

NJDOT Planning, Multimodal & Grant Administration







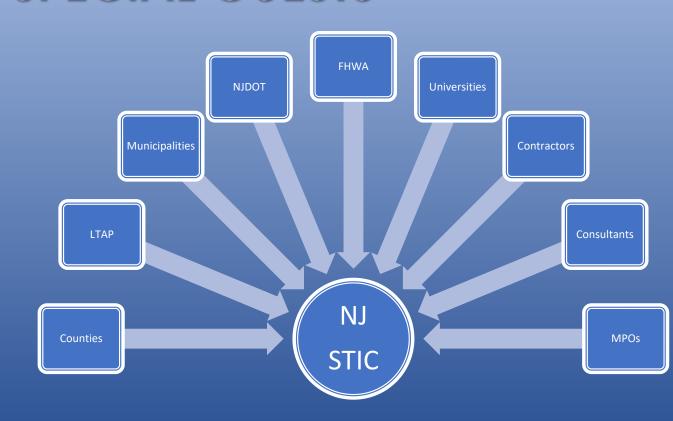


#### WELCOME ATTENDEES & SPECIAL GUESTS

SJTPO Innovative
Approaches to Traffic
Safety Education

Guest Speakers:

Jennifer Marandino, Executive Director Wayne Shelton, Traffic Safety Specialist Robert Clarke, Traffic Safety Specialist





Planning & Environment

### Sudhir Joshi











#### FHWA UPDATES



#### Christopher Paige

Innovation Coordinator & Community Planner FHWA, NJ Division Office

#### FHWA Updates

- July 2023 EDC-7 Summit Summary and Baseline Report released
- August 2023 EDC-7 Safety Initiative, Nighttime Visibility for Safety Briefing
- September 2023 EDC-7 Strategic Workforce Development (SWD)
   Kickoff Webinar
- EDC-7 Cycle
  - EDC-7 cycle will occur from April 2023 through May 2025
  - April 2024 First year progress reports due

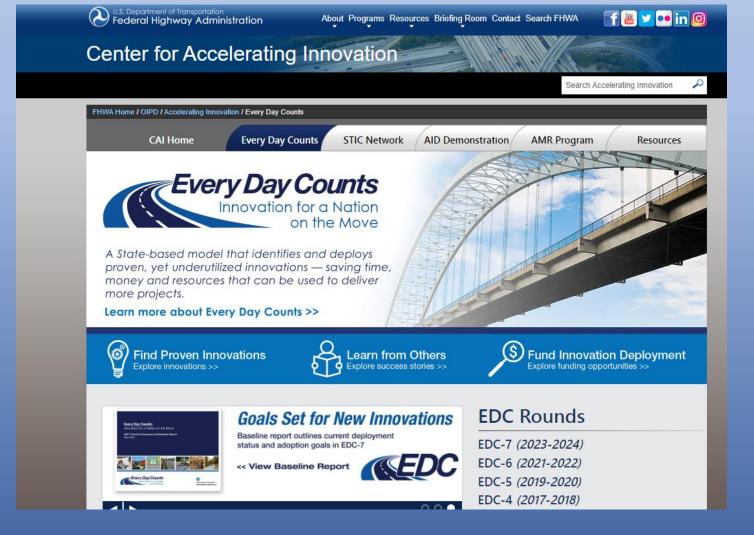


#### FHWA Resources

Center for Accelerating Innovation

#### Types of resources available:

- Funding opportunities
- National databases of innovative accomplishments
- Regulations and requirements for programs
- Multimedia
- Upcoming events



### CIA TEAM SAFETY

NJDOT – Dan LiSanti FHWA – Amy Kaminski

#### CIA TEAM

#### PLANNING & ENVIRONMENT

NJDOT – Sudhir Joshi FHWA – Sutapa Bandyopadhyay

## CIA TEAM INFRASTRUCTURE PRESERVATION

NJDOT – Shivani Patel FHWA – Nunzio Merla

## CIA TEAM MOBILITY & OPERATIONS

NJDOT – Vandana Mathur FHWA – Ek Phomsavath

#### **CIA TEAM**

**ORGANIZATIONAL** 

SUPPORT & IMPROVEMENT

NJDOT – Kristal Walker FHWA – Christopher Paige

## CIA TEAM SAFETY

NJDOT – Dan LiSanti FHWA – Amy Kaminski

Task	Status
Literature review of relationship between lighting and safety of vulnerable road users	Initial scan complete
Literature review summarizing best practice in design guidance for pedestrian-scale lighting	Current task (ongoing)
Lighting guide highlighting best practices in the types of lighting, luminaire placement, and ways to reduce fatalities and serious injuries	Upcoming



### LIFE-SAVING LIGHTING RESEARCH & GUIDE





### NIGHTTIME VISIBILITY FOR SAFETY

- Developing traffic signal pole and mast arm details for signalized intersection installations
- Includes backplates with retroreflective tape on signal indications

# CIATEAM INFRASTRUCTURE PRESERVATION

NJDOT – Shivani Patel

FHWA – Nunzio Merla





#### Purpose:

To implement the use of internally cured concrete to reduce shrinkage cracking and achieve long-term performance in concrete bridges, roads and repairs.



#### **Status:**

Special provisions for EPIC2 drafted





#### Status:

Candidate bridges selected





#### Status:

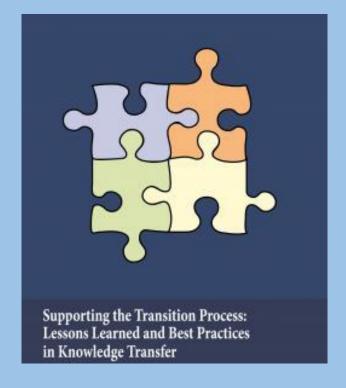
CPM coordination meeting held





#### Status:

Reached out to several state DOTs





#### **Next Quarter:**

- Contact & meet concrete suppliers
- Communicate with project designers



EDC-7
Environmental
Product
Declarations
(EPDs) for
Sustainable
Project Delivery



#### **Purpose:**

To identify and understand the environmental impacts from resource use, energy, and emissions in construction and consider alternatives using third party verified reports.



## THE OF NEW SHIP

EDC-7
Environmental
Product
Declarations
(EPDs) for
Sustainable
Project Delivery



#### **Status:**

 Established SME team and held kick-off meeting



# EDC-7 Environmental Product Declarations (EPDs) for Sustainable Project Delivery

#### **Status:**

 Participated in FHWA EPD training session and EPDs Community of Knowledge Quarterly Meeting





EDC-7
Environmental
Product
Declarations
(EPDs) for
Sustainable
Project Delivery

#### **Next Quarter:**

- Finalize work plan
- Reach out to state agencies for guidance
- Begin process to identify pilot projects





#### **Announcement**

- The Bureau of Structural Engineering, New Technologies & Products Unit to host HNTB training related to EDC-6 UHPC Innovation-"Recent Advancements for the use of UHPC in Infrastructure Applications" on October 13, 2023, for NJDOT staff.
- Training will be held in-person (NJDOT MPR) and via MS Teams
- Registration is required





# CIATEAM ORGANIZATIONAL SUPPORT & IMPROVEMENT

NJDOT – Kristal Walker

FHWA – Chris Paige

## Implementation Plans Development Stage Updates:

 Developed & submitted a proposal to apply for a NJ Build Fund Grant

• Working with the Office of Federal Contractor Compliance Programs (OFCCP)

# CIATEAM MOBILITY & OPERATIONS

NJDOT – Vandana Mathur

> FHWA – Ek Phomsavath

## Next-Generation TIM (NextGen TIM): Technology for Savings Lives

- Continue to evaluate the effectiveness of TIM technologies:
  - Using LED flares at incident scenes
  - Light towers on Incident Management Response Trucks (IMRT) for scene lighting
  - Real-time stopped queue and slowdown notifications to commercial truck drivers (Drivewyze)
  - Provide online TIM Training to maximize the number of first responders trained.
- Assessment Stage:
  - Incorporate activities into the ITS/Traffic Operations work programs.
  - Provide the drivers with real-time slowdown and congestion alerts.
  - "No Trucks in Left Lane" alerts to avoid traffic congestion.









#### Online TIM Training



Self-guided online TIM training



Can be accessed from anywhere, at any time, and is self-paced, a benefit for emergency responders with irregular work schedules in 24/7 work environments. Interactive multimedia helps to provide them with practical experiences that mimic real-world situations



Responders looking to take the self-guided online TIM training can register at **NJTIM.org**. Upon completion of the seven modules, they will receive an "NJ TIM Responder Training Program Completion Certificate" and Continuing Education Units (CEUs).



New Jersey - one of only a few states to implement an online self-guided TIM training program. It is a valuable, cost effective, and easily accessible tool that provides responders with greater training flexibility in a post pandemic work environment.

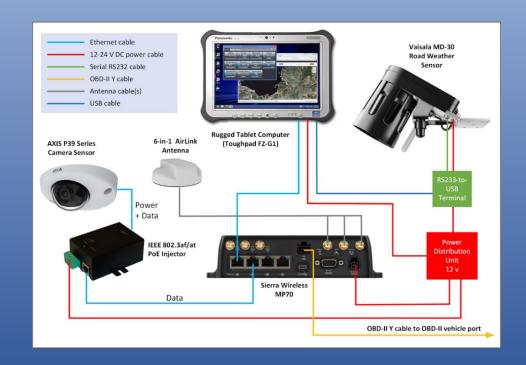
#### **Drivewyze Alerts**

- "No Trucks in Left Lane" alerts to avoid traffic congestion, increase traffic flow and increase safety
- Notifications are sent approximately every 15 miles on a 3lane roadway
  - All alerts are live and have been sending notifications since August 17.
- Following is the text that goes out:
  - . Title: LEFT LANE RESTRICTED
  - . Message: No Trucks Left Lane



#### **Expansion of Weathersavvy**

- 20 more vehicles (SSP, IMRT, OPS)
- 41 total vehicles
- Increased coverage = increased precision/accuracy of our statewide road surface conditions





# CIATEAM PLANNING & ENVIRONMENT

NJDOT – Sudhir Joshi FHWA – Sutapa

Bandyopadhyay





Sudhir Joshi – NJDOT



#### Current Status Update



National Electric Vehicle Infrastructure (NEVI)

Carbon Reduction Strategy (CRS)



#### **NEVI Current Status**



- NJDOT submitted an updated NEVI Deployment Plan to FHWA this summer
- We expect a response regarding certification this fall
- NJDOT will engage with the public and the EV charging industry this fall, prior to releasing the first round of NEVI procurement for DC fast charging stations along interstate highway corridors in NJ



#### **CRS Current Status**

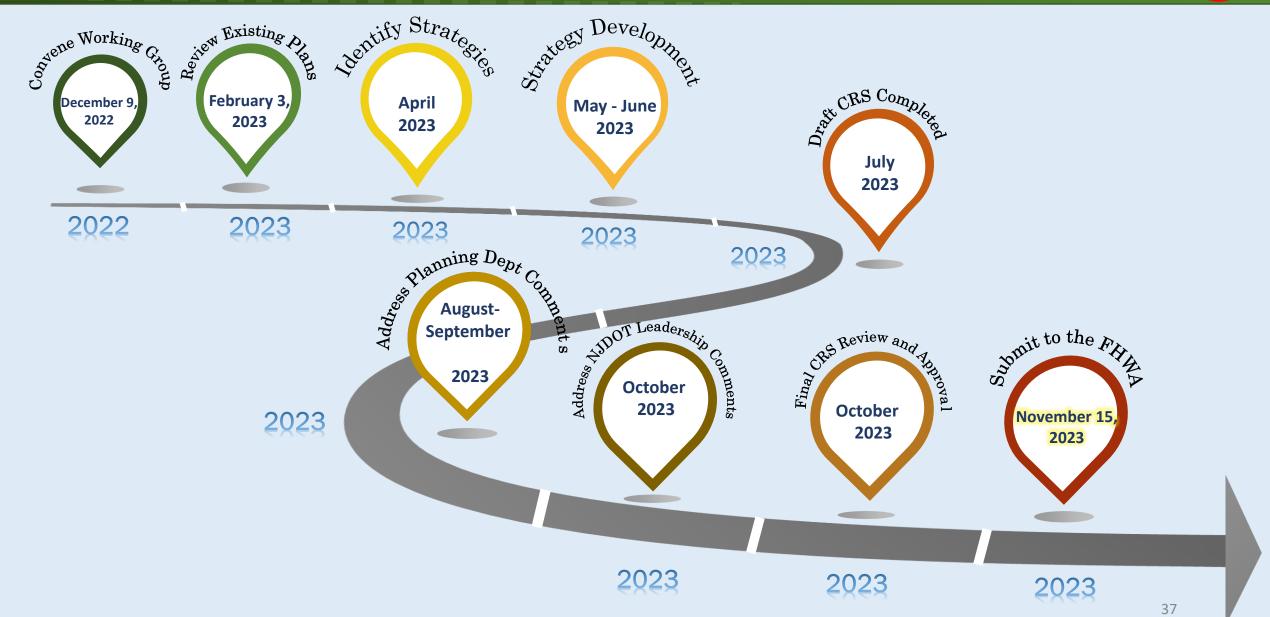


- Circulate Draft Carbon Reduction Strategy for review to,
  - I. NJDOT Leadership
  - II. External members of the Carbon Reduction Working Group
- ☑ Revise draft and circulate near-final strategy document.
- ☐ Investment strategy will be reflected in future MPO/Regional Transportation Plans (RTPs) and transportation improvement programs (TIPs).
- ☐ The final strategy will be submitted to FHWA by the November 15,2023 deadline.
- ☐ FHWA has 90 days to either certify or deny certification of the Carbon Reduction Strategy.



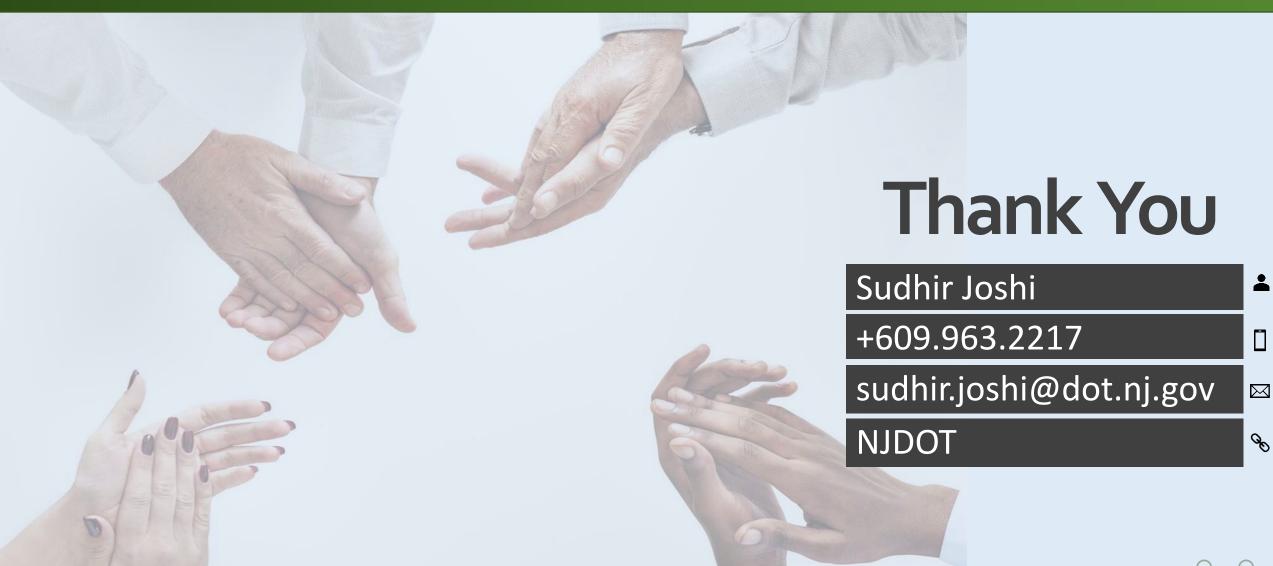
#### Milestones: Carbon Reduction Strategy











Feature Presentation

#### SJTPO Innovative Approaches to Traffic Safety Education

#### **Jennifer Marandino**

**Executive Director** 

#### Wayne Shelton

Traffic Safety Specialist

#### **Robert Clarke**

Traffic Safety Specialist

# SJTPO Traffic Safety Education

A Program Overview for the New Jersey State Transportation Innovation Council











#### **Meet the Team**



Wayne Shelton
Traffic Safety Specialist
wshelton@sjtpo.org



Robert Clarke
Traffic Safety Specialist
rclarke@sjtpo.org



Jennifer Marandino
Executive Director
jmarandino@sjtpo.org



## **Defensive Driving**



- Length of program: National Safety Council 6hour course
- Audience: Drivers of all ages



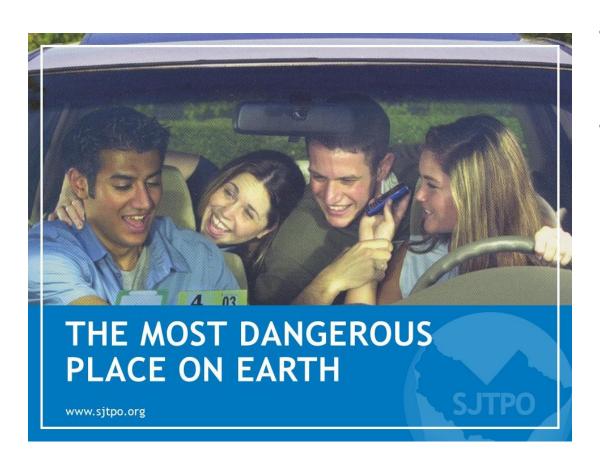
## **Driving Simulator** *In Partnership with Hero Campaign*



- Length of program: 40-90 minutes
- Audience: Teens in probationary period of licensure



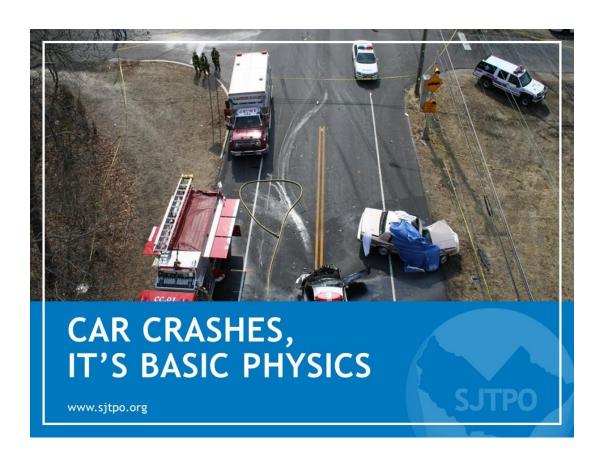
## **Most Dangerous Place on Earth**



- Length of program: 40-90 minutes
- Audience: High school students



## Car Crashes, It's Basic Physics



- Length of program: 40-90 minutes
- Audience: High school math and physics students



## **Share the Keys**



- Length of program: 60-90 minutes
- Audience: Parents and their teens in pre-permit, permit, and probationary period of licensure



## Belts on Bones (multiple programs)



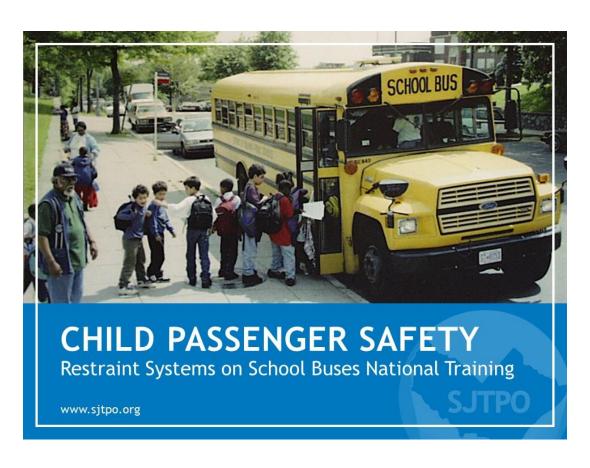
- Length of program: 30-45 minutes
- Audience: Kindergarten to middle school students

## Multiple programs available:

- Belts, Bones, and Buses
- Occupant Protection for Middle School Students



## Child Passenger Safety (multiple programs)



- Length of program: 8 hours
- Audience: School district employees

## Multiple programs available:

- Technician Training
- Transporting Children Safely
- Car Seat Inspection Program



#### **Car-Fit for Senior Drivers**



- Length of program: 15 minutes
- Audience: Elderly drivers



## **Program Funding**

- FHWA-PL funds authorized through UPWP
  - Task 24/140: Safety Education
    - 24/141: Safety Education Programs
    - 24/142: Safety Education Coordination & Collaboration
- NJ Division of Highway Traffic Safety Federal Highway Safety Grant
  - Grant cycle on Federal Fiscal Year (submitted Spring, effective October 1st)
  - Reimbursement of any salaries or wages not covered
  - Permissible reimbursement for
    - Travel and related expenses associated with professional development
    - Purchase of equipment and supplies including training manuals
    - Other contractual services for program presentation development covered



#### **Thank You**

- Program descriptions and request form: <a href="https://www.sjtpo.org/education">www.sjtpo.org/education</a>
- Call the office at (856) 794-1941



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Jennifer Marandino
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## ANNOUNCEMENTS & REMINDERS

#### **About**

#### Mission:

To serve as the one-stop destination for comprehensive roadway safety information.

#### Vision:

To be the essential source of trustworthy information that motivates and empowers New Jerseyans to make our roadways safer.

#### Purpose:

As we work toward zero deaths by 2050, we need to empower New Jersey roadway users by giving them information, inspiration, and motivation to be safe on our roadways.

#### Safety Resource Center Elements



#### Website

Primary gateway to everything roadway safety



#### **Public Campaigns**

Actively promoting a safety culture



#### **Social Media**

Connecting with people



#### **Training Program**

Learning center focused on safety resources



## NJ SHSP Implmentation Supports administration of associated

programs



#### **Meetings & Events**

Instruments to facilitate knowledge sharing and NJDOT's vision for safety





OFFICE OF TRANSPORTATION WORKFORCE DEVELOPMENT AND TECHNOLOGY DEPLOYMENT LOCAL AID SUPPORT

#### **2023 Bold Steps Award**

Winner

New Jersey Department of Transportation

**Innovation** 

Route 71 over Shark River Road Diet

#### Route 71 over Shark River

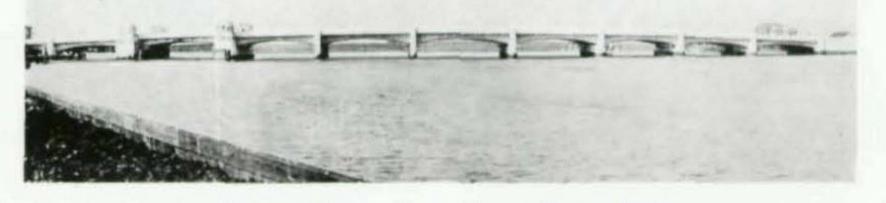
Road Diet & Safety Improvements





Route 71 over Shark River

- Spans Avon-By-The-Sea and Belmar
- Double leaf bascule drawbridge
- Constructed 1932
- Construction Cost: \$413,320.45



#### FIRST PLACE—CLASS B—1933 AWARD

SHARK RIVER BRIDGE—Between F St., Belmar, and Main St., Avon, N. J.; Total Cost, \$413,320.45; Engineer, Morris Goodkind. Bridge Engineer, State of New Jersey, State Highway Commission; Fabricators, American Bridge Company; Owner, State of New Jersey Highway Commission; Completed October 12, 1933; Spans: 9 spans, 83 ft., plus 1 bascule span. 110 ft.—total length. 853 ft.

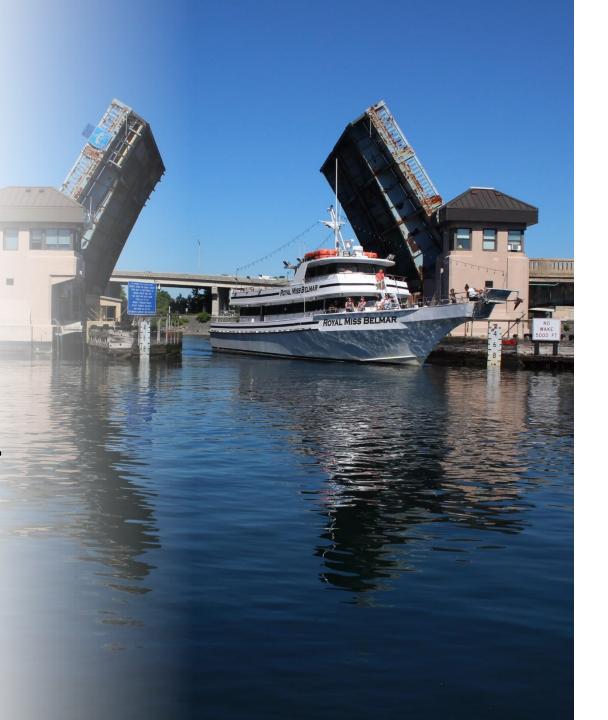


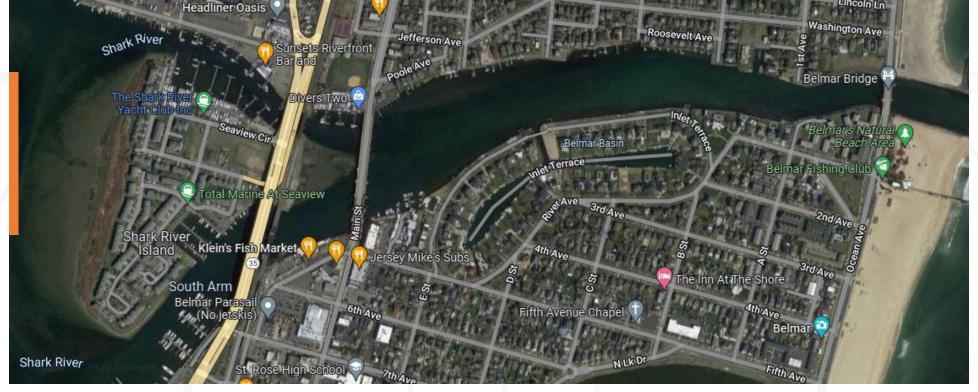
#### Route 71 over Shark River

- Awarded the 1933 "Most Beautiful Bridge Award" by American Institute of Steel Construction
- Listed on National Register of Historic Places

Route 71 over Shark River

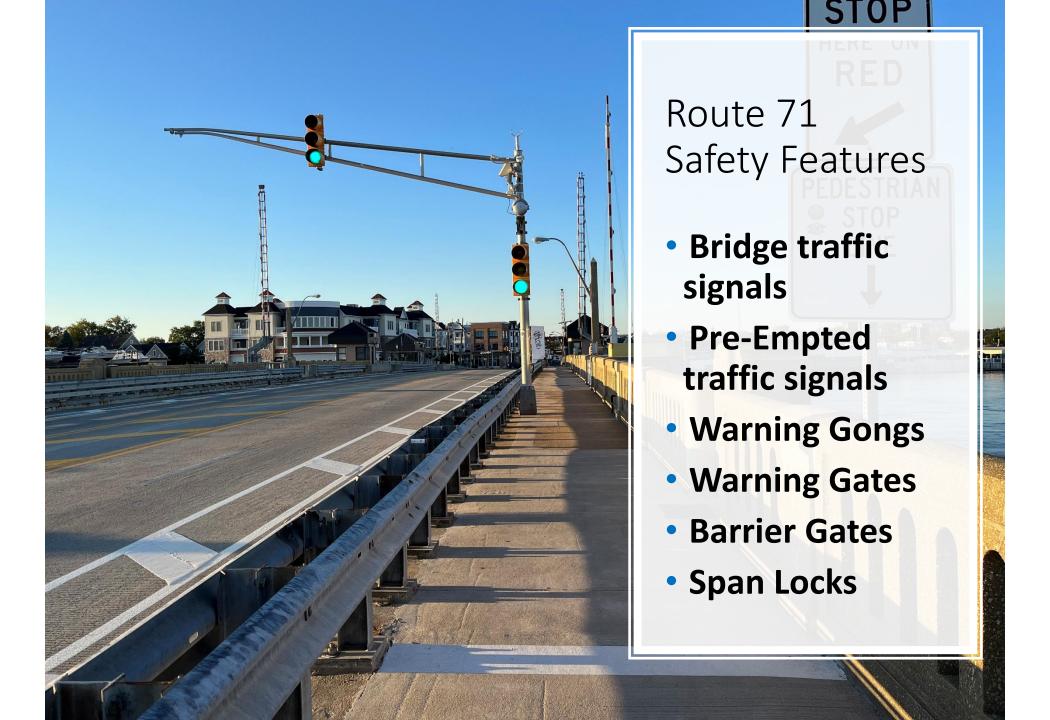
- NJDOT's busiest drawbridge
- Over 5,000 marine openings annually
- Staffed 24/7
- Seasonal vehicular traffic
- Heavy pedestrian and bicycle traffic year-round





## Route 71 over Shark River

- Second bridge of four bridges from Atlantic Ocean
- Offers 13 feet of clearance in closed position
- Ocean Avenue (15 ft closed)
- NJ Transit (8 ft closed)
- NJ Route 35 (50 ft fixed clearance since 2004)



Route 71
Safety
Features

- Green square = bridge traffic signal, warning gongs
- Yellow = warning gates
- Red = barrier gates
- Blue = span locks



#### Route 71 Opening Sequence

- Marine call to bridge house via radio or telephone
- Operator monitors cameras, turns traffic signals to red when safe (flashing lights, gongs activated)
- Operator ensures all traffic is stopped, clear of gates
- Warning gates lowered
- Barrier gates lowered (oncoming, offgoing)
- Span locks disengaged
- Horn sounded (2 long)
- Bridge raised

#### Route 71 Closing Sequence

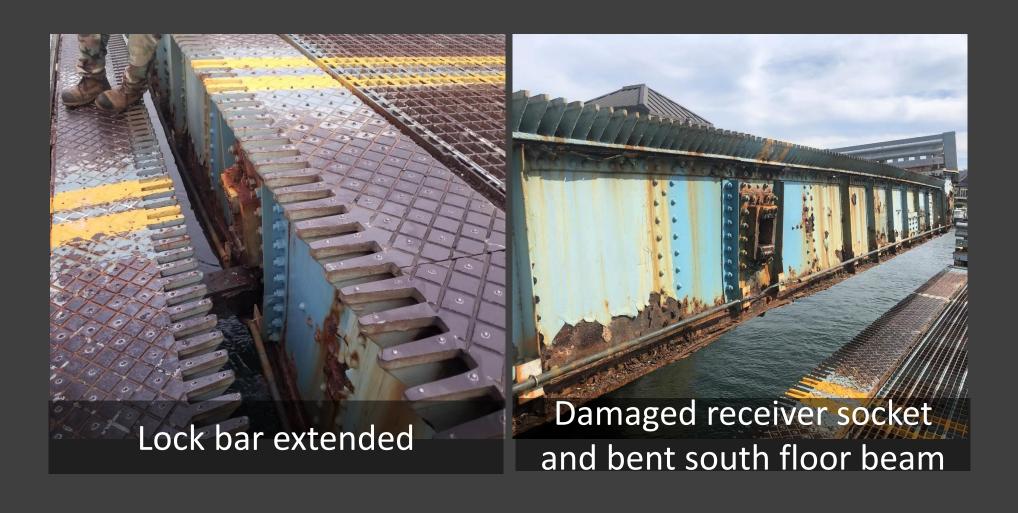
- Vessel captain notifies bridge house that vessel is clear of bridge
- Operator ensures marine traffic is clear of bridge
- Horn sounded (5 short)
- Bridge lowered
- Span locks engaged
- Barrier gates raised (offgoing, oncoming)
- Warning gates raised
- Operator turns traffic signals to green
- Sequence takes 7 minutes (red light to green light)

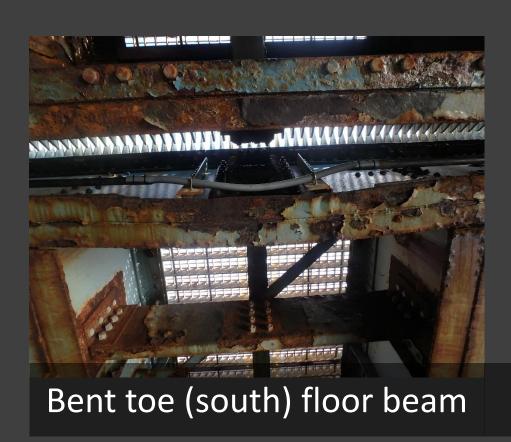


- Bridge equipped with three span locks for safe operation – Deck configured for 3 lanes
- Center span lock failed during third lift of the morning
- Weather conditions were partly cloudy, 70 degrees
- No previous significant events with span locks



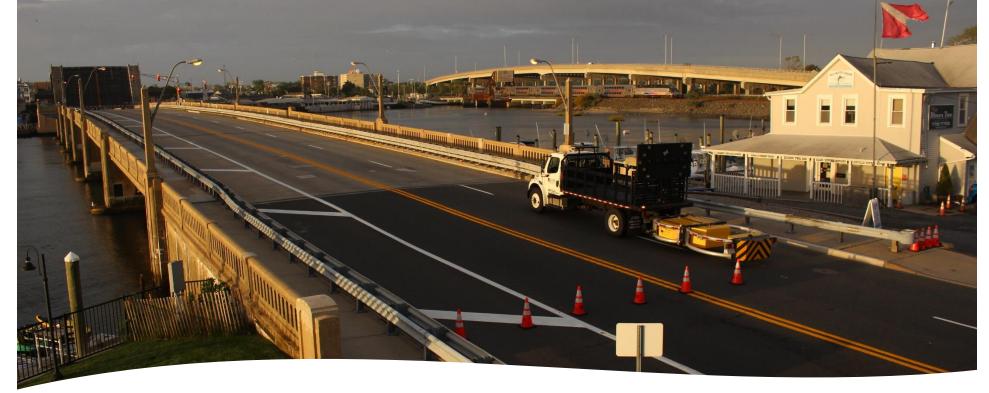
- Center span lock bar engaged while bridge was raised
- No indications on Operator's control panel
- Operator initiated closing sequence as usual
- Bridge could not close with lock bar engaged







Bent flange and web, misaligned receiver



Span Lock Failure – Emergency Response

- US Coast Guard notified bridge inoperable
- Local Police notified Route 71 shut down
- NJDOT Crews implemented detour
- Public alerted via 511, VMS Boards, Social Media
- Boats at sea notified via marine radio
- NJDOT and WSP engineers on site

Damaged span lock driving gear

## Span Lock Failure Emergency Response

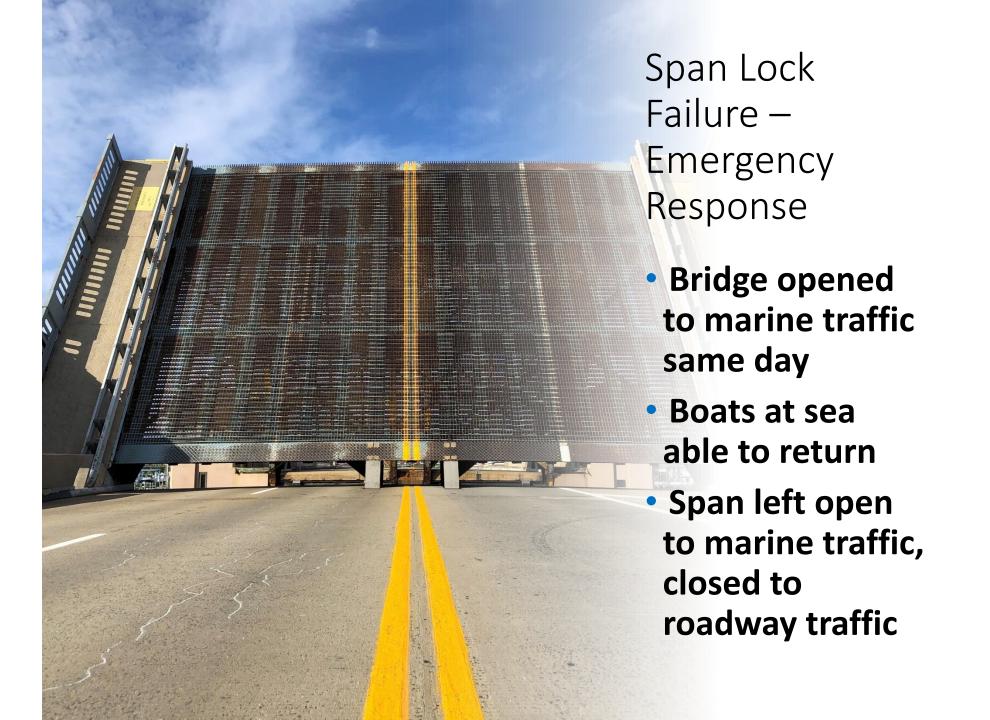
- On-Call Contractor on-scene
- Center span lock not reusable
- Damaged span lock hardware cut and removed
- Center span lock electric bypassed
- Allowed NJDOT to raise bridge to remove all damaged components



**Control Console** 

## Span Lock Failure Emergency Response

- Movable Bridge Engineering & DOT's On-call electrical contractor on-scene
- Operator's panel configured to allow operation with remaining two span locks
- Programming revised to prevent similar malfunction





### Span Lock Failure Cause & Response

- Failed proximity switch quickly identified
- False indication that span was lowered when it was not
- Span lock engaged improperly
- All proximity switches from that batch replaced statewide
- Bridge evaluated for operation with remaining two span locks



Span Lock Failure Bridge Re-Opening

- Pressure from towns to re-open to traffic (Shoulder Season)
- Bridge opened to one lane each direction September 24, 2021
- Safety interlock testing performed with center span lock removed

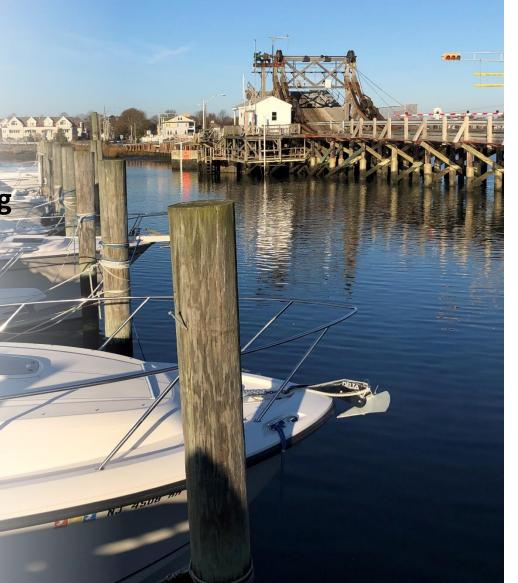


Route 71 Long Term Plan

- Plan needed for remaining life of bridge
- Bridge programmed for replacement in near-future, cost/benefit analysis prepared
- Interim repair options studied:
  - Option 1 No Changes
  - Option 2 Replace Center Span Lock
  - Option 3 Road Diet Across Structure

#### Option 1: Maintain Structure in Existing Condition

- Lowest up-front cost
- Bridge remains open to traffic
- Increased fatigue in structural steel
- Premature and uneven wearing of bridge machinery
- Any failure would cause imminent closure of bridge
- Concern with three heavy vehicles crossing bridge simultaneously
- Need to avoid potential loadposting of bridge



#### Option 2: Restore Structure to Pre-Failure Condition

- Highest cost option, repairs begin at \$3.5 million
- Most complex option
- Structural steel design, fabrication, and installation (COVID production delays, lead times)
- New span lock custom design, fabrication, and installation
- Internal access system, electrical system design, fabrication, and installation
- Extended roadway & sidewalk closures
- Prolonged detours, minimum six months
- Extended marine outages
- Balancing implications with steel removal and replacement
- General concerns performing such extensive repairs on a 1932 drawbridge

#### Option 3: Reduce Lane Configuration (Road Diet)

- Reduces roadway to one lane in each direction (previously 2 southbound, 1 northbound)
- Low cost solution
- Quick implementation
- Properly balance traffic load on outside two span locks
- No live load additional stress on damaged structural steel
- Preserve remaining lifespan of structure (estimated 8-10 years)
- 50 ft wide deck allowed option for bicycle traffic

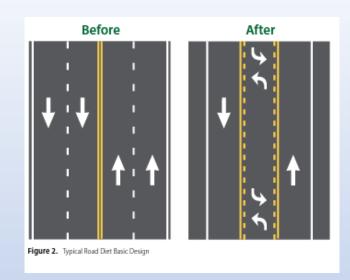
Option	Option 1:	Option 2:	Option 3:
	Maintain Structure	Restore Structure	Road Diet
Initial Cost	\$0	\$3.6 million	\$150,000
Annual Cost	\$1 million	\$36,000	\$36,000
Benefit	\$36,000	\$4.1 million	\$7.9 million
Benefit Ratio	0.036	1.14	52.7

### Long Term Plan – Cost Benefit Analysis

- Three options analyzed
- Initial repair costs compared to future emergency repairs
- Economic impact of Options 1 and 2
- Option 3 Road Diet clear path forward

# Route 71 Road Diet Design What Is A Road Diet?

- FHWA: "Removing travel lanes from a roadway and utilizing the space for other uses and travel modes"
- Create improved quality of life along a corridor
- Low cost solution to increased multimodal safety
- Reduction in overall crashes
- Provide more space on roadway for bicycles, pedestrians
- Reduction in traffic speeds







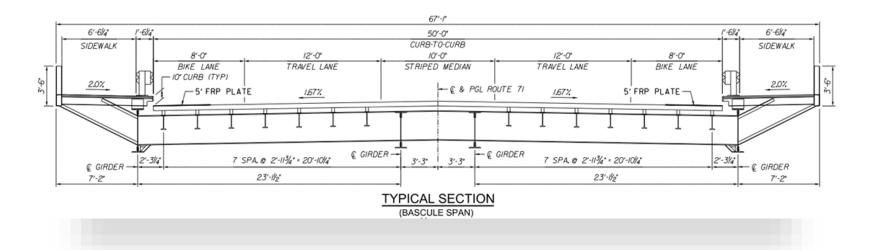
Route 71 Road Diet Design  Route 71 historically 4 lane highway with double yellow, limited parking

- 2004 "Streetscape" coordinated with Route 35 fixed bridge construction
- Route 71 reduced to one lane each direction through Avon-By-the-Sea
- Dedicated left turn lanes, bike lanes, parking
- Route 35 became arterial, Route 71 Main St.



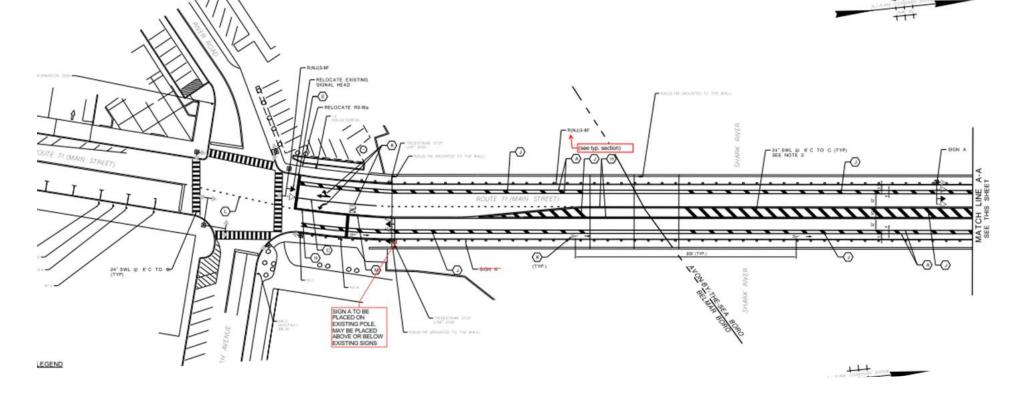
### Route 71 Road Diet Design

- Northbound right lane across bridge converted to shoulder in 2004
- Short 1,200 ft two lane section remained across bridge southbound
- Aggressive driving across bridge
- Backups from left-turning vehicles
- No safe passage for bicycles
- Overall disconnect between both towns



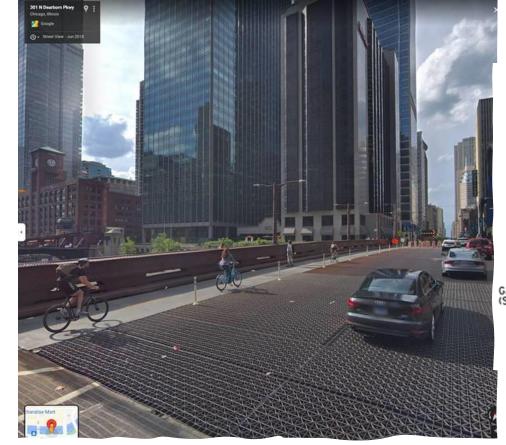
Route 71 Road Diet Design

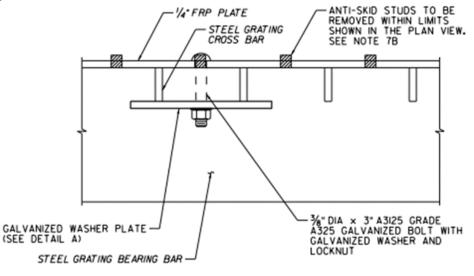
- 50 foot roadway width allowed for bicycle facilities
- 10 foot striped center median
- 12 foot travel lane in each direction
- 3 foot separation
- 5 foot bike lane across structure



Route 71 Road Diet Proposed Improvements

- Bicycle lanes extended across bridge from Avon-By-The-Sea into Belmar
- Elimination of merge in Belmar
- Dedicated left turn lane at Route 71 SB and 5<sup>th</sup> Avenue
- Additional parallel parking spots gained in Avon-By-The-Sea





TYPICAL SECTION AT BOLT AND FRP PLATE

Route 71 Road Diet Design

- Innovative Fiberglass Reinforced Polymer (FRP) plate proposed for steel grid bascule span
- First of its kind on NJ drawbridges
- Used widely on Chicago River crossings
- Lightweight, would not affect span balance

#### Route 71 Road Diet Design

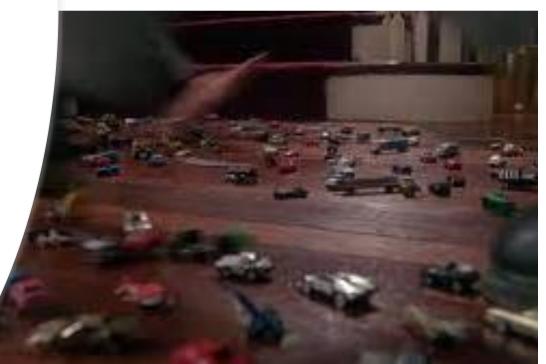


- Design finalized in December 2021
- Significant internal coordination within NJDOT
  - Drawbridge Operations
  - Regional Operations
  - Structural Engineering
  - Traffic Engineering
  - Sign Shop
  - Office of Government & Community Relations
- Presented to Avon-By-The-Sea and Belmar
- Belmar easily accepted
- Avon-By-The-Sea initially voiced concerns

# Route 71 Road Diet Design

- Meeting held with Avon-By-The-Sea officials in January 2022
- Logic behind the road diet was detailed
- Township had several requests for extra work to be included in project
- NJDOT accommodated every request
- Road Diet agreed upon





# Route 71 Road Diet Extra Work Requests



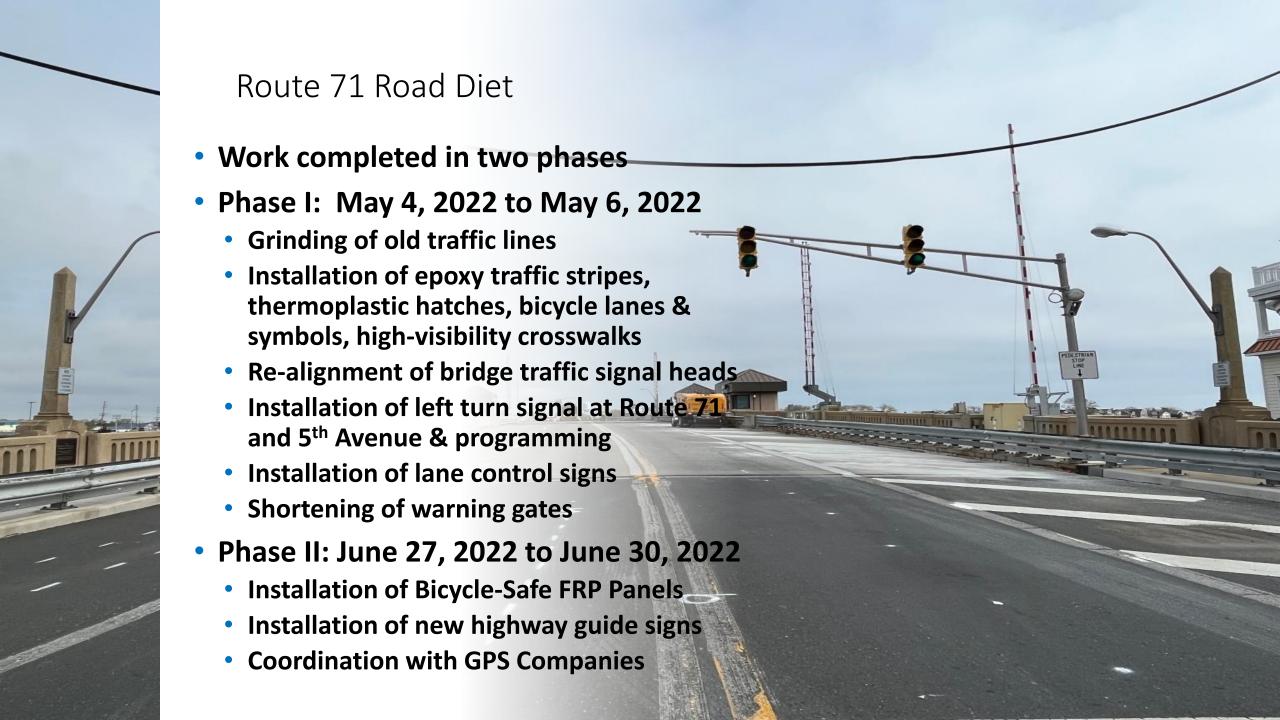
- Install high-visibility hatching at all crosswalks in Belmar and Avon-By-The-Sea
- Protected/permitted left turn signal at Route 71
   Southbound and 5<sup>th</sup> Avenue in Belmar
- Enhanced guide signs on Route 35, Memorial Drive, and Sylvania Avenue
- Coordinate with Monmouth County for upgrades to Sylvania Avenue
- Coordinate with major GPS companies to properly route Belmar and Avon-By-The-Sea traffic

### Route 71 Road Diet Public Outreach



- Townships requested informational video to alert public of upcoming changes
- NJDOT Office of Communications filmed video
- Description of Route 71 Road Diet
- Posted to NJDOT Social Media Pages

Rt 71 Drawbridge over Shark River Improvements - YouTube























### Installation of High-Visibility Crosswalks

- 18 intersections received crosswalk hatching
- 15 in Avon-By-The-Sea
- 3 in Belmar



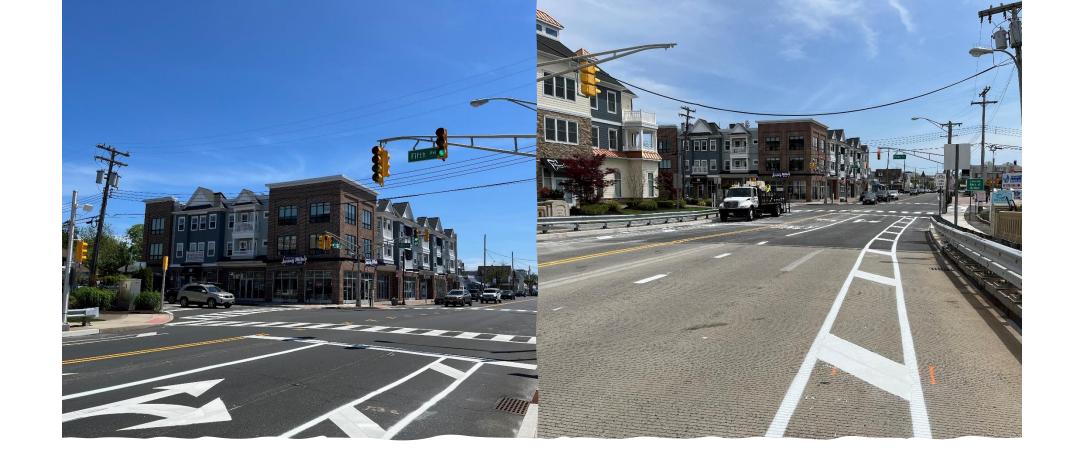
Bridge Traffic Signal Adjustments

- Bridge signals had been configured for two-lane operation in each direction
- Road diet lane re-configuration required signal adjustments
- Signal heads re-positioned above traffic lanes
- Side mounted signal heads installed for bike lanes



Bridge Warning Gate Adjustments

- Warning gates previously configured for two lane operation in each direction
- Road diet shifted lane configuration
- Gates extended past centerline after new striping installed
- Drawbridge Operations adjusted gates for new lane width



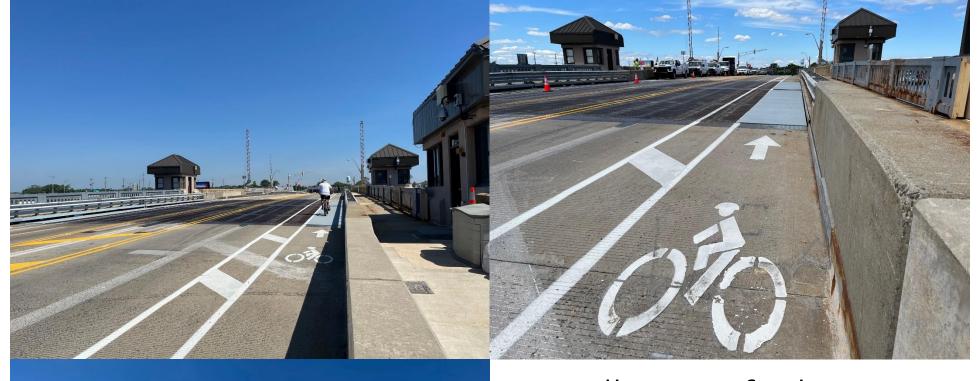
Dedicated Left Turn Lane at Route 71 and Fifth Avenue

- Eight vehicle queueing capacity
- Safely removes left turning vehicles from through traffic
- Protected/Permitted left turn signal
- Pre-Empted with bridge operation



Fifth Avenue Lane Control Installation

- East approach to Route 71 at Fifth Avenue previously two unmarked lanes
- One receiving lane opposite intersection
- Created confusion amongst drivers
- Dedicated left turn lane installed
- Through/right turn lane installed



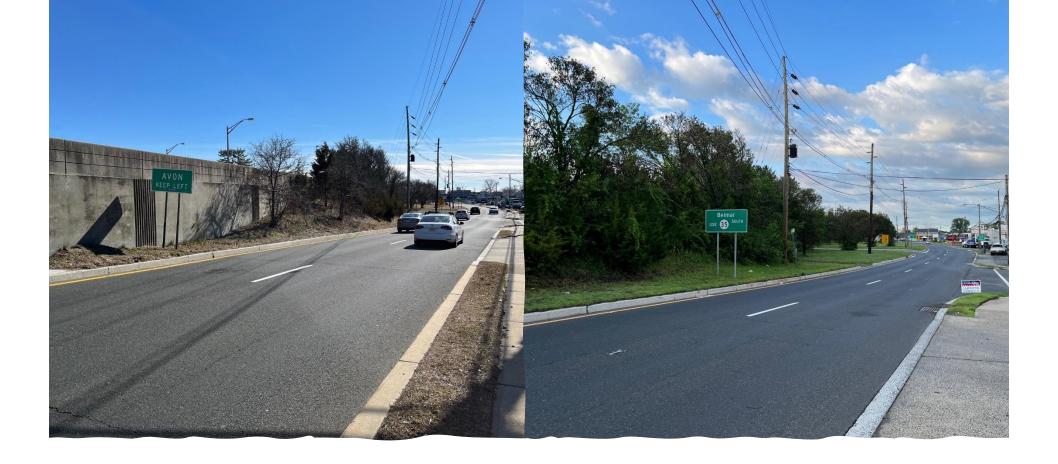


- Bike Lanes extended ¼ mile over bridge from Avon-By-The-Sea to Belmar
- Required barge for installation
- Required balancing of span to accommodate FRP panels



Coordination
With Monmouth
County

- NJDOT Office of Community Relations coordinated with Monmouth County
- County installed new traffic pattern on Sylvania Avenue
- Bike Lanes installed from Route 71 to beach area (3/4 mile)



Enhanced Highway Guide Signage

- New signs installed:
  - Route 35 Seaview Circle
  - Route 35 and Memorial Drive
  - Route 35 and Sylvania Avenue
  - Route 71 and Sylvania Avenue



Enhanced Highway Guide Signage

- More directly route motorists to proper beach destinations
- Intended to keep motorists on state highway system

# Route 71 Road Diet GPS Company Coordination



- NJDOT Office of Mobility coordinated with GPS Companies for routing changes
- Avon-By-The-Sea voiced concerns regarding GPS usage of residential streets
- Algorithms changed to better utilize state highways
- Belmar bound traffic from points north directed to utilize Route 35
- Belmar bound traffic on shore roads directed to utilize Route 71



Route 71 Road Diet Project Map

- White X denotes high visibility crosswalk location
- Green square denotes enhanced highway guide signage

# Route 71 Road Diet Completion Public Outreach



- NJDOT Office of Communications kept public aware of changes during construction through social media
- Completion video filmed after bike lanes officially completed
- Posted to NJDOT Social Media Pages

Rt 71 Over Shark River Bridge Safety Improvements - YouTube





Monitoring & Evaluation

- Operations continues to monitor highway
- Drastic increase in bicycle traffic over bridge
- Signal timings effectively manage traffic
- Backups from bridge openings cleared within three traffic light cycles at Fifth Avenue
  - Measured at busiest lift times, 7:30AM & 2:30PM
- Overwhelming support from community



Route 71 over Shark River Road Diet & Safety Improvements

**Awards** 

- AASHTO (NASTO) Operations Excellence Award 2023
- FHWA Build A Better Mousetrap
   2023 Bold Steps (National Award)
- NJ Society of Professional Engineers Public Project of the Year 2023 - 2<sup>nd</sup> Place



Looking Forward

- Traffic flows, bicycle trends, and bridge operation will continue to be monitored
- Evaluation of FRP plates after a winter season
- Drawbridges and bicycle lanes can co-exist
- Looking at future uses of FRP plates in drawbridge applications

### Route 71 over Shark River

Road Diet & Safety Improvements



## NJSTIC: 10+ Years of Innovating

**NJSTIC Wins** NJDOT Awarded First STIC New CIA Team Second STIC AID **NJSTIC** Incentive Demonstration Created, NJSTIC Excellence Established Proposal Grant **Goes Virtual** Award 2014 2016 2019 2021 2023 2010-2011 2015 2017 2020 2022 STIC Charter **New CIA Team CIA Teams NJSTIC Wins** NJSTIC Signed Established, STIC STIC Excellence Communications Created **Charter Updated** Award Plan





2023 Exemplary NJSTIC Member Award

Congratulations, Shivani Patel!









### REMINDERS & ANNOUNCEMENTS

NJDOT Tech Transfer Website www.njdottechtransfer.net

NJ STIC Website www.njdottechtransfer.net/nj-stic/

# GOT IDEAS?







The NJDOT invites you to share your ideas on the NJ Transportation Ideas Portal. The NJDOT seeks **RESEARCH IDEAS** that lead to implementation and **INNOVATION IDEAS** to advance deployment of innovations and knowledge transfer in transportation.

#### **SUBMIT YOUR IDEAS NOW!**

The next deadline to submit research ideas is December 31st.

Register at: njdottechtransfer.ideascale.com

Learn more at: www.njdottechtransfer.net

October 18, 2023: Commonsense Solutions for Intersection Problems (Hamilton)

October 23, 2023: Federal-aid Responsible Charge (Piscataway)

October 26, 2023: Pavement Management Systems (Piscataway)

October 30, 2023: Engineering and Traffic Studies (Piscataway)

**November 1-2, 2023**: Emergency Responder Transportation Safety Research Summit (Piscataway)

November 8-9, 2023: Federal-aid Responsible Charge (webinar)

December 4, 2023: Introduction to Crash Analysis (Hamilton)

**December 8, 2023**: Traffic Incident Management for First Responders Train the Trainer (Piscataway)

December 12, 2023: Asphalt Roads: Common Maintenance Problems (Piscataway)

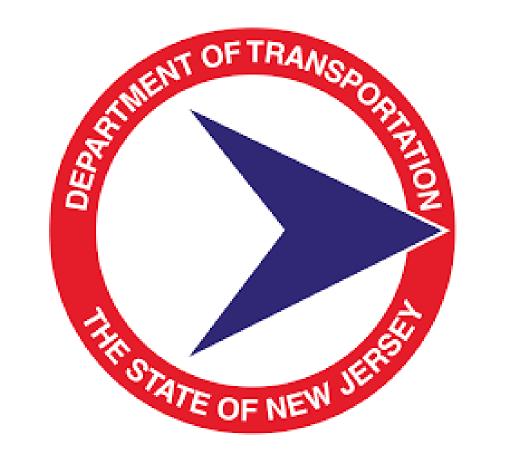
**December 15, 2023**: Slide-In Bridge Construction (Piscataway)

December 15, 2023: Engineering and Traffic Studies (Hamilton)



Details and Registration: <u>cait.rutgers.edu/events</u>

All are offered free of charge



### **UPCOMING EVENTS**

- Safety Summit
  October 24, 2023
- Research Showcase October 25, 2023
- Complete Streets Summit November 1, 2023









### STIC INCENTIVE PROGRAM

NJDOT Tech Transfer Website

https://www.njdottechtransfer.net/new-jersey-stic-requests/

Selection Criteria
Eligible Projects/Activities
How to Apply
List of Projects









# THANK YOU!

www.NJDOTtechtransfer.net/NJ-STIC

NJDOT Bureau of Research (609) 963-2242

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