New Jersey Department of Transportation

Safe Streets and Roads for All
SS4A

Laine Rankin | Director
Local Aid & Economic Development

RESOURCE CENTER
NJDOT LOCAL AID

Safe Streets and Roads for All
Self-Certification Eligibility Worksheet

Applicants should follow the instructions in the NOFO to correctly apply for a grant. See the SS4A website for more information.

Instructions: The purpose of this worksheet is to determine whether an applicant's existing plan(s) is substantially similar to an Action Plan for purposes of applying for an Implementation Grant or to conduct Supplemental Planning/Demonstration Activities only. Use of this worksheet is required. Applicants should not adjust the formatting or headings of the worksheet.

For each question below, answer "yes" or "no." If "yes," cite the specific page in your existing Action Plan or other plan(s) that corroborate your response, or cite and provide other supporting documentation separately.

An applicant is eligible to apply for an Action Plan Grant that funds supplemental action plan activities, or an Implementation Grant, only if the following two conditions are met:

- **Answer "yes" to Questions** 3 7 9
- **Answer "yes" to at least four of the six remaining Questions** 1 2 4 5 6 8

If both conditions are *not met*, an applicant is still eligible to apply for an Action Plan Grant that funds creation of a new Action Plan.

Lead Applicant: **UEI:**

1 Are both of the following true?
- Did a high-ranking official and/or governing body in the jurisdiction publicly commit to an eventual goal of zero roadway fatalities and serious injuries?
- Did the commitment include either setting a target date to reach zero, OR setting one or more targets to achieve significant declines in roadway fatalities and serious injuries by a specific date?

☐ YES ☐ NO
If yes, provide documentation:

2 To develop the Action Plan, was a committee, taskforce, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?

☐ YES ☐ NO
If yes, provide documentation:

3 Does the Action Plan include all of the following?
- Analysis of existing conditions and historical trends to baseline the level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types;
- Analysis of systemic and specific safety needs is also performed, as needed (e.g., high risk road features, specific safety needs of relevant road users; and,
- A geospatial identification (geographic or locational data using maps) of higher risk locations.

☐ YES ☐ NO
If yes, provide documentation:

Safe Streets and Roads for All
Self-Certification Eligibility Worksheet

4 Did the Action Plan development include all of the following activities?
- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

☐ YES ☐ NO
If yes, provide documentation:

5 Did the Action Plan development include all of the following?
- Considerations of equity using inclusive and representative processes;
- The identification of underserved communities through data; and
- Equity analysis, in collaboration with appropriate partners, focused on initial equity impact assessments of the proposed projects and strategies, and population characteristics.

☐ YES ☐ NO
If yes, provide documentation:

6 Are both of the following true?
- The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.

☐ YES ☐ NO
If yes, provide documentation:

7 Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, time ranges when projects and strategies will be deployed, and explain project prioritization criteria?

☐ YES ☐ NO
If yes, provide documentation:

8 Does the plan include all of the following?
- A description of how progress will be measured over time that includes, at a minimum, outcome data.
- The plan is posted publicly online.

☐ YES ☐ NO
If yes, provide documentation:

9 Was the plan finalized and/or last updated between 2018 and June 2023?

☐ YES ☐ NO
If yes, provide documentation:

Resolution of Support

1 **Are both of the following true?**

- Did a high-ranking official and/or governing body in the jurisdiction publicly commit to an eventual goal of zero roadway fatalities and serious injuries?
- Did the commitment include either setting a target date to reach zero, OR setting one or more targets to achieve significant declines in roadway fatalities and serious injuries by a specific date?

☐ YES ☐ NO

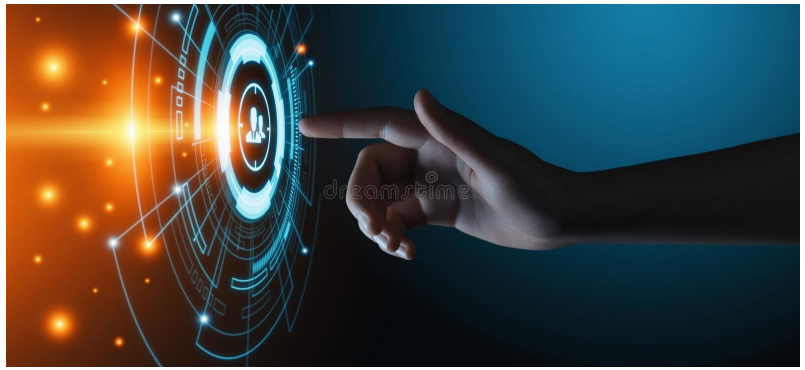
If yes, provide documentation:

Inclusive Process

2 **To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?**

☐ YES ☐ NO

If yes, provide documentation:



3 **Does the Action Plan include all of the following?**

- Analysis of existing conditions and historical trends to baseline the level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types;
- Analysis of systemic and specific safety needs is also performed, as needed (e.g., high risk road features, specific safety needs of relevant road users; and,
- A geospatial identification (geographic or locational data using maps) of higher risk locations.

☐ YES ☐ NO

If yes, provide documentation:

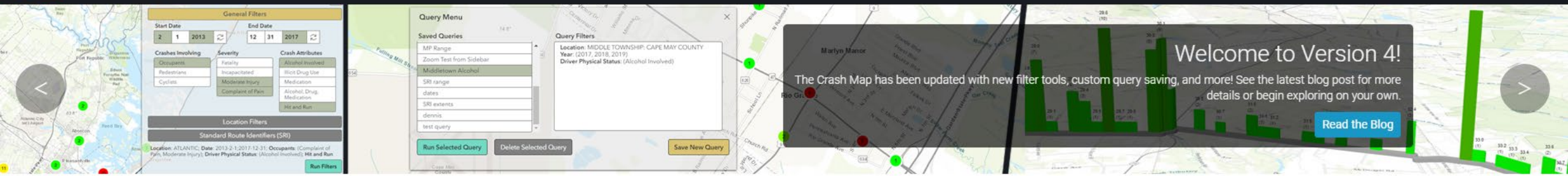
U.S. Department of Transportation

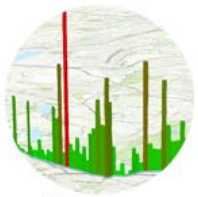
Safety Voyager

Still have questions? Visit the SS4A website

Safety Voyager

Notice: 2002-2019 data is complete, 2020 data is not all-inclusive.





Crash Map beta!

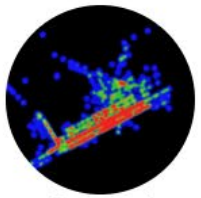
Interactively select and filter crash data.

View Map »

Pedestrian Dashboard

Instant synthesis of pedestrian and bicyclist related crashes.

View Dashboard »



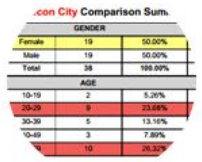
Pedestrian Heatmap

Dynamic map based visualization of crashes involving pedestrians and bicyclists.

View Heatmap »

Safety Calendar

View crash data aggregated by the NHTSA Safety Calendar themes. Access to this feature is at the discretion of NJDOT. Please contact the administrator for access to the safety calendar



Reports

Generate a crash attribute report that compares a jurisdiction with the statewide crash data.

View Reports »

Updates and Tutorials

updated!

See the latest news and updates about Safety Voyager.

View Blog »

Public Process

4 **Did the Action Plan development include all of the following activities?**

- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

☐ YES ☐ NO

If yes, provide documentation:

Equity

5 **Did the Action Plan development include all of the following?**

- Considerations of equity using inclusive and representative processes;
- The identification of underserved communities through data; and
- Equity analysis, in collaboration with appropriate partners, focused on initial equity impact assessments of the proposed projects and strategies, and population characteristics.

☐ YES ☐ NO

If yes, provide documentation:

Tool and Data Source

EJSCREEN: Environmental Justice Screening and Mapping Tool

https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen

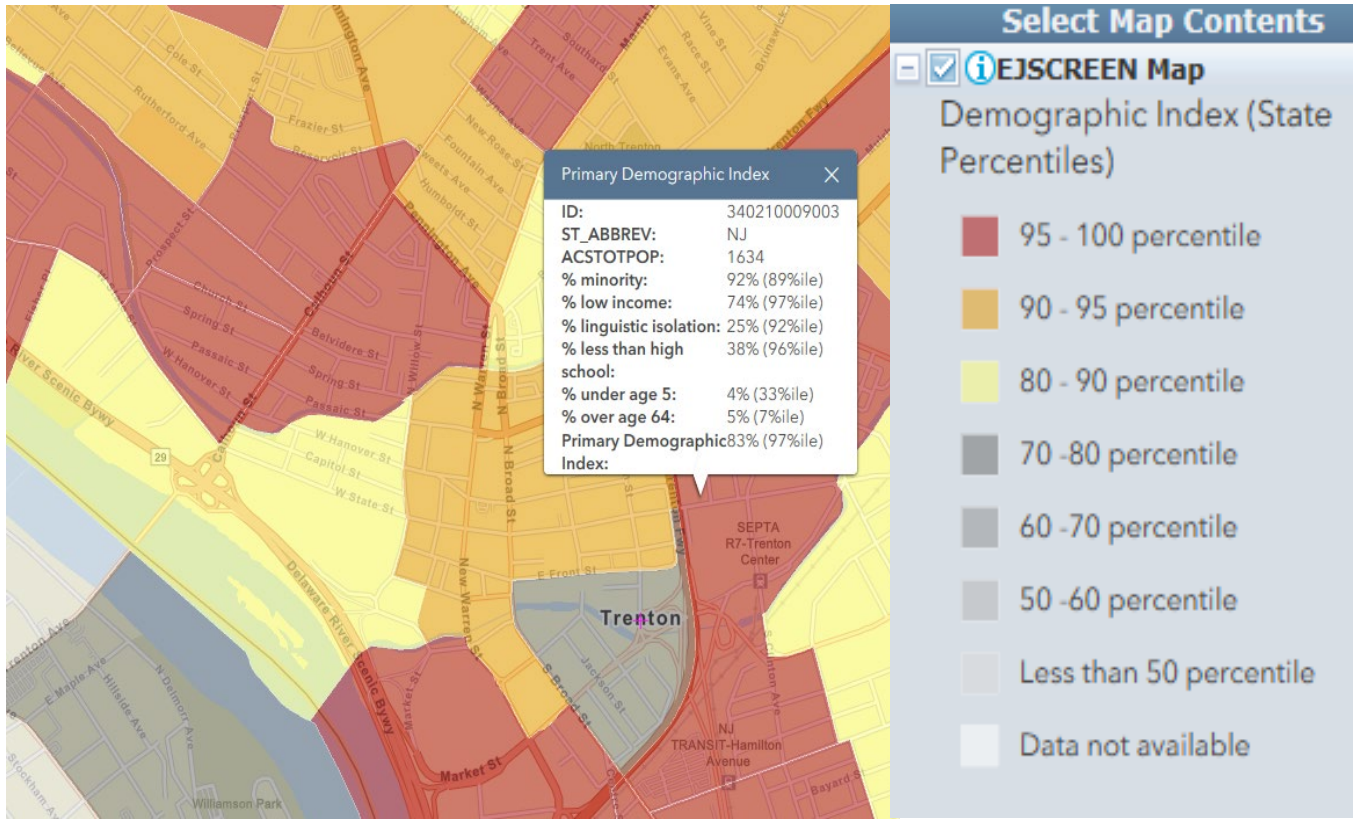
A Demographic Index is based on the average of two demographic indicators; Percent Low-Income and Percent Minority.

Six EJ Screen demographic indicators:

1. Percent Low-Income
2. Percent Minority
3. Less than high school education
4. Linguistic isolation
5. Individuals under age 5
6. Individuals over age 64

Two additional program indicators:

1. Individuals under age 18
2. Individuals with Disabilities



Safety Voyager

U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY
Proven Safety Countermeasures

Enhanced Delineation for Horizontal Curves

Enhanced delineation at horizontal curves includes a variety of potential strategies that can be implemented in advance of or within curves, in combination, or individually.

Potential Strategies	In Advance of Curve	Within Curve
Pavement markings (standard width or wider)	✓	✓
In-lane curve warning pavement markings	✓	
Retroreflective strips on sign posts	✓	✓
Delineators		✓
Chevron signs		✓
Enhanced Conspicuity (larger, fluorescent, and/or retroreflective signs)	✓	✓
Dynamic curve warning signs (including speed radar feedback signs)	✓	
Sequential dynamic chevrons		✓

Enhanced delineation treatments can alert drivers to upcoming curves, the direction and sharpness of the curve, and appropriate operating speed.

Agencies can take the following steps to implement enhanced delineation strategies:

1. Review signing practices and policies to ensure they comply with the Manual on Uniform Traffic Control Devices (MUTCD) principles of traffic control devices. Consistent practice for similar curves sets the appropriate driver expectancy.
2. Use the systemic approach to identify and treat problem curves. For example, Minnesota uses risk factors that include curve radii between 500 and 1,200 ft, traffic volumes between 500 and 1,000 vehicles per day, intersection in the curve, and presence of a visual trap.[1]
3. Match the appropriate strategy to the identified problem(s), considering the full range of enhanced delineation treatments. Once the MUTCD requirements and recommendations have been met, an incremental approach is often beneficial to avoid excessive cost.

Chevron signs with retroreflective strips on sign posts installed along a curve. Source: FHWA

Safety Benefits:

Chevron Signs
25% reduction in nighttime crashes.[1]
16% reduction in non-intersection fatal and injury crashes.[2]

Oversized Chevron Signs
15% reduction in fatal and injury crashes.[3]

Sequential Dynamic Chevrons
60% reduction in fatal and injury crashes.[3]

In-Lane Curve Warning Pavement Markings
35 - 38% reduction in all crashes.[4,5]

New Fluorescent Curve Signs or Upgrade Existing Curve Signs to Fluorescent Sheeting
18% reduction in non-intersection, head-on, run-off-road, and sideswipe in rural areas.[1]

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://safety.fhwa.dot.gov/provencountermeasures/ and https://safety.fhwa.dot.gov/roadway_dept/countermeasures/horicurves/.

FHWA-SA-21-035

1 Albin et al. Low-Cost Treatments for Horizontal Curve Safety 2016. FHWA-SA-15-084, (2016).
2 Srinivasan et al. Safety Evaluation of Improved Curve Delineation. FHWA-HRT-09-045, (2009).
3 Lyon et al. Safety Evaluation of Two Curve Warning Treatments: In-Lane Curve Warning Pavement Markings and Oversized Chevron Signs. Presented at the 96th TRB Annual Meeting, Paper No. 17-00432, (2017).
4 Hallmark, S. Evaluation of Sequential Dynamic Chevrons on Rural Two-lane Highways. FHWA, (2017).
5 Donnell et al. Reducing Roadway Departure Crashes at Horizontal Curve Sections on Two-lane Rural Highways. FHWA-SA-19-005, (2019).

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

6 Are both of the following true?

- The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.

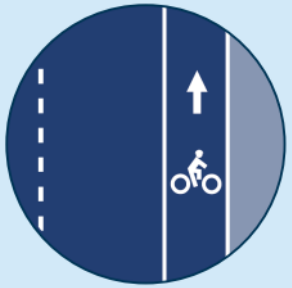
☐ YES ☐ NO

If yes, provide documentation:

Proven Safety Countermeasures

U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY
Proven Safety Countermeasures



Safety Benefits:

Bicycle Lane Additions can reduce crashes up to:

49%
for total crashes on urban 4-lane undivided collectors and local roads.[6]

30%
for total crashes on urban 2-lane undivided collectors and local roads.[6]

Separated bicycle lane in Washington, DC. Source: Alex Baca, Washington Area Bicyclist Association

Separated bicycle lanes may provide further safety benefits. FHWA is anticipating completion of research in Fall 2022.

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://safety.fhwa.dot.gov/provencountermeasures/ and https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf.

FHWA-SA-21-051

Bicycle Lanes

Most fatal and serious injury bicyclist crashes occur at non-intersection locations. Nearly one-third of these crashes involve overtaking motorists[1]; the speed and size differential between vehicles and bicycles can lead to severe injury. To make bicycling safer and more comfortable for most types of bicyclists, State and local agencies should consider installing bicycle lanes. These dedicated facilities for the use of bicyclists along the roadway can take several forms. Providing bicycle facilities can mitigate or prevent interactions, conflicts, and crashes between bicyclists and motor vehicles, and create a network of safer roadways for bicycling. Bicycle Lanes align with the Safe System Approach principle of recognizing human vulnerability—where separating users in space can enhance safety for all road users.

Applications

FHWA's *Bikeway Selection Guide* and *Incorporating On-Road Bicycle Networks into Resurfacing Projects* assist agencies in determining which facilities provide the most benefit in various contexts. Bicycle lanes can be included on new roadways or created on existing roads by reallocating space in the right-of-way.

In addition to the paint stripe used for a typical bicycle lane, a lateral offset with painted buffer can help to further separate bicyclists from vehicle traffic. State and local agencies may also consider physical separation of the bicycle lane from motorized traffic lanes through the use of vertical elements like posts, curbs, or vegetation.[2] Based on international experience and implementation in the United States, there is potential for further safety benefits associated with separated bicycle lanes. FHWA is conducting research on separated bicycle lanes, which includes the development of crash modification factors, to be completed in 2022 to address significant interest on this topic.

Considerations

- City and State policies may require minimum bicycle lane widths, although these can differ by agency and functional classification of the road.
- Bicycle lane design should vary according to roadway characteristics (e.g., motor vehicle volumes and speed) in order to maximize the facility's suitability for riders of all ages and abilities and should consider the travel needs of low-income populations likely to use bicycles. The *Bikeway Selection Guide* is a useful resource.
- While some in the public may oppose travel lane narrowing if they believe it will slow traffic or increase congestion, studies have found that roadways did not experience an increase in injuries or congestion when travel lane widths were decreased to add a bicycle lane.[3]
- Studies and experience in US cities show that bicycle lanes increase ridership and may help jurisdictions better manage roadway capacity without increased risk.
- In rural areas, rumble strips can negatively impact bicyclists' ability to ride if not properly installed. Agencies should consider the dimensions, placement, and offset of rumble strips when adding a bicycle lane.[4]
- Strategies, practices, and processes can be used by agencies to enhance their ability to address equity in bicycle planning and design.[5]

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

1 Thomas et al. Bicyclist Crash Types on National, State, and Local Levels: A New Look. Transportation Research Record 673(6). 664-676. (2019).
2 Separated Bike Lane Planning and Design Guide. FHWA-HEP-15-025. (2015).
3 Park and Abdel-Aty. "Evaluation of safety effectiveness of multiple cross sectional features on urban arterials". Accident Analysis and Prevention, Vol. 92, pp. 245-255. (2016).
4 FHWA Tech Advisory Shoulder and Edge Line Rumble Strips. (2011).
5 Sandt et al. Pursuing Equity in Pedestrian and Bicycle Planning. FHWA. (2016).
6 Avelar et al. Development of Crash Modification Factors for Bicycle Lane Additions While Reducing Lane and Shoulder Widths. FHWA. (2021).

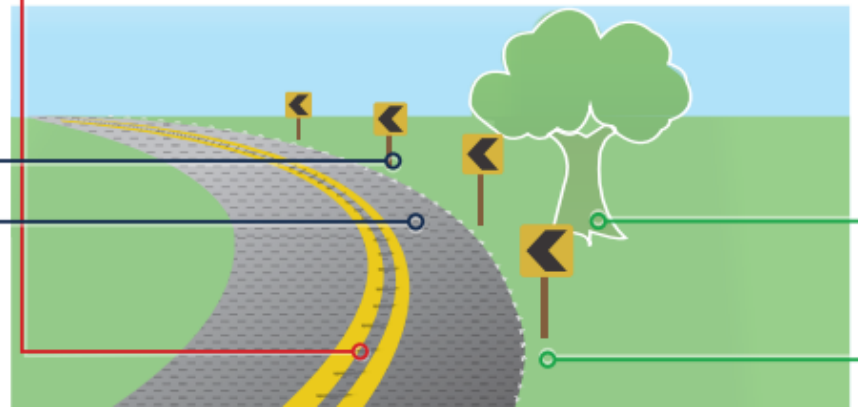
Countermeasures

Overturn Crash Strategies:

Curve delineation **1**
Friction treatments in curves **2**
Edge line and shoulder rumble strips **3**
Safety Edge$_{SM}$ **4**
Clear zones **5**
Traversable roadside slopes **6**
Barriers to shield fixed objects and slopes **7**

Opposite Direction Crash Strategies:

1. Center line rumble stripes
2. Friction treatments in curves
3. Increased separation between opposing lanes, particularly in curves
4. Median barriers



Roadside Trees and Shrub Crash Strategies:

1. Edge line and shoulder rumble strips
2. Curve delineation
3. Friction treatments in curves
4. Clear zone improvements, particularly on the outside of curves
5. Barriers to shield trees and shrubs

Local Aid Grants

7 Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, time ranges when projects and strategies will be deployed, and explain project prioritization criteria?

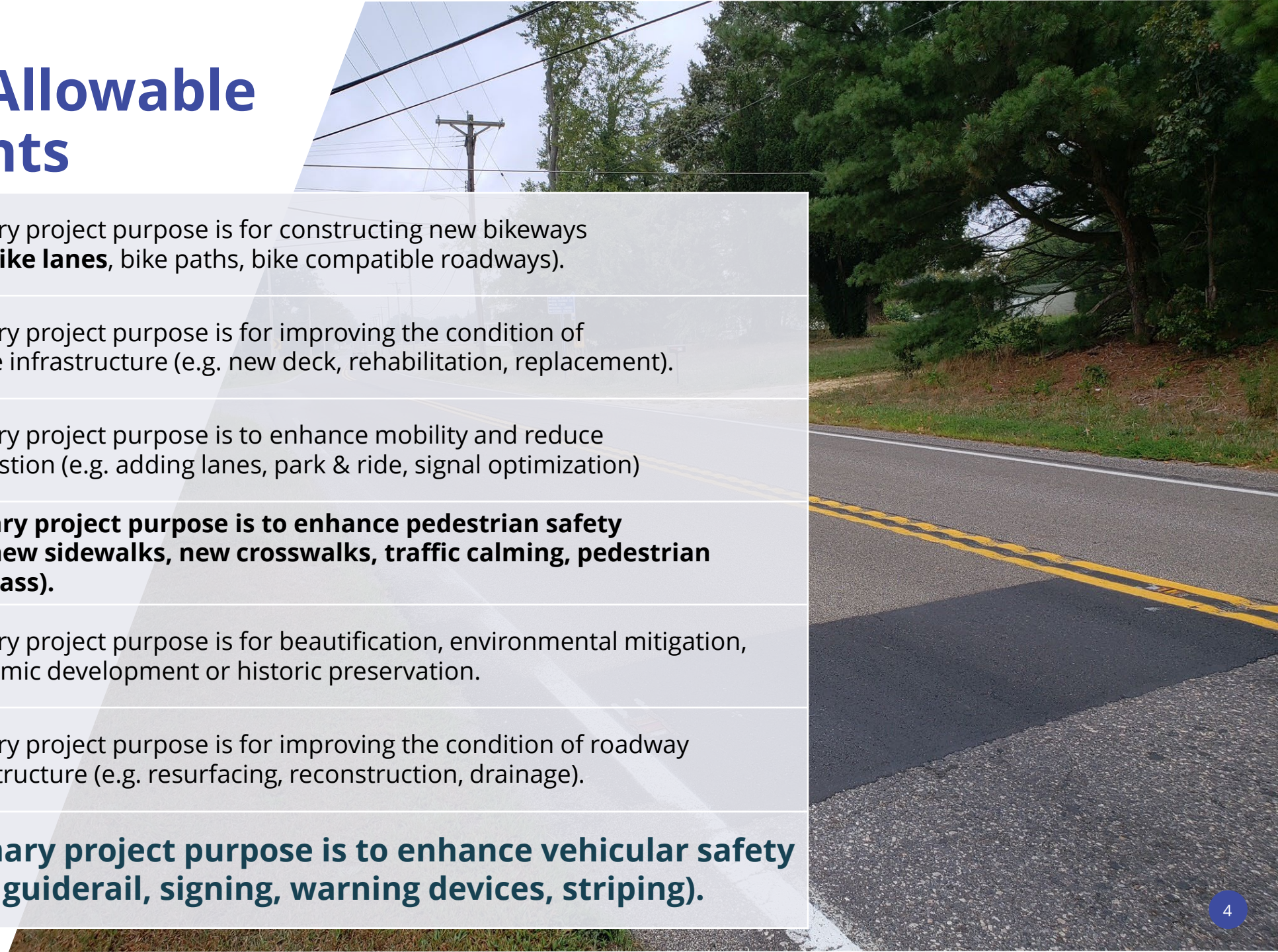
☐ YES ☐ NO

If yes, provide documentation:

- The Division of Local Aid **<u>strongly</u>** supports the use of local aid grants for safety improvements

County Aid Allowable Improvements

Bikeway	Primary project purpose is for constructing new bikeways (e.g. **bike lanes**, bike paths, bike compatible roadways).
Bridge Preservation	Primary project purpose is for improving the condition of bridge infrastructure (e.g. new deck, rehabilitation, replacement).
Mobility	Primary project purpose is to enhance mobility and reduce congestion (e.g. adding lanes, park & ride, signal optimization)
Pedestrian Safety	**Primary project purpose is to enhance pedestrian safety (e.g. new sidewalks, new crosswalks, traffic calming, pedestrian overpass).**
Quality of Life	Primary project purpose is for beautification, environmental mitigation, economic development or historic preservation.
Roadway Preservation	Primary project purpose is for improving the condition of roadway infrastructure (e.g. resurfacing, reconstruction, drainage).
Roadway Safety	**Primary project purpose is to enhance vehicular safety (e.g. guiderail, signing, warning devices, striping).**



Municipal Aid Allowable Improvements

Bikeway	Primary project purpose is for constructing new bikeways (e.g. **bike lanes**, bike paths, bike compatible roadways).
Bridge Preservation	Primary project purpose is for improving the condition of bridge infrastructure (e.g. new deck, rehabilitation, replacement).
Mobility	Primary project purpose is to enhance mobility and reduce congestion (e.g. adding lanes, park & ride, signal optimization)
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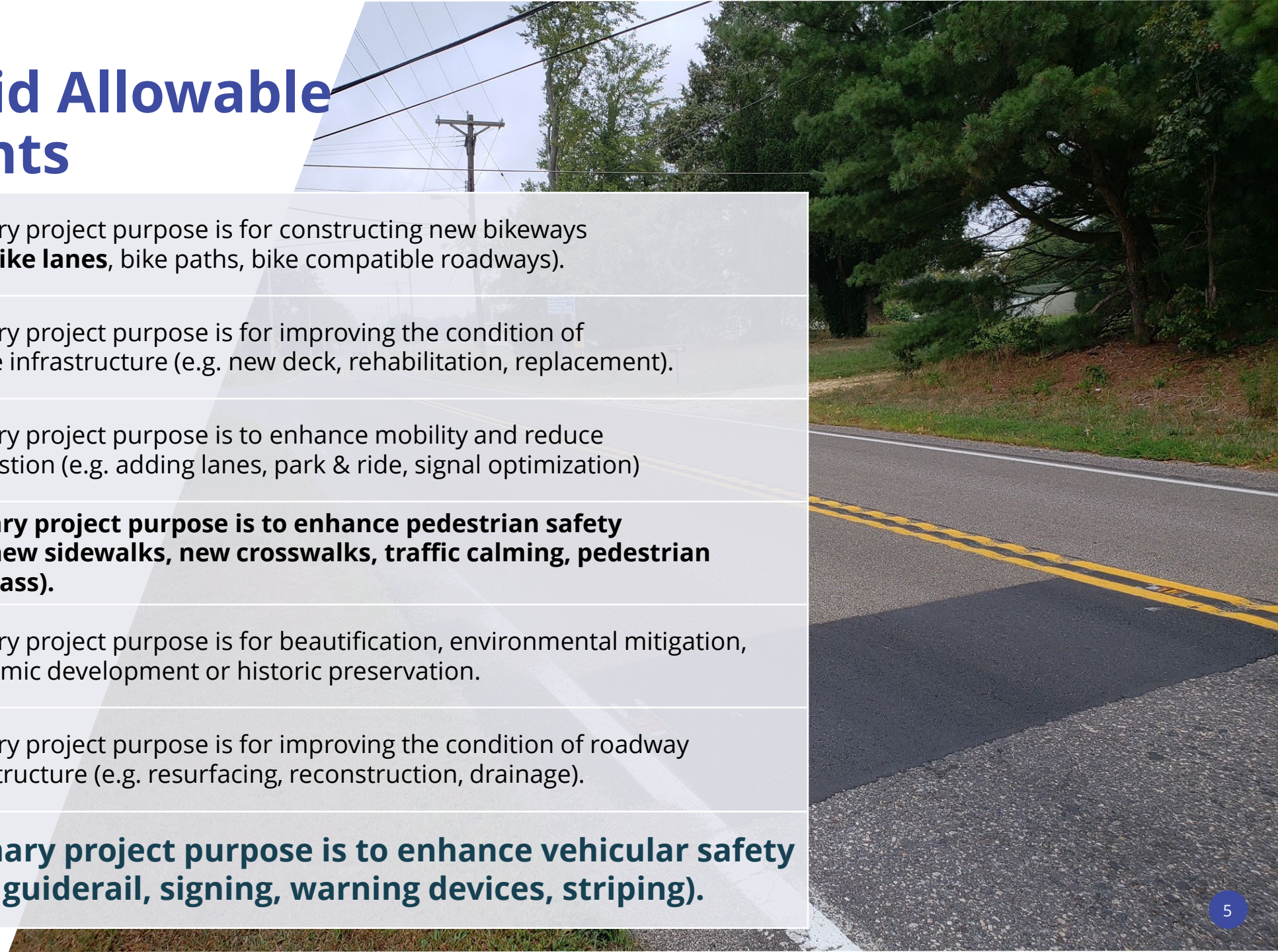
Roadway Safety	**Primary project purpose is to enhance vehicular safety (e.g. guiderail, signing, warning devices, striping).**

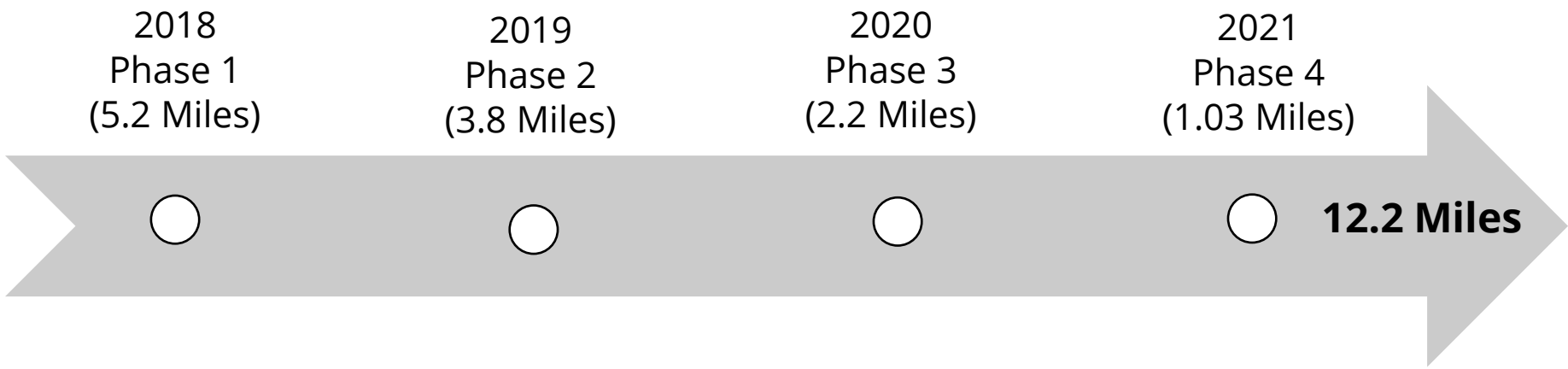


Municipal Aid Applications - Most Used Categories

	2017	2018	2019	2020	2021	2022	2023
Bikeways	1	2	7	5	3	6	3
Bridge Preservation	2	2	2	1	2	2	1
Mobility	1	2	3	4	6	5	3
Pedestrian Safety	23	29	23	17	12	8	12
Quality of Life	4	9	10	6	6	7	5
Roadway Preservation	591	607	632	620	606	593	584
Roadway Safety	7	5	4	7	1	4	4
Total	629	656	681	660	636	625	612

Municipal Aid Projects

Sooy Place Rd, Woodland Twp.



- Milled and overlaid HMA surface course. Repaired HMA base as required.
- Installed new center line striping.
- Installed RPM's and flexible delineators and signage at curves to alert drivers and increase safety.
- Filled sidewalk gaps to the Chatsworth Elementary School.

Safety Improvements

Does the project involve any of the safety improvements listed below? If so, please check all applicable and add a narrative of proposed safety improvements in the box below.

(X) Yes ( ) No

Flexible delineators and bi-directional retroreflective pavement markers and signage will be installed at the bends in the road to alert motorist of the bends in the road

Safety improvements cannot be replacement in kind; they must enhance/improve existing conditions.

MUNICIPAL AID PROGRAM

Scope of Work:
The roadway will be milled 1 1/2" - 2" thick and resurfaced with a 2" HMA surface course. HMA base repairs will be performed as required. New center line striping will be installed.
Raised pavement markers and flexible delineators with signage will be installed at the curves to alert drivers of the bends to increase safety.

Local Safety Program

Eligible improvements include:

- upgraded traffic signals
- **signage**
- pedestrian indications
- crosswalks
- curb ramps
- **pavement markings**
- and other improvements to increase the safety of drivers, bicyclists and pedestrians.

High Risk Rural Roads

Eligible improvements include:

- skid-resistant surface treatment
- guiderail
- reflective pavement markings
- rumble strips & rumple stripes
- Safety Edge
- enhanced and advanced warning signs
- other improvements to increase the safety of drivers, bicyclists and pedestrians.

Measurable

8 **Does the plan include all of the following?**

- A description of how progress will be measured over time that includes, at a minimum, outcome data.
- The plan is posted publicly online.

☐ YES ☐ NO

If yes, provide documentation:

Substandard Design Elements

- **Horizontal Radius**
- **Superelevation**
- **Sight Distance**
- **Drainage Issues**

21 Crashes

- **14 Fixed Object**
- **10 Injured**
- **1 Fatality**
- **7 Wet Surface**
- **12 Night Time**

Federal Aid Projects

Stagecoach Road, Millstone Twp.

- Milled and resurfaced CR 524
- Provided superelevation on horizontal curves.
- Applied high friction surface treatment.
- Installed and replaced regulatory and warning signs
- Installed RPM’s and new centerline striping.
- Constructed drainage inlets, pipes, manholes, MTD and outfall with riprap scour hole.
- Cleared brush to enhance sight distance along tight horizontal curve.

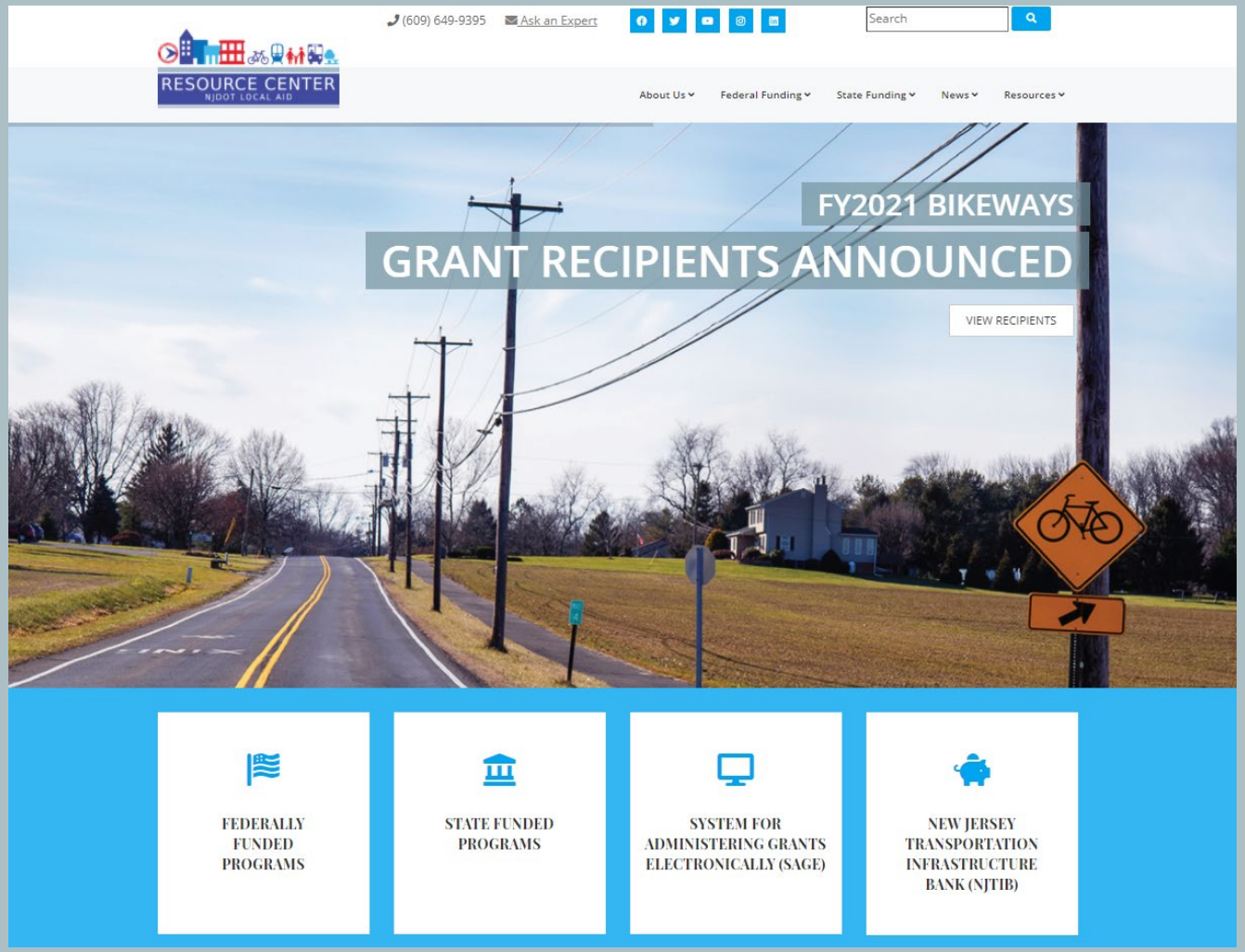
9 **Was the plan finalized and/or last updated between 2018 and June 2023?**

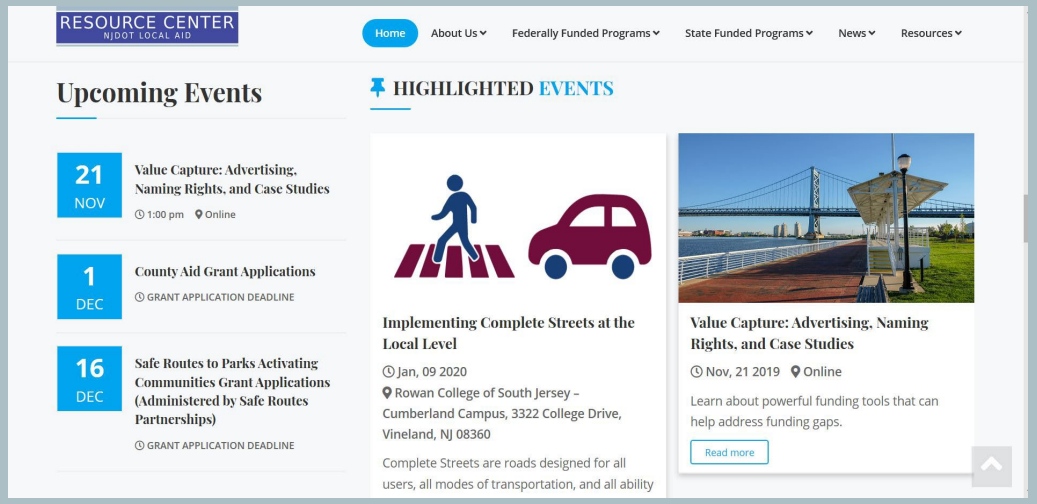
☐ **YES** ☐ **NO**

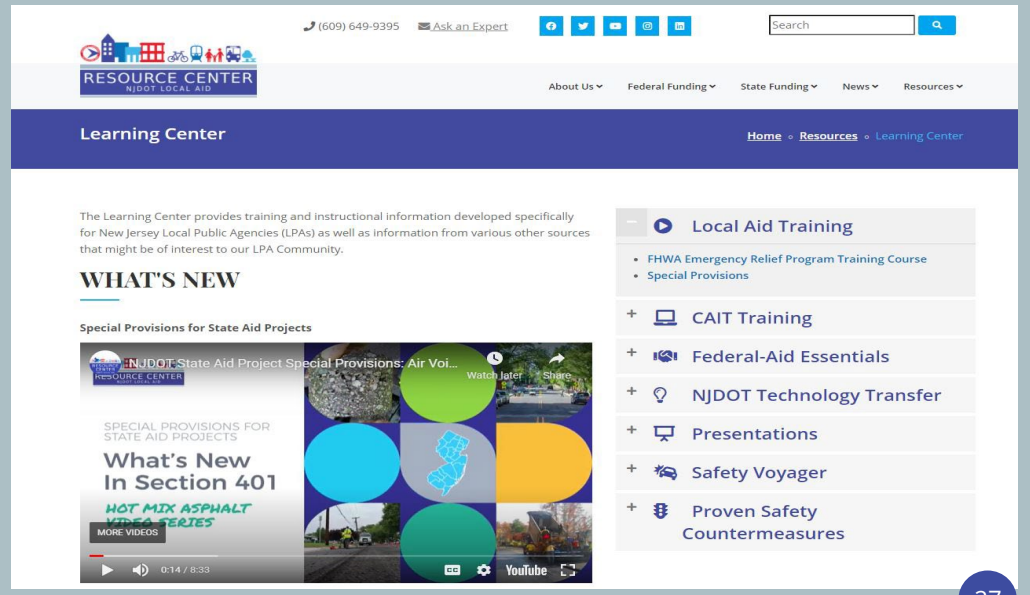
If yes, provide documentation:

Local Aid Resource Center

a hub for information & technical assistance







THANK YOU!

(609) 649-9395

www.njdotlocalaidrc.com

DOT-LocalAID.ResourceCenter@dot.nj.gov

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