

Township of Denville 2019 Walkability Assessment Report



Presented by:

TransOptions



Township of Denville

2019 Walkability Assessment Report

Produced by:

TransOptions, Inc.

Daniel Callas, President
Lisa Leone, Safe Routes to School Coordinator

Walkability Assessment Participants:

TransOptions:

Daniel Callas, President
Lisa Leone, Safe Routes to School Coordinator
Laura Cerutti, Project Manager
Denis Kelleher, Program Specialist
Justin Jenkins, Program Specialist

Township of Denville:

Steven Ward, Business Administrator
Samantha Anello, Municipal Engineer
Chief Chris Wagner, Denville Police Department
Lt. Jeff Tucker, Denville Police Department

Prepared for:

Township of Denville



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Disclaimer:

TransOptions' staff are not engineers or licensed planners. All suggestions are based on examples completed in other communities as well as recommendations provided by walkability assessment participants. Any infrastructure improvements require future consultation with a licensed engineer or planner. NJDOT should be consulted for infrastructure improvements along state roadways.

Introduction:

Denville Township is a main hub in Morris County for transportation and commerce. Denville Township's downtown provides access to shops and restaurants as well as close proximity to schools and train stations. Walkability and connectivity are goals of Denville Township to provide easy access to the amenities the Township offers. Denville Township has a multiple phase plan to upgrade the sidewalk network within the Downtown section of the Township to provide increased pedestrian amenities and safety. This report aims to provide recommendations of priority areas for future grant applications.

In order to assess the connectivity, walkability, and safety of main pedestrian routes in the Township, a walkability assessment was conducted on November 9, 2018 and December 10, 2018 throughout sections of Denville Township. A Walkability Assessment is an event where community members walk designated routes to identify safety hazards or concerns that make it difficult or unsafe for usage. Recommendations can be made at the end to highlight opportunities that will make the routes walkable for all ages, abilities, and comfort levels. Representatives from the municipality were present including the Township Administrator, Police Department, and Township Engineer along with TransOptions staff.

During the walkability assessment, participants made observations on the safety, condition, and connectivity of walking routes throughout sections of the downtown, Route 53, and Diamond Spring Road. **Map 1** on page 27 outlines the specific routes walked during this assessment.

The walkability assessment was organized and facilitated by TransOptions. TransOptions is a non-profit Transportation Management Association (TMA) that has been delivering programs that improve mobility, the environment, and quality of life in northwestern New Jersey for over thirty years. As a TMA, TransOptions is tasked with implementing strategies and programs that address traffic congestion, economic development, air quality, walking, biking and driving safety, and livability issues.

For this report, each route was analyzed based on the below factors:

Accessibility- How easy and safe it is to reach this location.

Safety-How safe this route is for pedestrians to walk including driver behavior, traffic volume, pedestrian visibility, and pedestrian infrastructure locations.

Crossings and Intersections- How visible and available crosswalks and intersections are and if it complies with the American with Disabilities Act (ADA).

Pedestrian Facilities- How available sidewalks are and the condition they are in.

Pedestrian Comfort- How comfortable it is for pedestrians to walk and if there are ample amenities such as lighting, benches, and trash receptacles.

Note: Further information on recommendations listed in this report can be found in the *2017 Complete Streets Design Guide and 2019 Green and Complete Streets Model Policy and Guide.*

Downtown Denville Route:

Downtown Denville is a major pedestrian destination featuring multiple restaurants and store fronts that are easily accessible by walking. Many people also commute through downtown Denville for its access to Route 46, Route 80, and Route 53 as well as the Denville Train Station.

The Downtown Denville route is broken into 4 separate grant focus areas for this report: (See **Map 2**)

- **West Main Street**- St. Marys Place to Righter Avenue and West Main Street
- **East Main Street (Rt. 53)**- between Broadway Avenue Bloomfield Avenue
- **Bloomfield Avenue**- from Broadway Avenue to East Main Street (Rt. 53)
- **Diamond Spring Road**- from West Main Street to 1st Avenue

West Main Street:

Accessibility:

Along West Main Street and adjacent roadways there are ample areas to park on the road and in parking lots to allow access for walking along this road. For pedestrians walking towards the downtown from the municipal building or from Gardner field, pedestrians need to walk through the St. Mary's parking lot in order to reach a sidewalk. This area is busy during pick-up and drop off times and when the church is being utilized. Additionally, the West Main Street municipal parking lot lacks curb ramps at the sidewalks for access to the bus stop and pay to park meter.

Accessibility Recommendations:

- Create ADA access to the West Main Street municipal parking lot and bus stop
- Continue sidewalk network from St. Marys Place

Safety:

When St. Mary's church and school lot is in use, pedestrians walking from the municipal building and surrounding roads have to walk through a parking lot with a lot of cars, creating a potential hazard. There are no alternatives besides walking through St. Mary's Church and school parking lots.

Crossing and Intersections:

The main concerns within this section at crossings and intersections are missing painted crossings and ADA compliance.

Several intersections were observed to be missing painted crosswalks and pedestrian crossing signage. These intersections include:

- St. Marys Place
- Myers Avenue

- Righter Avenue and Hinchman Avenue intersection- There is a lack of crosswalks and this crossing is also not aligned with the corner. The corner crosses several feet in from the corner creating a blind area

In addition to unmarked crossings, many of the non-signalized crossings lack signage and truncated domes. Specifically, Myers Avenue intersection lacks truncated domes and is covered in asphalt making the corner uneven and a tripping hazard.



Crossing at Myers Avenue



Crossing Hinchman Avenue and Righter Avenue

The crossing at West Main Street at Broadway and East Main Street has a faded crosswalk and lacking truncated domes. Along the West Main Street side of the crossing, a NJDOT utility plate is at the beginning of the crosswalk where a truncated dome should be located. Although this crossing is long, there is a pedestrian refuge median to break up part of the crossing.



Crossing West Main Street at East Main Street.



DOT utility plate where a truncated dome should be

Crossing and Intersection Recommendations:

- Install high visibility crosswalks at key intersections to be consistent throughout the Township (see Appendix A)
- Install truncated domes at all street crossings and makes sure all crossings are ADA compliant
- Install pedestrian crossing signage where missing at non-signalized crossings

Pedestrian Facilities:

From St. Marys Place to Myers Avenue the sidewalks are not continuous mainly through the St. Mary's parking lot. Along Righter Avenue, the sidewalk is flush with road and street parking and there is no curb to separate the sidewalk from the roadway. Although the sidewalk and road are flush drivers did a good job not parking onto the sidewalk.

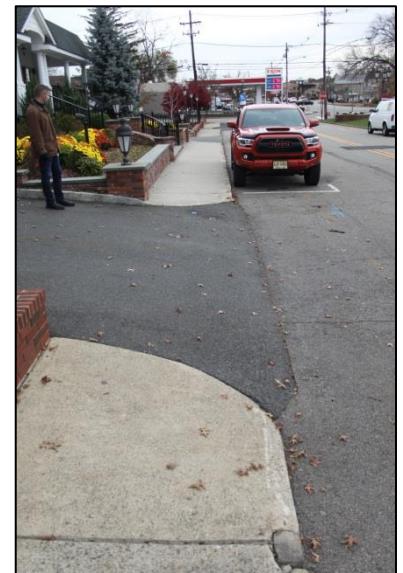
The West Main Street municipal parking lot provides access to the downtown and bus stops, however, curb cuts and truncated domes are missing on the sidewalk. Both bus stops along West Main Street have bus shelters, are off the sidewalk, and have pedestrian amenities which should be utilized as a good example for bus stops throughout the Township.



Sidewalk flush to roadway



West Main Street municipal parking lot



Sidewalk does not continue across driveways

Pedestrian Facilities Recommendations:

- Continue sidewalk network throughout West Main Street and Righter Avenue
- Create ADA access for West Main Street municipal lot and bus stop
- Install curbing and road buffers between roadway and sidewalks

Pedestrian Comfort:

Although there is light pedestrian traffic in this section of the downtown, Righter Avenue lacks street trees, benches, and trash receptacles. Extending these pedestrian amenities throughout this section would create a more pleasant walking experience.

Pedestrian Comfort Recommendations:

- Continue pedestrian amenities such as benches, scaled lighting, street trees, and trash receptacles throughout this section of the downtown

East Main Street:

Accessibility:

Despite the long crossing length from Broadway, there is a nice sitting area at the main intersection in Downtown Denville. There is also a bike rack located on East Main Street creating access for multiple users of the roadway.



Sitting Area at East Main Street and Broadway



Bike rack on West Main Street

Safety:

In this section of the Township there are limited safety concerns but overall safety improvements and education throughout the Township will improve safety throughout this section.

Crossing and Intersections:

The parking lot driveway between 1 West Main Street (deli) and 1 East Main Street (cleaners) is signalized and has a pedestrian crossing signal along the sidewalk; however, crossing this driveway can be confusing, and the crosswalk that crosses the driveway is barely visible.



Signalized crossing and crosswalk at 1 West Main Street

An additional area of concern is the crossing at East Main Street and Bloomfield Avenue. This crosswalk is low-visibility, truncated domes are lacking at both sides of the crossing, and the East Main Street side of this crosswalk has no curb cut and is blocked but the traffic signal pole.

The intersection of East Main Street and Broadway is high visibility but there are no truncated domes at the crossing. Instead there are NJDOT utility plates.



Crossing at East Main Street
and Bloomfield Avenue



Crossing at East Main
Street and Broadway

Crossing and Intersection Recommendations:

- Create a high visibility crossing across the parking lot driveway between 1 West Main Street and 1 East Main Street where there is a pedestrian crossing sign. Signage and high visibility striping to let pedestrians know this area is controlled by the light. Truncated domes are also needed at this crossing.
- Make sure intersections are ADA compliant- East Main Street and Broadway Avenue intersection

Pedestrian Facilities:

On the south side of the road going towards Route 53 the main issue is the condition of the sidewalks. Between 27 and 35 East Main Street there is a traffic signal pole blocking the sidewalk and crosswalk, drainage issues, cracked pavers that create a muddy and water filled area, and the sidewalk does not create a continuous path in this area. The sidewalks are also narrow and in need of maintenance with some extreme uplift in places. Closer to Broadway, the sidewalk network on East Main Street widens with a buffer between the roadway and sidewalk creating a pleasant walking area.



Cracked pavers and water retention along East Main Street



Traffic signal block that sidewalk and crosswalk at East Main Street and Bloomfield Avenue

Additionally, the driveway between 25 East Main Street (Mara's Café and Bakery) and 5 East Main Street (Second Half on Main) has limited visibility and the sidewalk does not continue across the exit.

On the north side of the road going towards downtown, the main barriers for walkability are the condition of the sidewalks and a lack of a buffer between the sidewalk and parking lot. The parking lot next to 18 East Main Street is flush to the sidewalk and lacking a curb or buffer to keep the cars out of the sidewalk. Additionally, along this side of the road the sidewalk slopes in areas and is in need of general maintenance where pavers are uplifted or cracked.



North side of the road is wide but is in needs of maintenance



Cracked sidewalk on the north side of the road and a lack of buffer between the parking lot and sidewalks

Pedestrian Facilities Recommendations:

- Continue sidewalk across driveways
- Maintain sidewalk and make sure trees and signage are placed outside of the pedestrian zone
- Create a curb or buffer between parking lots and the sidewalk as well as between the sidewalk and the roadway
- Consider installing green infrastructure in areas that retain water

Pedestrian Comfort:

There are multiple benches, pedestrian scaled lighting, trash receptacles, and street trees along the south side of the road where most of the store fronts are located. Along the north side of the road (heading towards downtown), there is an abundance of street trees but limited to no benches or pedestrian scaled lighting.

Pedestrian Comfort Recommendations:

- Continue pedestrian amenities such as benches, scaled lighting, street trees, and trash receptacles throughout this section of the downtown.



Bench and lighting along East Main Street

Bloomfield Avenue:

Accessibility:

Street parking is located throughout the downtown area. A municipal parking lot is located on Bloomfield Avenue and provides additional options for parking to access this area of the Township. Sidewalks are continuous and provide an option for pedestrians to access this area as well.

Safety:

In this section there are limited safety concerns but overall safety improvements and education throughout the Township will improve safety throughout this section.

Crossing and Intersections:

The main concerns in this section are the low visibility of crossings and missing ADA infrastructure. At the East Main Street and Bloomfield Avenue signalized intersection, the crosswalks are low visibility and a red painted square is in place of truncated domes. This intersection does however have a pedestrian crossing signal. Truncated domes are also missing at the intersection of Broadway and Bloomfield Avenue on the Bloomfield Avenue side. Aside from the missing ADA infrastructure, the crosswalk is high visibility with state law pedestrian crossing signage in the roadway. The crosswalk at the Route 46 ramp and Bloomfield Avenue is also high visibility with ADA infrastructure. This crosswalk is a good example to be used in other areas of the Township.



Crossing at Bloomfield Avenue to median



Pedestrian crossing signage at crosswalk on Bloomfield Avenue

Crossing and Intersection Recommendations:

- Install high visibility crosswalks at key intersections to be consistent throughout the Township (see Appendix A)
- Install truncated domes at all street crossings and make sure all crossings are ADA compliant

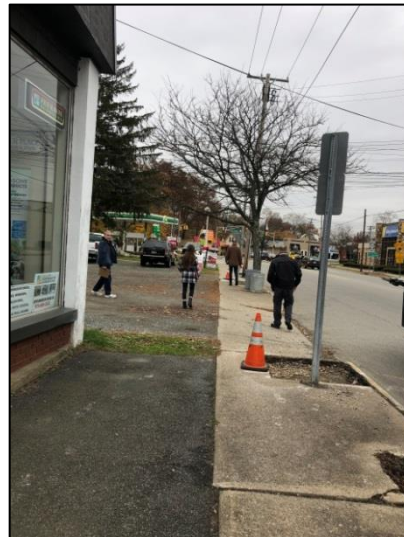
Pedestrian Facilities:

The main concerns along Bloomfield Avenue are the condition of the sidewalks. Along Bloomfield Avenue, there are multiple areas where sidewalks are cracked, broken, blocked, and uplifted.

The main problems are located on the west side of the road. At the Bloomfield municipal lot and farmers market, there is an asphalt path leading to the parking lot where it ends. Within the parking lot is a bus stop. Since this area will eventually be repaved by the town, putting in a sidewalk along this section of Bloomfield Avenue that continues throughout the edge of the parking lot will provide a safer area for pedestrians.



Sidewalk ends at Bloomfield municipal lot



Sidewalk on west side of Bloomfield Avenue

Additionally, the sidewalk on the west side of the street is severely cracked, uplifted, and has signs and trees placed in the middle, blocking the path. The sidewalk also does not continue across the driveway entrance at 17 and 21 Bloomfield Avenue.

Pedestrian Facilities Recommendations:

- Install sidewalk to continue to and through the Bloomfield municipal lot
- Sidewalk maintenance
- Continue sidewalks across driveways
- Maintain sidewalk and keep trees and signage are placed outside the pedestrian zone

Pedestrian Comfort:

Along Bloomfield Avenue there is a lack of pedestrian scaled lighting, benches, and trash receptacles. However, there are plenty of street trees along the sidewalk to create shade.

Pedestrian Comfort Recommendations:

- Continue pedestrian amenities such as benches, scaled lighting and trash receptacles throughout this section of the downtown

Diamond Spring Road:

This section looks at Diamond Spring Road between 2nd Avenue and Main Street focuses on the main down town part of this road. The Township of Denville put in an application for grant funding to make this area more pedestrian friendly.

Accessibility:

Parking to access Diamond Spring Road is abundant with street parking along Diamond Spring Road as well as adjacent roads and a few parking lots. Sidewalks to Diamond Spring Road are also continuous making walking an option.

Safety:

Diamond Spring Road is a very busy roadway with heavy vehicle and pedestrian traffic. To provide higher visibility for pedestrians, “State Law Stop for Pedestrians within Crosswalk” signage has been added to crosswalks. Overall safety improvements and pedestrian/driver education throughout the Township will improve safety and awareness.

Crossing and Intersections:

The main concern at crossings in this section is the amount of car traffic and multiple road intersections. The crossing at Diamond Spring Road and Broadway is in a confusing intersection with multiple roadways coming together causing pedestrians have to wait a long time to cross. When the walk signal is activated, pedestrians have only 15 seconds to cross, and after 3 seconds, the signal changes to a flashing “don’t walk”. To mitigate this, the Township is looking into a traffic study to create a longer timed crossing. In addition to the long intervals of the lights, the signal is timed with the light cycle and there is no push button for pedestrians to get the walk signal sooner.

The crosswalks along Diamond Spring Road have “State Law Stop of Pedestrians in Crosswalk” signage in the roadway at each crossing creating a visible area for pedestrian. In addition, the crosswalk design is high visibility although some crosswalks are slightly faded.

Additionally, due to the angle of the roadway, the crossing at 1st Avenue intersection is long and the turning radius is wide. Truncated domes are also missing at one side of the crossing.

Crossing and Intersection Recommendations:

- Potential leading pedestrian interval at the intersection of Diamond Spring Road and Broadway/Main Street.
- Continue to repaint faded crosswalks with high visibility stripping (See Appendix A)
- Repaint crosswalks with high visibility striping
- Install ADA compliant corners/truncated domes where they are lacking
- Consider Accessible Pedestrian Signals for people with disabilities
- Consider shortening crossing at 1st Avenue

Pedestrian Facilities:

This section of Diamond Spring Road has a continuous sidewalk network with shops, outdoor seating, and pedestrian amenities. Some maintenance is needed along the sidewalk network including bushes trimmed out of the pedestrian zone by GNC, cracked drainage in the sidewalk, curb needs to be fixed at number 23, and parking signage hangs low over the sidewalk.

There are several options for outdoor seating along Diamond Spring Road at coffee shops and restaurants, however at times the seating encroaches into the pedestrian zones, limiting the space for passing.



Low signage



Sidewalk narrowed by post and bushes

Pedestrian Facilities Recommendations:

- Maintain sidewalks with smooth surfaces. Stamped concrete or pavers create bumpy surfaces for people in wheelchairs, people using walkers, and strollers
- Outside seating and furniture should remain outside the pedestrian zone to provide passing access
- Regular maintenance of greener along the sidewalk

Pedestrian Comfort:

This section of Diamond Spring Road has ample pedestrian amenities including benches, trash receptacles, street trees, and pedestrian scaled lighting. These amenities are abundant from Bloomfield Avenue to 1st Avenue but become less abundant after 1st Avenue.

Pedestrian Comfort Recommendations:

- Continue pedestrian amenities such as benches, scaled lighting, street trees, and trash receptacles throughout this section of Diamond Spring Road.

Rt. 53 Route:

Route 53 provides access to two train stations, Morris County School of Technology, businesses, and the main downtown area. This route crosses under Rt. 46 and Rt. 80. Route 53 holds the potential to be an active transportation route for people going to and from the Denville Train Station as well as provides access from the train station to the main downtown. **Map 3** on page 29 outlines the route walked for this assessment.

Accessibility:

There is a direct sidewalk network between the main downtown and Route 53. Pedestrians can access Route 53 from Downtown Denville and both the Denville and Mount Tabor Train Stations.

Safety:

Sections of Route 53 are perceived to be unsafe for walking. Pedestrians are known to use a dirt path to get to the Denville Train Station instead of using the sidewalk. Additionally, at the overpass bridges, pedestrians are known to cross under the bridges instead of at the crosswalk creating an unsafe environment. At some intersections, the roadway lacks a buffer between cars and people waiting at the corner.

At the intersection of Route 53N and Cooks Road, a chipped pole with sharp wood sticking out blocks the sidewalk and creates an area of concern for pedestrians.



Chipped pole at Cooks Road

Safety Recommendations:

- Adding a painted shoulder helps to create a buffer between sidewalk and roadway where a sidewalk or grass buffer is not available
- Participate in a town-wide pedestrian and driver safety education campaigns
- Add lighting at the underpasses and bridges to create a more visible area
- Install additional pedestrian signage were needed

Crossings and Intersections:

The main concerns along Route 53 are the lack of ADA compliant crossing, low-visibility or missing crosswalks, and wide turning radius of corners.

Several intersections were observed to be missing painted crosswalks. These intersections include:

- Station Road and Route 53 intersection
- Crossing Station Road to the Mt. Tabor train station. This makes it difficult to walk to the Mt. Tabor station without having to go on the side of the roads.

- Crossing Front Street along Route 53 North. The crossing is very long and drivers need to be aware that people use this street to cross.
- Crossing Manor Road
- Crossing Fox Hill Road. In addition to the lack of a painted crosswalk, the crossing is long and the traffic light lacks a pedestrian push button and walk signal.
- Route 46 east ramp. This is a long crossing with no ADA corners or painted crosswalk

In addition to missing crosswalks, the crosswalk across the Route 80 east ramp is pushed back from the road and is difficult to see. Drivers don't seem to expect this crosswalk when entering the ramp and pedestrians find it hard to see drivers while crossing. Moving the crosswalk off the ramp or adding visible signage to alert drivers of the crossing can mitigate this issue.

The intersection of Manor Road and Route 53 has a wide turning radius and does not have a shoulder to act as a buffer between pedestrians and turning vehicles. In addition to the wide turning radius of the curb, the crossing at Manor Road is long. Several of the roadway crossings along Route 53 have long crossing with wide turning radii.

The Estling Road and Route 53 intersection and the Lugar Road and Route 53 intersection both feed you into the roadway because the curb ramp is angled into the intersection instead of directed towards the crosswalk. There is also no shoulder to act as a buffer between pedestrians waiting to cross and turning vehicle traffic.



Fox Hill Road lacks pedestrian push button and walk signal



Manor Road crossing is wide, lacks crosswalk, and ADA compliance



Estling Road crossing lacks a buffer for pedestrian at corner



Route 80 ramp crossing is low visibility

ADA Compliance

Throughout Route 53, the majority of the curbs have red rectangles painted onto the curb ramp to act as truncated domes but do not provide any tactical warning. This makes it difficult for pedestrians with vision impairments to detect a curb and is not ADA compliant. Some examples of non-compliant intersections are Fox Hill Road and Route 53 North as well as Bloomfield Avenue and Route 53 North. Additionally, the curb at the intersection of Route 53 and Estling Lake Road has a truncated dome, but does not lead to a sidewalk and does not provide a continuous route. Additionally, many curbs at business driveways lack curb cuts.



Curb ramp is painted no a truncated dome, is covered by debris, and a steep slope



Curb ramp is painted not a truncated dome



Lack of ADA compliance with no curb ramp or truncated dome

Crossing and intersection recommendations:

- Traffic calming measures to shorten crossing and slow turning vehicles at Manor Road intersection
- Install truncated domes/tactical warning strips at all crossings for ADA compliance
- Install high visibility crosswalks at key intersections to be consistent throughout the Township with high visibility signage where lacking (see Appendix A)
- High visibility crosswalk and signage for the Route 80 ramp crosswalk
- Painted shoulders at crossing could be considered to create a buffer between pedestrians waiting to cross and turning vehicles
- Maintenance of corners and roadway where there are cracks

Pedestrian Facilities:

Along Route 53 there is signage indicating that this roadway is part of the Denville Walking Trail which also continues along Diamond Spring Road. Since this sidewalk network is a designated walking trail, the sidewalks need to be maintained, accessible, and safe to walk on.

Sidewalk connectivity

The sidewalk network along Route 53 provides connections to places of interest such as the Denville and Mount Tabor train stations, businesses, and the Morris County School of Technology, but is not continuous and is in need of maintenance in some locations. Sidewalks are more prevalent along the north side of the road. Sidewalks are lacking on Route 53 South from the Mile 4 marker to Dickerson Road/Station Road where the sidewalk abruptly ends between Estling Lake Road and Fox Hill Road. This lacking infrastructure limits access to several bus stops along Rt. 53 making people wait in the grass or roadway. This also limits access to stores and the Mount Tabor Train Station from this side of the road.



Sidewalk ends on the south side of Route 53
Source: Google

Sidewalk condition

Along Route 53, there are multiple areas where sidewalks are cracked, broken, sloped, or narrow. One area that has several places of broken sidewalk is along Route 53 North between Lugar Road and Manor Road.

Certain sections of sidewalk along Route 53 North are extremely elevated from the roadway with a perceived 6-10 inch difference between the road and sidewalk in areas. These sidewalks also then become flush to the roadway with limited difference between the road and sidewalk creating concern. Sidewalks become extremely narrow in sections especially at the underpass by the train station where there is barely enough space for two people to walk side by side. Narrow sidewalk forces pedestrians into the roadway.

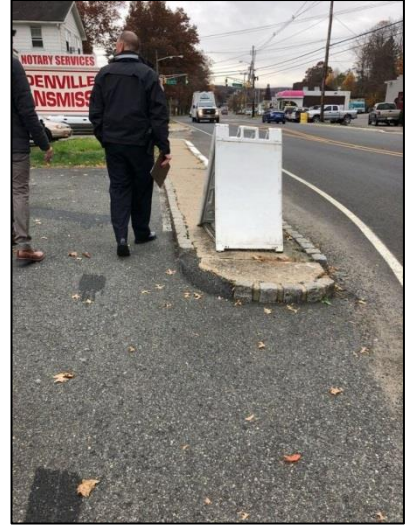
There are several businesses along Route 53 in Denville, however, the sidewalk does not continue across the business driveways, creating a location for cars and not for people. At many of these driveways, the area where sidewalk should be has an increased slope with the driveway and does not remain straight. Between Manor Road and Fox Hill Road, there lacks a continuous sidewalk network. Areas of sidewalk along the Morris County School of Technology were also observed to be sloped and covered by leaves and water.



Extremely elevated sidewalk



Narrow sidewalk



Sidewalk block and has ramp issues



Sidewalk does not continue across driveways



Sidewalk blocked by light and telephone pole



Vo-Tech sidewalk covered in leaves and water

Pedestrian facility recommendations:

- Continue sidewalk network on both sides of Route 53 to provide access to bus stops and places of interest
- Consult with New Jersey Transit to provide access to bus stops along Route 53 and the potential for bus stop shelters
- Continue sidewalks level across business, not sloped with the driveway
- Repair broken, cracked, and sloped sidewalks
- Consider installing green infrastructure in areas that retain water

Pedestrian Comfort:

Between Bloomfield Ave and Green Lane there is a lack of a buffer between the road and the sidewalk. The sidewalk network along The Morris County School of Technology has a wide grass buffer between the road creating a favorable walking environment outside the roadway and can be used as an example for other locations.

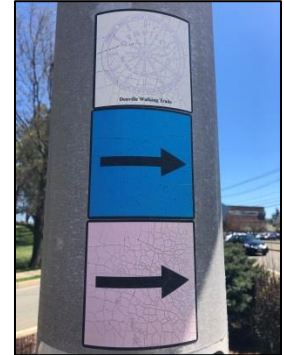
Along sections of Route 53, pedestrian scaled lighting is lacking and bird droppings and litter on the sidewalk create an unfavorable walking environment especially since there is signage designating the road as the Denville Walking Trail.

Pedestrian Comfort Recommendations

- Benches installed along Route 53 especially by Morris County School of Technology to provide a location for people to rest
- Install pedestrian scaled lighting in areas with heavy foot traffic
- Create a buffer between the sidewalk and road where there is none. A painted shoulder helps to separate traffic from pedestrian zones
- Clean up sidewalks to create an area people want to walk
- Work with organizations such as Morris Arts to paint murals under bridges

Diamond Spring Road Route

Diamond Spring Road provides access to Denville Township’s downtown, access to public amenities, and medical centers as well as a main road connecting Denville into Rockaway. Located along Diamond Spring Road is an independent senior housing complex, the public library, community garden, schools, public parks, and residential housing. The north side of Diamond Spring Road is a designated walking trail in Denville Township. Although it is not a designated bike route, many people bike this road into and through the downtown. **Map 4** on page 30 outlines the route walked for this assessment.



Accessibility:

There is easy access for pedestrians to Diamond Spring Road from the main downtown area especially along the north side of the road. The continuous sidewalks provide access to the amenities along Diamond Spring Road.

Diamond Spring Road is a mixed-use road but does not have any bicycle infrastructure or signage. Diamond Spring Road has the opportunity to include bicycle signage and infrastructure and be designated as a bike route. Diamond Spring Road is commonly used by bicyclists and added bike infrastructure and signage can be utilized to bring multiple mode users into the main downtown area and increase tourism to shops, restaurants and facilities the town has to offer.

Accessibility Recommendations:

- Infrastructure, road markings, and signage for bicyclist should be considered



Cyclist on Diamond Spring Road



Cyclist turning onto Diamond Spring Road from River Road

Safety:

Diamond Spring Road is perceived to be a safe place for walking. For the most part, speeding does not seem to be a concern along this road and the sidewalk network along the north side of the road provides a place for pedestrians outside the roadway. However, there are areas where the sidewalk lacks a buffer, making the sidewalk feel close to the road and to passing cars especially on the north side. In some areas without a buffer, a painted shoulder can provide distance between drivers and pedestrians.



Short shoulder ends on Diamond Spring Road north after Pocono Road



Short shoulder ends on Diamond Spring Road north after Pocono Road



Great buffer area between roadway and sidewalk

Safety Recommendations:

- Where necessary, a painted shoulder can provide separation between the sidewalk and the roadway to make pedestrians feel separate from cars where a grass buffer is not available.

Crossing and Intersections:

The main concerns along Diamond Spring Road are the lack of ADA compliant crossings and faded crosswalks. The crossing at the intersection of Diamond Spring Road and Pocono Road is hard to see and drivers do not seem to expect the crosswalk when the light is green. Motor vehicles are also hard to see coming when crossing in the crosswalk. This intersection is signalized and contains a push button for pedestrian crossing.

There is a lack of tactical warning strips/truncated domes at Second Avenue, Pocono Road, and River Road intersections. At the Second Avenue intersection, a red painted square on the curb apron provides a visible warning but is lacking any tactile warning. Additionally, at many intersections crossing paint is faded and low visibility.



Faded crosswalk at 2nd Avenue and no truncated dome/ADA compliance



Lack of ADA infrastructure at the middle school



Good example of pedestrian crossing signage and truncated dome



Pocono Road intersection crossing is hard to see

Crossing and Intersection Recommendations:

- Re-stripe crosswalks to be consistent and high-visibility (see Appendix A for crosswalk recommendations)
- Install tactical warning strips/truncated domes at all crossings
- Consider pedestrian crossing signage to alert drivers of crosswalk at the intersection of Pocono Road and Diamond Spring Road
- Signage to alert cars of crossing at Pocono road should be considered as well as more visibility at crossing to alert drivers of crossing. Examples of this are pedestrian crossing sign, delineated crosswalk, turning vehicles yield to pedestrians
- Make sure curb ramps do not have an extreme slope for ADA compliance

Pedestrian Facilities:

The sidewalk network along Diamond Spring Road is continuous on the north bound side which is designated as a walking trail, but in areas is in need of maintenance. Sidewalks along this side of the road are cracked in some areas while the curb is degraded and at a raised level compared to the sidewalk. Sidewalks along this route do not continue across driveways and can be narrow in sections with a limited buffer between the road and where people are walking.

The south side of Diamond Spring Road lacks sidewalks from Morris Avenue until Muriel Hepner Nature Park. Lack of sidewalks and crossings between Morris Avenue and Muriel Hepner Park, restricts safe access to people living within the no sidewalk zone. The existing sidewalk on this side of the road provides access to the public library, park, historical society, and community garden.



Sidewalk does not continue across driveway at St. Francis



Sidewalk is sunken down and curb is raised along Diamond Spring Road



Curbing is crumbling, missing, damaged in sections after Pocono Road intersection



Cracked and uplifted sidewalk

Pedestrian Facilities Recommendations:

- Repair sidewalks and curbs that are broken or cracked
- Continue sidewalks across business driveways to create a pedestrian zone
- Maintain trees and shrubs to be clear of the sidewalk
- Evaluate the slope of the sidewalk especially across driveways
- Follow the 2017 Complete Streets Guide for sidewalk materials

Pedestrian Comfort:

Along Diamond Spring Road’s walking trail there are benches and pedestrian scaled lighting close to the downtown but become limited past Pocono Road.

Pedestrian Comfort Recommendations:

- Install more benches or resting places for pedestrians walking along the designated trail
- Install pedestrian scaled lighting continuously along the designated walking trail



Pedestrian lighting on Diamond Spring Road



Bench along Diamond Spring Road

Appendix A. Crosswalk Design:

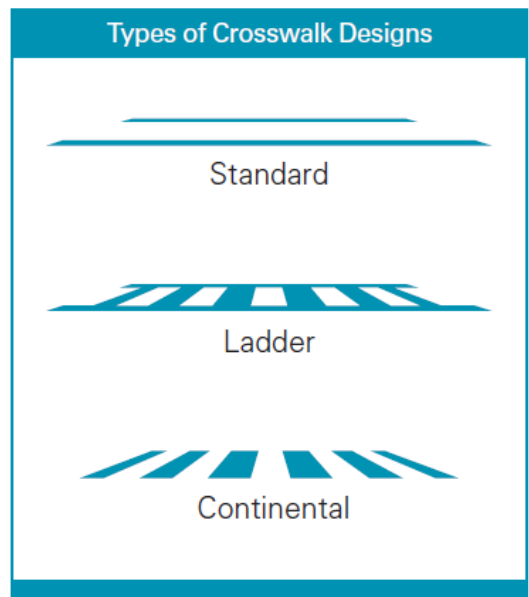
Denville has many crosswalks throughout the municipality, some in better condition and more visible than others. Crosswalks throughout Denville Township should be uniform and consistent. For highest visibility, all crosswalks should be repainted with ladder or continental stripping. As part of the Township’s maintenance plan, when a crosswalk is scheduled to be repainted it is recommended that they be all repainted the same style with the highest visibility.

“Standard crosswalk striping often has very poor visibility to motorist, particularly on higher-speed roadways or where the striping has faded. Ladder or Continental striping is preferable in most situations because it significantly improves the visibility of the crossing to motorists and maintains this visibility better as it ages” (2017 NJDOT Complete Streets Design Guide).

In some sections of Denville Township, red stamped concrete sidewalks are utilized. The Township does a good job of framing these crosswalks with high visibility paint. Since red stamped concrete is not as visible as a painted crosswalk, upkeep on these outlined crossings provides the highest visibility.

Make sure that all non-signalized crossings have pedestrian crossing signage and advanced warning signage. It may be advantages in high pedestrian areas, without a signalized crossing, to look into flashing pedestrian signage for higher visibility.

In addition to crosswalk design, crossings and sidewalk ramps should be ADA compliant and contain tactical warning strips/truncated domes as well as correct maximum cross slope (2%), ramp slope (8.33%), and running slope along the crosswalk (5%) (2017 NJDOT Complete Streets Design Guide).



Source: 2017 NJDOT Complete Streets Design Guide

Appendix B. Grants and Resources:

Below is a list of grant and planning assistance that Denville Township can look for to provided pedestrian and bicycle infrastructure improvements, awareness, planning assistance, and placemaking opportunities throughout the Township.

Federal:

- Safe Routes to School (SRTS)
- TAP/TA Set-Asides
- NJ Trails Program
- Integrated Mobility Innovation Program (Federal Transit Administration)

State:

- Safe Streets to Transit
- Transit Village
- Local Municipal Aid
- Bikeways (off-road)
- Bike/Pedestrian Planning Assistance (not a grant but planning help)

Other:

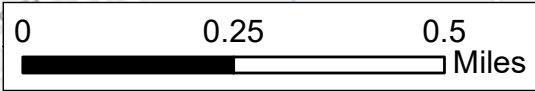
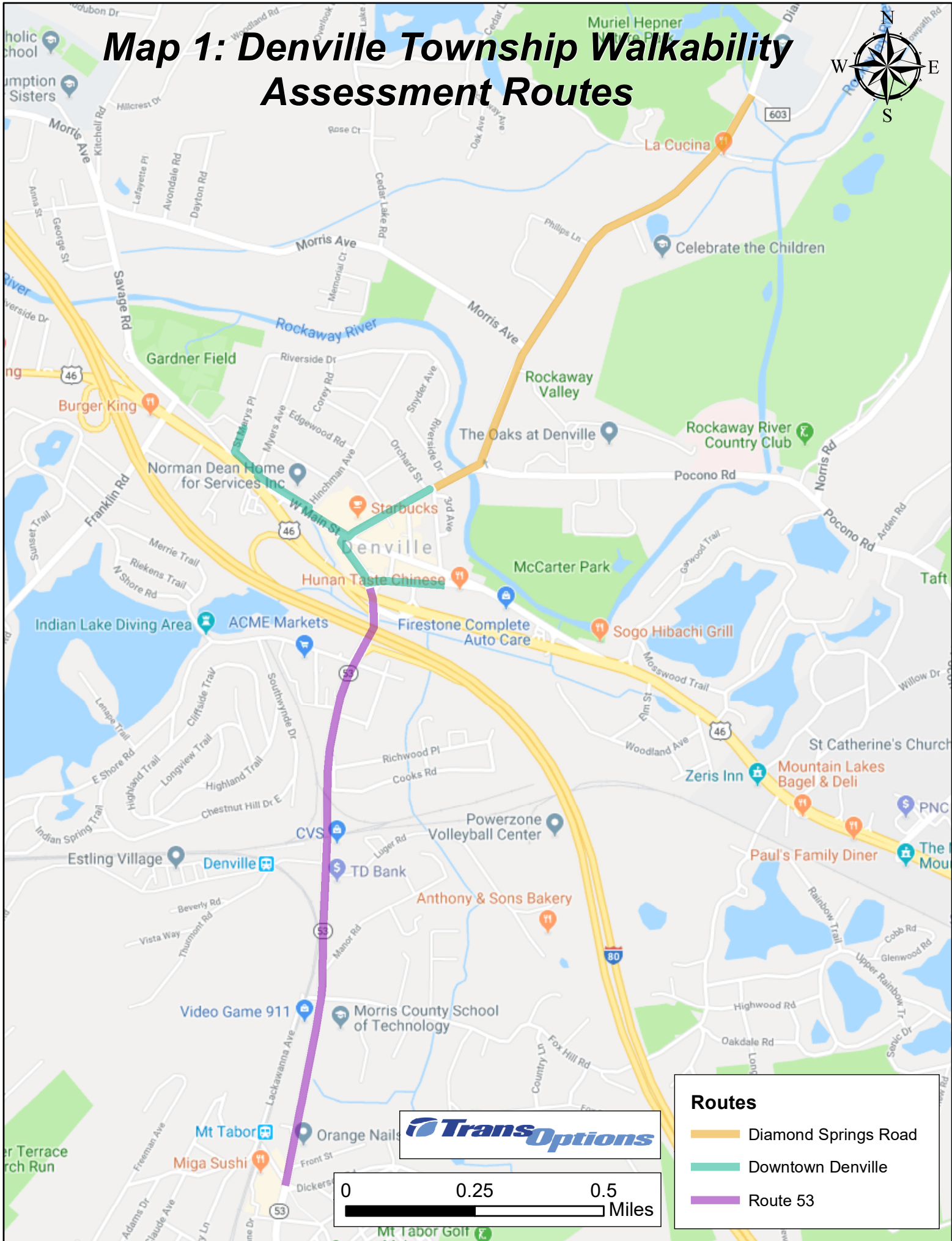
- NJ Healthy Community Network Grants
- Sustainable Jersey
- National Association of Realtors Smart Growth Grants
- NJAHPERD

Additional resource and grant opportunities are listed on the Together North Jersey website and the NJDOT Local Aid Resource Center website.

<https://togethernorthjersey.com/funding-tools-database/>

<https://njdotlocalaidrc.com/>

Map 1: Denville Township Walkability Assessment Routes



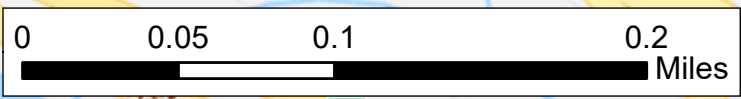
Routes	
	Diamond Springs Road
	Downtown Denville
	Route 53

Map 2: Downtown Denville Route

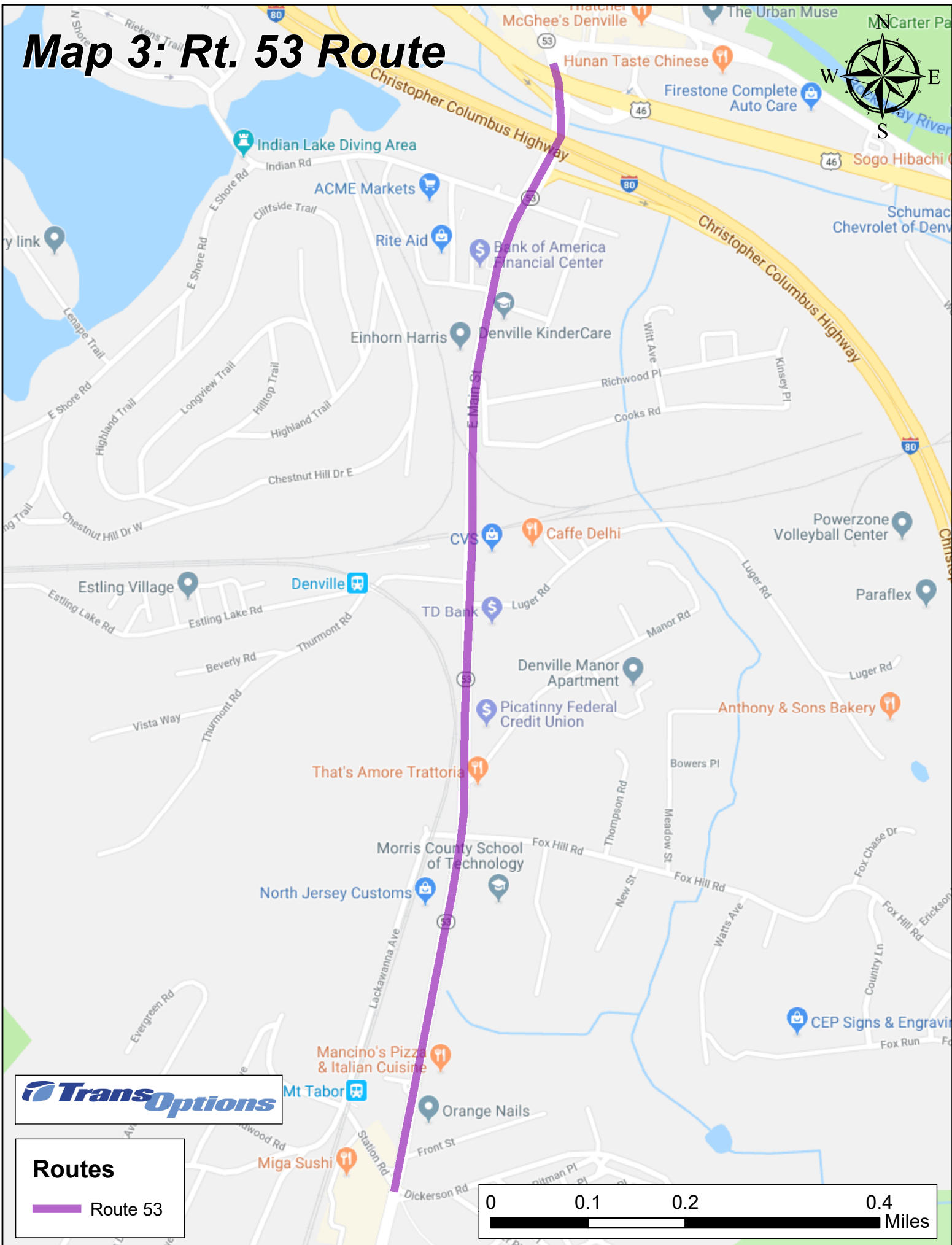


Routes


- West Main Street
- East Main Street
- Bloomfield Avenue
- Diamond Springs Road

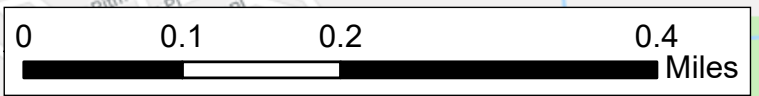


Map 3: Rt. 53 Route



Routes

 Route 53

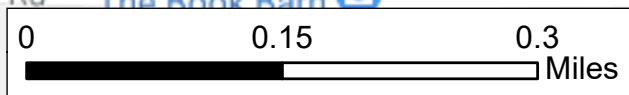


Map 4: Diamond Spring Road Route

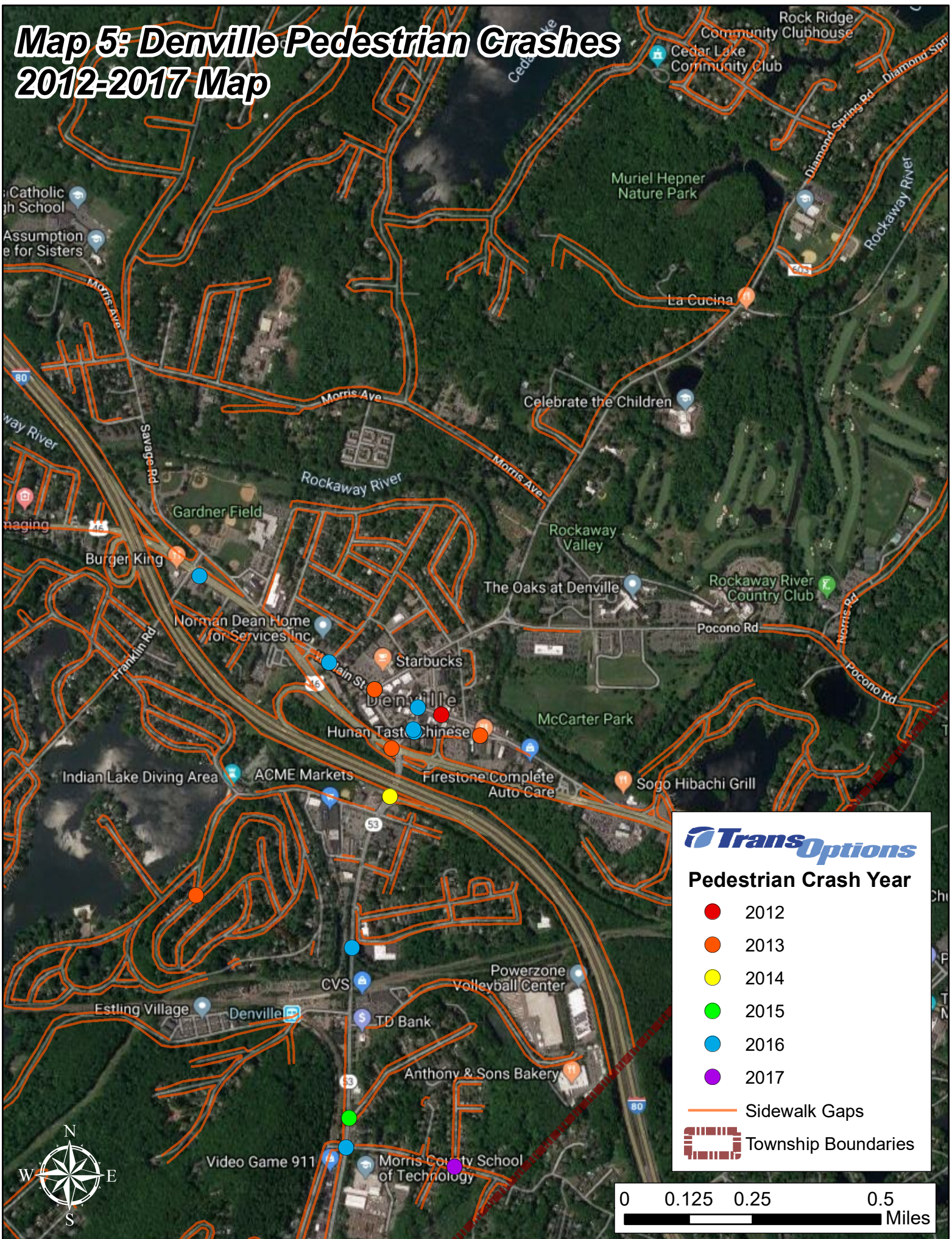


Routes

- Diamond Spring Road



Map 5: Denville Pedestrian Crashes 2012-2017 Map



Map labels include: Catholic High School, Assumption for Sisters, Gardner Field, Rockway River, Rock Ridge Community Clubhouse, Cedar Lake Community Club, Muriel Hepner Nature Park, La Cucina, Celebrate the Children, Rockway Valley, The Oaks at Denville, Rockway River Country Club, Pocono Rd, Starbuck's, Denville, Hunan Taste Chinese, Firestone Complete Auto Care, Sogo Hibachi Grill, ACME Markets, Indian Lake Diving Area, Burger King, Norman Dean Home for Services Inc, JAIN ST, Indian Lake, Estling Village, Denville, CVS, TD Bank, Powerzone Volleyball Center, Anthony & Sons Bakery, Video Game 911, Morris County School of Technology, and Morris Ave.