2016

NJTPA
NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

Walkable Community Workshop

Pedestrian Safety and Accessibility in the City of Garfield, NJ

This publication has been prepared as part of the North Jersey Transportation Planning Authority's Walkable Community Workshop Program with financing by the Federal Transit Administration and the Federal Highway Administration of the U.S. Department of Transportation. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The NJTPA is solely responsible for its contents.

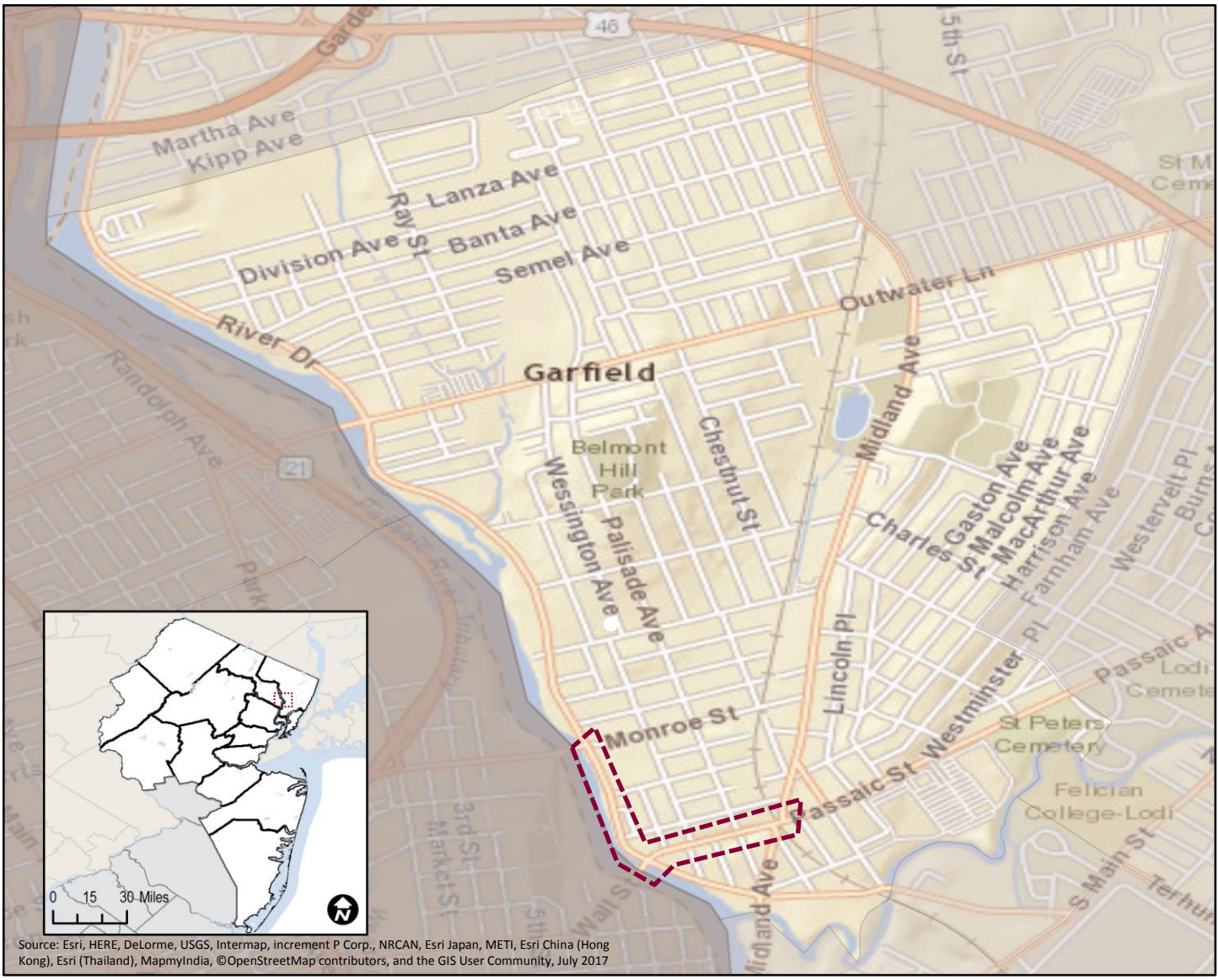
Contents

Background

Walkable communities are essential for addressing public health, advancing multi-modal networks, fostering economic development, and improving air quality through a reduction in greenhouse gas emissions produced by vehicles. The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization for 6.7 million people in the 13-county northern New Jersey region. The NJTPA conducts half-day Walkable Community and Senior Mobility Workshops with counties and municipalities to foster stakeholder involvement, identify barriers to walking, and improve pedestrian safety. For each workshop, NJTPA staff coordinates with local representatives to include a broad range of stakeholders including local leaders, planners, engineers, and residents.

Each workshop consists of four parts: 1) an introduction of local stakeholders; 2) a presentation by an NJTPA facilitator on best practices in a walkable community; 3) a guided walking audit of a study area identified by the local hosts; and 4) small group sessions where potential considerations for improvements are discussed and prioritized. The objective is to identify and prioritize potential considerations that will increase pedestrian safety and accessibility. The workshop also serves as a catalyst for local officials and county representatives to implement the improvements and/or to further refine the potential considerations for implementation by other agencies. In addition to addressing safety, the workshop supports the New Jersey Department of Transportation's (NJDOT) Complete Streets Policy, adopted in 2009, which directs that the implementation of federal and state funded new and retrofit transportation facilities enable safe access and mobility of pedestrians, bicyclists and transit users of all ages and abilities. The City of Garfield adopted a Complete Streets Policy in 2014.

Map 1: Location of Walkable Communities Workshop



The Garfield Walkable Community Workshop was held at the Greater Bergen Community Action office, located adjacent to the corridor, in the City of Garfield on October 21st, 2016. The walkable community workshop was initiated by the Bergen County Division of Planning in conjunction with the City of Garfield.

Walking Audit Location

Map 2: Aerial of the Workshop Neighborhood

The workshop area, highlighted in red in Map 2, focused on two roadway segments, Passaic Street and River Drive. Passaic Street (referred to as County Road 40 I in the NJDOT Straight Line Diagrams) is mostly commercial in nature, and River Drive (Route 507) is residential on the east side between Passaic Street and Hudson Street. The remainder of River Drive is either light industrial or vacant.

Characteristic	Passaic Street	River Drive
Jurisdiction	County	County
Class	Urban Minor Arterial	Urban Principal Arterial
SRI and MP	020000401, MP 0-0.27	00000507, 9.77-10.07
Speed	25 MPH	30 MPH
# Lanes	2	2
Shoulder	0	0
Pavement	34 feet	28-30 feet

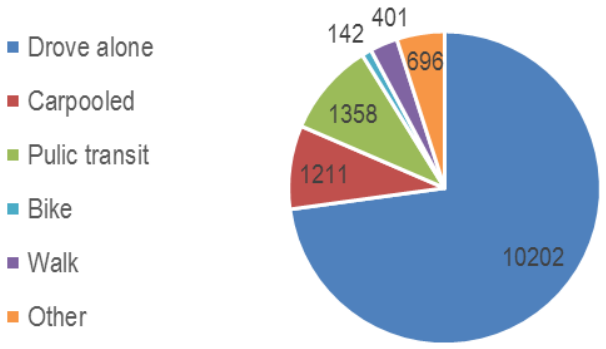
There are six bus routes and two train lines in the study corridor. Bus routes 160, 161, 707, 709, and 758 run, in part, along Passaic Street. Collectively, these routes service Elmwood Park, Fair Lawn, Saddle Brook, Wood-Ridge, Wallington, East Rutherford, Union City, South Hackensack, Lodi, Hasbrouck Heights, Teterboro, Little Ferry, Ridgefield Park, Moonachie, Carlstadt, North Bergen, Weehawken, Paramus, Paterson, Bloomfield, Passaic, Rochelle Park, Maywood and New York. Bus route 702 runs along Monroe Street to intersect the River Drive section of the study area, serving Paterson, Clifton, Passaic, Garfield, and Elmwood Park. Bus frequencies vary by time of day, day of week and bus stop locations. Buses are most frequent during rush hours with three to four buses per hour at some of the busier stops such as the one on the corner of Midland Avenue and Passaic Street east of the train station. The Garfield rail station, located at the intersection of Passaic Street and Midland Avenue, hosts the Bergen County and Port Jervis lines. Between the two trains in both directions, there are 26 daily trains on the weekdays and 24 daily trains on the weekends.

Both sections of the study corridor are under the jurisdiction of Bergen County. Passaic Street is an urban minor arterial and River Drive is an urban principal arterial. According to the straight line diagrams, Passaic Street measures 34 feet and River Drive measures 28-30 feet curb-to-curb with no shoulders. Both corridor sections run one lane in each

direction. Traffic counts were not available in the immediate area, though three-quarters of a mile northeast of the Midland Avenue intersection on Passaic Street, there was a recorded Average Annual Daily Trips (AADT) of 10,179 in 2012 on Passaic Street, and a half mile southeast of the River Drive and Passaic Street intersection there was an AADT of 8,136 in 2012 on River Drive. River Drive has a speed limit of 30 MPH and Passaic Street has a speed limit of 25 MPH.

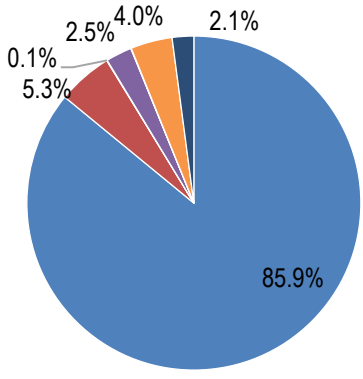
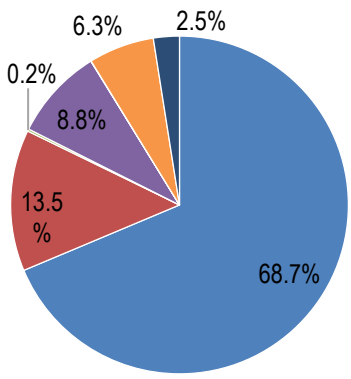
The mode split for commuting to work in the City of Garfield largely reflects that of the rest of New Jersey. There is a slightly higher percentage of people who drive alone, carpool, or bicycle.

Table 1: Commute to Work

Commute to Work Counts (City of Garfield)	Commute to Work	City of Garfield	New Jersey
	Drove alone	72.8%	71.9%
	Carpooled	8.6%	8.3%
	Public transportation	9.7%	10.9%
	Bicycle	1.0%	0.4%
	Walked	2.9%	3.0%
	Other	5.0%	5.5%
	Source: 2014 American Community Survey, 5 year estimates, 2009-2014 (Table B08301)		

The City of Garfield more greatly differs from statewide trends in demographics, especially in terms of income and linguistic isolation. Garfield's mean household income is $25,000 less than the state average and the median income is nearly $40,000 less than the state average. In terms of linguistic isolation, when compared to statewide averages, there are nearly three times the percentage of households in the City of Garfield where all individuals aged 14 and over have difficulty speaking English.

Table 2: Comparing Demographics (2014) in the City of Garfield and New Jersey

Characteristic	City of Garfield	New Jersey
Population*	30,996	8,874,374
Median Age*	35.3	39.3
Less than 18*	23.0%	22.9%
Older than 65*	15.4%	14.1%
Mean Household Income**	$46,499	$72,062
Median Household Income**	$59,679	$98,286
Linguistically isolated***	20.6%	7.2%
Race White alone Black or African American alone American Indian and Alaska Native alone Asian alone Native Hawaiian and Other Pacific Islander alone Some other race alone Two or more races 2014 Total population, 2009-2014 American Community Survey (B02001)		

*2014 Age and Sex, 2009-2014 American Community Survey 5-Year Estimates (S0101)
**2014 Income in the Past 12 Months (In 2014 Inflation-Adjusted Dollars), 2009-2014 American Community Survey 5-Year Estimates (S1901)
***2014 Linguistic Isolation, 2009-2014 American Community Survey 5-Year Estimates (S1602)

Pedestrian Crash Data

Map 3: Pedestrian Crash Maps

An analysis of crash data from 2011-2015 using the Plan4Safety data analysis tool found that there were 11 pedestrian crashes within the two workshop sections. Crash data revealed that 9 of the 11 crashes resulted in injury, though there were no fatalities. There were almost equal parts pedestrian and cyclist crashes and just over half occurred during daylight hours. Crashes occurred also as frequently at intersections as they occurred midblock. Map 3 and Table 3 show the location and discuss the characteristics of the pedestrian crashes.

Table 3: Pedestrian Crash Characteristics (2011-2015)

Location	Ped. Age	Ped. Gender	Date	Day	Time	Severity	At Inter-section?	Crash Type	Lighting
Hudson and River	33	M	5/29/2015	F	9:13 PM	Pain	Yes	Ped	Dark (Street Lights On/Continuous)
Palisade and Passaic	57	M	5/24/2015	Su	3:14 PM	Moderate Injury	No	Cyclist	Daylight
Midland and Passaic	39	M	4/22/2015	W	7:37 AM	Pain	No	Cyclist	Daylight
Palisade and Passaic	114	M	7/11/2014	F	3:49 PM	Moderate Injury	Yes	Cyclist	Daylight
Washington	40	F	11/4/2013	M	8:39 AM	Pain	Yes	Ped	NULL
Midland and Passaic	24	F	10/31/2013	Th	7:03 PM	Pain	Yes	Cyclist	Dark (Street Lights On/Continuous)
Palisade and Passaic	31	M	10/20/2013	Su	10:59 AM	Moderate Injury	No	Ped	Daylight
River and Passaic	?	?	12/17/2012	M	3:35 PM	Property Damage Only	Yes	Cyclist	Daylight
Passaic - unknown	?	M	11/23/2012	F	2:01 PM	Property Damage Only	No	Ped	Daylight
River and Passaic	24	F	10/16/2011	Su	2:27 AM	Moderate Injury	No	Ped	Dark (Street Lights On/Spot)
Palisade and Passaic	36	M	4/5/2011	Tu	11:51 AM	Pain	No	Ped	Daylight

Source: Plan4Safety (Rutgers CAIT), October 2016

Workshop Methodology

The Garfield Walkable Community Workshop began with participant introductions and a brief presentation. Workshop participants included staff from Bergen County Planning and Engineering departments, the City of Garfield (city manager, consultant engineer, police department), and staff from Greater Bergen Community Action. The workshop agenda and participant list is provided on pages 26-27.

NJTPA staff presented workshop goals, the benefits of improving walkability, and traffic calming techniques that might be employed to improve pedestrian access to transit or other services along Passaic Street and River Drive. The presentation discussed potential design improvements sensitive to the context of the walking audit area and the need to accommodate pedestrians of all ages and abilities. Improvements such as sidewalk conditions, enhanced crosswalks, and traffic calming were discussed as well as compliance with the Americans with Disabilities Act (ADA). The presentation also included the public health rationale for increasing physical activity and the relationship between walkability and improved quality-of-life.

Following the presentation, participants did a walking audit of the street focus areas starting at the intersection of Midland Avenue and Passaic Street, walking westward until River Drive to walk north, and then returning along the same path once reaching Monroe Street. During the audit, participants were asked to identify barriers to walkability and how these barriers might be addressed through a variety of measures. Attention was paid to the ease with which pedestrians of all ages were able to cross the street, the quality of the walking experience, driver behavior, ADA compliance (with a sensitivity to strollers and wheelchairs), and connectivity between destinations.

The final segment of the workshop was devoted to generating potential considerations for neighborhood walkability prompted by the walking audit. Participants gathered around street maps of the study area to pinpoint the location of specific walkability problems and to offer potential solutions. potential considerations were discussed and priorities identified as noted in the workshop findings and potential considerations, below.

Workshop Findings and Potential Considerations

Making potential considerations to improve pedestrian safety and access is a primary goal of a Walkable Community Workshop. Participants are also encouraged to suggest improvements that will address aesthetics and sidewalk conditions, which are important determinants in the decision of whether or not to walk in a given area. Roadway design that accommodates pedestrians of all ages and abilities and provides access over short distances encourages more trips by foot, bicycle and transit. Effective lighting is another critical factor for pedestrian safety, comfort, and usability. Additionally, improving the walking environment implements the City of Garfield's Complete Streets policy and will benefit all roadway users and result in a more vibrant community. All potential considerations are sketch level considerations made by the project team the day of the workshop and will require additional site verification and stakeholder consultation.

During the walking audit, specific attention was paid to the following:

- The condition of sidewalks and crosswalks
- The ability for pedestrians to cross safely at all intersections
- Motorist travel patterns and speeds in relation to observed pedestrian access patterns
- Bus stop amenities

Workshop participants identified the following issues in the study area. Below is a listing and illustration of these found in City of Garfield study area. In the subsequent pages, more specific design potential considerations are outlined.

- Missing curbing and tripping hazards in sidewalk
- Faded or nonexistent crosswalks
- Wide travel lanes along Passaic Street (though width varies throughout corridor)
- Traffic signal concerns (for both vehicle and pedestrian-oriented signals)

FINDINGS: RIVER DRIVE - PASSAIC STREET TO MONROE STREET

Crosswalks are faded or missing, especially on north, west and south legs.

Sidewalk ends and utility pole interupts pedestrian way.

Curbing is greatly diminished or non-existent along River Drive.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, October 2016

A skewed intersection makes for a pedestrian crossing distance of about 80-feet on the east leg.

Hudson Street is particularly wide for the pedestrian because of the angled parking.

Overgrown vegetation and terminating sidewalk.

- Curb ramp appears to be too steep and the landing pad area too small.
- Plants spill on to sidewalk.

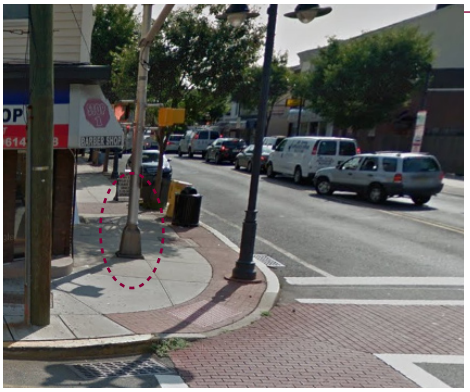
Motorists were observed to form two lanes on the westbound approach.

FINDINGS: PASSAIC STREET - MIDLAND AVENUE TO RIVER DRIVE

Many bus lines pass through the intersection of Midland Avenue and Passaic Street though there is no shelter at the bus stop.

Source: Google Maps

Lane designation on southbound Midland Avenue from north to south of Passaic Street to south is unclear.



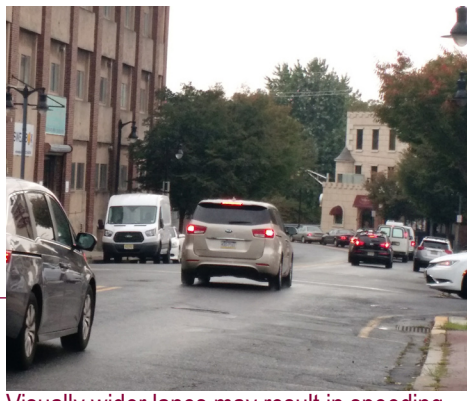
Pedestrian push button is located more than 5' from the curb ramp and the pole is located in the middle of the sidewalk.

The driveway curb cut is no longer needed.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, October 2016

The drop (depressed) curb is too wide to accommodate the driveway east of the railroad.

- Limited sight distance under bridge.
- Grease drips on sidewalk under bridge.
- Lighting under bridge may be insufficient.



Visually wider lanes may result in speeding.

FINDINGS: Pedestrian facilities

1. **Several tripping hazards were present on the sidewalks throughout the corridor.** Tripping hazards include rusting storage cellar (Bilco) doors (Figure 11), broken (Figures 5, 12) or heaving sidewalks (Figure 13), broken pavers in crosswalks (Figures 2, 3), and pole stumps.
2. **Many pedestrian push buttons appeared broken.**
3. **No ADA-compliant ramp access is** available at the Garfield Station area.
4. **Sidewalk along the west side of River Drive is not continuous**, often disrupted by driveways, parking lots, or disappearing altogether (Figures 4, 12, 14).
5. **Curbing is missing along both sides of River Drive** (Figure 5, 10).
6. **Some parking areas on not clearly separated from sidewalks,** which may result in vehicles encroaching on pedestrian area (Figure 16).
7. **There are no marked crosswalks** along River Drive between Passaic Street and Monroe Street (Figure 1).
8. **Many tree wells were missing trees** (Figure 9).
9. **Trees and other foliage occasionally encroached on the sidewalk** (Figures 14, 15).
10. **Some depressed curbs may be unnecessary or impose on the pedestrian zone.** The loading zone at 20 Passaic Street conflicts with the sidewalk area since trucks block sidewalk to unload.
11. **Some pedestrian lamp poles were broken or missing** (Figure 8).

Figure 1: Missing Crosswalks

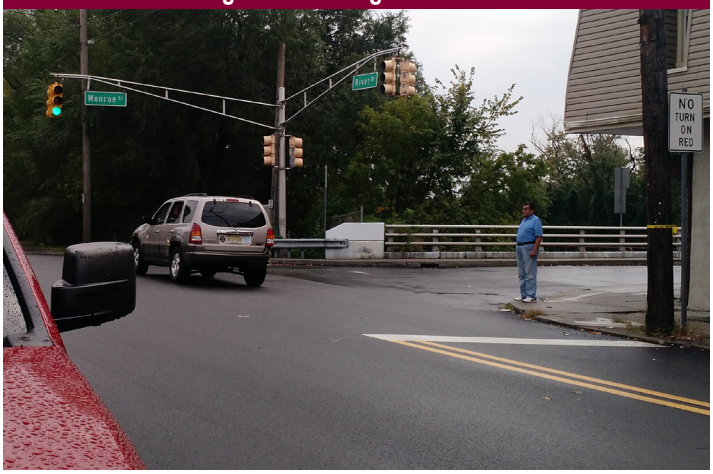


Figure 2: Broken Crosswalks

Figure 3 - Broken Crosswalks

Figure 4: Missing Sidewalk

Figure 5: Missing Curb

Figure 6: Missing Sidewalk

(Pedestrian facilities continued)

Figure 7: Faded Crosswalk

Figure 8: Broken Lamp

Figure 9: Excess Driveway

Figure 10: Sidewalk Obstruction

Figure 11: Broken Bilco Doors

Figure 12: Broken Sidewalk

Figure 13: Broken Sidewalk

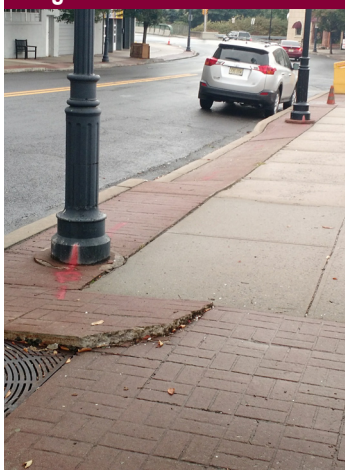


Figure 14: Sidewalk Obstructions

Figure 15: Overgrown Vegetation

Figure 16: No Barriers between Parking Lot and Sidewalk

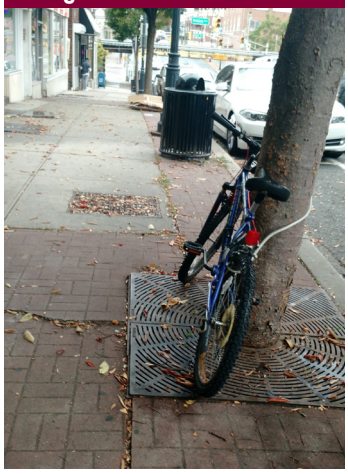
FINDINGS: Bicycle facilities

1. **There is no dedicated bicycle parking along the corridor.** Bicycles were observed tied to trees or sign posts (Figure 19).
2. **There is no dedicated lane use for bicycles.** Cyclists were observed riding on sidewalks (Figure 17, 18).

Figure 17: Cyclists on Sidewalks, Lack of Cycling Facilities

Figure 18: Cyclists on Sidewalk

Figure 19: No Bike Racks



FINDINGS: Vehicle operations

1. **Roadway appears wide in some areas.** Without as many parked cars or marked parking area along the street edges on the west end of Passaic Street, the road becomes visually wider, potentially encouraging motorists to travel at greater speeds (Figures 23, 24, 25).
2. **Heavy truck traffic was observed.** Many truck turning movements were seen to conflict with other roadway users' movements or facilities, especially at the intersections of River Drive and Passaic Street and River Drive and Monroe Street. Much of this truck traffic may be related to the transfer facility nearby. In Figure 20, notice the truck mounting the curb.
3. **Eight-inch signal heads are not as visible as the current 12-inch heads** (Figure 22).
4. **Sun glare may prevent motorists from distinguishing signals.**

Figure 20: Truck Encroaching on Curb

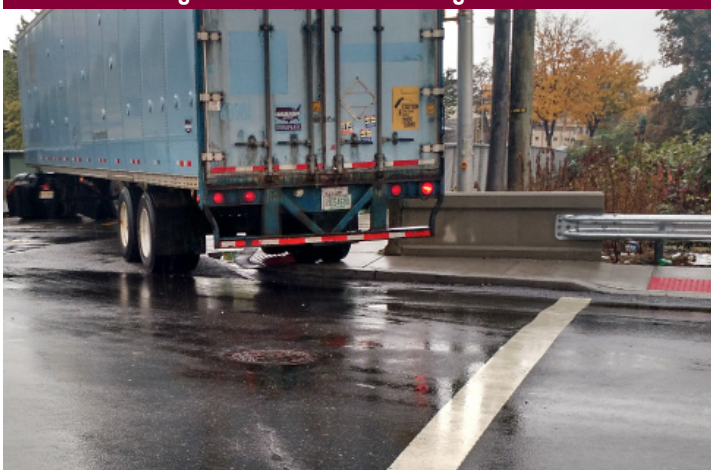


Figure 21: Truck Conflicts

Figure 22: 8 Inch Heads

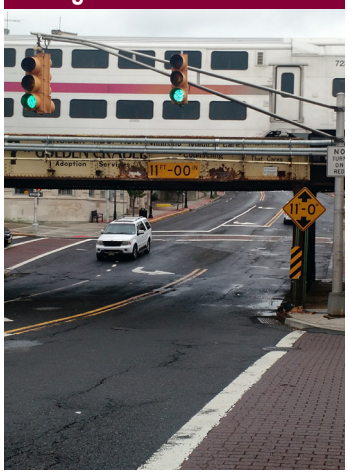
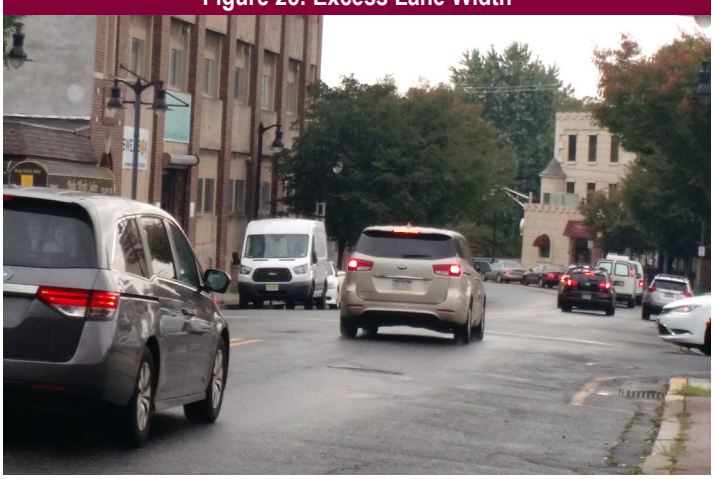


Figure 23: Excess Lane Width

Figure 24: Excess Lane Width

Figure 25: Excess Lane Width



FINDINGS: Midland Avenue and Passaic Street

1. **Few transit-user facilities.** There are many bus lines intersecting at the intersection of Midland Avenue and Passaic Avenue though no bus shelter exists. Many people descend the stairs on the east side of the railroad tracks to make a bus transfer, but signage indicating bus transfers may be insufficient (Figure 30). Many bus lines also pass through the Palisade Avenue intersection.
2. **Grease drips were noted on the sidewalk under the railroad tracks** (Figure 27).
3. **Sight distance under bridge is limited.**
4. **Lighting under railroad tracks appears insufficient.** No lighting facilities were observed (Figure 27).
5. **Lane designation from southbound Midland Avenue north of Passaic Street to south of Passaic Street is unclear.** The signage (Figure 29) was said to be confusing to motorists as they might not understand that Midland Avenue continues under the bridge and to the left.
6. **The drop curb is too wide.** The drop curb (where the curb is flush with the street) is too wide to accommodate the driveway east of the railroad at the Midland Avenue and Passaic Street intersection (Figure 26).
7. **Eight-inch heads have limited visibility** (Figure 28).
8. **Pedestrian push buttons west of the railroad tracks appear not to function.**

Figure 26: Excess Driveway Width

Figure 27: No Decking or Lighting

Figure 28: 8 Inch Heads

Figure 29: Confusing Approach

Source: Google Maps

Figure 30: No Bus Shelter

FINDINGS: Palisade Avenue and Passaic Street

1. **Potentially non-compliant curb cuts.** Due to crosswalk alignment, the northeast corner may need two separate curb ramps. Pedestrian push button is located more than 5 feet from the curb ramp and the pole is located in the middle of the sidewalk (Figure 32, located on the northeast corner of the intersection).

Figure 31: Broken Crosswalks

Figure 32: Pole in Middle of Sidewalk

FINDINGS: Cambridge Avenue and Passaic Street

1. **The curb cut for the driveway at the northeast corner is no longer needed.** The land use has changed from a gas station with multiple entrances to an auto repair shop (Figure 33).
2. **On the northeast corner, there is no vertical curb to delineate the property's parking area from the sidewalk area.** Vehicles may encroach on sidewalk area (Figure 34).

Figure 33: Excess Depressed Curb

Figure 34: Northeast Corner of Cambridge Ave and Passaic Street

FINDINGS: River Drive and Passaic Street

1. **Motorists were observed to form two lanes on the westbound approach (Passaic Street) of the Passaic Street and River Drive intersection.** Figure 36 shows the area where vehicles were observed to form a secondary lane.
2. **On the northeast corner, the curb ramp appeared too steep and the landing pad area too small.** Figure 37 shows no landing area for the pedestrian.
3. **Plants on the northeast corner spill over onto the sidewalk** (Figure 37).

FINDINGS: Hudson Street and River Drive

1. **Hudson Street is particularly wide for the pedestrian because of the angled parking.** The angled parking terminates 50 feet behind the stop bar, as seen in Figure 35.

FINDINGS: Monroe Street and River Drive

1. **Crosswalks are faded or non-existent.** The crosswalk on the west leg (Monroe Street, near bridge) appears very faded (Figure 38) and the crosswalk on the north and south leg appears non-existent. The crosswalk on the east leg is not high-visibility (Figure 39, 40).
2. **The skewed intersection makes for a particularly long pedestrian crossing distance on the east leg.** The east leg (Figures 39, 40) measures about 80 feet across.

Figure 35: Angled Parking Creates Wide Entrance

Figure 36: Used as Queue Area

Figure 37: Vegetation in Sidewalk

Figure 38: Faded Paint, Non-ADA

Figure 39: Tracks in Crosswalk

Figure 40: Long Crosswalk, Skewed Intersection

POTENTIAL CONSIDERATIONS: Enhance pedestrian facilities

1. **Replace upheaved and cracked sidewalk sections.** When installing new sidewalk, consider choosing a darker sidewalk color that does not show gum spots. The pavers installed near the funeral home and 15 Passaic Street may provide a good example. Figure 51 shows regular and Figure 50 shows tinted concrete.
2. **Replace rusting storage cellar (Bilco) doors.**
3. **Replace pedestrian push buttons.** Consider adding wayfinding signage, such as seen at Palisade Avenue and Passaic Street. Additionally, consider adding actuation recognition, such as an LED indicator or audible tone, and using a larger button that requires less force to be actuated, such as the push button assembly in Figure 43. In an area with less English fluency, consider using more diagrammatic signage.
4. **Install countdown timers at intersections.** Consider adding an audible countdown.
5. **Install ADA-compliant curb ramps.** Figure 53 shows a basic diagram with a landing area and tactile pad. For a full explanation of ADA-compliancy, consult FHWA resources.
6. **Keep ADA accessibility in mind when developing station area.** Opportunities may arise out of the Passaic Street Rehabilitation Plan.
7. **Install curb extensions.** Consider installing curb extensions (also known as bulb-outs) wherever possible to shorten pedestrian crossing distance and put the pedestrian more in view of oncoming motorists. Curb extensions can be implemented in a variety of ways, included painted (Figure 45), mountable (Figure 41), and concrete (Figure 42) extensions.
8. **Install high visibility international crosswalks** (Figure 52). Consider full intersection visibility treatments (Figure 47) as a sort of gateway treatment at the intersections of River Drive and Passaic Street and River Drive and Monroe Street.

EXAMPLES

Figure 41: Mountable Curb Extension

Seattle, WA
Source: Central Seattle Greenways

Figure 42: Concrete Curb Extensions

Newark, NJ
Source: Google Maps

Figure 43: Push Button Signage

Newark, NJ

Figure 44: Countdown Timer

Figure 45: Painted Curb Extensions

Hoboken, NJ
Source: NJ Bike Ped Flickr

9. **Replant tree wells and consider enlarging them to provide for a healthier tree environment.**
10. **Consider eliminating unnecessary curb cuts**, such as those at 20 Passaic Street, the northeast corner of Cambridge Avenue and Passaic Street and just east of the northeast corner of Bloomingdale Avenue and Passaic Street.

Figure 48: Cars Encroaching on Sidewalk

Source: Google Maps

Figure 49: Parking Blocks Prevent Cars from Encroaching on Sidewalk

EXAMPLES

Figure 46: HAWK Beacon

Metropark, NJ
Source: Larry Higgs, NJ.com

Figure 47: Painted Intersection

Jersey City, NJ
Source: Statewide Striping

Figure 50: Tinted Concrete

New York, NY
Source: NYC.gov

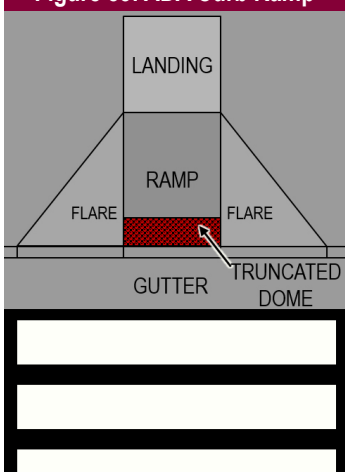
Figure 51: Regular Concrete

New York, NY
Source: NYC.gov

Figure 52: High Visibility Crosswalk

Metropark, NJ
Source: Google Maps

Figure 53: ADA Curb Ramp



POTENTIAL CONSIDERATIONS: Install Bicycle facilities

1. **Install bicycle parking**, especially in areas where parking is restricted so car doors and bicycle parking do not conflict. Figure 54 shows U-racks that allow for one or two bikes to park parallel to the street.
2. **Consider installing other bike facilities.** Sharrows (Figure 55) signal a shared lane area that directs cyclists to ride out of the door zone. Figure 56 shows a dedicated lane, which requires more street space but helps to separate facility users.

POTENTIAL CONSIDERATIONS: Address vehicle operations issues

1. **Paint an edge line** along Passaic Street and River Drive to visually narrow the corridor and better channelize vehicles. Figure 57 shows edge lines on a side street that help visually narrow the road and delineate the parking areas.
2. **Consider installing a left-turn** lane to formally recognize two lanes at the westbound approach of the Passaic Street and River Drive intersection.
3. **Roadway improvements should take truck turning movements into account.**
4. **Install larger signal heads for visibility.**
5. **Install retroreflecive back plates.**

EXAMPLES

Figure 54: Bike Parking

Newark, NJ
Source: City of Newark

Figure 55: Sharrow

New Brunswick, NJ
Source: City of New Brunswick

Figure 56: Bike Lane

New Brunswick, NJ
Source: City of New Brunswick

Figure 57: Edgeline

Newark, NJ
Source: Google Maps

Figure 58: Retroreflective Backplate

Source: FHWA

Figure 59: Mountable Curb Extension

Seattle, WA
Source: Central Seattle Greenways

POTENTIAL CONSIDERATIONS: Midland Avenue and Passaic Street

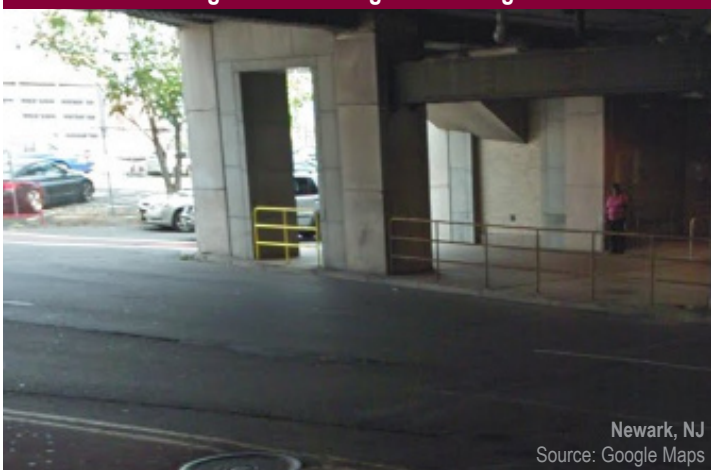
1. **Add fencing under the bridge** (such as in Figure 61) to prevent pedestrians from crossing where there is limited sight distance.
2. **Install pedestrian wayfinding signage near station exit areas (such as Figure 60).**
3. **Consider installing a bus shelter (such as Figure 62)** at the northeast corner of Midland Avenue and Passaic Street, in the proximity of 99 Passaic Street. Wayfinding signage can be added to the bus shelter to help transit users better understand the bus line connections and destinations.
4. **Consider installing decking** below the railroad tracks to protect pedestrians from the track's grease drips.
5. **Consider enhancing lighting under the railroad tracks.**
6. **Install in-street signage to reinforce signpost signage for drivers.** Figure 63 shows in-street diagrammatic markings for a roundabout, and perhaps similar markings can be used on the southbound Midland Avenue approach.
7. **Narrow the drop curb** to align with driveway east of the railroad on Midland Avenue.
8. **Consider repainting the railroad trestle.**
9. **Install larger signal heads for visibility.**

EXAMPLES

Figure 60: Transit and Pedestrian Wayfinding

New York, NY
Source: T-Kartor

Figure 61: Fencing Under Bridge



Newark, NJ
Source: Google Maps

Figure 62: Bus Stop

Leonia, NJ
Source: NorthJersey.com

Figure 63: In-Street Pavement Markings

Source: Washington State DOT

POTENTIAL CONSIDERATIONS: Palisade Avenue and Passaic Street

1. **Consider installing two separate curb ramps** at the northeast corner.
2. **Consider relocating the pole and pedestrian push button** to be within five feet of curb ramps but not blocking the sidewalk. Due to right of way conflicts and potential conflicts with placing facility poles too near the edge of the roadway, it may not be possible to relocate the pole to an ideal location.

POTENTIAL CONSIDERATIONS: Cambridge Avenue and Passaic Street

1. **Remove the driveway curb cut** at the northeast corner since it is no longer needed.
2. **Consider installing parking blocks** to prevent vehicles encroaching on the sidewalk from the property on the northeast corner. Note that in Figure 48, an older image from Google Maps, parked vehicles imposed on the sidewalk; however, in a more recent image (Figure 49), parking blocks prevent vehicles from doing so. Parking blocks may also assist in other potential areas where no infrastructure exists that separates parked vehicles from the sidewalk.
3. **Install a curb extension at the northwest corner.**

POTENTIAL CONSIDERATIONS: River Drive and Passaic Street

1. **Consider installing a left-turn lane** to formally recognize two lanes at the westbound approach of the Passaic Street and River Drive intersection.
2. **Widen the sidewalk and landing pad** area on the northeast corner.
3. **Trim foliage.**

POTENTIAL CONSIDERATIONS: Hudson Street and River Drive

1. **Extend the northeast curb to shorten the crossing distance of the minor street.**
2. **Consider installing a HAWK beacon** across River Drive when the River Drive improvements and widening occur.

POTENTIAL CONSIDERATIONS: Monroe Street and River Drive

1. **Repaint crosswalks and install retroreflective, high-visibility markings**. Workshop participants discussed the merits of constructing a pedestrian refuge island in the east leg due to the extended crossing length of the skewed intersection, but it was determined that it might conflict with truck movement.

Other potential considerations and discussion

In addition to physical design improvements (engineering), city and neighborhood officials and residents should identify opportunities to address pedestrian safety through enforcement and education. Leveraging the three "E's" (engineering, education and enforcement) is essential for making gains in traffic safety. While physical improvements will enhance comfort, safety, convenience, and accessibility for all roadway users, coupling the design potential considerations outlined in this report with enforcement and education ensures a more successful walking environment, since motorist and pedestrian behaviors directly impact a community's walkability.

Safety education programs focusing on both pedestrians and motorists are a priority in New Jersey because the state has been designated a "Pedestrian Safety Focus State" by the Federal Highway Administration (FHWA) due to its high number of pedestrian injuries and fatalities. Various government and private-sector organizations are taking an active role in addressing pedestrian safety at the community level, while the New Jersey Division of Highway Traffic Safety (NJDHTS) provides enforcement grants and educational materials focusing on pedestrian safety. Information on NJDHTS' grant opportunities and resources can be found at http://www.nj.gov/oag/hts/index.html and page 29 of this report.

In addition, the NJTPA created Street Smart NJ, a statewide pedestrian safety campaign, which has more than 60 partner communities. Participating communities work to raise awareness of pedestrian safety laws by hosting events, handing out information, and through social media and advertisements. Local police step up enforcement during the campaign to ensure motorists and pedestrians are obeying the laws. All communities are urged to participate. More information can be found online at http://bestreetsmartnj.org/. The NJTPA website also provides links to a number of resources offering both a national and local perspectives on pedestrian and traffic safety. Information may be found at http://www.njtpa.org/planning/regional-studies/safety. Additional information on pedestrian safety, including effective countermeasures, can also be found on the FHWA website at http://safety.fhwa.dot.gov/ped_bike/. Another resource discussed at the workshop was the Rails to Trails program for the rail bridge crossing the river near the Monroe Street intersection. The City of Garfield is encouraged to leverage these and other resources to implement pedestrian safety education and enforcement initiatives targeted at residents, employees and others who drive into and through the community.

Conclusion

Based on the feedback obtained during the workshop's walking audit, the commercial corridor along Passaic Street between Midland Avenue and River Road as well as the residential and industrial area along River Drive from Passaic Street to Monroe Street are both likely to benefit from several pedestrian upgrades including better traffic calming and enhanced pedestrian facilities.

Workshop participants recommended repaving sidewalk portions, adding curb extensions to decrease pedestrian crossing distance, upgrading signals, and implementing various traffic calming techniques. All of the potential considerations outlined in this report would enhance the safety for neighborhood residents, promote a friendlier walking environment and improve destination access.

In addition to the engineering potential considerations outlined in this report, employing enforcement and education tactics to reduce the incident of pedestrian crashes resulting in injuries is essential. City, neighborhood and school officials are encouraged to work with the EZ Ride, local Transportation Management Association (TMA), to further implement a Safe Routes to School program as well as take advantage of education and enforcement grant opportunities provided by the New Jersey Division of Highway Traffic Safety and to conduct a Street Smart NJ campaign. The City of Garfield has already had several successful infrastructure projects near the Washington Irving School #4 and James Madison School #10. New curb cuts were installed at all intersections surrounding the schools. New sidewalk was installed (and new curbing where necessary). To complete the project, the City is repaving the roads on both sides of School #10, which will include new crosswalks. Additionally, speed tables have been installed at various access points around both schools. The project was funded in large part by a Safe Routes to School grant. The City has applied and received authorization for Phase II of this project, which will include extensive improvements around Abraham Lincoln School #6 and Christopher Columbus School #8. Pursuing partnerships and identifying champions within the community who will promote pedestrian safety as a shared responsibility between all roadway users is highly recommended.

The design potential considerations outlined in this Walkable Community Workshop report seek to improve the walking environment in the commercial corridor along Passaic Street and River Drive supporting the City of Garfield's and NJDOT's Complete Streets Policy. The report is a valuable tool that public, law enforcement and community officials as well as citizens are encouraged to leverage to improve the safety and mobility of all who live and work in the neighborhood as well as other neighborhoods throughout the City of Garfield.

Appendices

Workshop Attendees

Name	Organization
Eugene Murphy	Bergen County Engineering
Donna Orbach	Bergen County Planning
Tom Duch	City of Garfield City Administrator
Kevin Boswell	City of Garfield City Engineer
Michael Marsh	City of Garfield Police Department
Christopher Helms	Bergen County Planning
Robert Halsch Jr	Greater Bergen Community Action
Gerard Haizel	Greater Bergen Community Action
Andrea Borja	Greater Bergen Community Action
Joseph Santangela	Greater Bergen Community Action
Ed Hynes	Greater Bergen Community Action
Aimee Jefferson	North Jersey Transportation Planning Authority
Lois Goldman	North Jersey Transportation Planning Authority

Agenda

City of Garfield

Walkability Communities Workshop Agenda

Garfield, NJ
9:30 AM
Friday, October 21st, 2016

Welcome..... 9:30

Walkable Community Presentation 9:40

- Complete Streets Policy
- Walking Environment

Walking Audit 10:15

- In-field assessment

Design Solutions (Breakout Session)..... 11:45

- Small team working groups
- Presentation of recommendations
- Priorities and action plan
- Next steps, questions, and wrap-up

Adjourn..... 1:00

NJTPA
NORTH JERSEY
TRANSPORTATION
PLANNING AUTHORITY

Educational flyers

The following materials and others are online and available for printing at http://BeStreetSmartNJ.org/resources.

Additional pedestrian enforcement and education materials are available through the New Jersey Division of Highway and Traffic Safety at http://www.nj.gov/oag/hts/pedestrian.html.

Potential Funding Sources

- Local Aid

  The State Aid Program is one method by which the New Jersey Department of Transportation (NJDOT) can work with county and municipal governments to improve the efficiency and effectiveness of the state's transportation system. The Transportation Trust Fund (TTF) has provided the opportunity for State assistance to local governments for road, bridge, and other transportation projects. (http://www.state.nj.us/transportation/business/localaid/stateaid.shtm)

  State funded programs administered by Local Aid:

Program	Website
Municipal Aid	http://www.state.nj.us/transportation/business/localaid/municaid.shtm
County Aid	http://www.state.nj.us/transportation/business/localaid/countyaid.shtm
Local Aid Infrastructure Fund (Discretionary Funding)	http://www.state.nj.us/transportation/business/localaid/descrfunding.shtm
Bikeways	http://www.state.nj.us/transportation/business/localaid/bikewaysf.shtm
Safe Streets to Transit	http://www.state.nj.us/transportation/business/localaid/safe.shtm
Transit Village	http://www.state.nj.us/transportation/business/localaid/transitvillagef.shtm
Local Bridges Future Needs	http://www.state.nj.us/transportation/business/localaid/localbridges.shtm

  The New Jersey Department of Transportation (NJDOT), Division of Local Aid and Economic Development, and/or the Metropolitan Planning Organizations currently administers these Federal Aid Programs:

Program	Website
Local Lead Program	http://www.state.nj.us/transportation/business/localaid/lead.shtm
Transportation Enhancements Program	http://www.state.nj.us/transportation/business/localaid/enhancements.shtm
Safe Routes to School	http://www.state.nj.us/transportation/business/localaid/srts.shtm
Emergency Relief	http://www.state.nj.us/transportation/business/localaid/er.shtm
Transportation Alternatives	http://www.state.nj.us/transportation/business/localaid/alternatives.shtm
Local Safety/High Risk Rural Roads Programs	http://www.state.nj.us/transportation/business/localaid/localsafety.shtm

- New Jersey Department of Community Affairs – Neighborhood Programs

  The Office administers a variety of other federal and state-funded programs, such as the Community Development Block Grants (CDBG) which provide funding to municipalities to help with economic development, housing rehabilitation and neighborhood revitalization. The Neighborhood Stabilization Program (NSP I and III), a federal grant/loan program that is designed to acquire, rehabilitate and sell foreclosed/vacant properties in targeted neighborhoods. The Neighborhood Revitalization Tax Credit (NRTC) is designed to improve distressed neighborhoods via partnership with non-profit organizations and contributing companies. (http://www.state.nj.us/dca/divisions/dhcr/offices/neighborhood.html)

Neighborhood Programs:

Program	Website
Community Development Block Grant (CDBG)	http://www.nj.gov/dca/divisions/dhcr/offices/cdbg.html
Neighborhood Stabilization Program (NSP)	http://www.nj.gov/dca/divisions/dhcr/offices/nspguide.html
Neighborhood Revitalization Tax Credit (NRTC)	http://www.nj.gov/dca/divisions/dhcr/offices/nrtc.html

- Resources Available Through NJTPA:

Program	Website
Congestion Management and Air Quality (CMAQ) - Local Mobility Initiatives Program	http://njtpa.org/project-programs/mobility-programs/cmaq-local-mobility.aspx
Local Concept Development (LCD) Phase	http://www.njtpa.org/project-programs/project-development/local-capital-project-delivery-process/local-concept-development
Local Safety Program	http://www.njtpa.org/local-safety

CM Police Chief
CA
DPW Super
City Planner
2/14/14

CITY OF GARFIELD
Bergen County, New Jersey

Resolution 14-330
Complete Streets Program

WHEREAS, a Complete Street is defined as a means to provide safe access for all uses by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options; and

WHEREAS, the benefits of Complete Streets include improving safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free; providing connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities; promoting healthy lifestyles; creating more livable communities; reducing traffic congestion and reliance on carbon fuels thereby reducing greenhouse gas emissions; and saving money by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project thus sparing the expense of retrofits later; and

WHEREAS, the Mayor and Council of the City of Garfield wish to implement a Complete Streets policy through the planning, design construction, maintenance and operation of new and retrofit transportation facilities enabling safe access and mobility of pedestrians, bicyclists, transit users of all ages and abilities.

NOW, THEREFORE, BE IT RESOLVED, that the Mayor and Council of the City of Garfield adopts the following Complete Streets Policy as follows:

Purpose: To adopt a Complete Streets Policy that acknowledges and implements the concept that streets should be designed, built and retrofitted for all users: motor vehicles, pedestrians, bicyclists, transit users and people with disabilities. Implementation of this policy will integrate the needs of all users into everyday transportation and land use decision making, and will take place through the following methods:

1. Bicycle and pedestrian ways shall be established in new construction and reconstruction projects, which shall

not include any projects pertaining to "milling and paving" and/or "re-surfacing" unless one or more of the following conditions are met:

*Bicyclists and pedestrians are prohibited by law from using the roadway.

*The cost of accommodations is excessively disproportionate to cost of project, at more than five percent (5%) of the total cost.

*Where sparse population, travel or other factors indicate an absence of need as defined by any street with a paved roadway width greater than 28 feet and less than 100 vehicles per day.

*Detrimental and environmental or social impacts outweigh the need for these accommodations as determined by either the Mayor and Council or the appropriate local government agency.

*The safety or timing of a project is compromised by the inclusion of Complete Streets.

2. Paved shoulders should be included where feasible in all new construction and reconstruction projects on roadways used by more than 21,000 vehicles per day consistent with NJDOT Complete Streets policy.

3. Sidewalks, shared use paths, street crossings, pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways shall be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.

4. The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

Planning projects for the long term. The design and construction of new facilities that meet the criteria in Item 1 above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.

Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. The design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.

Getting exceptions approved at a senior level. Exceptions for the non-inclusion of bikeways and walkways shall be approved by a senior manager and be documented with supporting data that indicates the basis for the decision.

Designing facilities to the best currently available standards and guidelines.

The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used, such as the AASHTO Guide for the Development of bicycle Facilities, AASHTO's A Policy on Geometric Design of Highways and Streets, and the ITE Recommended Practice "Design and Safety of Pedestrian Facilities."

5. This Complete Streets Policy shall be incorporated into the next Reexamination, update, revision, amendment or adoption of the Master Plan.

BE IT FURTHER RESOLVED that a copy of this Resolution shall be sent to all Departments and Agencies having a responsibility for or connection with projects covered by the Garfield Complete Streets Policy.

	AYE	NAY	ABSTAIN	ABSENT
CALANDRIELLO	X			
ALOIA	X			
DELANEY	X			
MATI	X			
RAYMOND	X			

I hereby CERTIFY that the foregoing is a true and correct copy of a resolution adopted by the City Council at a Meeting held AUG 12 2014

Andrew J. Pavlica, CITY CLERK

Addendum to the Garfield Walkable Communities Workshop Final Report, January 31, 2018

This document is an addendum to the Garfield Walkable Communities Final Report, which was approved at the City of Garfield Council Meeting on December 12, 2017. The purpose of the addendum is to record minor revisions to the report and to note the Bergen County Department of Planning and Engineering's comments.

Part 1: Comments from Bergen County Department of Planning and Engineering:

During review of the report, the County noted that it is responsible for maintaining County roads curb to curb. The report cites a number of potential hazards along the sidewalks including broken sidewalk slabs, overgrown vegetation, Bilco doors, and other sidewalk obstructions within the walking areas. The maintenance of the sidewalk is a municipal and/or property owner's responsibility. For safety reasons for both the pedestrian and vehicular traffic, the County does not recommend mountable curb extensions (listed as a Potential Consideration on page 19). The County also noted the existing traffic signals at the Passaic Street and River Drive intersection and the River Drive and Monroe Street intersection will be replaced as part of the River Drive Improvement – Phase 2 Project. The new traffic signals will have audible pedestrian countdown signal heads. Work for this project is proposed to commence circa 2019. The project is similar to the work that was done on River Drive from Outwater Lane to the Garfield / Elmwood Park Corporate Line (River Drive Improvement – Phase 1 Project).

Additionally, the County commented on the portion of the report that stated consideration should be given to installing audible pedestrian countdown signal heads. The County policy is to install this equipment when new traffic signal equipment is installed as part of a new traffic signal installation or the replacement of an existing signal. If a municipality wants pedestrian countdown signal heads installed prior to a major County signal project, the County can work jointly with the municipality to accomplish this. It was also stated in the report, to consider installing larger signal heads for increased visibility. The existing signal hardware, wiring and over the road clearances have been reviewed to determine if the 12-inch signal heads can be installed without performing some major upgrading. The review has disclosed that some major upgrading will be required including changing signal poles and arms.

Finally, with regards to the consideration of a HAWK beacon across River Drive at Hudson Street, the County expressed that if improvements are made, the current and potential pedestrian crossing patterns should be more closely examined to assess what would be the most appropriate crossing treatment.

Part 2: Minor revisions and corrections incorporated throughout in the Final Report:

- Added in appendix: Garfield's Complete Streets policy
- Explanations added, formatting corrected:
    - p. 23, The underlined language was added, "Repaint crosswalks and install retroreflective, high-visibility markings. Workshop participants discussed the merits of constructing a pedestrian refuge island in the east leg <u>due to the extended crossing length of the skewed intersection</u>, but it was determined that it might conflict with truck movement."
    - p. 5, Clarification that Passaic Street is referred to as "County Route 40 I" in the NJDOT Straight Line Diagrams.
    - p. 5, Underlined bus and rail frequency information added: "[…] serving Paterson, Clifton, Passaic, Garfield, and Elmwood Park. <u>Bus frequencies vary by time of day, day of week and bus stop locations. Buses are most frequent during rush hours with three to four buses per hour at some of the busier stops such as the one on the corner of Midland Avenue and Passaic Street east of the train station</u>. The Garfield rail station, located at the intersection of Passaic Street and Midland Avenue, hosts the Bergen County and Port Jervis lines. <u>Between the two trains in both directions, there are 26 daily trains on the weekdays and 24 daily trains on the weekends.</u>"
    - P. 7, Bus and train stop locations were added the map on page 7 and formatting within red "all crashes" circles was fixed so crash numbers were accurately shown.

- p. 9, Underlined explanation on lighting, "[…] more trips by foot, bicycle and transit. Effective lighting is another critical factor for pedestrian safety, comfort, and usability. Additionally, improving the walking environment."
- The underlined textual references were added to enhance understanding of existing images:
  - p. 22, "…fencing under the bridge (such as in Figure 61) to prevent…"
  - p. 22, "…wayfinding signage near station exit areas (such as Figure 60)."
  - p. 22, "…installing a bus shelter (such as Figure 62)…"
  - p. 12, "…pedestrian area (Figure 16)."
  - p. 12, "…and Monroe Street (Figure 1)."

- Minor corrections/revisions
  - Underlined words added
    - p. 3, "…directs that the implementation of federal and state funded…"
    - p. 4, "The Garfield Walkable Community Workshop was held at the Greater…"
  - Underlined references were corrected
    - p. 5, "Main/Bergen County" NJ Transit line corrected to "Bergen County"
    - p. 6, "Passaic Drive" corrected to "Passaic Street"
    - p. 17, 20 and p. 23, "Cambridge Street" corrected to "Cambridge Avenue"
    - p. 16, "Palisade Street" corrected to "Palisade Avenue"
    - p. 11, 16 and 22, "site distance" corrected to "sight distance"
  - p. 11, Repeated sentence removed: "The driveway curb cut is no longer needed"
  - p. 24, Incomplete sentence in second paragraph of the Conclusion corrected by removing "….especially those accessing."
  - p. 22, Remove the word "signage" from the Figure 62 title to read simply as "Figure 62: Bus Stop"
  - Ampersand and "and" was made consistent throughout the report
  - Source data dates was added to all maps
  - Street Smart information updated by replacing the first sentence in the third paragraph on page 24 from, "The NJTPA is currently in the second round of its pedestrian safety campaign, Street Smart NJ" to "In addition, the NJTPA created Street Smart NJ, a statewide pedestrian safety campaign, which has more than 60 partner communities." The Street Smart link on page 28 was also updated.
  - p. 24, Underlined reference to EZ Ride added: "[…] are encouraged to work with EZ Ride, the local Transportation Management Association (TMA) […]"
  - Page/spatial/Figure references to figure and table locations and pages were corrected or updated for clarity, including type reference of the following:
    - p. 6, The title "Table 1: Commute to Work" was added to the first table.
    - p. 6, The title "Figure 1" was changed to "Table 2"
    - p. 4, "Figure 1" was changed to "Map 1"
    - p. 5, "Figure 2" was changed to "Map 2"
    - p. 8, "Figure 4" was changed to "Table 3"