



Jersey City and Kearny, NJ, Pulaski Skyway

There have been several significant events since the 2008 Re-examination Report, which have profoundly affected development in Hudson County.

Natural Hazards and Extreme Weather

Hurricane Irene and Superstorm Sandy

Coastal and river flooding has long been an issue for the communities in Hudson County, but two severe weather events in the last five years have brought particular focus to the impacts of such storms on the county, and the necessity of planning for resiliency to mitigate storm impacts and to prepare for recovery.

Hurricane Irene, which occurred on August 28, 2011, affected the county. Residents in low-lying areas were advised to evacuate during which heavy rainfall inundated coastal areas of the county with floodwaters rising up to five feet, and high winds resulted in downed power lines and loss of power for many homes. There was one reported death in Hudson County as a result from the storm. In addition, a number of transportation systems were interrupted including local roads and the north tube of the Holland Tunnel.

Approximately a year later on October 29, 2012, Hudson County was severely impacted by Superstorm Sandy. Whereas much of the effect from Hurricane Irene was a result of inland river flooding, Hurricane Sandy devastated coastal communities with high winds, storm surges, and flooding. In Hudson County, there were massive power outages and residents became stranded due to floodwaters. Large areas of Hudson County had to be evacuated, including some medical centers. The storm inflicted damages from wind and storm surge on public infrastructure and residents. The storm resulted in approximately \$6 million



Hoboken, NJ, Source: NYTimes



"Coastal resilience means building the ability of a community to "bounce back" after hazardous events such as hurricanes, coastal storms, and flooding - rather than simply reacting to impacts."

Source: NOAA

in estimated damages to public infrastructure according to the Hudson County Department of Roads and Public Property, and nearly 11,000 households applied to FEMA Individual Assistance for funds to cover repairs from storm damages.

Sandy also had major consequences for Hudson County and the state's transportation system. Tunnels into Manhattan were flooded and it took over a week for automobiles to be allowed through the Holland Tunnel. There were fuel shortages as a result of gas stations losing power for an extended period of time and a delay in resupply from ocean tankers unable to reach port. For about two weeks, the ability to refuel was rationed based on license plates. All of NJ TRANSIT systems (bus, light rail, and rail passenger) and the PATH system were shut down. It took over two months for PATH service between Hoboken and the World Trade Center and a month and a half for normal NJ TRANSIT service levels to New York City to be fully restored. Even today, the long-term affects of Hurricane Sandy have ramifications on transportation. Damage from salt-water deposited in the Trans-Hudson Rail Tunnel will necessitate extensive repairs, and may require the closing of one-of-two rail tunnels for a year at a time to repair.

In addition to this current effort, Hudson County and its municipalities have been preparing for future storm events by adopting several initiatives and plans:

- *Hoboken Green Infrastructure Strategic Plan* (2013)
- *The New Meadowlands, ReBuild by Design* Finalist
- *Resist, Delay, Store, Discharge: A Comprehensive Strategy for Hoboken* (2014)
- *Hudson County Strategic Recovery Report* (February 2014)
- *Hudson County All Hazard Mitigation Plan* (2015)
- *Hudson County's Community Ratings System (CRS) Assistance Action Plan* (Early 2017)
- *Hudson County Debris Management Plan* (Early 2017)
- *Jersey City Resiliency Planning Documents* (May/June 2017)

Economy

2008 Financial Crisis

Hudson County is continuing to rebound from the economic crisis that began in 2007. The recession led to high unemployment rates (a high of 11.4% in 2009) in the county and an increase in home foreclosures. The County, which has become a secondary market for Wall Street financial firms and workers' residences, experienced a decline in investment and a slowing of new development. These trends have begun to turn around. The unemployment rate as of April 2016 dropped to 4.6% and the pace of development has returned.

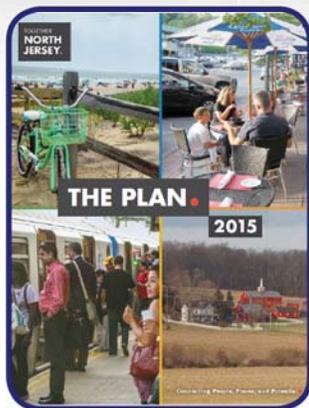
Although Hudson County has been at the forefront of the "green economy" and has experienced increased job growth and public investment, Hudson County is still challenged by pockets of poverty and high unemployment. In 2014, 15.0% of families fell below the poverty level, while 15.7% of families had an income of \$150,000 or greater. The systemic causes of these economic disparities need to be addressed, as they are here in the Economic Element and in the 2016 CEDS.

Regionalism

As major events such as Hurricane Sandy and the 2008 Recession have illustrated, there are some issues that exceed the ability for individual governments to address themselves. Resiliency, transportation, environmental quality, and economic growth solutions require crossing jurisdictional boundaries and a regional planning lens. This section highlights two recent and ongoing planning initiatives designed to build coalitions and cooperation in order to address these challenges.

Together North Jersey

Together North Jersey (TNJ) is a coalition of government agencies that was created under a 3-year Sustainable Communities Regional Planning Grant issued by the U.S. Department of Housing and Urban Development (HUD). The coalition created a regional plan, known as *The Plan*, for the 13 county northern New Jersey region, and implemented 18 local demonstration projects and 14 Local Government Capacity Grants. Hudson County received a Local Government Capacity Grant to fund an "Exploration of a Public Bike Share system in Hudson County". Together North Jersey is currently in the midst of providing technical assistance and offering education and training opportunities to jurisdictions, organizations and the public to advance sustainability projects and initiatives. More information about Together North Jersey and the steps being taken to implement *The Plan* can be found at togethernorthjersey.com.



RPA - The Fourth Regional Plan

The Regional Plan Association (RPA) is in the midst of creating the first regional plan in more than 20 years for the 31-county New York-New Jersey-Connecticut metropolitan area. Previous RPA plans were produced in 1929, 1968 and 1996. The

Fourth Regional Plan is expected to be published in 2017. It will focus on three key issues: Prosperity and Opportunity; Sustainability and Resiliency; and Movement and Connection. The plan will be a long-range vision to ensure the region's success for all residents. Visit rpa.org/fourth-plan for more information.

Special Planning Areas

New Jersey Sports and Exposition Authority

In February 2015, the Governor signed legislation that dissolved the New Jersey Meadowlands Commission (NJMC), and transferred its powers to the New Jersey Sports and Exposition Authority (NJSEA) to oversee the 30.4-square-mile New Jersey Meadowlands (the "Hackensack Meadowlands"). The law changed how municipalities within the Meadowlands District review and approve land use and zoning applications. Where the New Jersey Meadowlands Commission retains land use and zoning power, some municipalities have opted to take over those duties in accordance with NJSEA regulations. Since Secaucus and Kearny have adopted and maintained the *Meadowlands District Master Plan* as well as its zoning regulations, codes and standards, they have the authority to conduct their own review and approval of land use or zoning applications within the District. They are required, however, to forward all documentation of the applications to the NJSEA for review. Jersey City and North Bergen have chosen not to adopt and maintain the plan and have deferred review and approval rights to the NJSEA. *The Meadowlands District Master Plan*, last updated in 2004, is scheduled for re-examination sometime within the next five years.



Millennials

One of the largest generations in the United States is the Millennial Generation. This group refers to people who were born between about 1980 and 2000. As of 2016, the age of this group ranged between about 16 and 36 years old. The Millennial population is estimated to be over 83 million people nationwide, which represents approximately one-quarter of the United States total population. In Hudson County, Millennials make up just over one-third of the county's population, which is the highest percentage of any county within the state. Millennials represent the new generation of workforce, renters or homeowners, and consumers.

Generally, Millennial living preferences tend to align to Hudson County's strengths. A 2014 Urban Land Institute (ULI) survey of Millennials found that 50% are renters (635 of 1,270), and two-thirds of respondents reported that they are very satisfied or satisfied with being a renter.¹ The ULI's Millennial report also notes that one-third rent in an urban area (419 of the 1,270 survey respondents). The abundant number of rental units in the county certainly plays to this overall desire to rent in urban areas. Additionally, homeownership rates of people in these age cohorts have declined.² Nationally, the 2014 home ownership rate for households under 35 was 35.9%, 7.7% less than it was ten years ago in 2004. This percentage is also significantly lower than the overall home ownership rate of 64.8%.

Millennials also tend to use public transportation and other modes at a higher rate than previous generations. The county's strong public transportation system and urban form appeal to these patterns. In a survey of Millennials from the Rockefeller Foundation and Transportation for America³, 54% of respondents said that they would consider moving to another city if it had more and better transportation options, and two-thirds identified access to high quality transportation as one of their top three criteria when



Millennials Crowd, Source: <http://ivn.us/2014/07/28/well-truly-urban-and-politics-millennials>

choosing a place to live. Eighty percent said that it is important to have a wide range of transportation options, such as public transportation, bike- and car-sharing, and pedestrian-friendly streets. This is reflected in the county's Millennial commuting numbers. According to the 2014 ACS 5-year Estimates, workers in the age brackets between 20 to 24 and 25 to 44⁴ use public transportation at a higher rate (41.53% and 44.86%, respectively) than the county average as a whole and a higher rate than all older age cohorts. Workers between 16 and 19 used public transportation at a lower rate than the county average, but walked to work at a much higher rate (23.57%) than the county's average (8.36%). Workers 20 to 24 (10.60%) also exceeded the county's average rate. Additionally, workers between 16 to 19, 20 to 24, and 25 to 44 all drove to work alone at lower rates than the county average.

An unknown about the long-term impacts of Millennials is whether these preferences will stay consistent across their lifetime. Some of their preferences may be more of a matter of financial considerations. The average student-loan debt for a person who graduated in 2014 is \$33,000⁵, about double the average debt of someone who graduated in 2001, which would be the approximate year of graduation for a 22-year old who was born in 1979. The higher than average debts may impact a person's ability to afford a car, save for a down payment on a home, or start a family. As their incomes increase, they marry, and save more money, the question remains on whether Millennials will continue to prefer to rent and eschew car ownership, or whether they will look to move to more suburban areas to own homes and drive an automobile to work.

Changing Demographics

Baby Boomers

The other large generation, known as Baby Boomers, make up a relatively small percentage of Hudson County's population. Baby Boomers (born between 1946 and 1964) make up just about one-quarter of the United States population, but only 19.81% of the county's population. This is also the lowest percentage of Baby Boomers of any county within the state. While Millennials are just starting to join and establish themselves in the workforce, Baby Boomers are entering the twilight of their careers. The first Baby Boomer reached the age of 65 in 2010, and by 2030, the entire generation will reach the typical age of retirement.

While the percentage of Baby Boomers in Hudson County is relatively low compared to the U.S. and other counties in New Jersey, it still represents about 130,000 of the county's population. As they retire and age, there will be an increased demand to provide transportation and social services that cater to their needs. Despite the significant migration of the Baby Boomer population out of Hudson County, the overall population of older adults is expected to increase.



known as "Aging in Place". A key factor in aging in place is the ability to downsize in home if needed and continued mobility even without access to an automobile. AARP identified some policies⁷ to promote aging in place related to transportation, including transit-oriented development (TOD), complete streets, and human services transportation (such as municipal dial-a-rides). Hudson County's public transportation system, development around transit stations, and smaller housing units (69% have two bedrooms or less) provide some of these characteristics. In reality, Hudson County may become a desirable place for other Baby Boomers looking for such amenities if their current communities cannot provide for their needs.



The overall preference for aging adults is to stay in the current community or home in which they live. A survey⁶ by the American Association of Retired Persons' (AARP) Public Policy Institute revealed that 87% of individuals age 70 and above who responded to the survey wanted to stay where they lived, while those between 50 and 64 of age shared the same preference at 71%. This concept is

Hudson County Office on Aging
hudsoncounty.org/about-office-on-aging
NJ Find a Ride, a 211 Partnership
njfindaride.org
New Jersey Travel Independence Program
vtc.rutgers.edu/njtip/

Changing Demographics

Multi-Generational Households

Multi-generational households are defined by the U.S. Census as families consisting of more than two generations under the same roof (i.e. adult parents with children and living with their parents), though some research has been expanded to include households with two generations where a young adult who is between 25 and 34 and not the householder is included. There is an observed increase in both of these types of multi-generational households. According to Pew Research Center⁸, as of 2012, there were 57 million people (18.1% of the U.S. population) living in multi-generational households, double the number in the same situation in 1980.

Multi-generational household census data is not widely available, particularly for the latter category of young adults living with their parents; however, the 2014 ACS data does include household types that accounts for households that include characteristics of the former category. Households in the county that include a grandchild where

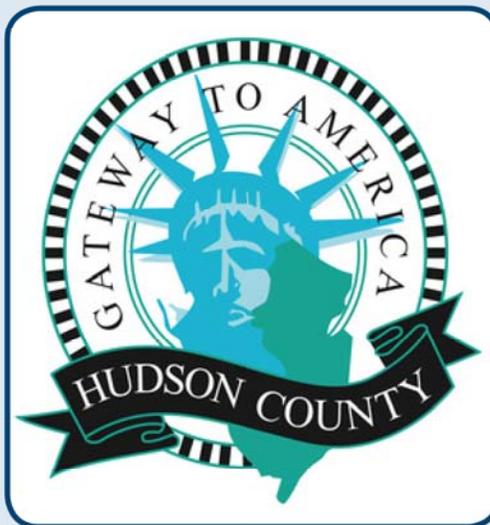
the grandparent is the householder or where the householder is living with a parent or parent-in-law was estimated at 6.0%. This is slightly higher than the estimate of multi-generational households in the United States from the 2009-2011 ACS 3-year Estimates⁹.

In addition to more young people continuing to live with their parents, another key contributor is the higher likelihood of racial and ethnic minority families to have multi-generational households. According to the Pew Research study, about 25% of Hispanics and blacks live in multi-generational households, as do 27% of Asians. Based on Hudson County's strong diversity and as a place of destination for immigrants, the number of people in multi-generational households in the county should be expected to continue to rise. Services that meet the varied needs of each generation will be required, making Hudson County a great place for young and old alike.

Changing Demographics

Immigration

Hudson County has long been a key destination for people entering the United States. Ellis Island was a port of entry for European immigrants during the 19th century, many of whom made Hudson County their home. That trend continues today, although their country of origin is quite different. More than 57% of the county's foreign-born population came from Latin America of which 22.01% were born in South America. Another 27.23% originated from Asia.



Overall, the county's foreign-born population make up more than 45% of the county population. Of the estimated 299,196 foreign-born residents, almost 10% entered the country after 2009. This immigration has helped drive some of the county's population growth, representing about 35% of the county's new population since 2010. This continued diversity will necessitate services that meet a multitude of backgrounds.

Redevelopment

Redevelopment has become a popular tool for planners and municipalities. Redevelopment is a planning tool under the New Jersey Local Redevelopment and Housing Law (LRHL) NJSA 40A: 12A-1 et seq. used to fulfill the goals of rebuilding abandoned and/or underutilized properties, increasing tax rates, improving the local economy, and improving the appearance of the community. Historically, redevelopment was primarily envisioned for totally deteriorated,

blighted urban areas. Today it has a much wider application in suburbs, office complexes, abandoned commercial properties (malls) and downtowns. Redevelopment enables municipalities to acquire property through eminent domain (only under a Condemnation Area Plan) and to provide short (5 years) and long term (30 years) tax abatement programs.

At the time of this report, eighteen (18) redevelopment plans have been adopted since the 2008 Master Plan Re-Examination:

Table 1: Redevelopment Plans Since 2008

Place	Year	Name
Bayonne	2016	46th Street Redevelopment Plan
Harrison	2012	Waterfront Redevelopment Plan (Amended)
Hoboken	2014	Hoboken Yard Redevelopment Plan
Hoboken	2015	Western Edge Redevelopment Plan
Jersey City	2009	Canal Crossing Redevelopment Plan
Jersey City	2009, amended 2012	Summit and Fairmount Redevelopment Plan
Jersey City	2009, amended 2012	Cambridge and North Redevelopment Plan
Jersey City	2010	Journal Square 2060 Redevelopment Plan
Jersey City	2011	McGinley Square East Redevelopment Plan
Jersey City	2011, amended 2015	8 Erie Street Redevelopment Plan
Jersey City	2011	Bright and Varick Redevelopment Plan
Jersey City	2011, amended 2014	Ninth and Brunswick Redevelopment Plan
Jersey City	2013	Liberty Harbor Redevelopment Plan (Amended)
Jersey City	2012	Exchange Place North Redevelopment Plan (Amended)
Jersey City	2013	Route 440-Culver Redevelopment Plan
Jersey City	2013	Liberty Harbor Redevelopment Plan (Amended)
Jersey City	2016	Jackson Hill Redevelopment Plan
NJSEA/Kearny	2011	Kingsland Redevelopment Plan
NJSEA/Kearny	2013	Koppers Coke Peninsula Redevelopment Plan
North Bergen	2015, amended 2016	Paterson Plank Road/ Grand Avenue Redevelopment Plan
Secaucus	2016	Hartz Carpet Center Redevelopment Plan

In addition, there are currently four redevelopment plans underway. These redevelopment plans will have an impact on population, household and employment growth within these areas.

Table 2: Working Redevelopment Plans

Place	Year	Name
Hoboken	Designated in 2015	Neumann Leathers Rehabilitation Area
Hoboken	Designated	South Waterfront Redevelopment Area
Hoboken	Designated	Northwest Redevelopment Plan
Hoboken	Designated	Public Works Garage Site Redevelopment Area
Union City	Active	Roosevelt Stadium Area
Union City	Active	Yardley Area

Transportation

Hudson County has long been on the forefront of advances in transportation. Its location on the eastern seaboard made the county an important destination for goods and passengers transported by ship or rail. Even as the automobile became the dominant mode of transportation in the 20th century, the county’s strong legacy of public transportation has continued. The Hudson and Manhattan Railroad (H&M) was taken over by the Port Authority of New York and New Jersey, modernized and renamed Port Authority Trans-Hudson, or PATH, in the early 1960s. The Hudson Bergen Light Rail Transit (HBLRT) was developed and opened in 2000, becoming the state’s first light rail line. Secaucus Junction and Hoboken Terminal continue to be two of the state’s most important passenger rail hubs. Even as Hudson County’s legacy infrastructure has aged, 21st century innovations to transportation have improved mobility options for residents and supported access to jobs and services. Bike share systems, complete streets, and strategies to make communities more walkable have been implemented. Other services like Uber and Lyft have emerged to help fill in a last-mile gap to transit. Further opportunities exist to strengthen these systems and provide avenues for new ones, such as Bus Rapid Transit, that will continue to make Hudson County the model for transportation mobility and innovation solutions in the region and across the state. This section discusses transportation trends that have emerged

in Hudson County since the 2008 Re-examination Report and emerging trends that will influence the county’s future.

Vehicle Technology

Most new cars include some kind of advanced technology such as blind spot monitoring systems, parking assistance, adaptive cruise control, or assisted braking, but those improvements are generally internal to the vehicle and have little impact on travel patterns. The advancement of vehicle technology, in the form of Connected Vehicles and Autonomous Vehicles, is a major trend that will have significant implications to travel in the county and throughout the state and nation by improving safety, and reducing congestion and greenhouse gases.



Connected vehicle technology involves the “communication” of information with other sources. There are two main types: the first, vehicle-to-vehicle (V2V), involves the ability of connected vehicles to monitor other connected vehicle speeds, intentions (turn signals), or breaking, and provide this information to the driver, who can react accordingly (or the vehicle takes appropriate action itself). The second type, known as vehicle-to-infrastructure (V2I), requires the integration of technology into roadside devices, such as traffic

devices, such as traffic signals. For instance, a traffic signal can relay information to a connected vehicle on its signal timing, and inform the driver on the optimal speed to drive to get a green signal, reducing vehicle delay, travel times, and improving air quality from reduced idling. V2I requires investment by the county, municipalities or public-private partnerships to implement.

Autonomous vehicles, often referred to as self-driving cars, use global positioning systems (GPS) to track and manage the vehicle's direction of travel, speed, and position on a roadway. Autonomous vehicles are being tested in a number of states, and some industry analysts anticipate that these vehicles will be available to the consumer within the next five years. Nissan has even suggested that by 2018, some of their cars will include autonomous functions, such as self-navigation. The Institute of Electrical and Electronics Engineers have even predicted that autonomous vehicles will account for 75% of the cars on the road by 2040¹⁰.

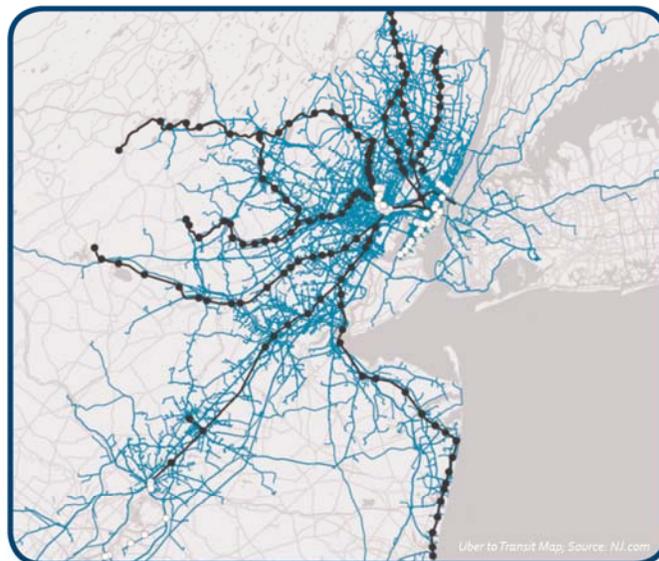
Autonomous vehicles can provide significant benefits to users and society, potentially reducing crashes, fuel consumption, and greenhouse gas emissions, while improving mobility and making more efficient use of the roadway. In particular, an autonomous vehicle would allow someone who normally may not have the ability to drive himself or herself (such as a disabled individual, senior citizen, or a child) to their desired destination. Higher levels of automation, in which the vehicle moves itself without any kind of driver, may also reduce the number of vehicles that a family needs to own. This, in turn, may have implications on minimum parking requirements necessary for new developments.

The Sharing Economy

The sharing economy refers to the commercial enterprise of peer-based sharing of goods or services. In recent years, companies have formed that allow people to rent their homes out for periods of time, or to use their vehicles to provide transportation services. While carpooling and ZipCar have been around as alternatives to driving alone to work or vehicle ownership, the rise of

these individually owned for-hire transportation services such as Uber and Lyft is a relatively new phenomenon. These services can help provide mobility for people who don't own a vehicle or unable to drive, but companies who organize these services are also often accused of skirting regulations that govern other transportation services, such as taxi cabs.

These services are being utilized far more than just to drive people door-to-door, but are also filling last-mile gaps in access to transit. In an article in NJ.com¹¹, nearly one-quarter (300,000) of the 1.3 million Uber rides taken in New Jersey in September 2015 began or ended within 1/8-mile of a transit station. Twenty (20) percent were to or from PATH stations. These services have provided mobility to transit stations for people who may live too far to walk or bike, lack available or any parking, or lack safe access via other modes.



Bike share systems are being initiated across the country by government and educational institutions, often through public partnerships with private sector operators. Since 2011, Hudson County Division of Planning has been researching bike share as a transit system and its applicability to Hudson County. Then, in 2013, the Division received a grant through the Together North Jersey initiative to hire consultants to complete a more technical analysis of bike share in Hudson County. The report, "Exploration of a Public Bike Share System in Hudson County", was released in 2015.



In the fall of 2015, two bike share systems were launched in Hudson County. Jersey City launched “CitiBike JC”, which includes 350 bikes and 35 stations and is fully supported by sponsorship and other revenues, making it the only bike share system in a mid-size city to operate without public funding. This system uses a kiosk style program where a user acquires and returns the bicycle to a specific location in the bike share network. Memberships are compatible with the CitiBike system in New York City. Jersey City is planning to add 15 new stations and 150 bikes by end of 2016. Hoboken’s system, Hudson Bike Share, includes 120 active GPS-inclusive “smart bikes” and 17 stations, each of which are designed to be a three- to five-minute walk from every Hoboken resident, with a plan to eventually expand to 29 stations and 250 bikes. The technology of this system allows users to lock the bike up anywhere that is most convenient for them, as long as it is within a certain radius of designated point, usually a bike share kiosk. In Hudson County, partnerships between governments, businesses, and schools could be formed to advance a bike share program to other communities.

The Transportation Funding Gap

Transportation projects in New Jersey are funded through the Transportation Trust Fund. In addition to funding state projects directly, the money can be used to either match Federal transportation money for projects or be sent to local governments in the form of state aid to fund their transportation needs. This money is raised through a series of taxes and user fees, most notably the gasoline tax. The tax, which stands at 14.5 cents per gallon and

is the second lowest in the nation (after Alaska), has not been increased since 1988.

As the cost of labor and materials have increased, funding contributions for projects have not kept pace. The impact of not raising the gas tax for almost 30 years is that the money raised through these surcharges do not currently meet the need to maintain the state’s roads and highways to a state of good repair, operate and improve public transportation, and provide people with safe and reliable transportation options. Additionally, as vehicles have become more fuel efficient, or people have been began buying electric vehicles, the amount raised through the gas tax has declined even as vehicle miles traveled (VMT) have reached its highest levels since 2005²².

The trust fund currently raises about \$535 million a year, but the New Jersey Transportation Trust Fund Authority has appropriated over \$1.2 billion for projects and past debt obligations²³. There have been many proposals to raise the gasoline tax to fill this funding gap; however, such proposals continue to be unpopular to state residents²⁴. Whether via an increase in the gas tax, there is a need to find a long-term and stable funding solution to maintain the current transportation system in a state of good repair and be able to further expand it to meet the needs of the future.

Bus Rapid Transit

Bus Rapid Transit (BRT) is a mass-transit system that utilizes buses whose design, operations, and infrastructure more closely resembles that of a rail system. The main intent of a BRT system is to reduce the delays typically associated with bus routes (traffic congestion, fare collection, etc.), but with less costly infrastructure such as overhead catenary wires for electrification. Characteristics of BRT include:

- Dedicated lanes or separated rights-of-way
- Off-board fare collections at stations
- Raised platforms at stations and multiple entry points to improve speed in boarding and alighting from buses
- Transit signal priority at intersections (the

traffic signals along a BRT detects the presence of the bus and changes phases to prioritize the bus)

- More frequent service (than typical bus routes), but fewer stops

BRT has been implemented in multiple cities in the United States (such as in Boston, Chicago, and Pittsburgh), and NJ TRANSIT's GoBus routes have some features similar to BRT. In Hudson County, potential for BRT between Bayonne and Jersey City was studied in 2013. The study ranked Kennedy Boulevard as having the greatest potential for BRT to connect southern Bayonne to Journal Square through Jersey City's Greenville section. Additionally, BRT has been studied by some other New Jersey (Bergen, Monmouth, and Union) counties for their feasibility.



One key challenge for Hudson County, however, may be the availability of dedicated right-of-ways or existing transportation corridors that could be adapted to accommodate some form of BRT, particularly for east-west connections where good public transportation system connectivity is lacking. A 2013 study of abandoned or at-risk rail right-of-way by the NJTPA identified several corridors that could be studied for dedicated BRTs in Hudson County. However, some of those corridors are no longer viable for BRT. The 2nd Street Pedestrian Esplanade (Hudson Bergen Light Rail) is now utilized as a bike and pedestrian connector between Jersey City and Hoboken and the HBLRT Route 440 Extension is planned to push the HBLRT west of its terminus in Jersey City. The 10th Street Embankment in Jersey City has been developed with an apartment building and the 6th

Street Viaduct Pedestrian and Bicycle Pathway in Jersey City faces physical limitations for BRT. Other right-of-ways with no plans identified for them that remain viable for BRT include:

- Boonton Line (between Montclair and Jersey City)
- Harrison-Kingsland Branch (Lyndhurst to Harrison)

These possibilities for BRT or adapting current bus routes in the county to incorporate characteristics more similar to what GoBus achieves could be further explored. Hudson County's high transit ridership and low automobile ownership offer great opportunities to develop a well-utilized system. These systems could provide the desired benefits of accessibility and mobility to the residents and workers in the areas of the county that need them.

Complete Streets/Walkable Communities

State and local jurisdictions are recognizing the need to accommodate people using all modes of transportation on its roadways. This acknowledgment is reflected in "Complete Streets" policies and implementation. This initiative is particularly important for Hudson County, where more than three out of every four households have no or only one vehicle available, and large percentages of population rely on public transportation, walking, or biking to reach their destination.

The pedestrian-friendly character of transit-oriented development is part of a broader trend toward walkable communities. The term "walkable community" refers to a community that provides access for people of all ages and abilities without relying on automobiles. Residential areas that are accessible to town centers, parks, and other public amenities have become more popular in recent years. According to a 2013 Community Preference Survey⁴⁵ conducted by the National Association of Realtors, 60% of respondents prefer to live in a neighborhood with a mix of residential, commercial, and recreational uses within walking distance.



Further, future demand for safe and attractive facilities for walking and biking is expected to increase as Millennials are more interested in living and working in walkable communities, and an aging population begins to drive less, but still want to remain in their communities. These trends require communities to plan for these other modes of transportation, and make the streets adapt to the needs of all.

Hudson County adopted a county-wide Complete Streets policy in 2012 and the 2016 Land Development Regulations provide guidelines for street designs through Street Typologies, using Complete Streets and Walkable Communities as guiding principles. In addition, three of the county's twelve municipalities have adopted municipal complete streets policies (Hoboken, Jersey City, and Secaucus). More communities should be encouraged to adopt policies of their own and work with the county to implement the new Street Typologies.

Municipal Resiliency Matrix

Performance Measure Matrix on County Resilience

The Performance Measure Matrix on County Resilience conveys how the county and its municipalities are progressing with regards to stormwater resiliency and hazard mitigation in eight (8) key focus areas including local zoning ordinances and other laws, plans, flood resistant design standards, transportation infrastructure, economic conditions, housing, community facilities, public utilities and infrastructure, and participation in resiliency themed programs. Each focus area lists possible implementation tools that are classified as the following:

- “Model Example” – the tool is a model example for other municipalities to follow
- “Good” – Satisfactorily addresses/ implements the tool
- “Room for Improvement” – Adequately addresses or implements the tool
- “Needs Improvement” – Could better address/implement the tool

The result is a “snapshot” of existing regulations, goals, objectives, and action items (proposed or implemented) that take into account resilience, within the county. The county hopes that this matrix will help identify county and municipal Strengths, Weaknesses, Opportunities and Threats (SWOT) and encourage municipalities to better prepare for future storm events. Details on each of the classifications can be found in the Appendix.

Legend

	Model Example
	Good
	Room for Improvement
	Needs Improvement
	No Data / Does Not Address / Not Applicable

Community Classifications Participation

- All municipalities in Hudson County are part of the National Flood Insurance Program (NFIP).
- All of the County’s municipalities are exploring the possibility of participating in the Community Rating System (CRS) with the exception of Union City (outside of the floodplain). North Bergen and Secaucus participate through the NJSEA. However, only those areas that are under NJSEA’s jurisdiction are included. Hoboken has been the most active in pursuing participation in the Community Rating System.
- Bayonne, East Newark, Harrison, Weehawken and West New York are all registered as Sustainable Jersey communities while Jersey City, Hoboken, Kearny and North Bergen are Bronze Certified participants and Secaucus is the only Silver Certified participant. Hoboken and Secaucus are the only municipalities that have received points for Climate Mitigation and Adaptation efforts.
- Harrison, Kearny and Weehawken are part of the Building Code Effectiveness Grading Schedule (BCEGS) program, each with a score of 3 (scale of 1-5). All other municipalities are either not participating in the program or are to be determined.
- No municipalities in Hudson County are part of the Firewise Communities of the National Fire Protection Association or the National Weather Service StormReady Community.

	Bayonne	East Newark	Guttenberg	Harrison	Hoboken	Jersey City*	Kearny*	North Bergen*	Secaucus*	Union City	Weehawken	West New York
Local Zoning Ordinance & Other Plans	Flood Damage Prevention Ordinance/ NFIP	Yellow	Light Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Light Green
	Stormwater Plan	Yellow	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Emergency (Response) Plan	Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Post-Disaster Recovery Plan	Yellow	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Flood Resistant Design Standards (ASCE-24)	Floodplain or Threatened Areas Avoidance	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green				
	Elevation	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Freeboard	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green
	Floodproofing	Yellow	Yellow	Light Green	Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Siting/ Site Design	Yellow	Yellow	Light Green	Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Flood Levees/Floodgates											
	Green Building Practices				Light Green	Green	Green					
Transit Use/ Transportation Infrastructure	Streetscape Design & Traffic Calming			Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Roadways & Bridges					Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Bicycle and Pedestrian			Light Green	Light Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Public Transit				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Economic Conditions	Capital Improvement Plan	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green				
	Economic Development Plan	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green				
	Recovery Costs	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green				
Housing	General				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Environmental Justice				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Mitigate Long-Term Post-Disaster Homelessness				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Recovery Housing				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Community Facilites	Emergency Services					Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Open Space				Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Public Utilities & Infrastructure	Energy				Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Wastewater/Sanitary Sewer	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green				
	Stormwater			Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Green Infrastructure	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Critical Facilities										Yellow	Yellow
	Public Water		Yellow	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green

*Some NJSEA jurisdiction