# The New North Jersey: Why we need regional planning

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**Abstract**

Research will focus on the issue of regional planning for greenhouse gas reductions and climate change resiliency in the northern New Jersey region. This paper argues that sound regional planning can provide the guidance to ensure land use and transportation law significantly reduce carbon emissions and help societies prepare for stronger or more frequent extreme weather events through fair and equitable solutions. This paper will advance the case that as the federal government retreats from aiding planning programs in places like New Jersey, the state will need to develop new regional planning programs focusing on New Jersey issues. It will inspect the potential losses to resilient planning should the federal government cut its domestic spending, as is currently proposed, and search for potential policy solutions by lsuei1ation l(s)2017)( a)4(n)-

There are many possible solutions to climate change and resilience, but this paper will focus on how urban and regional planning can provide sound and equitable solutions. Plans can help guide an area's growth and development to minimize the amount of carbon emissions it will produce, and adapt its built form for extreme weather.

The problem for North Jersey is that it currently has little to no regional planning

which include “society, economy, governance, transport, and land; with each having a different level of influence at different global, national and local scales” (56). In the United States, most cities have grown into a sprawling and scarcely populated urban form. The built environment--buildings, streets, and highways--tends to dominate the typically sprawling landscape. This affects carbon emissions in two important ways: it promotes single-occupancy automobile trips, as well as larger, detached, and less energy-efficient homes.

Davoudi and Sturzaker (2017) outline the former with a comparison of two cities, Atlanta, Georgia; and Barcelona, Spain. Both cities have populations of roughly 2.7 million, but Atlanta emits 100 million tons of carbon annually while Barcelona only emits 7 million (Davoudi and Sturzaker 2017, 56). Most research has found Atlanta’s much more sprawl

metropolis's carbon emissions. Indeed, on average, Lee and Lee calculated private transportation to emit 21,155 pounds of carbon, or 44.6 percent of total emissions from the housing sector. Overall, residential buildings and personal travel account for a combined 42 percent of U.S. carbon emissions. Lee and Lee's analysis revealed that population density exerts a clear effect on carbon emissions from vehicle miles traveled and the amount of electricity their houses need. When they measured for population-weighted density, or the density of the Census tracts where most people in the metropolitan area actually live, the predictor became even stronger.

Quantifying the reasons behind urban sprawl can be a complicated process. Davoudi and Sturzaker (2017) assess sprawl through their particular matrix, which they claim accounts for certain intangible influences on urban sprawl, such as what kind of lifestyle a country's society aspires to, as with English people and living in the countryside. The authors describe the United States as having "weak planning regulation and a social preference for living in the countryside" (58) which results in greater sprawl. One important note in their particular analysis of different

urbanization with the Wetlands Act of 1970 and the Coastal Area Facilities Review Act of 1973, and has seen meaningful success in that regard. Loss of wetlands decreased from roughly 1,214

created short-term plans that face less risk of becoming bogged down in red tape or being outpaced by climate change effects. The Jersey shore has not produced the same sophisticated response to the threats raised by sea level rise and stronger storms. As Rosenzweig and Solecki explain, federal funding for storm reparations and future climate preparedness arbitrarily distinguished New York City from New York State and New Jersey, when the more sensible plan would be for all three areas to receive combined funding for unified planning (403).

**Regional Planning in New Jersey**

Urban planners, designers, and public officials face a major task ahead of them in determining how to prepare the Jersey Shore for future storms. More importantly, they face a challenge that is regional, not local, in nature. The flooding from Sandy damaged virtually the entire Shore and communities fronting the Hudson River as well. Both Hudson County cities like Hoboken and Jersey City and Shore area destinations like Long Beach Island and Seaside Heights were severely flooded, with the latter being stripped of their boardwalks (Blake et al. 2013, 17). Mitigating the carbon emissions that have fueled that storm, and preparing for the next impact, will require multijurisdictional solutions. And that is not only because climate change is a global problem. Individual municipalities lack the resources necessary to address its complexities on their own. They face both economic and informational obstacles in acting alone against climate change.

New Jersey's state constitution entrusts its municipalities to provide multiple public services at their own expense. This reflects a long history of public services in New Jersey being predominantly funded by local taxes, a system that originated in the fifteenth century. The state legislature deliberated in adopting state income and sales taxes relative to other states. New Jersey finally passed a permanent sales tax in 1966, during the high tide of economic growth and

ostensible role here, but under the Christie Administration, its guidance on environmental issues diminished.

The pitfalls present in resiliency planning at the municipal level point to the necessity of coordinated regional planning. But regional planning in New Jersey is encumbered by its weak county governments. While New Jersey county planning departments possess the resources to prepare sustainability-oriented master plans, they lack the authority to enforce any recommendations they make. Legally, they can only issue such requirements for projects being built on county roads or near county drainage ditches. (Eric Timsak, personal communication, January 5th, 2018). Despite those limitations, county planning departments have successfully coordinated sustainability programs through innovative approaches. The Somerset County planning department exemplified this flexibility when it prepared its County Investment Framework in 2014. The CIF mapped out the entire county and designated certain areas to receive investment for new developments while designating others to be left as rural or 12 1(tsl6(d)2o )]TJ -0.0

(GIS) data in order to update the map if changes in the economy or population warrant it. owever, it

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the county planning department has adroitly cooperated with municipalities towards common goals. The problem lies in replicating this success in other county planning departments, or in encouraging sub-county or inter-county planning.

**Federal Support**

While New Jersey has no permanent regional planning framework in place, the federal government has provided support through both temporary and permanent programs. For decades, the Department of Transportation has funneled financial assistance for local infrastructure needs through metropolitan planning organizations (MPOs). They were created under the Federal Highway Act of 1962, which required any urbanized area with a population over 50,000 to have one. For this region, the North Jersey Transportation Planning Authority (NJTPA) operates as the MPO for the thirteen New Jersey counties occupying the New York metropolitan area. Its board of trustees is composed of the executives of each county, the mayors of Newark and Jersey City, and a few other representatives. The NJTPA does not implement any policies on its own. Instead, it counsels the municipal and county governments with planning research and can fund capital improvement projects with $2 billion sourced from federal grants and matching funds from state agencies and the Port Authority of New York and New Jersey (NJTPA n.d., 12). Through the long-range transportation plan it must develop every five years, the NJTPA can use its funding to motivate local projects to reflect its preferences for those that, for example, encourage the use of mass transit or walking.

The NJTPA funds important road maintenance activities, but several more innovative resilience projects have emerged thanks to competitive federal grants. Some of the programs discussed involve a coalition of municipalities while others include a multi-county region. The first initiatives is known as New Jersey Fostering Regional Adaptation through Municipal

Economic Scenarios (FRAMES). NJ FRAMES is a partnership between the New Jersey Department of Environmental Protection and a coalition of fifteen Monmouth County municipalities (known as the Two Rivers Council of Mayors) that are conducting long-term scenario studies into the consequences of flood and sea-level rise. The towns participating in the study include Republican as well as Democratic areas, and they surround the Navesink and

cities' communities from five-year floods, the project is remedial in nature. It was funded by an act which was only passed by Congress after Sandy had already slammed New Jersey. Vulnerable communities in the state require proactive solutions that anticipate future storms. They also require similarly dramatic investments in plans to reduce our carbon emissions and help address the cause of this problem.

While Sandy and other major storms have spurred government responses, there have been other grant initiatives intended to support smart growth, not just disaster preparedness. The most significant example is *Together North Jersey* (2015), a plan targeting the North Jersey region that was developed by a broad coalition of nonprofit organizations, private companies,

from employee training and improving public education to investing in renewable energy and ensuring the region becomes resilient to future weather. Interestingly, the grant program which funded *Together North Jersey* was the result of another nontraditional coalition. Defunct since 2016, the Partnership for Sustainable Communities was formed between HUD, the Department of Transportation, and the Environmental Protection Agency in 2009 in order to "help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment", and it was the main impetus behind the HUD's grants (Partnership for Sustainable Communities).

All three of these initiatives meaningfully address resiliency for New Jersey's most vulnerable communities using planning programs. They are all, however, products of temporary or expiring federal aid. While FRAMES promises much-needed resilience research, the Regional Coastal Resilience Grant series which funded it is among the multiple programs that will be cut in the current budget proposed for fiscal year 2019 (U.S. NOAA 2018). Rebuild by Design—Hudson was funded by a sum from an emergency appropriations bill, meaning it was a one-time opportunity for resiliency planners. The Partnership for Sustainable Communities had disbanded in 2016, but the Trump Administration has continued to slash funding to HUD. The fiscal year 2018 budget eliminated valuable grants such as the National Disaster Resilience Competition grants, which provided $15 million of its $925 million total treasure to New Jersey, to develop a comprehensive analysis of localized vulnerabilities to floods and storms, and plan countermeasures ("National Disaster Resilience Competition" 2016). The Department of Environmental Protection is currently preparing that money for use in competitive grants to assist communities in the resilience planning process; it will issue a request for proposals in spring of this year (Angarone 2018).

As part of a shrinking of HUD's budget, the administration also terminated the Community Development Block Grants for Disaster Recovery, which had previously aided reconstruction and redevelopment efforts for areas hit by hurricanes. New Jersey had received $3.8 billion from HUD over three rounds of CDBG-DR funding in order to rebuild after Sandy, and render the shoreline more resilient. $174 million went towards a home buyout program to help permanently relocate residents away from floodplains throughout eight counties (New Jersey Department of Community Affairs 2017). The FY 2018 budget completely defunded Sandy recover expenditures as well, which had totaled over $5 billion the year before. The only surviving program which was mentioned here would be the long-standing funding for the NJTPA. In fact, the fiscal year 2018 budget slightly increased spending for MPO funding and the Surface Transportation Block Grant Program, which distributes transportation improvement funding to states (U.S. Office of Management and Budget 2017, 871). Overall, however, the federal government has begun constricting its support for planning and development in states like New Jersey, and funding for future projects may need to come from alternative sources.

## The *Fourth Regional Plan*

As the federal government devolves more powers and planning responsibilities to the states, New Jersey will need to evaluate its ability to create long-term development strategies. Given the magnitude of climate change resilience planning, it might be better for the state to coordinate its response to climate change and resilience with other states. In doing so, it could follow the approach of the Regional Plan Association, one of the most well-known nonprofit planning advocacy groups in the New York area. Founded in 1929, the RPA develops policy recommendations for the entire Tristate Area to adopt. Its most recent major publication is its

potentially protect important communities such as Manhattan from storm surges, even its report acknowledges that the barrier would disrupt ecosystems and possibly fail to prevent surges if sea levels rise too much (Regional Plan Association 2017, 182). The more interesting proposals the *Fourth Regional Plan* makes focus on cooperation between New York, New Jersey and Connecticut.

The barrier would depend on federal research and funding, but the *Fourth Regional Plan* also proposes establishing a Regional Coastal Commission that oversees risk assessment and preparations for counties threatened by sea level rise and coastal flooding in the three states. In the RPA's vision, the Regional Coastal Commission would balance the perspectives of urban centers like Hoboken and New York City, "suburban communities along the back bays and barrier beaches of Long Island and New Jersey, and the undeveloped land off Long Island's east end" (66). It would also integrate various sectors such as transportation management, health concerns, and environmental conservation to more completely steward the Tristate Area's vulnerable coasts. The proposal would at least avoid the need for federal support, but funding its scientific research and planning activity would require consistent funding from the three states. The RPA prepared an additional recommendation for this purpose: introducing climate adaptation trust funds in each state that would accrue capital from surcharges on property-casualty insurance premiums for lines that could include "homeowners, commercial, farm owners, fire, inland and ocean marine, boiler and machinery, earthquake, and private-crop products" that would last ten years (70).

According to the RPA's estimates, the surcharges would amass roughly $27 billion to be directed towards better planning and infrastructure needs. The surcharge concept would face political hurdles, however: from the plan's description, it would target property owners in

threatened areas, which include New Jersey's most populous counties. If the state were to join such a commission either by referendum or law, many property and vehicle owners in flood-

state agencies spend money on Bay restoration efforts, but because those expenditures do not all pass through one organization, “it can be difficult to quantify the extent of financial resources that support the entire Chesapeake Bay restoration effort”. Restoration efforts are funded at the federal level by a range of agencies, including the EPA and the Departments of Agriculture, Commerce, Defense, Homeland Security, and the Interior, for a total of $569.2 million in fiscal year 2017 (Chesapeake Progress). The seven states in the Chesapeake Bay Watershed, which include New York, District of Columbia, New York, and West Virginia, invested $1.41 billion in watershed restoration programs, which may or may not include the Chesapeake Bay’s. The Chesapeake Bay Program itself receives direct funding from the EPA (Chesapeake Bay Program), meaning a Regional Coastal Commission would likely depend on federal aid as well, without becoming a major investment for the three states.

While establishing an interstate planning commission presents fiscal difficulties, it does have a historical precedent in the Tristate Area, due to federal highway aid requirements. Under the Federal Highway Act of 1962, urbanized areas with populations of 50,000 or higher needed to prepare long-range plans guiding all transportation projects that would receive federal funding. To that end, each urbanized area established a metropolitan planning organization (MPO) to oversee the creation and evolution of a long-range transportation plan, and just a single MPO was designated for the New York metropolitan a 0 Td [(r)30(r)-99Beu6wc

agency review. With its geographic range and population, the Commission administered funding for “multi-billion dollar projects” (Barron). An institution like the Commission would expedite many of the *Fourth Plan*’s recommendations, because it could incorporate them into its long-term plan.

Since 1982, however, the responsibilities of the Tri-State Planning Commission have been divided by state into three separate MPOs, still handsomely funded due to their large populations. The NJTPA alone oversees the allocation of more than $2 billion in federal transportation aid each year for its thirteen-county jurisdiction (North Jersey Transportation Planning Authority). A combined MPO for New York and New Jersey or the Tristate Area would have ample resources to fund more ambitious projects. In 2016, his office’s planning department created a new position for a director of regional development. The regional director’s role in the city’s planning procedures is unclear, but other documents at least suggest a commitment to working with authorities in the greater New York region on issues like infrastructure. The city’s current master plan, *One New York* (stylized as *OneNYC*), specifically refers to hardening regional transportation and freight shipping against storms (The City of New York 2015, 240). Beyond that, references to regional planning are admittedly scant.

None of this is to say that the region’s MPOs do not actively communicate and coordinate with one another on planning issues. The NJTPA has had an extensive relationship with the NYMTC; after Superstorm Sandy, the two agencies collaborated with two Connecticut

the New York City Department of City Planning, and the RPA's calls for a Regional Coastal Commission all invoke the potential benefits of a stronger, more unified regional planning framework, especially at a time when the federal government's role in infrastructure development has receded. Any attempt at regional governance, however, would have to manage to avoid the mistakes that led to the fracturing of the original Tri-State Commission.

The executive staffing of MPOs is a double-edged sword because they are mainly comprised of elected officials. The board of trustees of the NJTPA includes county freeholders, the mayors of Newark and Jersey City, state government officials, a delegate from the governor's office, and a citizen representative. This locally elected leadership structure makes it harder for federal administrations to influence a MPOs planning priorities, but it also means that the board of trustees and its executive committee all have additional offices which normally take precedent. The Tri--

loathed the oversight of a regional authority in its planning schemes. The Tri-State Commission also had to contend with stalwart Republican representatives of suburban Nassau and Suffolk counties who opposed the Commission's mandate to build more affordable housing. In a sentiment shared by suburban counties in New Jersey, then Suffolk County executive Peter F. Cohalan remarked that the Commission prioritized improving urban areas while the suburbs "got grossly shortchanged" (Barron). Large portions of the Tristate Area remain suburban and conservative today. If a regional organization were to once again assume planning authority over resilience, mass transit, and other issues, it would need to somehow account for the prevailing differences in political character and development interests between suburban counties like Morris and urban ones like Hudson. Perhaps it could attempt Somerset County's approach of meeting one-on-one with the municipalities and county governments in its jurisdiction.

Creating a new regional commission might help fund critical resilience and transportation plans for New Jersey and the greater New York region, but it would be a politically daunting task. It might therefore be easier to follow a different recommendation from the *Fourth R2k0(ul)-To R2k0/-To R*

when the states' governors agreed to let New Jersey's appoint the chairman of the board of trustees and New York's to appoint the executive director of the Port Authority. This leadership restructuring created two separate chief authorities "that often provide inconsistent direction to agency staff" (Knatz 2016, 75). The bickering that went on between states was indicative of a sense of competition for resources, not cooperation towards a greater goal.

The agency's functioning was further strained during the infamous "Bridge-gate" incident in 2013, when key officials in the Christie Administration ordered some lanes on the George Washington Bridge to be closed to punish the anti-Christie mayor of Fort Lee (Schuppe and Thompson 2017). The Port Authority commissioned a Special Panel to re

based on mission or service. Doing so would help open the door to private investment, and also encourage more distinct procedures and goals for staff overseeing daily services and staff overseeing infrastructure projects. Port Authority leadership could then negotiate with each division to set goals for how much money it should receive or contribute to subsidies and bond

The authority hesitantly agreed to finance construction of the PATH system, but only as part of a bargain to never fund another public transportation project. Governor Cahill was not just the individual who persuaded the authority to change its name; he was also the first New Jersey governor to "regularly threaten use of his veto power" (270). He was also first to ignore executive director Tobin's demand to not appoint political allies to commissioner positions. Similar resentments over favoritism brought down the Tri-State Regional Planning Commission as well. Suburban conservative Connecticut was joined by suburban conservative New Jersey in protesting the Commission's requirements for affordable housing and perceived preference for funding projects in New York and other cities.

Not all regional initiatives are limited to the Tristate Area, or the RPA's proposals. The Regional Greenhouse Gas Initiative, officially launched in 2009, is a joint effort by nine states in the northeastern U.S. to create a cap-and-trade program for carbon emissions. By limiting states

emits about half the amount of carbon as coal [583]) as major contributors to the drop. Through

By incorporating a component of Together North Jersey into its long-range plan, the NJTPA has ensured that a reliable stream of federal funding will support construction and education projects. As an example of this synergy, Together North Jersey calls for the broader implementation of complete streets policies in more North Jersey towns and counties. Complete streets policies set requirements for certain arterial roads to be designed to guarantee safe and convenient use for pedestrians and cyclists as well as cars. To promote complete streets, the plan recommends, among other things, educating stakeholders and training planners and officials on their benefits, and giving priority funding consideration to complete streets policies.

In turn, the NJTPA reflects this commitment to complete streets with its endorsement of projects to build bike lanes, pedestrian islands, and other road features that encourage diverse methods of transportation. It may be too early to determine how much this has impacted infrastructure upgrades in the region, but the NJTPA's planned transportation improvement program (TIP) for the 2017-

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top four priorities, and it drafted many initiatives that fall outside the purview of the NJTPA. Together North Jersey lays out numerous action frameworks for resilience, so just one will be examined here as a practice. The first and most fundamental step to resilience planning would be strategy 10.1: “identify[ing] the region’s vulnerabilities to extreme weather and climate change” (Together North Jersey 2015, 74). While Hurricanes Sandy and Irene revealed the susceptibilities of many communities to storms and flooding, the North Jersey region still needs to conduct a sweeping assessment of just how its different communities may be at risk from climate change

Plans"). This is a considerable task for municipalities to handle. Many town governments in New Jersey do not have planning departments, only boards to approve projects (Jon Carnegie, personal communication, January 12, 2018). They do not proactively plan growth and development. They would not have the staff or, likely, the capital needed to determine their vulnerability to extreme weather.

While the state's agencies do offer financial assistance for certain resilience activities, identifying risk does not seem to be one of them (New Jersey Governor's Office of Recovery and Rebuilding). The number of suggested responsible parties may also complicate achievement of these actions. Action 10.1.8 calls for highlighting the importance of carrying out the aforementioned vulnerability assessments and accounting for them in long-term community master plans. It proposes that responsibility lay with the New Jersey DEP, Office of Emergency Management, Sustainable Jersey, the New Jersey chapter of the American Planning Association, and/or the New Jersey Association of Counties. Such a long list indicates how action steps like this one may defy simple delegation. Any one of these organizations could communicate the benefits of resilience mapping and planning to local governments, and perhaps they all should, but coordinating the public and private sector in this way seems infeasible.

While some of the plan's initiatives may need further clarification, it has prepared instructions for a variety of actors to implement as well as a variety of ways to support implementation. Using the Together North Jersey website's funding source database, a municipal or county planner can direct themselves to funding opportunities by focus area. Searching for resources for resilience initiatives reveals a small handful of opportunities provided by the DEP and the Department of Community Affairs. It is a straightforward method for connecting local officials with state aid that they may not have been familiar with, like the Environmental

Infrastructure Financing Program. Furthermore, the plan also lays out goals for various actors to work towards, even if they are not themselves members of the government. In action plan 10.1.10, Together North Jersey proposes that the DEP identify Brownfield sites that may cause cross-contamination if flooded. While the DEP operates a Brownfield Site Remediation Program, it does not currently have

With a plan as broad as Together North Jersey, this is perhaps to be expected. And the plan is still the most robust and comprehensive resource for long-term planning that North Jersey currently has. Its recommendations should not be ignored. And one other important advantage that Together North Jersey possesses is the public-private partnerships it has strengthened in the region. The document affirms the central role of Rutgers University in regional planning efforts. The Bloustein School of Planning and Public Policy not only secured the grant which funded the plan, its faculty also collaborated with the NJTPA, the RPA, stakeholders, local government officials, and other private firms in drafting the document. The Bloustein School is also the only higher education institution in New Jersey to have a planning program accredited by the American Institute of Certified Planners, the only independent nationwide accreditation board for planning degrees. In other words, so long as the Bloustein School teaches its students about Together North Jersey and the significance of its recommendations, many of New Jersey's planners in the public and private fields will know about the plan and perhaps be more inclined to attempt its recommendations. Boosters of Together North Jersey and regional planning may also find more likely allies in the new Murphy Administration: two distinguished faculty members of the Bloustein School were named chair and co-chair of his transition team's transportation and infrastructure committee (Brodesser-Akner 2017).

Together North Jersey also demonstrates the importance of private partnerships to planning and resilience. Under hips hir h6ls me-2(ps N)-2pord [(t-2.3 Td(me-2(ps N)-2)-2(-2(ps( hi)-o(r)3( h( h

http://www.nj.com/politics/index.ssf/2017/11/phil_murphy_just_named_xx_people_to_his_transition.html

Brownfield and Contaminated Site Remediation Act of 1998, N.J.S.A. 58:10B-1 et seq (2012). Retrieved from

Lee, S., & Lee, B. (2014). The influence of urban form on GHG emissions in the U.S. household sector. Energy Policy, 68(Supplement C), 534–549. https://doi.org/10.1016/j.enpol.2014.01.024

Murray, B.C., and Maniloff, P.T. (2015). Why have greenhouse emissions in RGGI states declined? An econometric attribution to economic, energy market, and policy factors. *Energy Economics, vol. 51*, pp. 581-589, https://doi.org/10.1016/j.eneco.2015.07.013

NOAA announces $9 million in grants to improve coastal community resilience. (2015, May 19). *Targeted News Service*. Retrieved from http://library.ramapo.edu:2048/login?url=https://search.proquest.com/docview/1681907311?accountid=13420

New Jersey Department of Community Affairs. (2015). *SUPERSTORM SANDY COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY: ACTION PLAN AMENDMENT 21*. Retrieved from http://www.renewjerseystronger.org/plans-reports/

New Jersey Department of Environmental Protection. Bureau of Flood Resilience. (2015). *Rebuild by Design--Hudson River Scoping Document*. Retrieved from http://www.nj.gov/dep/floodresilience/rbd-hudsonriver-archive.htm

New Jersey Department of State. Office for Planning Advocacy. (n.d.). *Chronology.* Retrieved from http://www.nj.gov/state/planning/spc-research-chronology.html

New Jersey Office of the Governor. (2018). *Executive Order No. 7*. Retrieved from http://www.nj.gov/infobank/eo/056murphy/pdf/EO-7.pdf

New York Metropolitan Transportation Council. (2013). *Plan 2040: A shared vision for sustainable growth.* Retrieved from https://www.nymtc.org/Required-Planning-Products/Regional-Transportation-Plan-RTP/RTP-2040

North Jersey Transportation Planning Authority. (2017). *2018-2021 transportation improvement program*. Retrieved from http://www.njtpa.org/project-programs/transportation-improvement-program

North Jersey Transportation Planning Authority. (2017). *Plan 2045: Connecting North Jersey*. Retrieved from https://apps.njtpa.org/plan2045/draftplan.html

North Jersey Transportation Planning Authority. (n.d.). *North Jersey Transportation Planning Authority.* Retrieved from http://www.njtpa.org/home

North Jersey Transportation Planning Authority. (n.d.). *Citizen's guide to transportation planning in n(or)3(t)-2(h d ( )Tj EMC /P <<320( T))2(or) Tsey*Ret. (n.dr(r)-1(i)-6(ev)-4(ed)-4( f1)-1 2040

Schuppe, J., and Thompson, B. (2017, March 30th). Bridgegate scandal: Ex Christie allies Bill Baroni and Bridget Kelly get prison. *NBC News*. Retrieved from https://www.nbcnews.com/storyline/christie-bridge-scandal/bridgegate-scandal-ex-christie-allies-bill-baroni-bridget-kelly-get-n739941

Somerset County Planning Board. (2014). *County Investment Framework*. Retrieved from https://www.co.somerset.nj.us/home/showdocument?id=21900

Sustainable Jersey. (2017). *Sustainable Jersey Community Certification Report*. Retrieved from http://www.sustainablejersey.com/?type=1336777441&tx_sjcert_certification[certification][__identity]=537

Tiner, R.W., Jr. U.S. Fish and Wildlife Service, National Wetlands Inventory. (1985). *Wetlands of New Jersey*. Newton Comer, MA. Retrieved from https://www.fws.gov/wetlands/Documents/Wetlands-of-New-Jersey.pdf

Together North Jersey. (2015). *The Plan*. Retrieved from http://togethernorthjersey.com/?page_id=1814

Tourism Economics. (n.d.). The economic impact of tourism in New Jersey. Oxford Economics. Retrieved from https://www.visitnj.org/sites/default/master/files/2016-nj-economic-impact.pdf

Turkewitz, Julie. (2017, Dec. 4). Trump slashes size of Bears Ears and Grand Staircase Monuments. *The New York Times*. Retrieved from https://www.nytimes.com/2017/12/04/us/trump-bears-ears.html

United States Department of Housing and Urban Development. (2016). *National disaster resilience competition: Grantee profiles*. Retrieved from https://www.hudexchange.info/news/hud-awards-1-billion-through-national-disaster-resilience-competition/

U.S. Department of Housing and Urban Development. (n.d.). Sustainable Communities Regional Planning Grants. Retrieved from https://www.hud.gov/program_offices/economic_development/sustainable_communities_regional_planning_grants

U.S. Department of Housing and Urban Development, Department of Transportation, and Environmental Protection Agency. (n.d.). Partnership for Sustainable Communities. Retrieved from https://www.sustainablecommunities.gov/

U.S. Department of the Interior. Bureau of Land Management. (2018, Jan. 31). "UPDATING OIL AND GAS LEASING REFORM - LAND USE PLANNING AND LEASE PARCEL REVIEWS". Retrieved from https://www.blm.gov/policy/im-2018-034

U.S. Geological Survey/New Jersey Water Science Center. (n.d.). *Summary of flooding in New Jersey caused by Hurricane Irene, August 27–30, 2011*. Retrieved from https://nj.usgs.gov/hazards/flood/flood1108/index.html

U.S. National Oceanic and Atmospheric Administration. (2018). *NOAA Budget Summary 2019.* Retrieved from http://www.corporateservices.noaa.gov/nbo/fy19_bluebook/FY19-BlueBook.pdf