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Water and Sewer Infrastructure: Economic Development Funding and NY's Smart Growth Public Infrastructure Policy Act

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Abstract

This report is intended to analyze one way in which municipalities may come in contact with the NYS Smart Growth Public Infrastructure Policy Act (SGPIPA) by examining programs administered through the Consolidated Funding Application (CFA) process. The report focuses on CFA funding for sewer and water infrastructure programs. Following a brief description of the CFA process, the report examines the various programs through which CFA funding is available. This report explores how these programs, and the CFA process in general, are facilitating SGPIPA compliance through their application questions and agency documents, finding that agencies incorporate smart growth to varied extents. Overall, the report concludes that there is a significant integration of SGPIPA into the CFA process, at least as pertains to water and sewer infrastructure. The CFA mechanism helps involved agencies comply with their SGPIPA responsibilities and should help municipalities better understand SGPIPA and its effect on their future funding opportunities.

Three Summary Points of Interest

- The Consolidated Funding Application is a process for distributing state funding to support economic development established by Governor Cuomo in 2011. The CFA integrates elements of the State Smart Growth Public Infrastructure Policy Act in order to better align the State's goals of economic development and smart growth in its public infrastructure funding decisions.

- Sewer and water infrastructure funds are available through various state agencies that use the CFA process. The CFA application now includes smart growth questions, thereby facilitating SGPIPA compliance in the early stages of agency interactions with municipalities and other applicants.
- The integration of SGPIPA into the CFA process regarding water and sewer infrastructure will aid in the education of local officials and other fund applicants for a better understanding of SGPIPA and how it will influence state agency decision making.

Keywords
Smart Growth Public Infrastructure Policy Act (SGPIPA); Consolidated Funding Application (CFA; Sewer and Water Infrastructure; Green Infrastructure; Empire State Development (ESD); Community Development Block Grant (CDBG) Program; Department of Environmental Conservation (DEC); Clean Water State Revolving Fund (CWSRF); Environmental Facilities Corporation (EFC); Green Innovation Grant Program; New York State Energy Research and Development Authority (NYSERDA); Cleaner, Greener Communities Program; Department of State's Local Waterfront Revitalization Program (LWRP); Empire State Future (ESF)

Water and Sewer Infrastructure: Empire State Development, the Western New York Science & Technology Advanced Manufacturing Plant and NY's Smart Growth Public Infrastructure Policy Act

Introduction

This report is one of several intended to familiarize readers with the way New York's Smart Growth Public Infrastructure Policy Act (SGPIPA) is being implemented by State agencies that fund water and sewer infrastructure projects.[1] This report focuses on the integration of SGPIPA compliance into the Consolidated Funding Application (CFA) process designed to support economic development. Specifically, we examine sewer and water infrastructure programs administered through the CFA process in 2013.

Projects funded through the CFA are typically those which are part of a larger economic development initiative. Indeed, the CFA as a whole is explicitly promoted as a mechanism for streamlining access to "state economic development resources" by use of a single coordinated application for programs controlled by multiple agencies. The CFA is the gateway for both public and private sector access to economic development resources from more than a dozen state agencies.

SGPIPA applies to state agencies and authorities beyond those that participate in the CFA process. For this and similar reasons, this report does not address every possible avenue for approving the state's water and sewer infrastructure projects and evaluating their SGPIPA compliance. It does, however, discuss a primary avenue through which many local municipalities[2] access infrastructure funding. It is also a critical point of contact through which municipalities are likely to become familiar with SGPIPA. All municipalities that apply for funds through the CFA process to support local economic development initiatives are required to answer questions related to the SGPIPA as part of the application process.

This brief introduction raises at least two important definitional questions. First, which programs are considered as part of the State's economic development resources? Second, what are counted as water and sewer infrastructure projects? For the purposes of this report at least, the first question is answered most appropriately by the full list of the programs which can be accessed through the CFA process. These programs can be inspected in detail in the annually released documents known as "Available CFA Resources". These documents for 2013 and 2014 classed the full range of State economic development programs variously under the following labels:

- Community Development
- Direct Assistance to Businesses and Other Organizations
- Energy
- Education/Workforce Development
- Waterfront Revitalization
- Low Cost Financing
- Environmental Improvements (including Sustainability Planning and Implementation).[3]

With regard to the second question, the SGPIPA does not provide a precise or comprehensive definition of water and sewer infrastructure or even of infrastructure more generally. The law does explicitly include a list of individually named agencies and authorities plus "all other New York authorities", and defines them as "state infrastructure" agencies.[4]

As described in more detail below, to track CFA support for water and sewer infrastructure using state agency categories, we first found that self-described water and sewer infrastructure funding programs were overwhelmingly associated with 5 agencies: the Department of Environmental Conservation (DEC), the Department of State (DOS), the Environmental Facilities Corporation (EFC), Empire State Development (ESD) and Homes and Community Renewal (HCR). We then operationalized a less agency centered alternative

[1] For all references to SGPIPA, or Environmental Conservation Law, Article 6, see reference NYS ND-d.

[2] Our interest in smart growth in the context of a "public infrastructure act" narrows our attention primarily to funding programs that support municipal infrastructure, though some of these programs also support infrastructure that is not publicly owned.

[3] See references NYS 2013, NYS 2014a and NYS 2014b.

[4] Some ambiguity exists in the implementation of SGIPIPA about which of New York's many locally focused authorities qualify under the law as "state infrastructure agencies".

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definition based on funded projects. Brief project descriptions for all 2013 CFA awards were reviewed to assess whether funded projects were designed to directly or indirectly influence the need for, or actual provision of, water or sewer services.

The meaning of "direct or indirect influence" may not be self-evident. In common language use, the phrase water and sewer infrastructure focuses attention on the durable physical hardware (pipes, joints, pumps, buildings, etc.) that directly enables the provision of potable water and sanitary sewer services. For the purposes of this report, we also include "green infrastructure" (e.g. drainage swales, permeable paving) insofar as we can determine that it is designed primarily to divert water from, and therefore substitute for, more traditional water and sewer infrastructure. Also, we do not try to differentiate between separate components of given water and sewer related project awards, such as distinguishing spending on the hardware like pipes or concrete as opposed to labor or administration or engineering.

The Consolidated Funding Application Process: An Overview

In 2011, the Cuomo administration created ten regional economic development councils and charged these multi-county regions with developing five year plans to guide their economic development.[5] At the same time, the governor reformed the process for distributing state funding designed to support economic development through the creation of a *Consolidated Funding Application* (CFA). In 2013, the ten regional plans guided state agencies and the regional councils as they prioritized allocation of approximately $750 million of state economic development resources through the CFA process.

As a result of the CFA process, instead of having to navigate the varied application requirements of several funding agencies, applicants are required to submit a single application. Within this consolidated application, applicants identify all of the types of funding they seek to fulfill their economic development project goals. Applicant eligibility, across both public and private sector, varies by agency and funding program. Because sewer and water infrastructure is often an integral part of economic development, several programs that support sewer and water infrastructure development are funded through the CFA.

Sewer and Water Infrastructure Funding Distributed through the CFA Process

In 2013, 26 funding programs from 13 state agencies were part of the CFA (NYS 2013). To determine which programs included in the CFA support sewer and water infrastructure development, we took two approaches. First, we conducted a key word search of "2013 CFA Available Resources," a guide to the funding programs available through the CFA process, using the words: "sewer" and "water". This yielded a list of possible funding sources. Second, we reviewed the list of all awards made through the CFA process in 2013, looking for individual projects related to water and sewer services. This second approach yielded a list of water and sewer related projects actually selected that year, without prescreening the list by identifying the agency or program that funded them.

First approach

Using the first method, five programs were identified as supporting the development of sewer and water infrastructure.[6] These programs and the types of projects they fund are listed below:

1. **Empire State Development Grants Funds**

Projects funded through ESD grant funds are of three types: Business Investment, Infrastructure Investment and Economic Development Investment. Sewer and water infrastructure development is covered under the category of "infrastructure investment". These projects involve capital expenditures for the development of infrastructure, including sewer & water, which "attract[s] new businesses and expand[s] existing businesses, thereby fostering further investment." As used herein, *development* of infrastructure includes planning, feasibility analysis, and construction. (NYS 2013:7-8)

[5] See http://regionalcouncils.ny.gov/,accessed August 15, 2014.

[6] Based on a review of reference NYS (2013).

2. **The Community Development Block Grant (CDBG) Program**

The NYS CDBG program is described as providing "small communities and counties in New York State with a great opportunity to undertake activities that focus on community development needs such as creating or expanding job opportunities, providing safe affordable housing, and/or addressing local public infrastructure and public facilities issues." (NYS 2013:39). Four types of projects are funded through the CDBG program: Economic Development; Small Business Assistance; Public Infrastructure, and Public Facilities. Sewer and water infrastructure is included within the *public infrastructure* category, which consists of but is not limited to the following program activities:

> *water source development, storage, and distribution; sanitary sewage collection and treatment; flood control and storm water drainage. Projects may include ancillary public works components such as sidewalks, streets, parking, open space, and publicly - owned utilities* (NYS 2013:40).

3. **NYS Department of Environmental Conservation / Environmental Facilities Corporation Wastewater Infrastructure Engineering Planning Grant**

The Wastewater Infrastructure Engineering Planning Grant provides funds to municipalities to help them cover the costs of *planning* for the development and implementation of projects that address local water quality. Essentially, the completion of these plans is a prerequisite to applying to the *Clean Water State Revolving Fund* program, a program of the Environmental Facilities Corporation, designed to support the actual construction of infrastructure that addresses water quality.

> *The ultimate goal of this wastewater infrastructure engineering planning grant program is to assist needy communities to initiate a planning process with a follow-up implementation plan to address local water quality problems. Successful applicants will use the engineering report when seeking financing through the CWSRF program or other financial means to further pursue the identified solution.* (NYS 2013:122)

4. **Environmental Facilities Corporation - Green Innovation Grant Program** (NYS 2013:130)

Several categories of projects are funded through the Green Innovation Grant Program (GIGP), all of which are designed to "treat rainwaters as a valuable resource to be harvested and used on site or filtered and allowed to soak back in the ground, recharging our aquifers, rivers and streams". Because these projects are designed to channel rain water back to the earth rather than into sewers, they ensure rainwater remains a part of the hydrologic cycle and reduce the pressure put on sewer systems by reducing the quantity of water that is a part of the system inflow. Substituting these kinds of "green" management systems for the more conventional infrastructure that has been used to collect and treat stormwater can help avoid the significant environmental and other problems that arise in some systems when stormwater surges overwhelm traditional sewage treatment facility capacities.

The GIGP funds eight specific kinds of projects that offer alternative green stormwater management options, each of which is appropriate for some circumstances but not others. These are:

- Permeable pavement, eg. porous asphalt, concrete or pavers
- Bioretention, e.g. rain gardens or bioswales
- Green (vegetated, growing) roofs and walls
- Street trees/urban forestry programs designed to manage stormwater
- Construction or restoration of wetlands, floodplains, or riparian buffers
- Stream daylighting (ie. returning piped/culverted streams to more natural channels)
- Disconnecting roof runoff downspouts to redirect water out of the sewer system

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- Stormwater harvesting and reuse (eg. rain barrels and cisterns)

NYSERDA – Cleaner, Greener Communities Program, Phase II Implementation Grants (NYS 2013:137)

The Cleaner, Greener Communities Program, Phase II Implementation Grants is a "competitive grant program to encourage communities to develop and implement regional sustainable growth strategies" (NYS 2013:137). The program supports three major categories of projects:

(1) Streamlined Permitting ("of PV systems and/or Electric Vehicle Supply Equipment (EVSE) stations or zoning and parking ordinances that specifically accommodate EVSE");
(2) Comprehensive Planning; and
(3) Capital Expenditures (NYS 2013:138)

The "Capital Expenditures" category is the broadest of the three categories, and the only one possibly funding water and sewer infrastructure. It is intended to support a variety of "large-scale capital projects that support energy efficiency, renewable energy, or carbon mitigation," "including, but not limited to, land use, transportation, and buildings" (NYS 2013:144). While most types of eligible projects do not directly relate to water and sewer, one does: "Measures that significantly improve the efficiency of water treatment or waste-water treatment facilities" are specifically named, under "Examples of Eligible Projects," as types of building projects supported by the Cleaner, Greener Communities Program.

To summarize, there were five programs administered through the 2013 Consolidated Funding Application process that could support the development of sewer and water infrastructure as defined within this report. Depending on the program, eligible projects are those which support the design, feasibility assessment, construction and renovation (for improved energy efficiency) of sewer and water infrastructure.

Second approach

In contrast, with the second method we classified actual awards as reported in the "REDC 2013 Awards" publication for a single year (NYS REDC 2013). Total awards of just under $716 million were distributed across the 10 regions. Of those, we determined that about $33 million, or 5% by value, could be classified as "water and sewer" related.

Two of the programs listed above stood out in terms of total dollars. The EFC's Green Innovation Grants program (16 awards) and the ESD's Capital Grants program (13 awards) each gave out just over $10 million in water and sewer related funding. As noted already, the EFC Green Innovation grants are primarily intended to intercept runoff with "green infrastructure", thereby reducing the flows that must be managed and treated by traditional stormwater management infrastructure. The ESD Capital Grants prioritize water and sewer projects that are directly in the service of economic development.

Next in terms of dollar value were the 12 water and sewer related projects funded at a total of just under $7 million by the NYS Department of Home and Community Renewal's Community Development Block Grant Programs for Public Infrastructure and Public Facilities. CDBG projects must typically be justified by their ability to benefit persons of low and moderate income. By way of context for these water and sewer projects, Homes and Community Renewal currently allocates about $40 million of CDBG funds annually in competitive grants to eligible communities (i.e. towns, villages, and cities with less than 50,000 population and counties with unincorporated populations of less than 200,000.) Historically, about a quarter of CDBG funding went to water and sewer projects.[7]

By far the largest number of grants (62) were awarded through the Department of Environmental Conservation's Engineering Planning Grant Program for engineering studies, mostly small grants of $30,000 to study various kinds of wastewater system upgrades,

[7] See NYS HCR-a(ND) and NYS HCR-b(ND). From the latter source, it can be calculated that between 2001 and 2010, $354 million were cumulatively awarded through this program. After a peak of nearly $50 million in total awards in 2006, the highest subsequent total was $32 million in 2008. Of the $354 million total, $34 million were for sewer and $51 million for water projects.

especially those related to infiltration issues, whereby leakage increases the volumes of wastewater to be treated. As reported above, these grants are one way to support the development of engineering plans that are a necessary preliminary to applications to the EFC's Clean Water State Revolving Fund.

The Department of State's Local Government Efficiency program, which focuses on promoting the consolidation or sharing of government services and is not found in the water and sewer program funding sources listed above, allocated $3.2 million across eight projects designed to variously study, plan and implement the regionalization/sharing across municipalities of water and/or sewer services.

Finally, several other agency programs made a very small number of awards for projects that at least arguably influence water and sewer infrastructure: a couple projects supported by the Department of State's Local Waterfront Revitalization fund, and a couple of Empire State Development awards are examples. They were for projects with components that did not fund municipal wastewater treatment directly, but appeared as if they might have had implications, like projects in the Green Innovation Grants program, for the amount and nature of treatment that would be required by existing wastewater management systems. Note, finally, that no water and sewer related awards were made in 2013 under the NYSERDA program listed above.

Having identified the CFA programs which support sewer and water infrastructure development and the *types* of sewer and water infrastructure development they support, the ways in which agency compliance with SGPIPA is reflected in the CFA process is considered below.

The CFA and SGPIPA Compliance

In addition to the Consolidated Funding *Application*, there are other documents designed to guide potential applicants through the Consolidated Funding Application process. As summarized in the *Application* manual, "These documents provide applicants with information about the application as well as programmatic detail for each resource that is a part of the CFA process" (NYS 2014b:22). Three of these documents, in particular, help to explain the ways that the agencies which fund sewer and water infrastructure development through the CFA process are complying with SGPIPA: *Program Application Questions* (a series of questions specific to a particular funding program), *Available CFA Resources,* and *CFA Application Manual*. The ways each is used to support agency compliance with SGPIPA is described below.

Program Application Questions

The Consolidated Funding Application is an online form.[8] To view its entire contents, one is required to register and login as an applicant. However, guides to each program's application questions have been developed to specifically support applicants as they complete the CFA.[9]

A review of the Program Application Questions documents for each of the CFA's five sewer and water infrastructure program reveals that the questionnaire for each program consists of a set of questions common to all funding programs as well as some questions specific to particular funding programs. Notably, all five programs that support sewer and water infrastructure development share a set of ten identical questions designed to provide the respective agency reviewers with information they need to complete a Smart Growth Impact Assessment as required by the Smart Growth Public Infrastructure Policy Act. At heart, these questions directly assess a project's compliance with the smart growth principles articulated by the law. As such, the questions provide the agencies with a means to ensure they have the information they need *from project applicants* to conduct any required smart growth impact assessment.

As is illustrated by the Green Innovation Grant example,[10] the questions address the SGPIPA's ten

[8] See: http://nyworks.ny.gov and CFA FAQs (NYS REDC ND)
[9] These guides appear to be available online only for the duration of time that the application is available and to change from year to year.
[10] The Appendix includes the 2013 Green Innovation Grant Program's Program Application Questions as one example of the CFA's smart growth questions.

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smart growth principles directly. Following each question is a "help section" that provides additional information about the intent of the question. Furthermore, in addition to the section in each questionnaire dedicated specifically to smart growth, other sections in several of the funding programs address smart growth principles in other contexts. For example, in the Community Development Block Grant program, Empire State Development Grant Funds program, and the Cleaner, Greener Communities program, there is a question that addresses public engagement in the development of the project. This suggests that at least some smart growth principles are seen as important in a larger development context, independently of their importance for smart growth. However, it is not self-evident that the responses to these questions are routinely considered by reviewers in the context of agency Smart Growth Assessments.

2013 Available CFA Resources

The *CFA Available Resources* document also plays a role in supporting the agencies' compliance with SGPIPA. The "document outlines information about each agency's grant programs, including eligibility, scoring, criteria, applicant requirements, and agency contact information" (NYS 2013). While the questions about smart growth are standard across all five funding programs, references to smart growth and the SGPIPA in the *2013 CFA Available Resources* document are not. Although smart growth is referenced in all of the program areas, in some it is described in greater detail, while in others it is mentioned briefly. In some it is referenced in a couple of different sections (e.g.: eligible projects and selection criteria), while in others it is mentioned in only one section.

Before describing the way smart growth is addressed within the CFA Available Resources document, it is important to provide an overview of how projects are scored through the CFA. Essentially, projects are scored on a 100 point scale, with 20 points allotted by the Regional Economic Development Councils according to the degree to which the project aligns with regional priorities and fits with its respective REDC's Strategic Plan. The State assigns the remaining 80 points according to program specific criteria. As is implied above, some of the five programs specifically include smart growth as part of the program specific criteria, while others do not.

The specific ways smart growth is addressed within the 2013 CFA Available Resources by each of the five programs that fund sewer and water infrastructure is described below:

1. Empire State Development Grant Funds

The ESD Grant Funds program addresses smart growth under its "Selection Criteria" section, where it lists five general categories of selection criteria:

- Vision and Regional Economic Development Strategies;
- Public/Stakeholders;
- Implementation;
- Leveraged Resources; and
- Performance Measures.

Several indicators are listed under each category, more clearly defining (but not assigning weights to) the criteria used to evaluate the proposal. "The degree to which the project supports the principles of smart growth, energy-efficiency…and sustainable development" is one of five indicators specifically included under the "Performance Measures" category (NYS 2013:10). In addition, although public engagement (smart growth criteria) is implied by the Public/Stakeholder category, the indicators listed under it seem somewhat different than the engagement called for within SGPIPA: "community based planning and collaboration." Rather the criteria most directly related to engagement under the ESD Grant Funds "Public/Stakeholder" category assesses "[w]hether the project has demonstrated support from local government and private sector leaders in the locality and the region where the project will be located" (NYS 2013:9)

2. Community Development Block Grant Program

The CDBG program addresses smart growth under two sections: "Project Eligibility" and "Selection Criteria." Eligible projects funded by the CDBG program fall into four categories (NYS 2013:40)

(1) Economic Development;
(2) Small Business Assistance;
(3) Public Infrastructure; and
(4) Public Facilities.

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Water and sewer infrastructure is not only included in the "Public infrastructure" category, as indicated by the full title of this section ("Public Infrastructure (water/sewer/storm water)"), it is the primary focus of the infrastructure category. SGPIPA is explicitly referenced within the eligible projects description:

> *Eligible projects may include the repair or replacement of existing systems, construction of new systems, or expansion of existing systems into areas previously unserved that are in compliance with the NYS Smart Growth Public Infrastructure Act (Chapter 433 of the Lows of 2010)...*(NYS 2013:40).

The law is also referenced in the Selection Criteria section for the Public Infrastructure category. The 80 points of CDBG-program specific criteria are further broken down, with a maximum of 20 points allocated to Municipal Poverty Score and a maximum of 60 points reserved for "Project Assessment." The project assessment includes three subcategories – need, impact, and financial capacity, but without a further a priori allocation of the 60 points across them. Impact includes

> *the degree to which the applicant has demonstrated… that the proposed project supports a 'Smart Growth' development strategy in accordance with the New York State Smart Growth Public Infrastructure Act (Chapter 433 of the Laws of 2010) (NYS 2013:45) .*

Presumably, flexibility in awarding points means that high scores in all the subcategories are desirable but not always necessary. For example, the "Need" component of the criteria could presumably lead a project to be funded even if it is not in compliance with smart growth principles because it is important for reasons of public health and safety. Need is evaluated in large part on the basis of the

> *degree to which the applicant has demonstrated serious public health, welfare or safety conditions as attested by third party documentation (e.g. consent orders, engineering reports, test results)* (NYS 2013:45).

Threats to human health and the environment are examples of the grounds on which projects that are not in compliance with smart growth principles have been justified in other programs that fund sewer and water infrastructure (e.g., Department of Health's Drinking Water State Revolving Fund and the DEC/Environmental Facility Corporation's Clean Water State Revolving Fun)

3. NYS Department of Environmental Conservation / Environmental Facilities Corporation Wastewater Infrastructure Engineering Planning Grant

As noted above, the EFC Wastewater Infrastructure Engineering Planning Grant is one source of funding that supports the development of the engineering report that is required of applicants who seek to fund the construction of wastewater infrastructure through the EFC's CWSRF program. As independent studies, they do not constitute "infrastructure" expenditures in and of themselves under SGPIPA, so the agency is not required to file a Smart Growth Impact Assessment. However, the engineering reports themselves are required to "consider and document" both smart growth and green infrastructure alternatives (NYS EFC ND).

Within the 2013 CFA Available Resources section devoted to this program, smart growth is referenced in the following sections: "Key Definitions", Eligible Activities, and Successful Applicant Requirements. *Key Definitions: The Engineering Report.* The section devoted to the Engineering Report specifically outlines required components of the report, including "Selection of an Alternative" – meaning the type of infrastructure to be developed. The chapter or section of the report presenting the selection of alternatives, which immediately precedes the chapter on the "recommended alternative", must include discussion of three selection criteria: a life cycle analysis, a smart growth analysis, and nonmonetary factors. Although not identified as such, it should be noted that other required parts of the engineering report potentially align closely with smart growth criteria. For example, the engineering report must address "Location", "Community Engagement", "Reasonable Growth" and Sustainability Considerations" (NYS 2013:123).

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Eligible Activities. Similarly, smart growth is explicitly referenced in the section on Eligible Activities and clearly defined (NYS 2013:124):

> *Smart Growth alternative(s) and green infrastructure alternative(s) must be considered and documented in the engineering report. The following minimum alternatives need to be considered for projects with* ***no existing wastewater infrastructure****:*
>
> - *decentralized systems;*
> - *new sewers and connection to regional wastewater treatment facility; and*
> - *new sewers and a wastewater treatment facility.*
>
> *The following minimum alternatives need to be considered for projects with* ***existing wastewater infrastructure****:*
>
> - *rebuilding existing wastewater infrastructure; and*
> - *connecting to regional wastewater treatment facility.*

Successful Applicant Requirements. The final section of the Wastewater Infrastructure Engineering Planning Grant program area in which smart growth is referenced is under "Successful Applicant Requirements" (NYS 2013:125). "Compliance with the New York State Smart Growth Infrastructure Policy Act of 2010" is one of several requirements that must be documented before the funding agency will enter into a grant agreement to fund the project.

Before leaving the Wastewater Infrastructure Planning Grant, it is worth noting that the attention given to smart growth in the documentation required in the engineering study does not necessarily translate into priority for funding the studies. Smart growth is in fact not mentioned in the "Selection Criteria," as with the Community Development Block Grant program. More significantly, language within the selection criteria clearly indicates that it is the urgency of the problem and need for a study leading to solutions, rather than any preliminary ideas about possible solutions and smart growth, that are most important for funding. In fact, up to 64 of 80 points allocated to the State's technical evaluation of these projects depend on the "severity of existing water quality impairments" and whether or not the study is required as part of a regulatory process that is already engaged. This suggests that the greater the degree to which water is impaired, the greater the chances this first important step towards a project designed to correct it will be funded, whether or not the project includes smart growth principles. Insofar as the study itself is merely a preliminary to proposing a specific infrastructure project, and the study must address smart growth issues explicitly, this seems both practical and sensible.

4. **Environmental Facilities Corporation - Green Innovation Grant Program**

The Green Innovation Grant Program focuses on water – as already noted, its goal is to fund "green" projects that capture and use stormwater where it falls and/or take advantage of natural processes that enable the water to "soak back into the ground". The program description explicitly mentions smart growth only under a section entitled "Successful Applicant Requirements," where documentation of "compliance with the Smart Growth Infrastructure Act of 2010" is required before successful applicants can enter into a grant agreement (NYS 2013:134).

At the same time, although "smart growth" is not explicitly mentioned in the program description, the language used to describe the types of projects that will be funded overlaps to some extent with smart growth criteria:

> *Projects selected for funding go beyond providing a greener solution, they maximize opportunities to leverage the multiple benefits of green infrastructure, which include restoring habitat, protecting against flooding, providing cleaner air, and spurring economic development and community revitalization. At a time when so much of our infrastructure is in need of replacement or repair and communities are struggling to meet competing needs, we need resilient and affordable solutions like green infrastructure that*

> *can meet many objectives at once.* (NYS 2013:131).

This language seems well aligned with the broadly worded smart growth criterion *d* in SGPIPA: "To protect, preserve and enhance the state's resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources." However, it is really only the allusion to "replacement or repair" that is consistent with some of the most discriminating smart growth criteria like prioritizing repair of existing infrastructure or, perhaps more indirectly, location in municipal centers. Even then, the language then opens up to "resilient and affordable solutions like green infrastructure" rather than prioritizing replacement or repair of existing infrastructure more specifically. The point is that this program is not explicitly about smart growth as such, and while green infrastructure provides in and of itself many benefits, green infrastructure is not inherently classifiable as a form of smart growth.

5. NYSERDA – Cleaner, Greener Communities Program, Phase II Implementation Grants

The Cleaner Greener Communities Program was created to help New York communities develop regional sustainable growth strategies. Phase I of "Cleaner Greener" supported the development of the plans and Phase II is designed to support the implementation of strategies articulated by the plan.

Insofar as smart growth bears a close but not exact relationship to sustainable growth– and in complex ways that are well beyond the scope of this report to summarize[11] – the Cleaner Greener Communities program should be expected to be largely but not necessarily fully consistent with smart growth. Accordingly, it is not surprising that "smart growth" is explicitly mentioned in several of the program's sections, including the introduction, the program description, and in the selection criteria for two of the three categories of funding, including Category 3 that funds water and sewer infrastructure. The context in which it is referenced in each section related to sewer and water infrastructure development is discussed below.

Introduction. The introduction to the Cleaner, Greener Communities Program, Phase II, provides an overview of the program and essentially recognizes the central importance of smart growth in the projects funded by this program:

> *By integrating smart growth principles into all aspects of project execution, these innovative and exemplary projects will be holistic in nature, exhibit positive large-scale impacts, and contribute to an improved quality of life in New York. Projects selected under Phase II of CGC will not only save energy and reduce greenhouse gas emissions; they will also make NYS a better place to live, work, and do business* (NYS 2013:136).

Program Description. Following the introduction, smart growth is again mentioned in the very next section – the program description. Within the description, smart growth is not only explicitly referenced but essentially operationalized:

> *This solicitation will fund projects and activities that promote smart growth and sustainable development. Smart growth promotes land use practices such as compact growth, transit-oriented and mixed-use development, pedestrian and bicycle friendly practices, complete streets, and protection of critical land, water, and natural resources* (NYS 2013:138).

Selection Criteria. Finally, smart growth is mentioned again under the Selection Criteria section for Category 3 – Capital Expenditures. "Adherence to Smart Growth Principles Applicable to Project Location" is one of several technical review criteria used to evaluate a project. The extent to which the applicant has

[11]Variability in the use of terminology persists, and some in the planning community prefer simplification to "good planning": "Most of these principles, whether labeled 'growth management,' 'smart growth,' or 'sustainable development,' are undoubtedly viewed by many planners as simple good planning practice. But the level of specificity varies..." (Talen and Knapp, 2003:346)

"demonstrated that the project will produce significant Smart Growth benefits to New York State" is worth 15 of the 80 points allotted in the technical review (NYS 2013:146).

6. OTHER – DOS's Local Waterfront Revitalization Program (LWRP).

As suggested previously, while the LWRP is not specifically designed to support water and sewer infrastructure, it does fund projects that can be significantly related to water and sewer, for example: redevelopment of hamlets, downtowns and urban waterfronts, or implementing watershed revitalization plans or community resiliency strategies. In light of this, we note that, "consistency with the Smart Growth Public Infrastructure Policy Act will be [among the] factors used in determining successful grant proposals." (NYS. 2014a:84)

Summary

We make the following summary observations about the integration of smart growth into the CFA and the water and sewer agencies that disburse infrastructure funding through the CFA:

- Although the respective water and sewer infrastructure agencies emphasize smart growth principles to varying degrees in the overview of their respective programs, each agency has taken steps to comply with SGPIPA through the CFA process by including a section that assesses an applicant's adherence to smart growth principles through the application questions.
- Within the overviews of the respective programs, smart growth is referenced under several different sections, depending on the program, including: the introduction, program description, key definitions, eligible projects, selection criteria, and successful applicant requirements.
- In some of the programs, smart growth is only mentioned briefly while in others it is explained in greater detail, more fully operationalizing the concept of "smart growth."
- The most forceful and direct incentive to applicants to comply with smart growth principles is probably in the extent to which technical review points are explicitly linked to smart growth principles. Despite the attention given to the topic in other ways, the stated allocation of points does not clearly reinforce smart growth as a priority, at least in ways made obvious to applicants.
- One of smart growth's characteristics in general and in its articulation in SGPIPA is that it has multiple dimensions. Many typically reinforce each other and tend to be highly correlated even without conscious design. However, a given project may comply with some smart growth criteria more than others, or even raise tensions between them. SGPIPA criteria include several locational characteristics that are relatively easy to document – especially location in existing municipal centers or areas formally identified as priorities for development – but ways to clearly comply with many of the other criteria are less straightforward. In CFA documents, there are many ways in which smart growth in general or individual elements of smart growth are discussed or supported. However, the relevance or significance of each of the distinct SGPIPA smart growth criteria for particular CFA programs is not clearly articulated.

Food for Thought: An Educator's Perspective

We suspect that the visibility of SGIPIPA in the generic process positioned between applicants and State dollars helps significantly raise awareness of smart growth principles and SGPIPA. Because state agencies and authorities rather than applicants are directly responsible for compliance with SGPIPA, the latter do not have as immediate a need for concern with SGPIPA. As documented elsewhere, many local governments remain unaware of the law or its detailed implication for them.

The fundamental purpose of the CFA materials reviewed is to provide guidance to applicants interested in applying for state economic development funding. From one perspective, inclusion of smart growth questions in the CFA simply adds an extra series of

questions to which applicants for funding must submit. But clearly, because smart growth is a formal aspect of NYS law and policy, it is important for applicants for funds, not just the administering state agencies, to be made aware of the relevance of the law to specific project proposals.

Moreover, the CFA process also represents a broader educational opportunity as well. Each reference to smart growth and the SGPIPA in CFA support materials has the potential to help applicants understand the principles themselves. The variety of ways in which state agency compliance with the SGPIPA is supported through the CFA process presents an equally diverse array of ways to educate applicants about smart growth principles, some subtle and some more direct.
The opportunity to educate applicants extends beyond simply increasing awareness that their chances for funding are linked in part to the degree to which their project complies with smart growth principles. Also possible is increasing understanding of why the law was implemented, and in turn, how their communities can benefit from adhering to smart growth principles.
One way to increase this understanding would be to have links to standard smart growth and SGPIPA documents from the references to smart growth throughout each program area within the CFA Available Resources document. Doing so in the selection criteria section, for example, would seemingly encourage participants to be more thoughtful about how to include smart growth principles in the development of their program.

Concluding observations

This review of the consistency of the SGPIPA with the consolidated funding application process suggests that both of these relatively recent State innovations have been integrated in significant ways, at least from the perspective of our focus on water and sewer infrastructure. The SGPIPA did not mandate any administrative mechanisms that agencies and authorities needed to adopt to integrate the SGPIPA into their funding application processes. Nevertheless, the State has taken significant advantage of the common framework offered by the CFA to incorporate smart growth screening questions into the routine procedures all CFA applicants for economic development funding must follow. This enables efficiencies in implementation of the SGPIPA from the perspective of both the State and the applicants who might otherwise have to deal with SGPIPA reviews and implementation criteria with less consistency. Over time, it should help local officials and project applicants attain a better understanding of the significance and role of SGPIPA in state priorities.

For the SGPIPA to have real world impact on water and sewer infrastructure funding and approval decisions of state agencies, it must influence the decision making outcomes of project review and scoring, not only the administrative procedures of the application process on which we have focused. A full review of the impact of SGPIPA would involve project-by-project analyses of the SGPIPA criteria as they were applied to the prioritization, selection and even execution of all submitted and then completed projects.

This kind of comprehensive, evaluative review exceeds the scope of this report and we do not prejudge what it would reveal. Notably however, Empire State Future (ESF), a coalition/membership organization advocating for smart growth in New York State, has taken its own first step towards such an evaluation (Empire State Future ND). According to ESF's criteria, very little of the requested funding for the ten regions' top projects was in tension with smart growth precepts. For the 2013 regional priority lists, ESF's concluded that about half of the proposed funding was aimed at projects embodying smart growth principles, most of the remaining funds supported projects that did not conflict with the principles, and only 13% of the funding was for priority projects that were "questionable" from a smart growth perspective.

Funding for economic development is typically subject to multiple forces and pressures that do not inherently prioritize smart growth. Therefore, the generally approving report by a smart growth advocacy organization about distribution of economic development funding seems particularly significant.
It is important to underscore that ESF reached these conclusions based on the project priority lists adopted by the ten Regional Economic Development Councils.

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These lists represent the conclusive step within each region in prioritizing projects for ultimate State funding. But, as described previously, the state funding agency has the greatest ultimate say in project selection even for funding programs involved in the regionalized CFA process. It is worth noting in this context that ESF's two specifically named "questionable" water and sewer projects (involving the consolidation or extension of water and sewer facilities in ways that could "easily lead to unwanted sprawl") were both funded by Empire State Development in the 2013 CFA round.

The power of SGPIPA, as with all laws, depends not just on the willingness of those responsible to enforce its provisions or to follow "the letter of the law". Broadly defined laws in particular are unlikely to be successful unless they can both codify and diffuse a socially acceptable norm of expected behavior. To what extent does and will SGPIPA influence the pre-application process of conceiving and shaping projects so that they are in compliance with smart growth principles? Though difficult to document quantitatively, this, perhaps, is where the greatest potential of the integration of SGPIPA into the CFA exists.

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APPENDIX

Program Questions:
Green Innovation Grant Program

Q_1059

Does the proposed project use, maintain, or improve existing infrastructure? Y/N/Not Relevant. Please explain all responses.

- **Optional Question Header:** Smart Growth Questions: The NYS Smart Growth Public Infrastructure Policy Act requires that a project meet the relevant smart growth criterion to the extent practicable. Please respond to the questions below regarding smart growth criteria.
- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

  If you are maintaining or improving existing infrastructure, please answer "YES". If you are building new infrastructure, or expanding infrastructure answer "NO" and provide justification that explains the need to build new infrastructure instead of using or improving existing infrastructure.

  For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1060

Is the proposed project located in a municipal center? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

  Municipal Centers are areas of concentrated and mixed land use that serve as centers of various activities (civic, commercial, recreational, and residential, among others). Specific examples include Central Business Districts; Brownfield Opportunity Areas (BOAs); Downtowns in Local Waterfront Revitalization Program (LWRP) Areas;

Transit-Oriented Development, Environmental Justice Areas and Hardship Areas; in many instances, an entire city, village or hamlet can be considered a municipal center. This definition can include development "adjacent to municipal centers" and a "future municipal center" – an area planned and zoned to be a municipal center.

For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1061

Is the proposed project located in a developed area or an area designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

Please explain how your project advances infill development or redevelopment in existing developed areas consistent with an approved plan. Infill development includes redevelopment, rehabilitation and new development between existing buildings on vacant or under-utilized sites.

For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1062

Will the proposed project protect, preserve and enhance the State?s resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

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Beyond simply avoiding or minimizing negative environmental impacts, please indicate the resources that may be impacted by your project and how your project will preserve and enhance these resources.

For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1063

Will the proposed project foster mixed land uses and compact development, downtown revitalization, Brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

Please explain how your project advances these objectives and improves the quality of life in your community.

For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1064

Will the proposed project provide mobility through transportation choices including improved public transportation and reduced automobile dependency?Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

There are many alternatives to automobile transportation. Please explain how your project provides or complements alternatives to automobile travel such as bikes, pedestrians, public transit, air travel or rail travel.

For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

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Q_1065

Will the proposed project involve coordination between state and local government and inter-municipal and regional planning? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

  Identify any interaction between the applicant and any municipal and county governments, planning boards, regional planning associations or similar organizations. Document any outreach by the applicant to these organizations regarding the project and any relevant correspondence.

  For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1066

Will the proposed project involve participation in community based planning and collaboration? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

  Please explain how the project results from an inclusive, multi-stakeholder (including traditionally underserved populations) process of community-based planning and collaboration. To assist with your explanation, identify any affected community groups or organizations with an interest in the proposed project and if the planning process involved outreach to citizens and stakeholders at all stages of development of the project.

  For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1067

Will the proposed project ensure predictability in building and land use codes? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes

- **Answer Type:** Long Answer
- **Help Text:**

  Provide any additional relevant information.

  For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils

Q_1068

Will the proposed project promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain its implementation? Y/N/Not Relevant. Please explain all responses.

- **Question Type:** Smart Growth
- **Required:** Yes
- **Answer Type:** Long Answer
- **Help Text:**

  Please explain how your project promotes sustainability. For example does your project include buildings and plans that seek to minimize consumption of fossil fuels (coal, petroleum), reduce water usage / consumption, and encourage the use of renewable energy (wind, solar, and geo-thermal).
  For specific guidance on rail/port, aviation, and other transportation projects please refer to https://www.nysdot.gov/programs/RegionalEconomicDevelopmentCouncils