#### TECHNICAL MEMORANDUM

NYS FTP TASK 1.2 (FREIGHT PLAN STRATEGIC GOALS AND OBJECTIVES)







#### PREPARED FOR:

NEW YORK STATE DEPARTMENT OF TRANSPORTATION



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#### **EXECUTIVE SUMMARY**

#### **Purpose and Introduction**

Task 1.2 of the New York State Freight Transportation Plan (NYS FTP) scope includes development of the goals and objectives that the New York State Freight Plan's specific strategies and actions shall support. The goals need to align with New York's aspirations for mobility and economic development and help meet the national freight goals established by Congress in Moving Ahead for Progress in the 21st Century Act (MAP-21). This memorandum provides a review and synthesis of existing federal and state-level freight transportation goals from across the nation. NYSDOT will use this information to inform development of the Freight Transportation Plan strategic goals and objectives.

#### **Approach and Methodology**

- Findings from New York Regional/Statewide Plans: At the beginning of the NYS FTP development process, the project team conducted a review of other freight-planning efforts throughout the state in recent years to recognize common themes and planning principles among the studies. The intent of the review was to form a foundation over freight infrastructure, movement, and issues throughout the state, which will ultimately inform the NYS FTP. The review also focused on the particular goals and objectives identified in these plans. Ten of the planning documents reviewed included a set of goals and/or objectives. The project team reviewed these goals in context and summarized/compared them to understand the major goals of each region and agency in New York. The result was eight common goal categories for consideration in the plan.
- Findings from Other Laws/Policies/Plans: Following the background analysis of New York's current regional and statewide plans, the project team extended the review of existing freight-related resources. This review included the following laws, policies, and plans: (1) MAP-21; (2) the National Freight Advisory Committee (NFAC) structure and draft National Strategic Freight Plan (NSFP); (3) statewide freight plans from across the US; (4) the NYSDOT "Forward Four" Principles; and (5) the plans from New York's Regional Economic Development Councils (REDCs). The project team reviewed these goals in context and summarized/compared them with one another and with the results of the original analysis of New York Regional/Statewide Plans. The result was an additional 17 common goal categories for consideration in the plan.
- Summary of Findings in the Overall Review of Laws, Policies, and Regional/Statewide
  Plans: The findings from the New York Regional/Statewide Plan review and review of Other
  Laws/Policies/Plans review culminate into a discussion of what factors are truly critical to
  freight movement, and what factors are particularly relevant on the statewide scale.
- Draft Goals Provided by NYSDOT & Stakeholder Comment: At the commencement of the NYS FTP, NYSDOT developed an initial set of draft goals based on MAP-21 state freight plan guidance, NYSDOT priorities, and a basic understanding of regional studies and other state freight plans. The project team presented these goals at the June 30, 2015, stakeholder meeting,

where stakeholders were able to provide comments and feedback. This section includes a discussion of both the draft goals and the stakeholders' response to the draft set.

Recommendations for Addition to the Draft Goals: The project team incorporated all of the
above findings and stakeholder comments to identify what the draft set of goals lacks or includes
superfluously.

#### **Final Statement of Goals**

The project team integrated the recommendations with the draft set of goals to derive a final set of goals for the NYS FTP: The review of the goals and objectives of each of these sources culminated into the following list of final goals and objectives for the NYS FTP:

#### INVEST FOR THE STATE'S FUTURE

New York State expects and encourages future growth, and is committed to ensuring efficient goods movement in all modes by identifying and removing key freight bottlenecks and investing in strategic enhancements that will support existing and emerging freight markets.

#### **BUILD COLLABORATIVE PARTNERSHIPS**

Engage regional partners, government agencies, economic development councils, the private sector and international trade partners to advance high-priority freight transportation projects and strategies.

#### ENSURE SAFETY AND SECURITY FOR NEW YORK'S FREIGHT SYSTEM

Design, operate, and maintain the freight transportation system to ensure overall safety and security, as well as resiliency to the impacts of extreme weather and climate change.

#### PROVIDE SOUND AND EFFICIENT INFRASTRUCTURE

Identify infrastructure investments, innovative technologies, and operational strategies that will ensure efficient goods movement on a multi-modal freight network.

#### ELEVATE NEW YORK'S ECONOMIC COMPETITIVENESS

Strengthen New York's competitive position in national and global freight-centered business and activity by selecting strategies and projects that support emerging markets and ensure reliable, efficient multimodal supply chains

#### CREATE AN ENVIRONMENTALLY-BALANCED FREIGHT ECONOMY

Provide efficient goods movement through a connected multimodal infrastructure that supports fuel-efficient and sustainable freight movement and delivery, while maintaining quality of life for New York's communities.

Figure 1 summarizes the goals evaluation process in a flow chart.

FIGURE 1: METHODOLOGY FOR THE ASSESSMENT OF POTENTIAL GOALS FOR THE NYSFTP



#### 1.0 FINDINGS FROM REGIONAL PLANS

As part of FTP Task 1.1, Background Research Review, the project team examined various plans, programs, and studies directly related to freight transportation that planning entities throughout the state and across the nation have sponsored. These included:

- G-MAP: A Comprehensive Goods Movement Action Program for the New York-New Jersey Metropolitan Region – PANYNJ (2015)
- John F. Kennedy International Airport (JFK) Air Cargo Study New York State Economic Development Council (NYSEDC) (2013)
- PortNYC Program Port NYC (2015)
- I-87 Multimodal Corridor Study NYSDOT (2006)
- Niagara Frontier Urban Area Freight Transportation Study Greater Buffalo Niagara Regional Transportation Council (GBNRTC) (2010)
- Transportation Strategies For Freight And Goods Movement In The Genesee-Finger Lakes Region - Genesee Transportation Council (GTC) (2012)
- New York Metropolitan Transportation Council (NYMTC) Regional Freight Plan
- Update 2015-2040 NYMTC (Draft 2015)
- New York State Rail Plan NYSDOT (2009)
- Binghamton Regional Freight Study Binghamton Metropolitan Transportation Study (BMTS) (2008)

This review revealed eight specific commonalities across the goals and objectives articulated in these documents that shed light on what different states and agencies envision for their freight systems, as well as how they plan to achieve these visions. **Table 1** summarizes the categories of goals and objectives by agency based on review of the regional plans.

TABLE 1: GOALS AND OBJECTIVES FROM THE BACKGROUND REVIEW

	CONNECTIVITY	INFRASTRUCTURE	ECONOMIC DEV.	INVESTMENT	SAFETY/SECURITY	ENVIRONMENT	GOVERNANCE	LAND USE
GMAP	X	X	X	X	X	X	X	X
JFK Air Cargo	X	X	X	X			X	X
PortNYC		X	X	X		X	X	
I-87	X		X		X	X		
Niagara Frontier	X	X	X					
GTC	X	X	X	X	X	X		
NYMTC	X	X					X	
NYS Rail	X	X	X	X	X	X		
вмтѕ	Х	X	X	X	X			
Cross Harbor	X	X			X			X
	9	9	8	6	6	5	4	3

The following set of bullets provides more detail on these **eight categories** of commonality in goals, objectives, and strategies in these ten plans, programs, and studies:

- Connectivity. Efficient freight movement requires a transportation network that links economic centers. Connectivity may refer to gaps in a single mode, like cross-Hudson movement of rail freight, or on a smaller scale, lack of a rail siding serving an individual shipper. While the system may be physically connected, it may not be functioning in an operationally connected manner. (Examples of operational issues include (1) Class 1 and shortline railroad are connected but there are delays when cars from the shortline may sit for days waiting for pick-up via a Class 1 vehicle; (2) Port and highway are connected, but inefficient port operations at gate, or lack of available chassis for containers causes delay.) Availability of intermodal connections is also important. (Nine out of the ten plans reviewed had a "Connectivity" goal.)
- Infrastructure. The quality of the transportation infrastructure across modes is a critical factor in maintaining freight flows. Asset management and improvement of deficient facilities, including the design of such facilities, must recognize freight movement needs, not just overall traffic volume. (Nine out of the ten plans reviewed had an "Infrastructure" goal.)
- Economic Development. Efficient freight movement underlies a healthy economy. In order for New York firms to be competitive in a regional, national, or global marketplace, they must be able to ship and receive goods at competitive costs. In a "just-in-time" world that relies on fluidity, inefficiencies in the supply chain that add to shipping time cause

businesses to incur added costs. While not all barriers to efficient goods movement are a consequence of the transportation system, it is important that the agencies responsible for planning, constructing, and operating it are aware of the implications for economic development. (Eight out of the ten plans reviewed had an "Economic Development" goal.)

- Investment. All public agencies experience challenges in finding adequate financial
  resources to meet their needs to plan, construct, operate, and maintain the transportation
  infrastructure under their jurisdiction. Important themes include advocating for adequate,
  predictable, and stable funding; identifying non-traditional sources of public funding; and
  exploring methods to encourage appropriate private investment, including public-private
  partnerships and incentives for private sector partners. (Six out of the ten plans reviewed had
  an "Investment" goal.)
- Safety and Security. Transportation safety is a broad topic that extends across all modes and modal interconnections, and sometimes to neighboring land uses. There is consensus on the importance of improving roadway safety related to truck movement, as well as the interface at highway-rail grade crossings. Security is a related but independent matter. Security concerns exist at ports-of-entry, both seaports and land border crossings, and in the transport of dangerous cargo. (Six out of the ten plans reviewed had a "Safety and Security" goal.)
- Environment. There is an important link between freight movement and environmental protection. Each mode of transport creates issues of environmental concern. All modes create air emission, including both criteria pollutants and greenhouse gases. Energy consumption closely relates to emissions. Federal regulatory actions often include strategies to reduce both energy use and emissions. (Five out of the ten plans reviewed had an "Environment" goal.)
- Governance. As a multiplicity of state, regional, and local governments, quasi-governmental
  agencies, and private entities share authority and responsibility for planning, maintaining, and
  operating freight facilities and for raising revenue and managing budgets regulation,
  policy, and coordination is critical. (Four out of the ten plans reviewed had a "Governance"
  goal.)
- Land Use. Land use and freight movement inextricably link to one another. In most
  instances, however, transportation agencies see land use decision making as outside their
  purview, except for the control they exercise over their own rights-of-way and real estate.
  (This is exemplified by the fact that only three out of the ten plans reviewed had a "Land
  Use" goal)

#### 2.0 FINDINGS FROM OTHER LAWS, POLICIES, AND PLANS

Following the FTP Task 1.1 Background Review and as part of FTP Task 1.2, the project team reviewed additional resources at the national, state, and local level to identify other common planning goals related to freight. These additional five resources included:

- MAP-21 national freight goals;
- the framework and themes associated with the National Freight Advisory Committee (NFAC), which developed the National Strategic Freight Plan (NSFP);
- goals, objectives, and considerations identified in statewide freight plans from across the US;
- the NYSDOT "Forward Four" Principles; and
- the priorities, strategies, and objectives identified in by each of New York's 10 Regional Economic Development Councils (REDCs).

The identification of categories of commonality in the goals, objectives and strategies at the national, state, and local level further guided the development of the NYSFTP by identifying additional priority areas to consider in the development of NYSDOT's own vision, goals, and objectives. Not all of these considerations fit the mold of the eight goal categories previously listed; therefore, additional goal categories were added where applicable.

The assessment of these five resources revealed 17 common goals across the reviewed resources, in addition to the eight common goals previously identified in the regional plan review. **Table 2** illustrates these 17 common goal categories combined with the original eight common goal categories to illustrate which plans/policies/law/resources shared common goals.

Categories that were independent to their resource type (i.e., regional plans, statewide plans, or REDC plans) are highlighted in gray. While these goal categories were not common in the overall spectrum of resources reviewed, they were a significant commonality identified in the specific resource category reviewed. (i.e., "Land Use" was not a common theme throughout – but it was a common theme for regional/statewide plans in New York; "Customer Service" and "Reliability" were not common goals across all reviewed resources – but these were common themes in the goals of other statewide freight plans; etc.)

TABLE 2: SUMMARY OF THE 25 COMMON FREIGHT-RELATED GOALS FOR ALL RESOURCES REVIEWED

Reviewed Resources	INFRASTRUCTURE	INVESTMENT	PERFORMANCE MANAGEMENT	SAFETY AND SECURITY	ECONOMIC DEVELOPMENT	PARTNERSHIPS/COLLABORATION	QUALITY OF LIFE	GOVERNANCE	TECHNOLOGY ADVANCEMENT	EFFICIENCY	GLOBAL COMPETITIVENESS	CONNECTIVITY	PROJECT PIPELINE	PUBLIC ENGAGEMENT/OUTREACH	R&D/ACADEMIA	WORKFORCE TRAINING	LAND USE	CUSTOMER SERVICE	RELIABILITY	ENTREPRENEUR/BUSINESS INCUBATORS	INVESTMENT/BUSINESS FROM OUTSIDE REGION	JOB MARKET	REGIONAL STRENGTHS/INDUSTRIES	REVITALIZATION
Background Review X Common Goals	X	X		X	X			X				X					X							
MAP-21 National X Freight Goals	X	X	X	X	X		X	X	X	X														
NFAC/NSFP X	X	X	X	X		X		X	X	X	X		X		X	X								
NY Forward Four X Principles	X	X	X	X		X	X					X												
State Freight Plan Review Common X Goals	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X					
REDC Plan Review X Common Goals	X	X	X		X	X	X		X		X		X	X	X	X				X	X	X	X	X
TOTAL 6	6	6	5	5	4	4	4	4	4	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1

The following set of bullets provides more detail on these 25 categories of commonality in goals, objectives, and strategies:

- Environment: (See Section 1) All six resource-types reviewed included "Environment." Fifteen of 22 state freight plans and 7 of 10 REDC plans include "Environment" as a consideration.
- Investment: (See Section 1) All six resource-types reviewed included "Investment." Sixteen of 22 state freight plans and all REDC plans include "Investment" as a consideration.
- Infrastructure: (See Section 1) All six resource-types reviewed included "Infrastructure." Sixteen of 22 state freight plans and six of 10 REDC plans include "Infrastructure" as a consideration.
- **Performance Management:** MAP-21 set the stage for increased measurement of transportation system performance throughout the US, including freight and goods movement. National

Freight Goals, National Strategic Freight Plan, state freight plans, and REDC plans all include performance measurement goals to tie the outcomes of the plan back to the intended visions and goals. "Performance Management" goals spanned from the declaration of performance measures for future assessment to the establishment of data collection programs to the requirement for return on investment assessments. Five of six resource-types reviewed included "Performance Management." Four of 22 state freight plans and two out of 10 REDC plans include "Performance Management" as a consideration.

- Safety & Security: (See Section 1) Five of six resource-types reviewed included "Safety & Security." Eighteen of 22 state freight plans include "Safety & Security" as a consideration.
- Economic Development: (See Section 1) Four of six resource-types reviewed included "Economic Development." Twenty-one of 22 state freight plans and all REDC plans include "Economic Development" as a consideration.
- Partnerships/Collaboration: Freight planning encompasses a broad spectrum of governing bodies, businesses, investors, and other public and private stakeholders. In recognition of this reality, the National Strategic Freight Plan, the NY Forward Four Principles, many state freight plans, and all REDC plans prioritize the development of strong and purposeful interdisciplinary/inter-jurisdictional relationships. Partnerships and collaboration help to prevent overlap in research, resources, and investment to provide a seamless system for freight and goods movement. Four out of six resource-types reviewed included "Partnerships/ Collaboration." Thirteen of 22 state freight plans and 10 of 10 REDC plans included "Partnerships/Collaboration" as a consideration.
- Quality of Life: Recognizing that the freight system affects both communities and other transportation system users, freight plans at the national, state, and regional level acknowledge the importance of maintaining a quality state for these communities and commuters amidst the need for freight related infrastructure and services. Goals often included the reduction of community impacts in freight planning, preserving communities' natural environments which also relates to "Environment" goals, and using freight infrastructure and policy to support community economies which also related to "Economic Development" goals. Four of six resource-types reviewed included "Quality of Life." Seven of 22 state freight plans and five of 10 REDC plans included "Quality of Life" as a consideration.
- Governance: (See Section 1) Four of six resource-types reviewed included "Governance." Six of 22 state freight plans include "Governance" as a consideration.
- Technology Advancement: Goals pertaining to technology may focus on either (1) advancement of the freight transportation system with new infrastructure, information systems, or energy technologies or (2) advancement of technology to enhance key state/regional/local industries. Technology advancement and implementation requires investment in innovation, research, transfer; and interdisciplinary coordination. MAP-21 includes technology advancement in the national freight goals, supporting this goal as a national priority. Four out of six resource-types reviewed included "Technology Advancement." Two of 22 state freight plans and seven of 10 REDC plans include "Technology Advancement" as a consideration.

- Efficiency: Growing congestion on the nation's highways, urban arterials, intermodal facilities, and distribution access points is a threat to efficient goods and freight movement. Keeping increasing congestion in mind, the National Freight Goals, National Strategic Freight Plan, and State Freight Plans call out system wide efficiency as a critical goal in freight planning. "Efficiency" goals are different from "Connectivity" goals in that they underscore the importance of unhindered travel. - Three of six resource-types reviewed included "Efficiency." Seventeen of 21 state freight plans include "Efficiency" as a consideration.
- Global Competitiveness: Freight and goods movement considerations extend far beyond the domestic economy in that agencies must plan infrastructure and policy around maintaining a competitive advantage in the global market. The National Strategic Freight Plan and REDCs consider freight planning in the global context. Specifically, REDCs reference New York's Global NY initiative, a "one stop shopping to both foreign businesses looking to invest in New York and to local businesses who want to export globally." Three of six resource-types reviewed included "Global Competitiveness." Five of 22 state freight plans and seven of 10 REDC plans include "Global Competitiveness" as a consideration.
- Connectivity: (See Section 1) Three of six resource-types reviewed included "Connectivity." Eighteen of 22 state freight plans include "Connectivity" as a consideration.
- Project Pipeline: Project readiness is a major factor in establishing which projects will be included in a plan and the timing of their implementation. "Project Pipeline" goals focus on this aspect of project readiness, indicating that planning agencies will prioritize investment in projects that are closer to implementation, avoiding project delay or overlooking "low hanging fruit" projects. - Three of six resource-types reviewed included "Project Pipeline." One of 22 state freight plans and five of 10 REDC plans included "Project Pipeline" as a consideration.
- Public Engagement/Outreach: State freight plans and REDC plans both addressed "Public Engagement/Outreach," as these agencies are at an appropriate level to draw upon public outreach efforts. Planning at the federal level gears toward state entities to provide them with the resources necessary to plan freight projects, programs, and policies. States and regional entities, on the other hand, need to communicate and educate their constituents regarding suggested and alternative projects, programs, and policies to ensure that their efforts support a variety of populations and interests. - Two of six resource-types reviewed included "Public Engagement/Outreach." Five of 22 state freight plans and three out of 10 REDC plans included "Public Engagement/Outreach" as a consideration.
- Research and Development (R&D)/Academia: "R&D/Academia" goals leverage research and educational institutions to advance the economy and the transportation system. Similar to "Technology Advancement" the benefits of R&D/Academia can manifest as advancements to the economy or as advancements to freight-related infrastructure, information systems, or energy sources. Development of the National Strategic Freight Plan and most of the REDC plans have an "R&D/Academia" goal. - Two of six resource-types reviewed included "R&D/Academia." Eight of 10 REDC plans included "R&D/Academia" as a consideration.

<sup>&</sup>lt;sup>1</sup> http://global.ny.gov/

- Workforce Training: Similar to "R&D/Academia" goals, "Workforce Training" does not directly relate to the freight transportation system, it strongly links to the economic productivity of a region and, similarly, the movement of goods and freight to regional industries. Development of the National Strategic Freight Plan, as well as each of the REDC plans, acknowledge the importance of creating and maintaining skilled and innovative members of the workforce through the provision of training and education programs. Two of six resource-types reviewed include "Workforce Training." All REDC plans include "Workforce Training" as a consideration.
- Land Use: (See Section 1) One of six resource-types reviewed includes "Land Use."
- Customer Service: State freight plans were the only references that included "Customer Service" goals. State DOTs provide services for regional/local agencies and private industries involved in the movement of freight. State DOTs should maintain a constant awareness of providing helpful and cost-effective services to these customers, specifically reducing the costs for users and taxpayers. One of six resource-types reviewed includes "Customer Service." Nine of 21 state freight plans include "Customer Service" as a consideration.
- Reliability: Similar to "Efficiency" goals, "Reliability" goals envision a system without significant time delays; however, "Reliability" does not solely rely on reducing congestion within the system and ensuring connected/accessible mobility. "Reliability" draws on these concepts further to include consistency in travel times, patterns, and infrastructure. State DOTs were the only agencies to incorporate "Reliability" into their set of goals, which may also relate to their concentration on providing positive customer services. One of six resource-types reviewed includes "Reliability." Eight of 21 state fright plans include "Reliability" as a consideration.
- Entrepreneur and Business Incubators: As REDC plans focus on methods to increase regional economic development, the "Entrepreneur and Business Incubators" goal focuses on encouraging innovation and development in new business sectors through regional advocacy and provision of resources to these growing enterprises. This goal relates to freight in that, as new industries enter a region, they may also create a market for increased freight infrastructure or a need for a logistics hub/center. One of six resource-types reviewed includes "Entrepreneur and Business Incubators." Nine of 10 REDC plans include "Entrepreneur and Business Incubators" as a consideration.
- Investment/Business from Outside the Region: As REDC plans focus on methods to increase regional economic development, this goal hones in on the ability to attract freight movement to/from the region through attracting investment, workforce, and other business from outside of the region. One of six resource-types reviewed includes "Investment/Business from Outside the Region." Seven of 10 REDC plans include "Investment/Business from Outside the Region" as a consideration.
- Job Market: Similar to "Entrepreneur and Business Incubators" and "Workforce Training," all REDC plans included a goal of building and retaining the local workforce. The regional workforce drives the regional freight industry by determining which freight and goods will move into and out of the region. For example, many REDCs in upstate New York noted a desire to

enhance and retain manufacturing workforces, which generate a significant amount of freight movement into and out of an area through varying modes. Job market initiatives extended to consider increasing job availability for both veterans of the armed forces and young adults. (One of six resource-types reviewed included "Job Market." All REDC plans include "Job Market" as a consideration. Eight of ten REDC plans include veteran-oriented job creation goals, while three of the ten included young-adult-specific job creation goals.

- Regional Strengths/Industries: Each of the REDCs in upstate New York recognize New York's Opportunity Agenda, seeking to capitalize on regional strengths and industries. For example, New York maintains markets in manufacturing, agriculture, and tourism. Many of the REDC plans highlight the opportunities associated with these markets and target future economic development in these industries. (One of six resource-types reviewed included "Regional Strengths/Industries." All REDC plans include "Regional Strengths/Industries" as a consideration. Seven of ten REDC plans include Tourism goals, while five of the ten include agriculture goals.
- Revitalization: While not directly related to freight, most of the REDC plans identify "Revitalization" as a regional goal. "Revitalization" include brownfields redevelopment, community development initiatives, business investment districts/centers, waterfront redevelopment, downtown improvements, and contributions to NY Rising<sup>2</sup> the Community Reconstruction Program developed in response to help rebuild and revitalize areas damaged by Hurricanes Sandy and Irene and Tropical Storm Lee. One of six resource-types reviewed included "Revitalization." All REDC plans include "Revitalization" as a consideration.

The following sub-sections detail each of the resources reviewed and show how the contents of the resources connect to each of the 25 common goals described above. The subsections follow the list of additional resources shown at the beginning of Section 2: MAP-21, the NFAC/NSFP Framework, NYSDOT's Forward Four Principles, Other States' Freight Plans, and REDC Plans. A common goal category (or categories) is provided in parentheses and bold text next to each goal, objective, or planning element listed in the subsections. This breaks down the specific goal categories addressed by each law/plan/policy.

#### **MAP-21**<sup>3</sup>

As part of MAP-21, signed into law in 2012, Congress established the following National Freight Transportation Goals. As part of MAP-21 requirements, state freight plans must demonstrate how they adhere to each of the following six National Freight Transportation Goals:

- Improving the contribution of the freight transportation system to the state's economic efficiency, productivity, and competitiveness. (Economic Development)
- Reducing congestion on the freight transportation system. (Efficiency)

 $<sup>{}^2\,\</sup>underline{\text{http://stormrecovery.ny.gov/community-reconstruction-program}}$ 

<sup>&</sup>lt;sup>3</sup> http://www.gpo.gov/fdsys/pkg/FR-2012-10-15/html/2012-25261.htm

- Improving the safety, security, and resilience of the freight transportation system.
   (Safety and Security)
- Improving the state of good repair of the freight transportation system. (Infrastructure)
- Using advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system.
   (Investment; Technology Advancement; Performance Management; Global Competiveness)
- Reducing adverse environmental and community impacts of the freight transportation system. (Environment; Quality of Life)

The premise of MAP-21 also sets forth requirements for statewide freight planning initiatives, inherently rendering "Governance" as a goal of the legislation.

#### National Strategic Freight Plan (NSFP)<sup>4</sup>

In developing the National Strategic Freight Plan, the NFAC established six Subcommittees. The subcommittee focus areas align with the National Freight Transportation Goals. The existence of these subcommittees underscores the importance of each of the associated goals with regard to maintaining and improving the national freight system. The Subcommittees include:

- Conditions, Performance, and Data (Performance Management)
- Safety, Security, and Environment (Safety and Security; Environment)
- Project Delivery and Operations (Project Pipeline; Efficiency)
- Research, Innovation, and Technology (Technology Advancement)
- International Freight Strategies and Operations (Global Competiveness)
- First and Last Mile (Efficiency)

In the development of the NSFP, the NFAC was responsible for evaluating potential barriers to freight movement on the national freight system. The NFAC's recommendations related to **assessing barriers** to improved freight transportation performance are included in the bulleted list below to show how these areas of concern align with the goal categories:

- Safety and Security (Safety and Security)
- Funding (Investment)
- Streamlining (Project Pipeline)
- Harmonization of Policy, Regulation and Programs (Partnerships/Collaboration)
- Data, Research and Education (R&D/Academia; Workforce Training)
- Technology Implementation (Technology Advancement)

In the development of the NSFP, the NFAC was also responsible for evaluating potential methods for enhancing freight movement on the national freight system. The NFAC's recommendations for **improving the performance** of the national freight network are included in the bulleted list below to show how these areas of concern align with the goal categories:

<sup>4</sup> http://www.dot.gov/sites/dot.gov/files/docs/NFAC%20Task%201-Recommendations%20for%20NFSP-Final%286-12-14%29.pdf

- Funding (Investment)
- Streamlining (Project Pipeline)
- Data, Research, and Education (R&D/Academia; Workforce Training)
- Planning (Governance)
- Capacity Enhancements/Efficiency (Efficiency)

In the development of the NSFP, the NFAC was also responsible for evaluating potential methods of ensuring that freight movement on the national freight system does not have negative impacts on the transportation system or localities. The NFAC's recommendations for best practices to mitigate the impacts of freight movement on communities are included in the bulleted list below to show how these areas of concern align with the goal categories:

- Safety (Safety and Security)
- Environmental Sustainability (Environment)
- Funding (Investment)
- Harmonization, Standards and Institutional Arrangements (Partnerships/Collaboration)
- Data, Research, Education and Reporting (R&D/Academia; Workforce Training)
- Infrastructure Design (Infrastructure)
- Regulation and Enforcement (Governance)
- Technology Implementation (Technology Advancement)

#### New York Department of Transportation's Forward Four Principles<sup>5</sup>

NYSDOT developed four principles to guide the agency in meeting the state's transportation needs with limited resources. The following list provides the goal categories associated with each principle and shows how each of these principles relates to the goal categories:

- Preservation First (Infrastructure; Safety and Security)
- System not Projects (Connectivity; Partnerships/Collaboration)
- Maximize Return on Investments (Investment; Performance Management)
- Make It Sustainable (Environment; Quality of Life)

The safety of the traveling public is a priority that is woven into each of these principles, and into all infrastructure projects. A safe, reliable and multi-modal transportation system is essential to a sustainable society, addressing the needs of system users and facilitating the flow of commerce. NYSDOT has implemented a "Preservation First" capital planning process. Under the Preservation First framework, NYSDOT will focus investments in current infrastructure on preventive, corrective and demand maintenance. In doing so, the Department will emphasize proper management of assets; will undertake appropriate treatments, at appropriate times, and at the appropriate locations to maximize the life of its assets. Replacement of roadways and bridges and modal assets will occur only when an asset has reached the end of its useful life and attempts to further extend the life of the asset are no longer cost-effective.

<sup>&</sup>lt;sup>5</sup> More defined information on the Forward Four principles are in appendix 3

By adhering to these guiding principles, NYSDOT will maximize the life of its existing infrastructure, improve livability, consider environmental protection and improvement in the development and implementation of its projects and will promote economic development. Collectively, its investments will support a sustainable society.

#### Other States' Freight Plans/Studies

The review of freight plans developed by other states in the past five years revealed a variety of visions, goals, objectives, and strategies to guide freight and goods movement planning throughout each of those states. The following common goal categories were not observed in the statewide plan review: R&D/Academia, Workforce Training, and Land Use.

**Table 3** includes a matrix of the common goal categories identified in each individual state freight plan. "Economic Development," "Connectivity," "Safety & Security," and "Efficiency" were the top three observed goal categories in these plans. "Customer Service" and "Reliability" were also common goal categories, but these two categories were not observed in any of the other resources reviewed in this analysis. **Appendix 1** provides the specific goals, objectives, and other factors related to the statewide freight vision for each plan reviewed in the analysis. The project team included these goals in the overall list of common goals because they were noteworthy themes in the statewide plan review process.

**Note:** Six of the state freight plan efforts reviewed were not complete at the time of this analysis. These plans, however, had sufficient documentation available to provide detail on the draft goals, objectives, and strategies associated with the upcoming freight plan.

TABLE 3: GOALS AND OBJECTIVES FROM STATE FREIGHT PLANS

State	Plan	Year	ECONOMIC DEVELOPMENT	CONNECTIVITY	SAFETY & SECURITY	EFFICIENCY	INFRASTRUCTURE	INVESTMENT	ENVIRONMENT	PARTNERHIPS/ COLLABORATION	CUSTOMER SERVICE	RELIABILITY	QUALITY OF LIFE	GOVERNANCE	GLOBAL COMPETITIVENESS	PUBLIC ENGAGE/ OUTREACH	PERFORMANCE MANAGEMENT	TECHNOLOGY ADVANCEMENT	PROJECT PIPELINE
Alabama	IP	IP					_												-
Alaska	No	N/A																	
Arizona	No	N/A																	
Arkansas	No	N/A																	
California	Yes	2014	Х		Х	Х	Х		Х		Х		Χ					Χ	
Colorado*	IP	IP	X	Х	X	X	^	Х	X		^	Х						,,	
Connecticut	No	N/A																	
Delaware	Yes	2004																	
Florida	Yes	2013	Х	Х		Х		Х		X	Х			Х	Х	Х			
Georgia	Yes	2011	X	X		X		^		X	X	Х		^	X	^			
Hawaii	No	N/A																	
Idaho	Yes	2013	Х	Х	Х	Х	Х	Х		Х									
Illinois	Yes	2012	X	X	X	X	^	X	Х	X		Х					Х		
Indiana	Yes	2012	X	X	X	X	Х	X	X	X	Х	^				Х	X		
lowa*	IP	IP	X	X	X	^	^	X	X	X	^					^	^		
Kansas	Yes	2009																	
Kentucky	Yes	2006																	
Louisiana	Yes	2003																	
Maine	Yes	2014	Х	Х	Х	Х	Х		Х		Х	Χ							Χ
Maryland	Yes	2009	^	^							^	^							
Massachusetts	Yes	2010	Х		Х	Х	Х	Х	Х		Х		Χ						
Michigan	Yes	2013	^	Х	X	X	X	^	X				^						
Minnesota	IP	IP				<b>/</b> \			^										
Mississippi	Yes	2015	Х		Х	Х	Х	Х	Х			Х	Х						
Missouri	Yes	2014	X	Х	X	X	X	X	X	Х		^	^	Х				Х	
Montana	No	N/A			-					-									
Nebraska	No	N/A																	
Nevada	IP	IP																	
New Hampshire	 No	N/A																	
New Jersey	Yes	2007																	
New Mexico	No	N/A																	
North Carolina	Yes	2008																	
North Dakota	Yes	2014	Х		Х		Х	Х	Х	Х	Х	Χ	Χ	Х					
Ohio	Yes	2013	X			Х	X	X	1	1									
Oklahoma	Yes	2005																	
Oregon	Yes	2011	Х	Х	Х	Χ	Χ	Х	Χ	Х			Χ	Х					
Pennsylvania	No	N/A																	
Rhode Island	Yes	2006																	
South Carolina	Yes	2014	Х	Х	Х	Χ	Χ		Χ			Χ			Χ				
South Dakota	No	N/A																	
Tennessee	IP	İP																	
Texas*	IP	IP.		Х	Х	Χ		Х		X						X			
Utah*	iP	IP	Х	Х	Х		Х			X	Х						Х		
Vermont	Yes	2012	X	X			X	Х		X	X			Х	Х	Х	X		
Virginia	Yes	2009																	
Washington	Yes	2014	Х	Х	Х		Х		Х						Χ				
West Virginia*	IP	IP	Х	Х				Х		X				Х		Х			
Wisconsin	No	N/A																	
Wyoming*	IP	IP	X	Х	Х	Χ	Х	Х	Х			Χ	Χ						
		Total	21	18	18	17	16	16	15	13	9	8	7	6	5	5	4	2	1

<sup>\*</sup>The review team only reviewed state freight plans published after 2010. IP = In Progress

#### **Regional Economic Development Councils (REDCs)**

REDC plans focus enhancing regional economic development (ED) in a cross-disciplinary context, rather than freight transportation or related infrastructure specifically. Therefore, we assessed REDC economic development goals to develop an understanding of the major ED priorities across New York State.

Because not all REDC priorities and strategies fit the mold of the goals identified in the Background Review, MAP-21 goals, National Strategic Freight Plan framework, or other states' freight plan goals, the review team added goal categories where applicable. Note that the added REDC goals categories overlap with "Economic Development" and "Investment." Due to the nature of the mission of REDCs, the review team did not limit REDC priorities and strategies to "Economic Development" and "Investment" goal categories, as these goal categories inherently apply to the REDC plans. While all REDC goals target "Economic Development" or "Investment," the review team added categories to illustrate specific areas of economic development and investment concentration within the state of New York.

"Entrepreneur and Business Incubators," "Investment/Business from Outside Region," "Job Market," "Regional Strengths/Industries," and "Revitalization" were common goal categories observed in the REDC plans, but these five categories were not observed in any of the other resources reviewed in this analysis. The project team included these goals in the overall list of common goals because they were noteworthy themes in the REDC review process.

**Table 4** includes a matrix of the goals in each individual REDC plan for additional reference. **Appendix 2** provides the specific goals, objectives, and other factors related to the statewide freight vision for each plan reviewed in the analysis.

**TABLE 4: REDC GOALS AND OBJECTIVES** 

REDC	JOB MARKET	REGIONAL STRENGTHS/INDUSTRIES	PARTNERSHIPS/ COLLABORATION	WORKFORCE TRAINING/EDUCATION	REVITALIZATION	ENTREPRENEUR & BUSINESS INCUBATORS	R&D/ACADEMIA	VETERAN-ORIENTED (Combined w/ Job Market)	TOURISM (Combined w/ Regional Strengths/Industries)	NY RISING (Combined w/ Revitalization)	ATTRACT INVESTMENT/WORKFORCE FROM OUTSIDE REGION	TECHNOLOGY ADVANCEMENT	ENVIRONMENT	OPPORTUNITY AGENDA (Combined w/ Regional Strengths/Industries)	INFRASTRUCTURE	GLOBAL COMPETITIVENESS	QUALITY OF LIFE	AGRICULTURE (Combined w/ Regional Strengths/Industries)	PROJECT PIPELINE	GLOBAL NY (Combined w/ Global Competitiveness)	PUBLIC ENGAGEMENT/OUTREACH	YOUNG-ADULT ORIENTED (Combined w/ Job Market)	BUSINESS CLUSTERS (Combined w/ Regional Strengths/Industries)	PERFORMANCE MANAGEMENT	SMART GROWTH (Combined w/ Environment)
Capital District	X	X	Х	X	Χ	Х	X	X	X	Χ	Х	X	Х	X	Χ	Х	X			X					
Central NY	X	X	X	X	Χ	X	X	X		X	Х	X		X	Χ	X			X	X		X			
Finger Lakes	X	X	Х	X	Х	X	X		X			Х			Χ		X	X							
Long Island	X	X	X	X	X	X	X	X	X		Х	X	X		Χ	X	X	X		X	X		X		X
Mid-Hudson	X	X	X	X	X	X		X	X	X	Х	X	Х	X	Χ	X		X	Χ						
Mohawk Valley	X	X	X	X	Х	X	X		X	X	Х	Х	X		Χ			X			X		X		
North Country	X	X	X	X	Х	X	X	X		X	Х					X							X	Χ	
New York City	X	X	X	X	Х	X	X	X	X	X	Х		X	X		X	X		X	X					
Southern Tier	X	X	X	X	Х	X	X	X	X			X	X	X			X	X	Χ			X			
Western NY	X	X	X	X	X			X		X			X	X		X			X		X	X		X	X
TOTAL	10	10	10	10	10	9	8	8	7	7	7	7	7	6	6	7	5	5	5	4	3	3	3	2	2

Note: The review team combined the goal categories highlighted in orange into other related categories as indicated to reduce the overall number of REDC-specific goal categories.

# 3.0 SUMMARY OF FINDINGS IN THE OVERALL REVIEW OF LAWS, POLICIES, AND REGIONAL/STATEWIDE PLANS

The eight goal categories identified in the original review of New York's regional plans carried well across the other resource types reviewed. "Land Use" was the only category not acknowledged by the other resource types as a specific planning goal. Goals, objectives and strategies also varied substantially based on the geography of the agency who authored the publication.

Federal plans tend to focus on similar large-scale goals including the environment, infrastructure, investment, performance measurement, governance, technology advancement, and efficiency. Statewide plans also focused on these elements but dig further into improving the statewide economies and DOT service - working to move projects through the pipeline, increase public/agency participation, and ensuring reliability. New York's Forward Four Principles demonstrate this statewide-level focus for New York, specifically. Regional plans further refine methods of local economic improvement, specific projects and strategies, and ideas to engage the public all at the micro scale.

Development of a statewide plan should consider both the federal and regional perspectives. By fusing these large-scale and micro-scale priorities, the state's goals should reflect the ability to adhere to federal legislation and promote national system goals while creating paths to achieve local planning goals. Therefore, NYSDOT's goals and objectives for the NYS FTP should be based on a set of goals and strategies similar to those of other statewide freight plans and the Forward Four Principles. These goals should then be able to translate upward to meet large-scale federal goals and requirements and set the stage for regions to move forward in their goals and strategies.

The next section reviews the draft goals established for the NYS FTP and the commentary received at a public meeting on the draft language.

### 4.0 DRAFT GOALS PROVIDED BY NYSDOT & STAKEHOLDER COMMENT

NYSDOT developed an initial "strawman" set of six goals in early 2015 as a starting point for development of the FTP. NYSDOT developed the following goals based on initial review of MAP-21 legislation, regional freight plans and other completed state freight plans. The draft goals include:

#### INVEST FOR THE FUTURE

New York State's freight transportation system should anticipate future freight growth, and ensure the most efficient movement of goods in all modes, through removal of key freight bottlenecks and investment in strategic enhancements that will support existing and emerging freight markets.

This goal addresses "Investment" and "Efficiency."

#### **BUILD PARTNERSHIPS**

Engage regional partners, government agencies, economic development councils, the private sector and international trade partners to develop a strategic framework to advance high priority freight transportation projects and strategies.

This goal addresses "Partnerships/Collaboration" and "Project Pipeline."

#### **ENSURE SAFETY AND SECURITY**

The freight transportation system must be safe, secure and be designed to be resilient to the impacts of extreme weather and climate change.

This goal addresses "Safety & Security."

#### PROVIDE SOUND AND EFFICIENT INFRASTRUCTURE

Identify infrastructure and innovative technology investments and operational strategies that will ensure that the infrastructure is in a state of good repair and efficient for multimodal freight movement.

This goal addresses "Infrastructure," "Technology Advancement," and "Connectivity."

#### FOSTER ECONOMIC COMPETITIVENESS

Strengthen national and global competitiveness for existing and emerging freightcentered business and activity in New York State by selecting strategies and projects that support emerging markets and ensure reliable, efficient multimodal supply chains.

This goal addresses "Global Competitiveness," "Economic Development," and "Connectivity."

#### RESPECT THE ENVIRONMENT

Provide efficient goods movement through a connected multimodal infrastructure that supports the most fuel efficient, economical and sustainable freight movement and delivery.

This goal addresses "Environment."

These NYSDOT draft goals reflect 10 of the 25 identified common goals, objectives, priorities, and strategies in this review. The goals address the three most common and critical

elements to freight planning: "Environment," "Infrastructure," and "Investment." Additionally, the draft set of goals call out "Safety/Security," "Economic Development," "Partnerships/Collaboration," "Technology Advancement," "Efficiency," "Global Competitiveness," "Connectivity," and "Project Pipeline" elements for the statewide plan.

When given the opportunity to comment on the draft set of goals at the NYS Freight Plan's initial Stakeholder Working Group meeting and webinar held on June 30, 2015, the following major themes arose:

- Connectivity Stakeholders agreed that the Core Freight Network needs to be
  multimodal and must reduce bottlenecks in the system. Stakeholder highlighted the
  need for an integrated approach to goods movement on land, air and maritime
  modes.
- Infrastructure Stakeholders cited various infrastructure improvements necessary for the improvement of the statewide freight system including rail clearances, bridge access/flow/safety, rail yard usage, and dredging of primary and secondary waterways.
- Investment/Efficiency Stakeholders voiced concern in the freight tonnage forecasts and projections cited for the state, citing that oversize vehicle and dimension issues currently present problems and will continue in the future. Stakeholders believe that to remain competitive it is very important to grow capacity both in and out of New York's ports. The NYS FTP should coordinate with the large distribution centers in the state adding value capture, monitoring capacity, proactive engagement, and strategies to balance loads.
- Safety & Security Stakeholders commented that truck parking is a major safety concern in the state and should be a top priority in the NYS FTP. Stakeholders also voiced concern over HAZMAT trains.
- Land Use Stakeholders voiced concerns regarding the preservation of industrial
  and manufacturing land uses along working waterfronts and rail lines. Stakeholders
  suggested that the NYS FTP include an inventory and analysis of freight-dependent
  land uses and directly address the need to include land use by cataloguing and
  preserving adequate rights of way, as well as creating manufacturing and freight
  corridors.

The Stakeholder Comments echo that and "Connectivity," "Infrastructure," "Investment," "Efficiency," and "Safety/Security" are statewide priorities. In addition to these priorities already addressed in the NYS FTP draft set of goals, stakeholders cited "Land Use" as a consideration for the plan, as land use interactions have a significant impact on freight movement and the community.

To provide a visual synopsis of how these draft goals and stakeholder comments stack up to the review of background plans, policies, and laws, **Table 5** summarizes the similarities across plans.

TABLE 5: COMMON GOALS COMPARED TO NYSDOT DRAFT GOALS

ENVIRONMENT	INFRASTRUCTURE	INVESTMENT	PERFORMANCE MANAGEMENT	SAFETY AND SECURITY	ECONOMIC DEVELOPMENT	PARTNERSHIPS/COLLABORATION	QUALITY OF LIFE	GOVERNANCE	TECHNOLOGY ADVANCEMENT	EFFICIENCY	GLOBAL COMPETITIVENESS	CONNECTIVITY	PROJECT PIPELINE	PUBLIC ENGAGEMENT/OUTREACH	R&D/ACADEMIA	WORKFORCE TRAINING	LAND USE	CUSTOMER SERVICE	RELIABILITY	ENTREPRENEUR/BUSINESS INCUBATORS	INVESTMENT/BUSINESS FROM OUTSIDE REGION	JOB MARKET	REGIONAL STRENGTHS/INDUSTRIES	REVITALIZATION
Background Review X	X	X		X	X			X				X					X							
Common Cools																								
MAP-21 National Freight Goals	X	X	X	X	X		X	X	X	X														
NFAC/NSFP V	v	X	X	v		v		X	v	V	V		v		X	v								
Framework	^	^	^	^		^		^	^	^	^		^		^	^								
NY Forward Four X	X	X	X	X		X	X					X												
State Freight Plan																								
Review Common X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X					
Goals REDC Plan																								
Review Common X	X	X	X		X	X	X		X		X		X	X	X	X				X	X	X	X	X
Goals																								
NYSDOT Draft	X	X		X	X	X			X	X	X	X	X											
Goals ^ Stakeholder	V	V		v						<b>V</b>		<b>V</b>					V							
Comments	^	X		^						^		^					X							

### 5.0 RECOMMENDATIONS FOR ADDITION TO THE DRAFT GOALS

While the NYSDOT draft goals successfully consolidate ten of the identified goals, objectives, priorities, and strategies into only six overall goals, it is possible to integrate more elements into set of statewide goals to ensure the NYS FTP acknowledges and prioritizes all critical freight considerations at the statewide level. Based on the comparison shown in Table 5, the following three goal subjects addressed in MAP-21 were not included in the NYS FTP draft goals: "Performance Management," "Quality of Life," and "Governance" are potential elements for incorporation into the NYSFTP.

- Performance Management is important to long-range planning at the state level because it allows the state to see the outcomes of investment choices over time. MAP-21 places an emphasis on quantitative assessment in the planning process, so the addition of performance management into the statewide plan ensures New York's compliance with federal legislation, as well as a commitment to performance evaluation for new and existing infrastructure and programs. In the case of the NYS FTP, Performance Management will not be a specific goal. Rather, the plan will reflect performance management through the development of specific performance measures to support each goal and objective. Therefore, NYSDOT will acknowledge the need for performance management overtime as a method of assessing goals rather than a goal itself.
- Quality of Life is an important element of freight planning in that this plan affects not only freight-related industries; rather, the freight system affects all people. Customers expect timely arrival of goods and services and simultaneously desire minimization of congestion and trucks on local roads. It is critical for the statewide freight plan to acknowledge the need for trade-offs to ensure that the freight system appropriately balances the needs of business owners, manufacturers, shippers, distributors and customers. The draft "Respect the Environment" goal provides an opportunity for integration of "Quality of Life" concepts to enhance the scope of this particular goal.
- By acknowledging Governance in the statewide freight goals, NYSDOT recognizes the
  importance of its role in freight planning and understands that its effectiveness may lie
  particularly in the realms of policy suggestions and implementation. The NYS FTP's
  draft
  - "Build Partnerships" goal provides an opportunity to place emphasis on intergovernmental partnerships to guide policies not only at the state-level but also at regional and local levels.

Other potential additions to the NYSDOT draft goals (based on the goal commonalities) include the elements of "Land Use," "R&D/Academia," "Workforce Training," and "Reliability." These aspects, however, fall less under the responsibility of NYSDOT and more toward local jurisdictions and the private sector, so the project team recommends that NYSDOT address these elements within the plan as they tie into some of the larger-scale

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goals. (e.g., "Land Use" links to "Governance" on a statewide scale; "R&D/Academia" and "Workforce Training" tie into "Economic Development" on a statewide scale; "Reliability" can relate to "Efficiency" and "Connectivity" on a statewide scale.) "Public Involvement" and "Customer Service" are additional considerations for incorporation in the NYS FTP. Rather than have these listed as a specific goal or goals, these elements will be included in the overall planning process, as they are a means to achieving a goal rather than a standalone goal.

#### 6.0 REVISED PROPOSED DRAFT FTP GOALS

Based on the findings of this Task 1.2 effort, the draft set of goals provided by NYSDOT have been changed and presented as the following Revised Draft Freight Transportation Plan Goals:

#### INVEST FOR THE STATE'S FUTURE

New York State expects and encourages future growth, and is committed to ensuring efficient goods movement in all modes by identifying and removing key freight bottlenecks and investing in strategic enhancements that will support existing and emerging freight markets.

This goal addresses "Investment" and "Efficiency."

#### **BUILD COLLABORATIVE PARTNERSHIPS**

Engage regional partners, government agencies, economic development councils, the private sector and international trade partners to advance high-priority freight transportation projects and strategies.

This goal addresses "Partnerships/Collaboration," "Project Pipeline," and "Governance."

#### ENSURE SAFETY AND SECURITY FOR NEW YORK'S FREIGHT SYSTEM

Design, operate, and maintain the freight transportation system to ensure overall safety and security, as well as resiliency to the impacts of extreme weather and climate change. This goal addresses "Safety & Security."

#### PROVIDE SOUND AND EFFICIENT INFRASTRUCTURE

Identify infrastructure investments, innovative technologies, and operational strategies that will ensure efficient goods movement on a multi-modal freight network.

This goal addresses "Infrastructure," "Technology Advancement," and "Connectivity."

#### ELEVATE NEW YORK'S ECONOMIC COMPETITIVENESS

Strengthen New York's competitive position in national and global freight-centered business and activity by selecting strategies and projects that support emerging markets and ensure reliable, efficient multimodal supply chains

This goal addresses "Global Competitiveness," "Economic Development," "Connectivity," and "Reliability."

#### CREATE AN ENVIRONMENTALLY-BALANCED FREIGHT ECONOMY

Provide efficient goods movement through a connected multimodal infrastructure that supports fuel-efficient and sustainable freight movement and delivery, while maintaining quality of life for New York's communities.

This goal addresses "Environment" and "Quality of Life."

### APPENDIX 1: FORWARD FOUR PRINCIPLES MORE FULLY DEFINED

- Preservation First To ensure the State's transportation system can continue to support future commerce, personal travel demands and address emergencies and unforeseen circumstances, NYSDOT will focus first on preserving the existing infrastructure. This includes focused investment in current infrastructure on preventive, corrective and demand maintenance. The highest priority of infrastructure investment will be to preserve the functionality of the existing transportation system.
- System not Projects While NYSDOT's annual investments in transportation infrastructure are composed of many individual projects, each project must contribute to an efficient multi-modal transportation system. Critical transportation corridors in the State (including both long-distance and local corridors and encompassing all transportation assets) must remain functional, and provide uninterrupted connectivity for system users. System-wide conditions require a system and program-driven, rather than a project-driven, solution. Where warranted, NYSDOT will strategically advance a limited number of system replacement and expansion projects. NYSDOT will leverage technology will that support economic development and users of all modes.
- Maximize Return on Investments Age, utilization and the harsh freeze-thaw cycle of the Northeast all serve to accelerate the deterioration of the State's transportation infrastructure. Given the backlog of investments needed to bring the system to a state-of good-repair (SGR), it is essential that a strategy be implemented that optimizes the benefits to the system for the investment made. To facilitate this principal, NYSDOT emphasizes proper management of assets with appropriate treatments, at appropriate times, and at the appropriate locations to maximize the life of the existing assets.
- To support this strategy, the Department performs condition assessments of its roads and bridges and then models those conditions and subsequent deterioration to determine the lowest cost treatment that can be applied. It then applies that treatment just before conditions fall to a lower level, thus getting the most life out of these low cost treatments. To maximize the service life of the transportation infrastructure, NYSDOT will perform focused rehabilitation work, fixing only those elements in need of repair, when determined that the service life of the asset can be extended with limited investment.
- Make It Sustainable Sustainability balancing economic, social and environmental
  considerations is an overarching principal. NYSDOT will incorporate
  sustainability considerations into all of its actions and investments. A sustainable
  approach to transportation investment considers the relative and cumulative value
  of the assets as they benefit the public, economy and environment.

#### **APPENDIX 2: DETAIL OF STATE FREIGHT PLANS**

This appendix provides a full breakdown of the goals, objectives, visions, missions, and performance measures identified in state freight plans developed for US states after 2010.

#### California DOT6

#### Goals:

- Economic Competitiveness: Improve the contribution of the California freight transportation system to economic efficiency, productivity, and competitiveness (Economic Development)
- Safety & Security: Improve the safety, security, and resilience of the freight transportation system (Safety and Security)
- Freight System Infrastructure Preservation: Improve the state of good repair of the freight transportation system (Infrastructure)
- Environmental Stewardship: Avoid and reduce adverse environmental and community impacts of the freight transportation system (Environment; Quality of Life)
- Congestion Relief: Reduce costs to users by minimizing congestion on the freight transportation system (Efficiency; Customer Service)
- Innovative Technology & Practices: Use innovative technology and practices to operate, maintain, and optimize the efficiency of the freight transportation system while reducing its environmental and community impacts (Technology Advancement; Efficiency; Quality of Life; Environment)

#### Colorado DOT7

#### Goals:

- Safety: Develop and implement programs and projects to improve the safety of moving goods in a multimodal transportation system. (Safety and Security)
- Efficiency: Enhance mobility and connectivity, provide reliability, and relieve congestion for freight movement. (Efficiency; Connectivity; Reliability)
- Economic Vitality: Invest in and sustain a freight system to support state, regional, and local Economic development. (Economic Development; Investment)
- Environmental Stewardship: Make freight-related decisions consistent with CDOT's commitment to protect the environment and quality of life for Colorado's citizens.
   (Environment; Quality of Life)

#### Florida DOT<sup>8</sup>

#### Goals:

 Increasing the flow of domestic and international trade through the state's seaports and airports, including specific policies and investments that will

 $<sup>^{6}\,\</sup>underline{\text{http://www.dot.ca.gov/hq/tpp/offices/ogm/CFMP/Dec2014/CFMP\_010815.pdf\#zoom}{=}75}$ 

 $<sup>^{7}\,\</sup>underline{http://coloradotransportation matters.com/other-cdot-plans/freight/}$ 

<sup>8</sup> http://www.freightmovesflorida.com/docs/default-source/fmtp-freight-information/freight-mobility-and-trade-plan-policy-element\_2013-06-19-web-(2).pdf

recapture cargo currently shipped through seaports and airports located outside the state. (Governance; Investment; Economic;

#### Partnerships/Collaboration; Global Competitiveness)

- Increasing the development of ILCs in the state, including specific strategies, policies, and Investments that capitalize on the empty backhaul trucking and rail market in the state. (Governance; Investment; Partnerships/Collaboration)
- Increasing the development of manufacturing industries in the state, including specific policies and investments in transportation facilities that will promote the successful development and expansion of manufacturing facilities.
   (Investment; Economic)
- Increasing the implementation of compressed natural gas (CNG), liquefied natural gas (LNG), and propane energy policies that reduce transportation costs for businesses and residents located in the state. (Governance; Economic)

#### Objectives:

- Objective 1: Capitalize on the freight transportation advantages of Florida through collaboration on economic development, trade and logistics programs (Partnerships/Collaboration; Economic Development)
- Objective 2: Increase operational efficiency of goods movement (Efficiency)
- Objective 3: Minimize costs in the supply chain (Customer Service)
- Objective 4: Align public and private efforts for trade and logistics (Partnerships/Collaboration)
- Objective 5: Raise awareness and support for freight movement (Public Engagement/Outreach)
- Objective 6: Develop a balanced transportation planning and investment model for all forms of transportation (Investment; Connectivity)
- Objective 7: Transform the FDOT's organizational culture to include consideration of supply chain and freight movement issues (Governance)

#### Georgia DOT9

#### Vision:

 Georgia will be the global gateway of choice, providing reduced time to market, superior supply-chain efficiency, and reliability from destination to end customer. (Economic Development; Efficiency; Reliability; Customer Service; Global Competitiveness)

#### Mission:

• The State, in partnership with private sector and local and Federal governments, will identify and promote the implementation of activities that improve the capacity, capability, and connectivity for today's supply chains. This will leverage intermodal freight connectors to destinations both inside and outside of Georgia to generate a competitive advantage that benefits Georgians. (Partnerships/Collaboration; Connectivity)

http://www.dot.ga.gov/InvestSmart/Freight/Documents/Plan/GAFreightLogisticsPlan%20ExecutiveSummary.pdf

#### Idaho DOT10

#### Goals:

- GOAL 1: Idaho's freight system features seamless, modal connectivity while maintaining safety and efficiency. (Connectivity; Safety and Security; Efficiency)
- GOAL 2: Idaho's freight system features effective partnerships to leverage resources and opportunities. (Partnerships/Collaboration; Economic)
- GOAL 3: Idaho strategically invests in its freight system infrastructure while maximizing existing capacity. (Infrastructure; Investment)

#### Illinois DOT11

#### Performance Measures:

- Safety Performance (Safety and Security)
- Service Reliability (Reliability)
- Air Quality (Environment)

#### Strategies:

- First, implement freight performance measures, so that the quality of performance can
  be known and enriched, and ultimately employed as a competitive advantage. The
  information from this Freight Mobility Plan will aid in the determination of specific
  freight performance measures. (Economic Development; Performance
  Management)
- Second, enhance knowledge of industry transportation needs, so that responsive policies
  and investments can be implemented in the long-term interest of the Illinois economy
  and jobs. Public-private coordination should be encouraged to ensure efficient freight
  system operation. (Governance; Investment; Partnerships/Collaboration)
- Third, expand freight multimodal planning, in order to enjoy the benefits of every mode, improve their connection, and sustain the State's position as the primary freight hub of the United States. This will need to occur both at the State and local level, as well as expanded coordination with neighboring states and other major economic regions where Illinois freight moves. (Connectivity; Partnerships/Collaboration; Economic Development)

#### Indiana DOT12

#### Goals:

- Deliver Capital Program projects in accordance with key performance indicators and INDOT performance measures. (PMs include travel demand, travel efficiency, safety, environment, economic.) (Performance Management; Connectivity; Efficiency; Safety and Security; Environment; Economic Development)
- Publish and implement a plan, consistent with the funds available, that maintains steady improvement in pavement and bridge quality. Proactively communicate and market the

 $<sup>^{10}\</sup>underline{\text{http://www.dot.ga.gov/InvestSmart/Freight/Documents/Plan/GAFreightLogisticsPlan\%20ExecutiveSummarv.pdf}$ 

<sup>11</sup> http://apps.dot.illinois.gov/ISTP/pdfs/final\_report/05\_freight\_mobility\_plan.pdf

<sup>12</sup> http://www.in.gov/indot/files/FM\_MultimodalPlan\_2014.pdf

plan to internal and external stakeholders defining the value of preservation.

#### (Infrastructure; Partnerships/Collaboration)

- Ensure a commitment to safety throughout the agency. Meet departmental safety goals
  for both internal employees and external customers. (Safety and Security; Customer
  Service)
- Implement a talent management system that links strategy and operations to results.
   Establish a culture of continuous improvement that is consistent with performance of a 21st century organization. Reduce operational and construction expenses that will ultimately save the taxpayers money and channel more dollars to capital investments.
   (Customer Service; Investment)
- Improve internal and external customer satisfaction by providing timely responses with quality products and services. Take an outside in view by identifying customers, understanding their expectations and creating internal alignment to ensure the highest level of customer service. (Customer Service; Public Engagement/Outreach)

#### Iowa DOT13

#### Goals:

- Improve safety (Safety and Security)
- Improve freight mobility (Connectivity; Efficiency)
- Improve intermodal connectivity (Connectivity)
- Stimulate economic development (Economic Development)
- Enhance environmental conditions (Environment)
- Develop financial strategies for freight projects (Investment)
- Strengthen partnerships to address freight issues (Partnerships/Collaboration)

#### Maine DOT14

Performance Measures to Align with MAP-21 Requirements:

- Safety (Safety and Security)
- Infrastructure Condition (Infrastructure)
- Congestion Reduction (Efficiency)
- System Reliability (Reliability)
- Freight Movement and Economic Vitality (Connectivity; Economic)
- Environmental Sustainability (Environment)
- Reduced Project Delivery Delays (Project Pipeline)

#### Michigan DOT15

#### Goals:

- Efficient and Effective Operations (Efficiency)
- System Improvements (Infrastructure)

<sup>13</sup>http://www.iowadot.gov/systems\_planning/freight/FAC/Iowa%20Freight%20Plan%20Outline.pdf

<sup>14</sup> http://maine.gov/mdot/ofbs/docs/FreightStrat.pdf

<sup>15</sup>http://www.michigan.gov/documents/mdot/MDOT 2013 MI Freight Plan 1 thru 4 437871 7.pdf

- Safety and Security (Safety and Security)
- Stewardship (Environment)
- Modal Choice (Connectivity)
- Freight Adequacy (Infrastructure; Efficiency)

#### Massachusetts DOT

#### Goals:

- Safety Manage the nation's safest transportation system (Safety and Security)
- State of Good Repair Build a quality transportation system and maintain it in a state of good repair (Infrastructure)
- Stewardship Operate the transportation system in a manner that embraces our stewardship of the Commonwealth's natural, cultural, and historic resources (Environment, Quality of Life)
- Customer Service Deliver superb service that both anticipates and responds to customer needs (Customer Service)
- Efficiency Invest public funds and other resources wisely while fostering
  economic development wherever and whenever possible (Efficiency; Investment;
  Economic Development)

#### Mississippi DOT16

#### Goals/Objectives:

- Improve economic benefits of the statewide freight network. Increase public investment
  to facilitate freight system improvements that generate jobs and enhance MS's
  competitive position. (Economic Development; Investment)
- Improve reliability and reduce congestion (efficiency) on the priority freight corridors.
   Provide reliable and predictable travel times along identified freight corridors by reducing time delays. (Reliability; Efficiency)
- Protect the safety and security of freight infrastructure. Reduce the number and rate of freight-movements related fatalities and injuries. (Safety and Security)
- Maintain the MS freight network infrastructure in a state of good repair.
   (Infrastructure)
- Continuously improve infrastructure conditions that affect freight bottlenecks and reliability issues. (**Reliability**)
- Protect and enhance the environment while enhancing the freight network performance.
   Implement freight-specific environmental stewardship programs to reduce impact of freight movement on the state's communities. (Environment; Quality of Life)

<sup>16</sup> http://mdot.ms.gov/documents/Planning/Freight/Documents/MS%20Freight%20Plan%20-

<sup>%20</sup>Executive%20Summary.pdf

#### Missouri DOT17

#### Goals:

- Maintenance: Maintain the freight system in good condition by keeping highways and bridges in good condition and supporting the maintenance of railways, waterways, airports, and multimodal connections. (Infrastructure)
- Safety: Improve safety on the freight system by decreasing the number and severity of
  crashes involving commercial vehicles and improving safety at railroad crossings.
  (Safety and Security)
- Economy: Support economic growth and competitiveness in Missouri through strategic improvements to the freight system. (Economic Development)
- Connectivity and Mobility: Improve the connectivity and mobility of the freight system
  by reducing congestion and increasing reliability on the roadways; by supporting
  improved efficiency of rails, waterways, and airports; and by improving connections
  between freight modes. (Connectivity; Efficiency)

# Considerations:

- Environmental: Reduce and/or mitigate the adverse environmental impacts of freight.
   (Environment)
- Organizational and Process: Institute policies and practices that support the freight system, such as exploring funding flexibility and stability and using technology to improve operations on the freight system. (Governance; Technology)
- Customers and Partners: Improve coordination and collaboration with freight stakeholders. (Partnerships/Collaboration; Investment)

# North Dakota DOT18

# Vision:

 North Dakota's transportation personal and freight mobility goals are interdependent, mutually supportive, and apply to both infrastructure and services (Infrastructure; Customer Service)

#### Goals:

- Goal 1 Safe and secure transportation (Safety and Security)
- Goal 2 Sustainable and reliable mobility (Reliability)
- Goal 3 Diversified and sufficient funding (Investment)
- Goal 4 Communication and cooperation (Partnerships/Collaboration;
   Governance)
- Goal 5 Strong economic growth with consideration of environmental, cultural, and social impacts (Economic Development; Environment; Quality of Life)

 $<sup>^{17}\</sup> http://www.mofreightplan.org/wp-content/uploads/2015/02/Missouri-Freight-Plan-Executive-Summary-FINAL-small-version.pdf$ 

<sup>18</sup> https://www.dot.nd.gov/divisions/planning/freight/docs/FreightPlan.pdf

#### Ohio DOT19

#### Goals:

- Plan and prioritize future strategic investments in Ohio's freight infrastructure; and (Investment; Infrastructure)
- Guide future economic development activities to make the most efficient use of the existing freight infrastructure. (Economic Development; Efficiency)

# Oregon DOT20

#### Vision:

- Supports identifying, prioritizing and facilitating investments in Oregon's highway, rail, marine, air and pipeline transport infrastructure to further a safe, seamless multimodal and interconnected freight system; (Infrastructure; Safety and Security; Connectivity)
- Identifies institutional and organizational barriers to an efficient and effective freight transportation system in Oregon, and develops strategies for addressing issues associated with overcoming these barriers; and (Partnerships/Collaboration)
- Adopts strategies for implementation of the Oregon Transportation Plan (OTP) goals and policies related to the maintenance and improvement of the freight transportation system. (Governance; Infrastructure)

#### OTP Goals:

- Goal 1 Mobility and Accessibility (Connectivity)
- Goal 2 Management of the System (Efficiency)
- Goal 3 Economic Vitality (Economic Development)
- Goal 4 Sustainability (Environment; Quality of Life)
- Goal 5 Safety and Security (Safety and Security)
- Goal 6 Funding the Transportation System (Investment)
- Goal 7 Coordination, Communication and Cooperation (Partnerships/Collaboration)

#### South Carolina DOT21

# Goals:

- Mobility and system reliability goal: Provide surface transportation infrastructure and services that will advance the efficient and reliable movement of people and goods throughout the state. (Connectivity; Reliability; Infrastructure; Efficiency)
- Safety goal: Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective emergency management operations. (Safety and Security)

<sup>19</sup>http://www.dot.state.oh.us/Divisions/Planning/SPR/StatewidePlanning/access.ohio/Ohio%20Freight%20Study%20Report s/Ohio%20Statewide%20Freight%20Study%20Final%20Report.pdf

<sup>20</sup> http://www.oregon.gov/ODOT/TD/TP/docs/ofp/ofp.pdf

<sup>21</sup> http://www.scdot.org/multimodal/pdf/sc\_mtp\_freight\_plan.pdf

- Infrastructure condition goal: Maintain surface transportation infrastructure assets in a state of good repair. (Infrastructure)
- Economic and community vitality goal: Provide an efficient and effective interconnected transportation system that is coordinated with the state and local planning efforts to support thriving communities and South Carolina's economic competitiveness in global markets. (Economic Development; Quality of Life; Connectivity; Global Competitiveness)
- Environmental goal: Partner to sustain South Carolina's natural and cultural resources by minimizing and mitigating the impacts of state transportation improvements. (Environment)

#### Texas DOT<sup>22</sup>

# Key Needs/Challenges:

- System Capacity (Efficiency)
- System Operations (Efficiency)
- Safety (Safety and Security)
- Connectivity (Connectivity)
- NFTA and Border Challenges (Safety and Security)
- Institutional-interagency-industry Coordination (Partnerships/Collaboration)
- Education and Public Awareness (Public Engagement/Outreach)
- Funding Challenges (Investment)

# Utah DOT23

# Goals:

- Preserve Infrastructure Focus UDOT infrastructure improvements on Utah's Primary
  Freight Network highways, and monitor operations of all freight modes for potential
  impacts to the transportation system and business community. (Infrastructure;
  Performance Management)
- Optimize Mobility Identify problems affecting freight service and operations in Utah, as well as options for addressing those challenges, such as improved highway access to freight centers including warehouse complexes, rail intermodal terminals, and pipeline/energy facilities. (Connectivity)
- Zero Fatalities Improved infrastructure for freight such as adequate turning radii, signal timing, passing/climbing lanes, paved shoulders, and truck parking. (Safety and Security; Infrastructure)
- Strengthen the Economy Continued coordination with Utah business and logistics leaders, including each freight mode and rail passenger/commuter provider on current

 $<sup>^{22}\,\</sup>underline{\text{http://ftp.dot.state.tx.us/pub/txdot-info/freight/meetings/082213-key-freight-needs.pdf}$ 

<sup>&</sup>lt;sup>23</sup> http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:4368

and future needs and operations. (Economic Development; Partnerships/Collaboration; Customer Service)

# Vermont AOT24

# Objectives:

- Incorporate freight into VTrans planning, project development and service delivery activities (Governance; Customer Service)
- Facilitate economic development in Vermont by improving transportation infrastructure and operations between Vermont and its trading partners in New York, New England and Canada (Economic Development; Infrastructure; Partnerships/Collaboration)
- Improve access to major regional suppliers and markets for Vermont shippers and receivers by enacting a series of infrastructure, operational and regulatory programs (Governance; Infrastructure; Partnerships/Collaboration)
- Improve the rail infrastructure, operations and regulatory and institutional frameworks in order to (i) keep rail freight services viable and maintain market competition with trucking, (ii) allow an opportunity for future growth in mid-length intermodal services (distances approximately 500 miles), and (iii) improve the freight rail market share (Connectivity)
- Expand air freight and cargo services available to Vermont shippers (Connectivity)
- Promote the development and institutionalizing of measures that gauge the performance of the Vermont freight system and support informed and cost-effective investments (Performance Management; Investment)

# Goals:

- Establish a demographic and economic profile of the State, which identifies major and emerging industries, and recognizes trends and opportunities in trade between Vermont and domestic and international markets; (Economic Development; Global Competitiveness)
- Provide an up-to-date assessment of the condition of the State's freight infrastructure and the impacts of current and future freight traffic; (Infrastructure)
- Assemble, through analyses and stakeholder involvement, a comprehensive list of infrastructure, operational, institutional and regulatory needs; and (Public Engagement/Outreach; Governance)
- Develop packages of programs, policies and projects that address Vermont's freight needs and position the State's economy to be competitive today and in the future. (Economic Development)

#### Washington State DOT<sup>25</sup>

State Legislature's Six Transportation Policy Goals:

• Economic vitality (Economic Development)

 $<sup>{}^{24}\,\</sup>underline{http://www.camsys.com/pubs/Vermont\_Freight\_Plan\_Final.pdf}$ 

<sup>&</sup>lt;sup>25</sup> http://www.wsdot.wa.gov/NR/rdonlyres/4AB1DCDE-5C29-4F08-B5E7-

<sup>697</sup>F432C34D7/0/2014WashingtonStateFreightMobilityPlan.pdf

- Preservation (Infrastructure)
- Safety (Safety and Security)
- Mobility (Connectivity)
- Environment (Environment)
- Stewardship (Quality of Life/Environment)

# Three objectives guided development of the Plan:

- Developing an urban goods movement system that supports jobs, the economy, and clean air for all; and provides goods delivery to residents and businesses. (Economic Development; Environment; Customer Service; Quality of Life)
- Maintaining Washington's competitive position as a global gateway to the nation with intermodal freight corridors serving trade and international and interstate commerce, and the state and national Export Initiatives. (Economic Development; Connectivity; Global Competitiveness)
- Supporting rural economies' farm-to-market, manufacturing, and resource industry sectors. (Economic Development)

# West Virginia DOT (Plan in Progress)26

# Purpose:

• Build off of the national freight network and identify facilities that best complement the movement of freight in West Virginia (Investment)

#### Goals:

- Identify a comprehensive freight route network and a future freight planning framework for West Virginia (Connectivity)
- Evaluate existing transportation systems and how they are used by different industry sectors in and through West Virginia (Economic Development)
- Better position West Virginia for federal funding (Investment; Governance)
- Strengthen relationships with the freight industry through outreach activities (Partnerships/Collaboration; Public Engagement/Outreach)

## Wyoming DOT (Plan in Progress)<sup>27</sup>

## Goals/Performance Measures:

- Improve Freight Safety (Safety and Security)
  - o Reduce fatalities
  - o Reduce crash severity
  - o Reduce total number of crashes
  - o Reduce the number of freight and rail related accidents in Wyoming
- Support Regional Economic Development (Economic Development; Investment)

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<sup>&</sup>lt;sup>26</sup>http://www.transportation.wv.gov/highways/programplanning/plan\_conf/Documents/2014PC/WV\_Freight.pdf <sup>27</sup> http://www.wyomingstatewidefreightplan.com/goals-performance/

- Encourage freight investments with positive economic benefits to the Wyoming economy
- Maintain an efficient multimodal freight network for Wyoming businesses across all key industries
- o Rural economies' farm-to-market, manufacturing, and resource industry sector
- Advance Freight Network Efficiency (Efficiency; Connectivity)
  - o Identifying and mitigating impediments to freight mobility
  - o Truck climbing lanes
  - O Share of rail system that can support 286k modern rail cars
  - o Oversize and overweight load restrictions
  - o Improve multimodal connectivity and last mile connections
- Maintain the State of Good Repair (Infrastructure)
  - o Maintain freight distribution centers
  - o Reduce the number of deficient bridges on the freight network
  - Maintain the pavement condition
- Reduce Environmental Impacts (Environment; Quality of Life)
  - Ensure that improvements to the freight system minimize or mitigate impacts to the environment and help improve the quality of life for residents
  - Encourage freight modes, strategies, and investments that promote environmental benefits and minimize negative impacts
  - Reduce truck engine emissions
- Freight Network Reliability (Reliability)
  - Promote redundancy and flexibility within the system to meet unanticipated events and aid emergency response
  - o Reduce frequency and duration of road closures

# APPENDIX 3: DETAIL OF REGIONAL ECONOMIC DEVELOPMENT COUNCIL REPORTS

# Capital Region REDC<sup>28</sup>

# Themes:

- Cleaner/Greener (Environment)
- Opportunity Agenda (Regional Strengths/Industries)
- Global NY Initiative (Global Competitiveness)
- Veterans' Initiatives (Job Market)
- NY Rising (Revitalization)
- Interregional (Investment/Business from Outside Region; Partnerships/Collaboration)

## Regional Strategies:

- Foster success in leveraging and collaboration among academic, not-for-profit, government and commercial organizations (Partnerships/Collaboration)
- Utilize resources at the federal, state and local level to open new doors for business by
  funding development, supporting incubators and creating opportunities for new and
  expanding enterprises in the Region (Entrepreneur & Business Incubators; Regional
  Strengths/Industries; Investment/Business from Outside Region; Job Market)
- Prepare for tomorrow by supporting education and workforce development projects that
  will meet and exceed the needs of the Region's growing high-tech industries
  (R&D/Academia; Technology Advancement; Workforce Training)
- Invest in infrastructure to support the growth of our economy in both new and retained jobs, building a superhighway to carry the Tech Valley forward as a leader in technology and innovation Build a Superhighway (Infrastructure; Technology Advancement)
- Bring cities to life by focusing on development within the urban core, restoring, rebuilding and revitalizing streets and communities by investing in capital projects for the Region (Revitalization; Infrastructure)
- Highlight the importance of sustaining and optimizing our surroundings, protecting the
  environment and natural resources while connecting citizens to the beauty of the Region
  with access and opportunities for activities (Environment; Quality of Life)
- Showcase the beauty of the Region's Arts, Culture and Tourism, embracing the diversity
  of attractions and venues of the eight counties (Regional Strengths/Industries; Quality of
  Life)
- Spotlighting the strengths of the Region by marketing existing historic assets and growing, attracting and developing new avenues for economic development from global

<sup>&</sup>lt;sup>28</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/capitalregion/CRREDC-2014PR.pdf

markets (Regional Strengths/Industries; Global Competitiveness; Investment/Business from Outside Region)

## Central New York REDC29

#### Goals:

- Strengthen Targeted Industry Concentrations that Leverage Unique Economic Assets (Regional Strengths/Industries)
- Improve Competitiveness in, and Connections to, Regional, National, and Global Economies (Investment/Business from Outside Region; Global Competitiveness)
- Revitalize our Region's Urban Cores, Main Streets, and Neighborhoods (Revitalization)

#### **Priorities:**

- Global New York Initiative (Global Competitiveness)
- Integration of veterans into our entrepreneurial ecosystem (Job Market)
- Local Government Collaboration (Partnerships/Collaboration)
- Opportunity Agenda (Regional Strengths/Industries)
- NY Rising Community Reconstruction Plan (Revitalization)
- Project Pipeline (leveraging investment and return on investment) (Project Pipeline)

- Invest in Regional Industry Concentrations and Businesses (Regional Strengths/Industries; Job Market)
- Encourage Cross-Industry Collaboration (Partnerships/Collaboration)
- Attract Outside Investment and Interest (Investment/Business from Outside Region)
- Encourage New Venture and Product (Entrepreneur & Business Incubators; Technology Advancement; R&D/Academia)
- Development and Process Improvement (Technology Advancement; R&D/Academia)
- Prioritize Investments in Research, Innovation, and Commercialization (Entrepreneur & Business Incubators; Technology Advancement; R&D/Academia)
- Capture a Greater Share of the Global Marketplace (Global Competitiveness)
- Build a 21st-Century Infrastructure (Infrastructure)
- Maximize Human Capital (Job Market; Workforce Training)
- Create and Support Apprenticeship Programs (Workforce Training; R&D/Academia)
- Attract and Retain Students and Young Professionals (Job Market)

 $<sup>^{29}\</sup> http://regional councils.ny.gov/themes/nyopenrc/rc-files/centralny/CNYREDC-2014PR.pdf$ 

- Leverage the Region's Exemplary Anchor Institutions (Regional Strengths/Industries)
- Repurpose Existing Infrastructure to Recreate Density in Development and Capitalize on Regional Assets (Regional Strengths/Industries; Infrastructure)
- Retrain to Develop the Workforce of Tomorrow (Job Market; Workforce Training)

# Finger Lakes REDC<sup>30</sup>

# Priorities:

- Revitalization of Eastman Business Park (Revitalization)
- Development of the Science and Technology Advanced Manufacturing Park in Genesee County which will create a new center for high tech manufacturing (Technology Advancement)
- Translate the scientific discoveries and expertise of the region's research universities and
  institutions of higher education into new generations of innovative products and
  companies (R&D/Academia)
- Support new investment and expansion of academic-industry partnerships in the field of workforce development (R&D/Academia)
- Reinforce the region's quality of life by continuing implementation of its five-year strategy to strengthen key innovation hubs, including higher education, agriculture and food processing, targeted fields of advanced manufacturing, life sciences, business services, optics/ photonics/ imaging, energy innovation, and tourism and the arts (leveraging private and federal investment) (Quality of Life; Regional Strengths/Industries; R&D/Academia; Technology Advancement)

# Strategies:

- Optimize Business Creation, Retention, and Expansion (Entrepreneur & Business Incubators; Job Market)
- Strengthen Academic and Industry Partnerships (Partnerships/Collaboration)
- Align Workforce Development Efforts with Sector Needs (Workforce Training; Regional Strengths/Industries)
- Invest in Community, Industrial Development, and Infrastructure (Quality of Life; Regional Strengths/Industries; Infrastructure)

# Long Island REDC31

## **Objectives:**

 Create a cohesive education and workforce training strategy through stakeholder partnerships (Partnerships/Collaboration; Job Market; Workforce Training)

<sup>30</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/fingerlakes/FLREDC-2014PR.pdf

<sup>31</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/longisland/LIREDC-2014PR.pdf

- Develop innovation and industry clusters in transformative locations across the region (Regional Strengths/Industries; Technology Advancement)
- Enhance and develop multi-faceted, interdisciplinary facilities aimed at incubating and
  accelerating the commercialization of innovative products generated at the region's
  premier research institutions (Technology Advancement; Partnerships/Collaboration;
  R&D/Academia)
- Reinvigorate Long Island's manufacturing sector (Technology Advancement)
- Produce a new generation of sustainable, well-paying jobs in the legacy sectors of agriculture, aquaculture, fisheries, and tourism (Regional Strengths/Industries; Job Market)
- Improve job access, revitalize downtowns and transit hubs, speed trade, and attract/retain dynamic regional businesses and skilled workers by updating infrastructure. (Revitalization; Infrastructure; Job Market)
- Protect Long Island from the perils of climate change and encourage new "cleaner, greener" industries by leading collaborative regional efforts to harden our infrastructure (Infrastructure; Environment)
- Revitalize Long Island's poorest places (Revitalization)
- Global NY Initiative (Global Competitiveness)
- Veterans Workforce Development (Job Market)
- Attract tourism (Regional Strengths/Industries)

- Provide training opportunities for workers from all of Long Island's communities to help take advantage of new job opportunities in key economic growth sectors (Job Market; Workforce Training; Regional Strengths/Industries)
- Integrating the smart growth principles of transit-oriented development and community life. (Quality of Life; Infrastructure; Environment)
- Link scientists, engineers, and health and medical professionals to entrepreneurs and small businesses to promote cross-industry innovation (Technology Advancement; Partnerships/Collaboration; Entrepreneur & Business Incubators)
- Continued transformation from traditional defense and aerospace work to advanced technology products, creating skilled, high-value jobs and a network of nimble companies that can develop synergistic partnerships with companies in other regions of the state. (Technology Advancement; Partnerships/Collaboration; Investment/Business from Outside Region)
- Enhance the economic value of our parks, historic places, and arts venues and organizations, and expanding export opportunities, infrastructure, recreation facilities,

- research partnerships and workforce training. (Quality of Life; Regional Strengths/Industries; Infrastructure; Partnerships/ Collaboration; Workforce Training)
- Rebuild and expand infrastructure to improve job access/downtown areas/transit hubs/trade/businesses. (Infrastructure)
- Lead collaborative regional efforts to harden our infrastructure, businesses and homes against the next major storm and to encourage transportation, energy and construction policies that reduce our vulnerability, as well as our carbon footprint. (Infrastructure; Environment)
- Target the region's collective resources on new community-driven initiatives that can
  create jobs, homes and businesses and ensure that all communities are participating fully
  in the state's economic revitalization. (Public Engagement/Outreach; Revitalization;
  Quality of Life)
- Augment the export capacity of Long Island companies and attract direct foreign
  investment in the region by bringing together experienced exporters, relevant
  government agencies and education/research institutions to identify/pursue potential
  business opportunities overseas. (Investment/Business from Outside Region; Global
  Competiveness; R&D/Academia)
- Creative new ways to provide information, job training and other skills that will honor veterans' service and aid the region by helping them succeed as employees/entrepreneurs. (Job Market)
- Leverage Long Island's unique heritage and tourism assets to convey our rich contributions to American history, the arts, and culture. (Regional Strengths/Industries)

# Mid-Hudson REDC32

# **Priorities:**

- Develop and Implement Global Marketing and Export Strategies (Global Competitiveness; Investment/Business from Outside Region)
- Collaborate with Local Governments to Transform the Regional Business Climate (Partnerships/Collaboration)
- Support NY Rising Community Reconstruction Plan Projects (Revitalization)
- Keep the Project Pipeline Flowing (Project Pipeline)
- Address Regional Workforce Development Needs for Key Sectors (Job Market; Workforce Training)
- Refine the Regional Opportunity Agenda (Regional Strengths/Industries)
- Promote Veterans' Participation in the Workforce (Job Market)

<sup>32</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/midhudson/MHREDC-2014PRa.pdf

- Invest in Technology: Biotech, Biomedical, and Healthcare/Advanced Manufacturing/ Information Technology (Technology Advancement)
- Attract and Retain Mature Industries: Distribution/ Financial and Professional Services/ Corporate Food and Beverage (Investment/Business from Outside Region)
- Grow Natural Resource-Related Sectors: Natural Resources and the Environment/ Clean and Renewable Energy/ Waterfront Development/ Tourism, Arts, and Culture/ Agriculture (Regional Strengths/Industries; Environment; Technology Advancement)
- Revitalize Regional Infrastructure: Infrastructure/ Housing/ Urban Centers (Regional Strengths/Industries; Infrastructure)
- Enhance the Region's Workforce Development Initiatives (Job Market; Workforce Training)
- Promote Entrepreneurship, Small Business, and MWBEs (Entrepreneur & Business Incubators)
- Make New York State More Business Friendly (Job Market; Entrepreneur & Business Incubators)
- Ensure Public-Private Support and Collaboration (Partnerships/Collaboration)

# Mohawk Valley REDC33

#### **Priorities:**

- Public Engagement (Public Engagement/Outreach)
- Cleaner, Greener Communities Program (Environment)
- Technology & The Innovation-Based Economy (Entrepreneur & Business Incubators; Technology Advancement; R&D/Academia)
- Downtown Agenda (Revitalization)
- Entrepreneurship (Entrepreneur & Business Incubators)
- Waterfront Development (Revitalization)
- NY Rising/Community Reconstruction Program (Revitalization)
- Agriculture & Agribusiness (Regional Strengths/Industries)
- Tourism (Regional Strengths/Industries)

#### **Strategies:**

 Assist communities with public improvements and other strategic investments to safeguard the region from future storm damage (Environment)

<sup>33</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/mohawkvalley/MVREDC-2014PR.pdf

- Expand regional workforce development and training programs that are aligned with regional concentrations (Job Market; Workforce Training)
- Focus on business attraction-recruitment efforts on businesses with high-growth potential (Job Market; Regional Strengths/Industries)
- Focused business outreach/retention effort to assist and stabilize existing employers (Job Market; Regional Strengths/Industries)
- Foster the creation of new college-based economic development partnerships to strengthen regional concentrations (R&D/Academia)
- Improve the region's broadband connectivity (Technology Advancement)
- Leverage key R&D institutions for spinoff economic development activities (R&D/Academia)
- Leverage the region's waterfront and canal corridor assets (Revitalization)
- Make key investments that improve critical infrastructure assets and promote sustainability (Infrastructure; Environment)
- Optimize key business and industry clusters to catalyze economic growth (Regional Strengths/Industries)
- Promote brownfield redevelopment (Revitalization)
- Promote development and reuse of vacant building stock (Revitalization)
- Promote investment in regional cores/Main St. districts to foster community revitalization (Revitalization)
- Strengthen regional R&D capacity through education (R&D/Academia)
- Target the attraction-growth of complementary firms and business activities (Investment/Business from Outside Region; Job Market)

## New York City REDC34

#### **Priorities:**

- Global NY Export and Marketing (Global Competitiveness)
- Global NY Implementation Agenda (Global Competitiveness)
- Collaboration with local governments to transform the regional business climate (Partnerships/Collaboration)
- Support NY Rising Community Reconstruction Plan projects (Revitalization)
- Keeping the project pipeline flowing (Project Pipeline)
- Implementing the Opportunity Agenda through Workforce Development (Job Market; Workforce Training)

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<sup>34</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/nyc/2014-REDC-FINAL-0912.pdf

- Job Linkage Initiative (Partnerships/Collaboration; Job Market)
- Refinement of the Regional Opportunity Agenda (Regional Strengths/Industries)
- Promote veterans' participation in the workforce (Job Market)
- Support the development of affordable housing (Quality of Life)

#### **Strategies:**

- Collaboration with other Regional Councils to advance projects and shared objectives (Partnerships/Collaboration)
- CUNY 2020 Challenge Grants (R&D/Academia)
- Cleaner, Greener Communities Sustainability Plans (Environment)
- New York City Wetland Mitigation Bank (Environment)
- Innovation Hot Spots & NYS Certified Business Incubators (Entrepreneur & Business Incubators)
- Path Through History (developing a marketing program for less well known heritage tourism sites) (Regional Strengths/Industries)
- Opportunity Zone Updates (Investment/Business from Outside Region; Regional Strengths/Industries)

## North Country REDC35

## **Priorities:**

- Global Marketing and export strategy (Global Competitiveness)
- Integrated Workforce Development Planning (Job Market; Workforce Training; Partnerships/Collaboration)
- Veterans (Job Market)
- NYSUNY 2020 (R&D/Academia)
- NY Rising (Revitalization)

- Increase Export-Import Bank has not had a presence in the North Country by entering into an agreement with the Ex-Im Bank to establish a City-State Partnership in the region (Partnerships/Collaboration)
- Use of technology for educational programs on exporting subjects through a
  combination of webinars, seminars, websites, overseas trade missions and a speaker
  bureau as tools for increasing exports. (Investment/Business from Outside Region)

<sup>35</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/northcountry/NCREDC-2014PR.pdf

- Develop an inventory of resources, including funding resources to be posted on the NCREDC website and those of partner organizations. (Investment/Business from Outside Region; R&D/Academia)
- Develop opportunities for Trade Missions and Foreign Direct Investment (FDI) workshops in key sectors. (Investment/Business from Outside Region)
- Work with our colleges and universities, including HEARD and Innovation Hot Spot. (R&D/Academia)
- Improve access to export data to help us benchmark our progress. (Performance Management)
- Utilize our Foreign Trade Zones and EB-5 Regional Center where appropriate. (Global Competitiveness)
- Increase industrial and business park capacity. (Regional Strengths/Industries)
- Utilize Start-Up NY as a tool for FDI (Entrepreneur & Business Incubators)

#### Southern Tier REDC36

## **Objectives:**

- Energy Efficiency & Renewable Energy Technology (Technology Advancement)
- Manufacturing and Transportation Industry ... Next Generation Technology and Advanced Manufacturing (Technology Advancement)
- Health Care 2020 (Quality of Life)
- Revitalize the Rural Farm and Forest-based Economy (Revitalization; Regional Strengths/Industries)
- Economic Development Backbone (Regional Strengths/Industries)
- Technology Development and Transfer ... A Job Generator (Technology Advancement; Workforce Training; R&D/Academia)
- Opportunity Agenda (Regional Strengths/Industries)

- Using Technology to Preserving the Watershed (Technology Advancement; Environment)
- Advancing Clean Energy (Technology Advancement; Environment)
- Promoting Energy Research (Technology Advancement; R&D/Academia)
- Energy Efficiency in a Manufacturing Setting (Technology Advancement)
- Business Development and Technology (Entrepreneur & Business Incubators;
   Technology Advancement)

<sup>&</sup>lt;sup>36</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/southerntier/STREDC-2014PR.pdf

- Meeting Global Demand for Energy Efficient Products through Advanced Manufacturing (Technology Advancement; Environment)
- Telemedicine and Mobile Health Care Technology Fund (Technology Advancement; R&D/Academia)
- Health Care Workforce (Job Market)
- Sustainable Agriculture and Food Delivery Systems (Regional Strengths/Industries; R&D/Academia)
- Business Development in the Agriculture Industry (Regional Strengths/Industries; Job Market; Entrepreneur & Business Incubators)
- Shovel Ready Sites (Project Pipeline)
- Tourism marketing (Regional Strengths/Industries)
- Growing International Tourism and Creating Jobs (Regional Strengths/Industries; Job Market)
- Community Revitalization (Revitalization)
- Broadband Initiatives (Technology Advancement)
- Retaining the Brightest and Most Qualified Workforce (Job Market)
- Commercializing Technology and Promoting Entrepreneurs (Entrepreneur & Business Incubators; Technology Advancement; R&D/Academia)
- Promote the STREDC's Opportunity Agenda (Regional Strengths/Industries)

# Western New York REDC37

# Priorities:

- Create, Retain, and Fill Jobs (Job Market)
- Maximize Return on Investment (Performance Management)
- Project-ready Implementation (Project Pipeline)
- Inclusivity (Partnerships/Collaboration; Public Engagement/Outreach)
- Promotion of Smart Growth (Environment)
- Orientation towards Young Adults (Job Market)
- Builds Upon Regional Strengths (Regional Strengths/Industries)
- Yields Regional Impacts (Regional Strengths/Industries)
- Will Improve the Region's Image (Regional Strengths/Industries)

<sup>&</sup>lt;sup>37</sup> http://regionalcouncils.ny.gov/themes/nyopenrc/rc-files/westernny/WNYREDC-2014PR2.pdf

- Project Pipeline Flow (Project Pipeline)
- Global and Marketing Export Strategies (Global Competitiveness)
- NY Rising Community Reconstruction Program (Revitalization)
- Workforce Development and Opportunity Agenda (Regional Strengths/Industries;
   Workforce Training; Economic)
- Veterans in the Workforce (Job Market)
- Collaboration with Local Government to Transform the Regional Business Climate (Partnerships/Collaboration)