

## NEEDS ASSESSMENT AND STRATEGY DEVELOPMENT



The IMTS and its 1,118 miles of commercially navigable waterways are a vital part of the state's transportation network. The freight aspect of the marine mode has not been included as extensively as other modes in Illinois due to many reasons, one being that there is no sustainable dedicated funding. Additionally, there are few active port districts in Illinois, as well as that similar to railroads - that private freight providers dominate the market. Through the IMTS Plan process, IDOT has initiated mainstreaming the IMTS within the other modes of transportation fully considered at IDOT.

While completion of the IMTS Plan integrates the marine mode further into IDOT's multimodal program, there is more work that needs to be continued beyond this plan. This chapter highlights the needs and strategies on how to continue to support the IMTS and those who utilize this valuable system. Specifically, this chapter addresses the following: 1) activities and programs in peer states and neighbor states; 2) critical needs for the IMTS and its stakeholders; 3) programmatic recommendations to address identified needs; and 4) the benefits of acting to implement these programmatic recommendations. Key findings are as follows:

- Compared with a representative set of peer states and neighboring states, Illinois performs comparably well in many metrics. However, in certain areas – primarily related to organizational structure, funding, and dredging activities – there are opportunities for improvements to make Illinois more competitive.
- Critical IMTS needs exist with respect to: Port Development; Waterway Maintenance and Operations; and Statewide Planning and Funding. Eight programmatic recommendations are identified to address these critical needs.
- The quantifiable value of the marine transportation system (MTS) to Illinois – leaving aside its substantial additional benefit to other states and the nation as a whole – is extremely large. The Programmatic Recommendations defined in this Plan are intended to safeguard and preserve this value and to support continued and beneficial MTS growth.

This chapter also highlights the synergies between the IMTS Plan programmatic recommendations and the goals and strategies identified in the IDOT Statewide Long-Range Transportation Plan and the Illinois State Freight Plan.

## 5.1 PEER STATE AND NEIGHBOR STATE REVIEW

The IMTS Plan provided the opportunity to not only examine the IMTS assets and economic performance, but also to consider long-term programmatic opportunities and strategies for the state, particularly with respect to relevant best practices in peer states and neighbor states. The analysis considered:

- Identification of peer state and analysis of their MTS planning and funding
- Analysis of neighbor state dredging programs

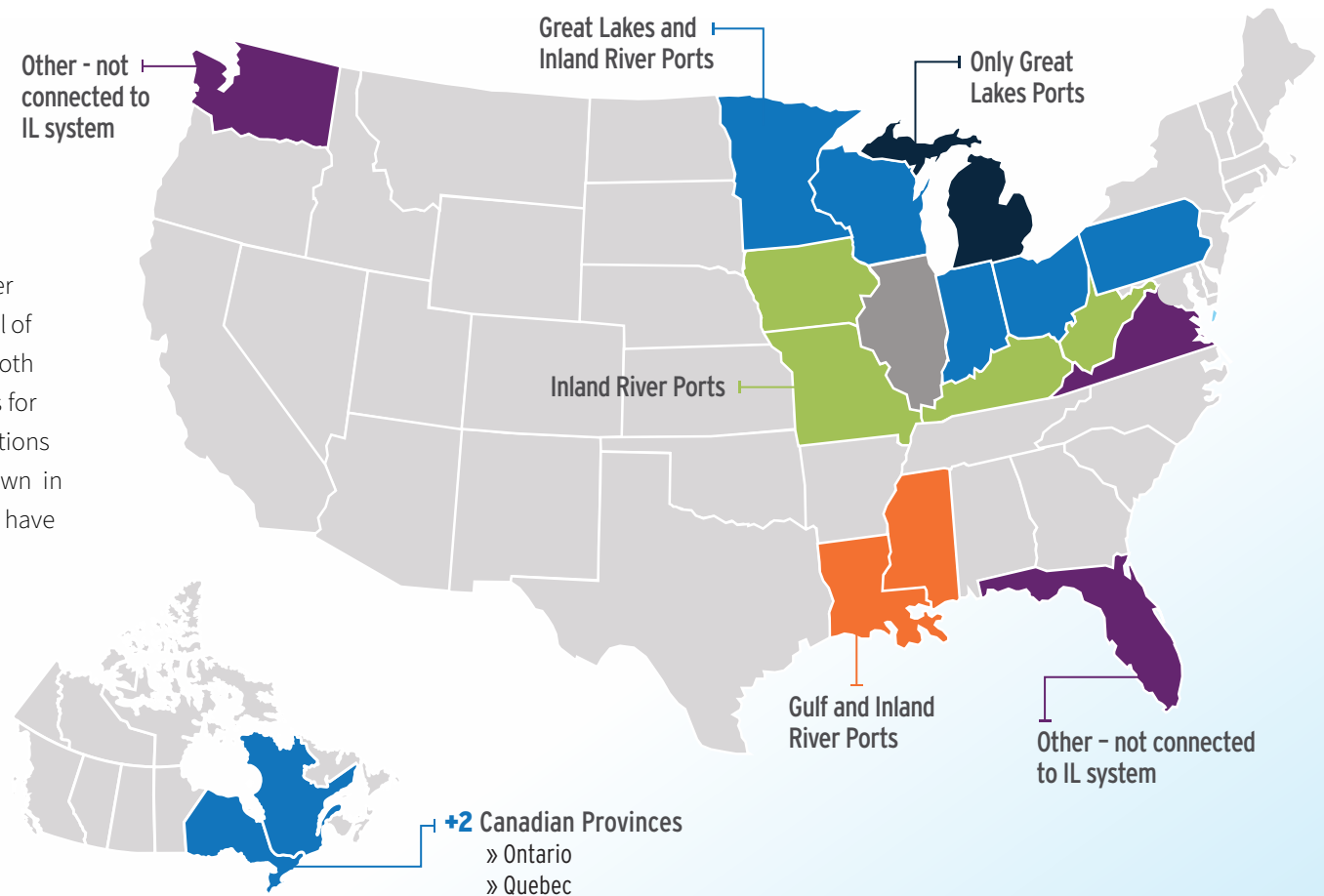
### 5.1.1 PEER STATE ANALYSIS—FINDINGS RELATED TO MTS PLANNING AND FUNDING PROGRAMS

#### Peer State Identification

In consultation with study stakeholders, a set of peer states were identified for examination, with the goal of capturing a mix of neighboring states (which are both partners for interstate trade as well as competitors for MTS business) and other states with MTS conditions and programs offering valuable lessons. As shown in **Figure 5.1**, each of the Peer States reviewed have ports on the Great Lakes, an Inland/Intracoastal Waterway, or both. Additionally, some states have deep-water ports on the Atlantic, Pacific, or Gulf coasts. Except for Florida, Virginia, and Washington, each of the peer

states is reachable from Illinois by water via the Great Lakes and/or Mississippi River-Ohio River system. For additional perspective, three international examples were included in the analysis – two provinces in Canada that are adjacent to the Great Lakes and the St. Lawrence Seaway.

FIGURE 5.1 Map of Peer States Reviewed



### Issues and Questions for Investigation

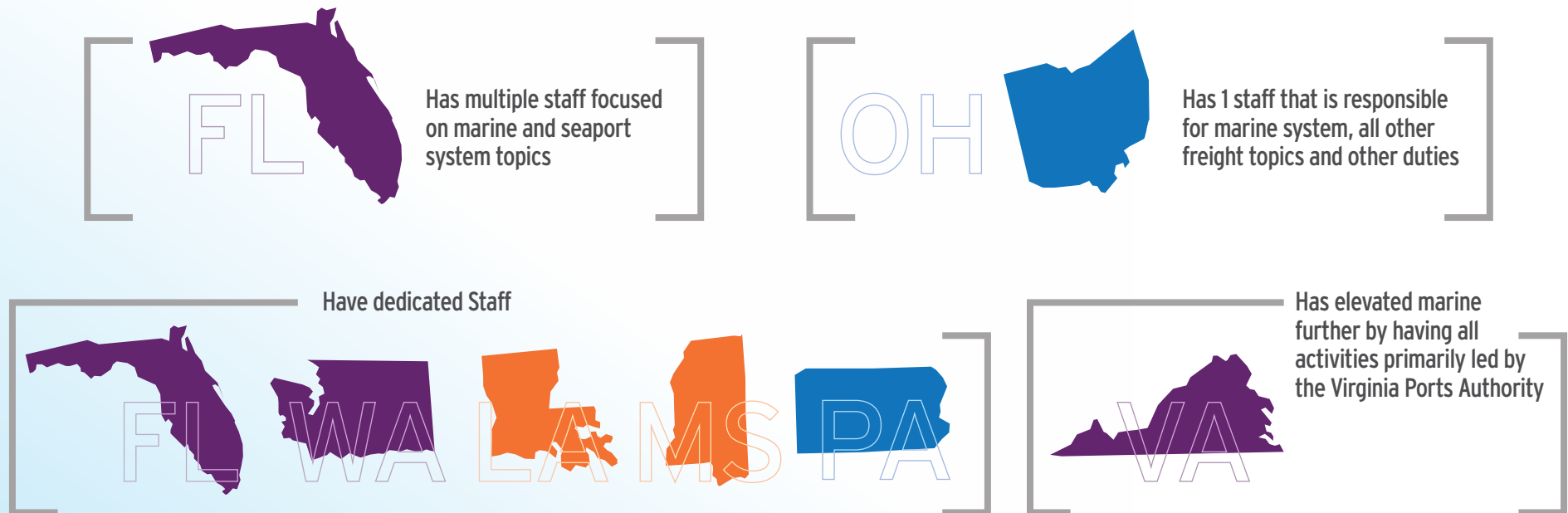
Some of the key questions driving the investigation included:

- How could IDOT organize itself to provide an appropriate level of attention to the marine system (i.e., to understand system needs and position itself to address those needs)?
- How could IDOT integrate marine system activities with other synergistic statewide planning activities (e.g., long-range planning, safety planning, multimodal freight planning, etc.)?
- What type of funding could IDOT provide for marine projects in the state, and who should be eligible for the funding?
- What support and advocacy activities could IDOT provide to marine stakeholders in the state?

### Findings: DOT Structure

While all states acknowledge a role in the marine system, Illinois is in the minority in that it does not have dedicated transportation staff to address marine issues. Most states that have active marine programs (e.g., funding support to address marine needs) have dedicated marine transportation staff, may have multiple dedicated staff, and in some cases, have a dedicated marine section/department. See **Figure 5.2**.

FIGURE 5.2 Case Study Highlights – Marine Staff and/or Dedicated Section



### Findings: Marine Planning Integration

In the last half century, IDOT has had varying roles in marine planning. When the agency was established in the early 70s it took over the Division of Water Resources from the dissolved Department of Public Works and Buildings. The Division was responsible for marine planning activities among others. In 1995, the Illinois Department of Natural Resources (IDNR) was established and the Division of Water Resources was transferred to IDNR. Between 1995 and 2016, IDOT's role in marine planning was minimal. In 2016, IDOT and IDNR came to an understanding that IDOT is responsible for promoting, supporting, and encouraging transportation along the states' waterways, while IDNR would continue to regulate food plains, recreational uses, etc. This shift aligned with IDOT's holistic approach to viewing the transportation system as a multimodal system and not by individual mode.

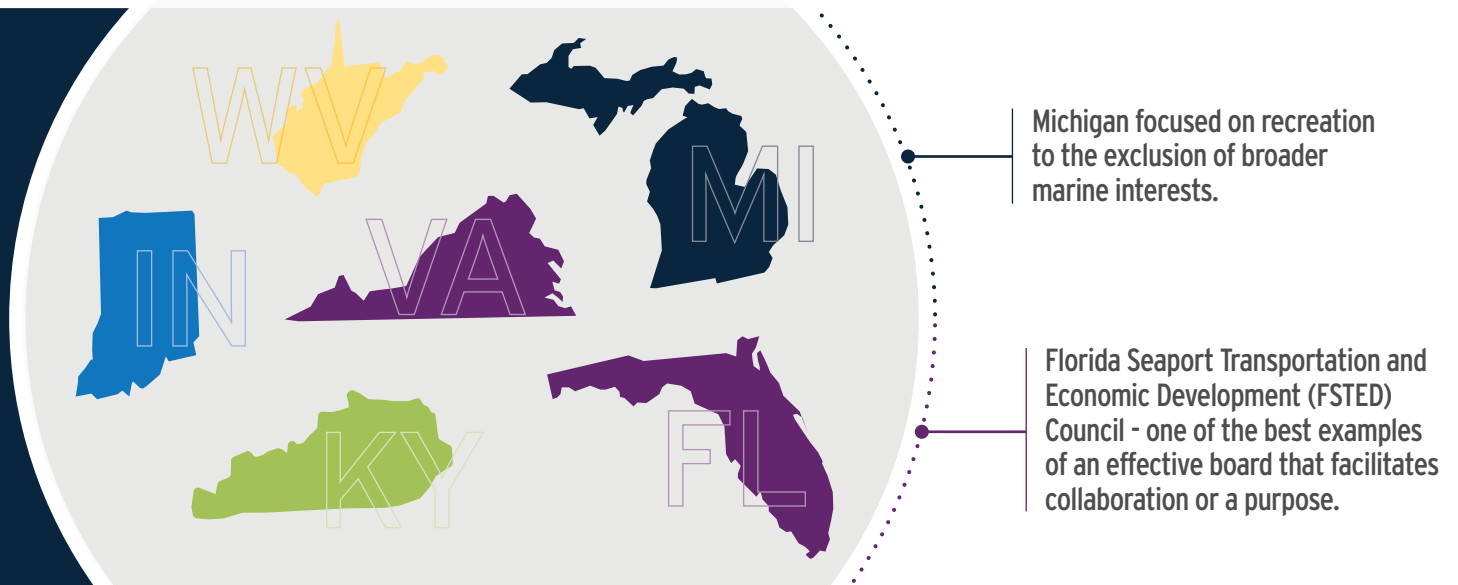
While IDOT currently does not have a designated marine section or solely dedicated staff, the agency has acknowledged the role and high-level needs of the marine system in other state planning

documents, including the Illinois Long Range Transportation Plan and the Illinois State Freight Plan. This range of engagement is typical of other DOTs and states. With the completion of this Illinois Marine Transportation System Plan, Illinois joins the ranks of states that have dedicated marine modal system plans.

Compared to peer states, Illinois has less established formal cross-agency and executive level structures to address the MTS. When the IDNR was created, it took much of the marine expertise that was previously housed in IDOT to address recreation, flooding, and transportation issues. Today, the Illinois Environmental Protection Agency (IEPA), Illinois Department of Commerce and Economic Opportunity (DCEO) have large roles in Illinois' waterways and ports; these agencies and IDOT approach the MTS based on their respective responsibilities, but without formal cross-agency guidance. Several states have created state-level advisory boards to provide some level cross-agency guidance (see **Figure 5.3**).

FIGURE 5.3 Case Study Highlights – Integration of Marine Planning

PEER STATES WITH SOME  
TYPE OF STATE-LEVEL  
MARINE FOCUSED  
ADVISORY BOARD

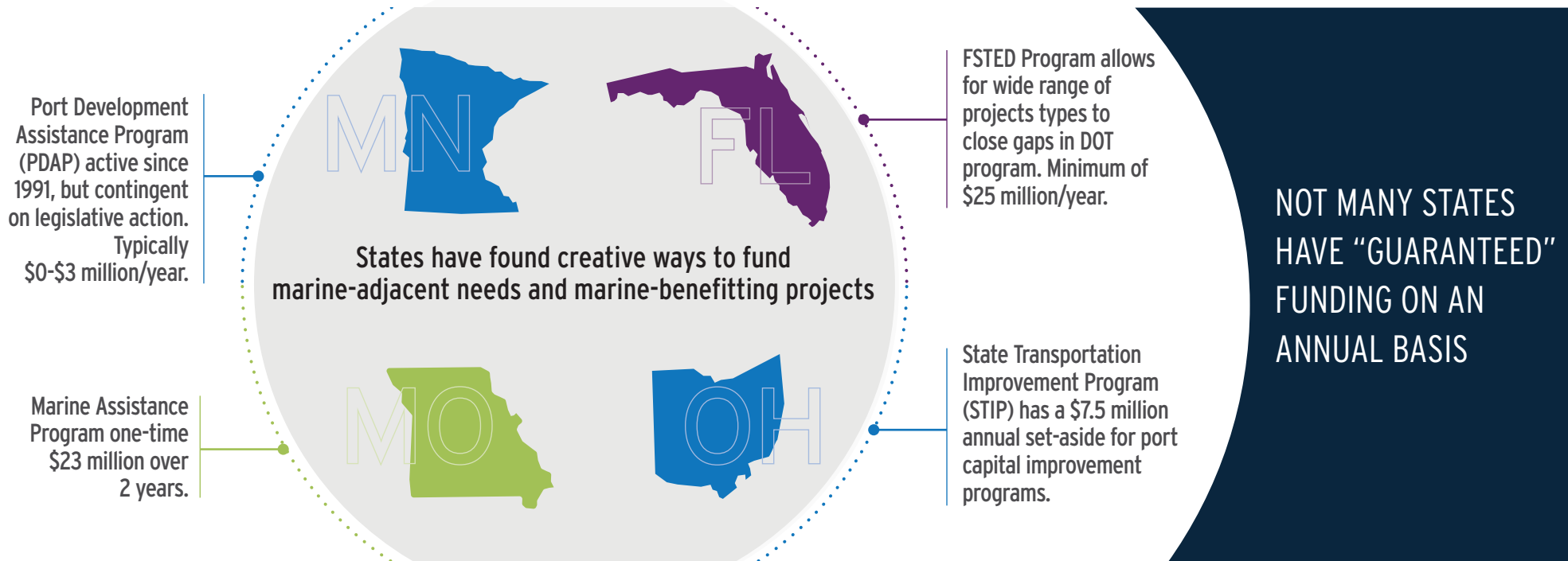


### Findings: Marine Funding

All states provide support to their ports and waterways through funding of connecting modes – principally in the form of highway access and truck corridors, but also including freight rail – as well as to industrial land development through state and regional economic development agencies. Some peer states also have funding programs dedicated to addressing marine system needs as shown in **Figure 5.4**. Several of these states have funding programs that are secured through regular annual grants (Florida) or guaranteed shares of state transportation funding (Virginia), meaning that funding is both substantial and reliable, but the majority of these states have funding programs supported by one-time allocations or annual legislative appropriations, meaning funding may be available but is less reliable on a year-to-year basis.

Historically, Illinois does not offer a dedicated port funding mechanism. However, in 2019, Illinois established the Port Capital Improvement Grant Program, providing a one-time funding pool of up to \$150 million for port assistance, to be allocated under the direction of IDOT and DCEO with the involvement of other relevant agencies. IDOT is currently developing guidance for a phased five-year distribution of these funds, which would provide funding levels equivalent to Florida. However, the extent and timing of distribution may be impacted by responses to the COVID-19 pandemic. Additionally, within Illinois there are programs administered by DCEO that place emphasis on economic development at/around ports, such as the River Edge Redevelopment Zone Program, but these are not led by IDOT or marine transportation focused.

FIGURE 5.4 Case Study Highlights – Sustainable, Dedicated Funding



Like many other states, Illinois provides the ability to “flex” a portion of transportation funds for marine uses. In 2018, IDOT initiated the Illinois Competitive Freight Program, a grant program to select projects for Illinois’ share of National Highway Freight Program (NHFP) funds provided to the state through USDOT. This program allows for up to 10 percent of state funds to be “flexed” for use on non-traditional highway/transportation projects and can include rail or marine projects. IDOT also provides some support to plan for the marine system through its Statewide Planning & Research (SPR) funds.

**Findings: Engagement and Advocacy**

Peer states generally engage in some level of support and advocacy for marine system stakeholders. With the development of this IMTS Plan and the establishment of a guiding committee comprised of a wide array of port and waterway system stakeholders, IDOT is providing comparable service and support.

Currently, IDOT is in the process of developing a port capital grant program in consultation with the DCEO, IDNR, and IEPA.

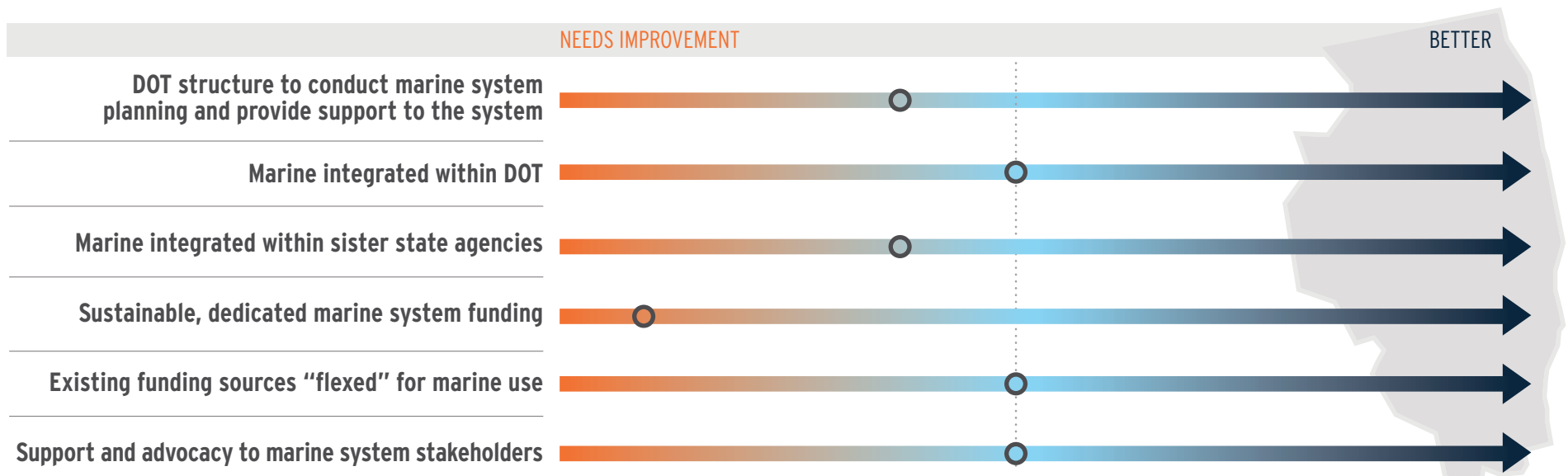
**Key Takeaways From Analysis of Peer States MTS Planning and Funding Programs**

With respect to peer states, Illinois is performing at a typical level with respect to: integration of MTS planning within the larger framework of IDOT activities; allowance for flexible use of FAST Act freight funds; and stakeholder advocacy and support. Areas where Illinois could potentially benefit from best practice examples (Figure 5.5) in other states include:

- Providing dedicated IDOT staff for MTS planning;
- Streamlining cross-agency coordination and partnerships; and
- Developing a reliable long-term mechanism for MTS and ports funding, following up on the one-time Port Capital Grant Improvement Program allocation.

**IN 1995, IDOT'S DIVISION OF WATER RESOURCES WAS TRANSFERRED TO IDNR. SINCE THEN IDOT HAS NOT BEEN ENGAGED IN THE IMTS. IN 2016, IDOT AND IDNR CAME TO AN AGREEMENT WHERE IDOT WOULD OVERSEE THE TRANSPORTATION ASPECT OF THE IMTS.**

FIGURE 5.5 Case Study Highlights - Illinois “Base Case” Benchmarking





## 5.1.2 NEIGHBOR STATE ANALYSIS—FINDINGS RELATED TO DREDGING PROGRAMS

### Importance of Dredging

Adequately and timely dredging of navigation channels to maintain sufficient depths for vessel operation is critical for the IMTS. Without adequate and timely dredging, shippers/carriers and the marine industry overall can face significant economic losses (and the sheer inability to deliver goods) due to impassable channels. Several key dredging-related issues include:

- Federal and state requirements are burdensome to comply with in terms of cost and time.
- There is a lack of consistency in regulations as applied at the state-level.
- There is no reliable source of funding for dredging at the federal level, and the funding that is available is oversubscribed.
- Most states do not have dedicated funds to perform dredging in their own borders, nor has authority to dredge federally managed navigation channels.
- “Lessons learned” are being collected for the disposal and reuse of dredged materials, and true best practices to comply with regulations are not formally established.
- Illinois is at a competitive disadvantage as compared to other states due to regulatory requirements that lead to higher per-unit costs and longer implementation timelines for dredging.



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### Neighbor States Analysis

A review of neighbor state dredging regulations was conducted to aid IDOT in understanding how other states regulate, permit, fund, and dispose of dredged material. While IDOT may not be in a position to implement changes to state dredging regulations or processes, they may provide advice and recommendations on next step actions to IDNR, IEPA, and other state stakeholders on how to better position the state to ensure its businesses are on a level playing field with potential neighbor-state competitors. Neighbor states reviewed included: Minnesota, Iowa, Missouri, Wisconsin, Indiana, and Kentucky. Federal, state, port, association, and dredging contractor stakeholders were also consulted as part of this review. Key findings from the analysis are summarized below.

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### Findings: Permitting and Regulatory Authority

While all states are governed by the same regulations at the federal level, it is truly the regulations of each state that govern the playing field. In Illinois, both the IDNR and IEPA are involved in permitting and regulating dredging activity in the state. Both Indiana and Minnesota have similar structures, but neighbor states of Iowa, Kentucky, Missouri, and Wisconsin all only have one state agency overseeing these activities – and in most cases, it is the Department of Natural Resources. This structure influences state dredging considerations.

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### Findings: Placement of Dredged Material

Federal regulations for all states are the same; “Contained Disposal” is required if the dredged material is deemed contaminated or silty, or “Open Water Disposal” is allowed if the dredged material is clean and smooth sand (per a “Section 401” water quality certification). However, each state also has its own clean water standards, and the state water quality standard may be more strict than

the Federal § 401 water quality certification. This state standard may also only apply if the project sponsor is an entity other than a federal agency, namely the USACE. This is the case in Illinois, where a federal dredging project may be governed by federal water quality standards and allow for open water disposal, but the same project advanced by a local sponsor would be required to follow State of Illinois standards, which are more strict and may deem the dredged material contaminated and not allowable for open water disposal. While stricter water quality standards are positive for the surrounding population that depends on the water supply, this disconnect between federal and state regulations places an undue burden on non-federal dredging projects.

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### Findings: Beneficial Use of Dredged Material

Neither “contained disposal” nor “open water disposal” provide benefits beyond simply removing materials to ensure proper channel depth. There are, however, many other potential uses for dredged materials that can build and support natural infrastructure, such as building beaches and revitalizing shoreline. The USACE encourages and aims to ensure as much excavated sediment from dredging is used for natural infrastructure, but there are challenges to making use of this dredged material. In Illinois, it is undetermined how much of the dredged material is suitable for reuse at this time. However, IDOT and the University of Illinois at Urbana – Champaign Illinois Center for Transportation (ICT) is currently undertaking a Beneficial Use of Dredge Material (BUDM) from the Illinois Marine Transportation System Study to better determine what this material may be used for by IDOT and others. In Indiana, while BUDM is encouraged, the high cost of reuse has led stakeholders to lean toward contained disposal facilities as a preference. In Kentucky, there is active BUDM, but the state has absolved itself of responsibility



and indicated that the sponsor will assume liability for any contamination issues that arise from the use.

Few best practices exist regarding the use/reuse of dredged material. The USACE is conducting 10 pilot studies across the US (including in IL and its neighbor states), representing a variety of dredging conditions, to help establish best practices in BUDM. In Missouri, Greater St. Louis was also part of an early USACE study on reuse, but there has not been much activity in the state since the study. One of the most active states in BUDM and one leading in terms of best practices is Minnesota. In the state, BUDM is considered for each dredging project and an innovative numeric system is used to assess water quality levels for each project and then the action for dredged materials based on the “score.” In some cases, this could result in beneficial use, but it could also mean contained disposal or open water disposal. Additionally, the recently enacted Water Resources Development Act of 2020 (WRDA) requires the USACE to establish a national policy to maximize the beneficial use of material obtained from Corps projects.

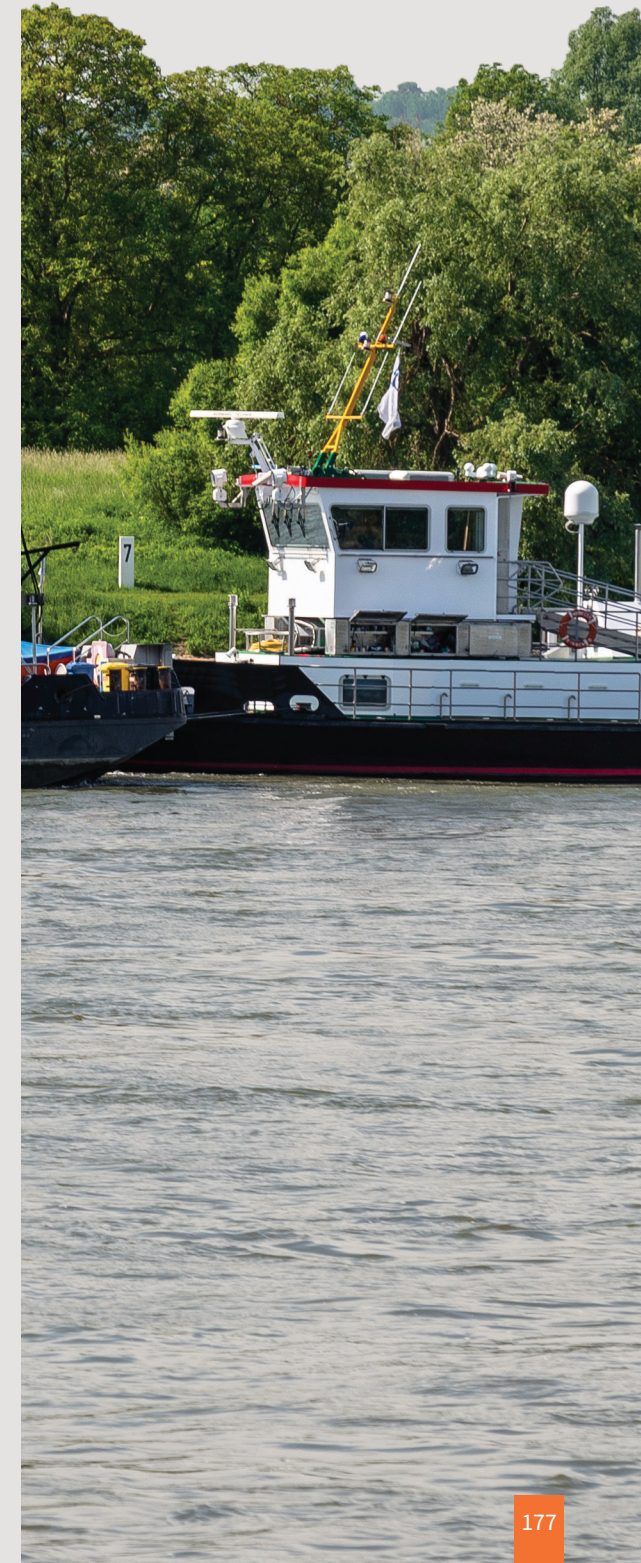
#### Finding: Funding for Dredging

While there is funding for dredging at the federal level, it is insufficient to address the dredging backlog. Several neighbor states do provide annual or bi-annual funding for dredging projects within their borders as part of broader marine investment programs, including Kentucky, Minnesota, and Wisconsin. Other states only provide funding during emergency situations. In Illinois, there is no dedicated funding for dredging.

#### Key Takeaways From Analysis of Neighbor States Dredging Programs

The analysis of neighbor states suggests the following opportunities for the State of Illinois.

- **Definition of “Contaminated” Dredged Material.** Illinois appears to have more stringent water quality standards and a definition for “contaminated” dredged material that goes beyond the federal definition. An exception could be explored by Illinois and federal stakeholders related to the water quality standard and the meaning of contamination, so that if open water disposal is allowed by one stakeholder, then it is allowed by the other.
- **Dredged Materials Management.** Illinois could continue to explore how dredged materials in Illinois are managed and maintained over time. Missouri has an aggressive dredged materials management program that enables the state to do more open water disposal than may be possible absent the oversight. Review of Illinois’ procedures and revisions to these, may allow for increased opportunities for open water disposal on non-federal projects.
- **Beneficial Use of Dredged Materials (BUDM) Best Practices.** Illinois has over 1,000 miles of navigable waters and has the geographic and community diversity to serve as a testing ground for BUDM. While an Illinois challenge is that some dredged soil is of unsuitable quality for reuse, as technology changes, Illinois could be a leader in how to make use of undesirable material – potentially as part of the BUDM study being led by IDOT. In the interim, the state could get involved in and monitor the activities of the pilot study that is being conducted by USACE in Illinois.
- **Use of Dedicated Marine Transportation System Funding for Dredging Activities.** As IDOT explores establishment of an annual, dedicated program, consideration could be given in the project criteria to allow for state-supported dredging.



## 5.2 PROGRAMMATIC RECOMMENDATIONS

To directly address the identified critical needs, IDOT and its IMTS partners and stakeholders developed a set of programmatic recommendations, focusing on actions that IDOT can lead or assist in implementing. There are eight recommendations in total, addressing the areas of: port development; waterway maintenance and operations; and statewide planning and funding. These recommendations were also made with guidance from existing IDOT plans including the Long-Range Transportation Plan and the Statewide Freight Plan.

### 5.2.1 IDOT LONG-RANGE TRANSPORTATION PLAN

The primary purpose of the Illinois Long-Range Transportation Plan (LRTP) is to provide strategic direction for the development of the Illinois transportation system. The LRTP vision for transportation in Illinois is to provide innovative, sustainable and multimodal transportation solutions that support local goals and grow Illinois' economy. This vision was established in conjunction with

thousands of stakeholders who participated in outreach activities throughout the planning process. The development of the IMTS Plan and its programmatic recommendations was done in consultation of the objectives of the 5 goal areas of the LRTP. Below you will find the 5 goal areas, as well as their objectives. Each recommendation that follows which goal area and objective from the LRTP it supports.

### Economy

**Goal:** Improve Illinois' economy by providing transportation infrastructure that supports the efficient movement of people and goods.



**Objective 1:** Encourage regional coordination in the identification of solutions to transportation problems to provide for efficient movement of freight, people and services supporting economic growth.

**Objective 2:** Support projects that improve connectivity and coordination of services to enhance continuity and accommodate the efficient movement of people, goods and services across all modes to address intermodal efficiency.

**Objective 3:** Support land use and transportation connectivity.

**Objective 4:** Identify and address issues affecting freight commerce and passenger services.

**Objective 5:** Support economic development in Illinois communities.

### Livability

**Goal:** Enhance the quality of life across the state by ensuring that transportation investments advance local goals, provide multimodal options, and preserve the environment.



**Objective 1:** Enhance collaboration and coordination between IDOT and regional and local transportation agencies and adjoining states in transportation decision-making.

**Objective 2:** Support projects that enhance the livability of Illinois - making connections between people, and the places they need to go.

**Objective 3:** Enhance the effectiveness of the multimodal transportation system through better traveler information, utilizing technology where possible, to maximize efficiency of existing facilities and services.

**Objective 4:** Enhance existing policies and practices related to under-served populations so outreach and inclusion are effective and go beyond meeting the minimum federal requirements.

**Objective 5:** Utilize a sustainable approach to transportation planning, design, construction and operation which promotes environmental stewardship and energy conservation.

### Mobility

**Goal:** Support all modes of transportation to improve accessibility and safety by improving connections between all modes of transportation



**Objective 1:** Enhance intermodal freight connectivity and mobility to improve continuity and accommodate the efficient movement of goods and services.

**Objective 2:** Invest in and support multimodal transportation infrastructure improvements and strategic performance-based expansion of services that support the effective movement of passengers.

**Objective 3:** Increase route efficiency and safety for all users by improving infrastructure condition and addressing capacity issues.

### Resiliency

**Goal:** Proactively assess, plan and invest in the state's transportation system to ensure that our infrastructure is prepared to sustain and recover from extreme events and other disruptions.



**Objective 1:** Improve safety on the Illinois transportation system by reducing the number of injuries/fatalities attributable to extreme events.

**Objective 2:** Minimize the frequency and duration of facility closures due to extreme events and other disruptions.

**Objective 3:** Enhance transportation system redundancy.

**Objective 4:** Identify current and future transportation system vulnerabilities to extreme events and climate change.

**Objective 5:** Address transportation system vulnerabilities to extreme events and climate change within the transportation planning, design, and asset management processes.

### Stewardship

**Goal:** Safeguard existing funding and increase revenues to support system maintenance, modernization, and strategic growth of Illinois' transportation system.



**Objective 1:** Invest in improvements for airports, highways/streets, freight, ports, waterways and new traffic and transit technologies.

**Objective 2:** Ensure selection and prioritization decisions on projects is transparent and guided by sound data and performance-based decisions.

**Objective 3:** Support innovative project opportunities.

**Objective 4:** Identify funding sources and leverage resources wisely to maximize the value of investments.

## 5.2.2 ILLINOIS STATE FREIGHT PLAN

In 2014, Illinois had over one billion tons of freight, valued at nearly \$3 trillion moved to, from, or within the state. This vast amount of freight is moved on Illinois' multimodal network that includes highways, railroads, waterways, and airports. The state freight plan provides data and analysis on the movement of goods within the state. The freight plan provides a framework to ensure the freight system, regardless of mode, work in a manner that is beneficial to Illinois' economy. The development of the IMTS Plan and its programmatic recommendations was done in consultation of the freight plan and its goals.



### IMPROVE SAFETY

- Minimize roadway incidents involving freight vehicles
- Ensure IDOT's Intelligent Transportation System (ITS) has adequate safety notification protocols



### IMPROVE EFFICIENCY

- Establish performance measure to evaluate efficiency of freight movement
- Update IDOT's Illinois Transportation Automated Permits (ITAP) truck permitting process



### GROW THE ECONOMY

- Secure stable dedicated state funding source for freight projects
- Improve international competitiveness of Illinois



### PRESERVE EXISTING INFRASTRUCTURE

- Reduce stress on roadway system by supporting multimodal alternatives for freight shipments
- Perform routine maintenance in order to control deterioration of roadways and lessen number of critical repairs



### EXPAND INFRASTRUCTURE STRATEGICALLY

- Optimize the limited funds that are available for new construction projects
- Ensure design policies encourage innovation and design flexibility to support multi-modal transportation goals



### SUPPORT MULTIMODAL DISTRIBUTION

- Enhance coordination of multimodal planning with Illinois Metropolitan Planning Organizations (MPOs), local jurisdictions, and adjoining states
- Encourage mode shifting to lessen environmental impacts



### 5.2.4 RECOMMENDATION #2: FULLY INTEGRATE IMTS MODAL SYSTEM PLANNING WITHIN IDOT

IDOT should – as one stakeholder put it – “embrace waterways as part of the transportation system” by fully integrating it as a transportation mode within the framework of statewide modal system planning. Additionally, IDOT should coordinate internally and with external partners to make sure other modal investments which impact the IMTS are done so in a manner that minimizes potential negative impacts on the IMTS, or in a manner that complements the IMTS. This IMTS Plan is an important first step in that process. Follow-on steps should include:

- Establish a regular update cycle for the IMTS Plan
- Establish processes to effectively coordinate the IMTS modal system plan with other modal system plans, state freight plan, statewide long-range transportation plan, rail plan, pipeline plan, and regional/MPO plans, and Port District plans
- Provide effective linkage between statewide IMTS planning and public/private investments and activities at the state, port districts, IDOT districts, metropolitan/regional, and local levels, through involvement and engagement of the new Marine Section (see Recommendation 1)
- Establish performance measures and targets for the IMTS to guide data collection and performance tracking towards statewide goals, consistent with or similar to those in other modes
- Review project and program funding criteria to better address marine (freight and passenger) system needs and establish a “level playing field” to the extent permitted by revenue sources



#### Synergies with other IDOT modal plans and policies:

##### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>ECONOMY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
			✓	✓		

	<b>STEWARDSHIP CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

##### ILLINOIS STATE FREIGHT PLAN

FREIGHT GOALS					
					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
	✓		✓	✓	✓

### 5.2.5 RECOMMENDATION #3: FULLY INTEGRATE STATEWIDE IMTS PLANNING ACROSS PUBLIC AND PRIVATE STAKEHOLDERS

IDOT should take a lead role in developing structures and processes that effectively integrate IMTS planning across the full spectrum of responsible state agencies, regional agencies, and private sector stakeholders. IDOT should use these venues to advocate for the IMTS. Follow-on steps should include:

- Establish a state-level Marine Transportation System Advisory Board, to include IDOT, IEPA, IDNR DCEO, Department of Agriculture and/or other public agencies, as well as private sector partners
- Collaborate to establish and administer marine system funding programs & existing state programs that can benefit the marine system
- Address key issues and shared interests: beneficial use of dredged materials; permitting/regulatory changes; resiliency/flooding; multimodal system connections; etc.
- Establish coordination between the Advisory Board (see Recommendation 1) and the Illinois State Freight Advisory Committee and other private sector stakeholder groups and associations to facilitate private sector input
- Collaborate with state regulatory agencies and public and private ports to review permitting regulations for efficiencies and economic competitiveness related to activities undertaken by ports to improve the movement of goods and increase economic competitiveness.



#### Synergies with other IDOT modal plans and policies:

##### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>ECONOMY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓	✓			

	<b>LIVABILITY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

	<b>MOBILITY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>
		✓		

	<b>RESILIENCY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

##### ILLINOIS STATE FREIGHT PLAN

FREIGHT GOALS					
					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
	✓				

### 5.2.6 RECOMMENDATION #4: IMPROVE PORT DISTRICT STRUCTURE AND APPOINTMENT PROCESS

IDOT should work to improve the structure and function of port districts, helping to match the boundary definitions of port districts to appropriate market regions and facilitating the timely appointment of port district board members.


- Develop relationships with port district boards/staff through the new Marine Section (see Recommendation 1)
- Collaboratively review whether consolidation, dissolution, or boundary adjustments for port districts would provide greater efficiency and achievement of statewide MTS goals, considering market needs and infrastructure conditions
- Establish a port district board appointment process within IDOT, and work as a liaison with the Governor’s Office to promote timely port district board appointments



#### Synergies with other IDOT modal plans and policies:

#### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>ECONOMY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

	<b>STEWARDSHIP CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
					✓	

#### ILLINOIS STATE FREIGHT PLAN

##### FREIGHT GOALS

					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
	✓				

### 5.2.7 RECOMMENDATION #5: STREAMLINE DREDGING PROCESS

IDOT should take a lead role in addressing known deficiencies in the state’s process for port activity permitting, dredging, and beneficial use of dredged materials, to improve the efficiency and performance of the IMTS and remedy Illinois’ competitiveness with neighboring states.

- Collaborate with new Marine Transportation System Advisory Board (see Recommendation 3) to define and establish common, accepted definitions of “contaminated” dredged material, dredged materials management practices, and beneficial use of dredged material best practices
- Work with Federal regulatory agencies as necessary to establish consistency between improved state practices and federal practices and to generally streamline the federal permitting process for dredging projects to the extent practical




#### Synergies with other IDOT modal plans and policies:

##### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>ECONOMY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓	✓			

	<b>MOBILITY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>
		✓		✓

	<b>RESILIENCY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
			✓			

##### ILLINOIS STATE FREIGHT PLAN

###### FREIGHT GOALS

					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
	✓		✓		



### 5.2.8 RECOMMENDATION #6: STRENGTHEN FEDERAL AGENCY AND MULTI-STATE PARTNERSHIPS

IDOT should take a lead role in managing and strengthening relationships with Federal agency partners and in facilitating multistate partnerships to achieve IMTS objectives that extend beyond the boundaries or direct control of the state itself.

- Leverage previous recommendations (new IDOT Marine section, statewide IMTS Advisory Board, dredging process improvements) to strengthen relationships with responsible Federal regulatory and implementing agencies (USACE, Fish & Wildlife, EPA, MARAD, et al.)
- Encourage the USACE to develop and regularly publish a 5-year program of planned activities and timelines potentially impacting IMTS stakeholders, allowing stakeholders to plan ahead for waterway closures, improvements, and other USACE activities
- Seek opportunities to accelerate or facilitate Federal program delivery through state participation in administration, contracting, or other means
- Work with USDOT partners to make IMTS projects as competitive as possible for discretionary grant awards
- Collaborate with federal regulatory agencies and public and private ports to review permitting regulations for efficiencies and economic competitiveness related to activities undertaken by ports to improve the movement of goods and increase economic competitiveness



#### Synergies with other IDOT modal plans and policies:

##### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>ECONOMY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

	<b>LIVABILITY CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
		✓				

##### ILLINOIS STATE FREIGHT PLAN

FREIGHT GOALS					
					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
		✓		✓	

**5.2.9 RECOMMENDATION #7: LEVERAGE EXISTING ILLINOIS FUNDING TO MEET IDENTIFIED IMTS NEEDS**

Many partners and stakeholders expressed concern regarding the condition of the existing IMTS infrastructure. IDOT should continue to leverage existing Illinois funding sources to invest in IMTS improvements, to the extent practical. These existing funding sources should include all modes and types of sources including for rail, roadway, and other landside infrastructure. This will allow to leverage existing transportation funds when it is appropriate to support multimodal investments.

- Continue to leverage National Highway Freight Program Funds (or similar future programs) allowing for flexible allocation across modes; re-establish the Port Revolving Loan Fund (see Recommendation 8) as a mechanism for project applicants to meet grant match requirements
- Continue to pursue and support discretionary grant applications under BUILD, INFRA, PIDP (Port Infrastructure Development Program), and other applicable programs for IMTS investments
- Review other IDOT transportation system funding programs for leveraging potential in cases where the integration of IMTS projects would be demonstrably more beneficial than single-mode investments
- Review federal and state economic development grant programs (TARP, USCG, IDNR, DCEO, etc.) for potential use in meeting IMTS needs
- Explore the potential for establishing public-private partnerships for IMTS maintenance and capital needs when deemed appropriate, especially when funding is not sufficient to provide safe, efficient, and/or reliable marine transportation



**Synergies with other IDOT modal plans and policies:**

**STATEWIDE LONG-RANGE TRANSPORTATION PLAN:**

	<b>STEWARDSHIP CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
				✓	✓	

**ILLINOIS STATE FREIGHT PLAN**

<b>FREIGHT GOALS</b>					
					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
		✓	✓	✓	

### 5.2.10 RECOMMENDATION #8: ESTABLISH LONG-TERM, SUSTAINABLE IMTS FUNDING PROGRAM

Building on the Port Capital Grant Improvement Program, IDOT should work to design and establish a long-term, predictable, and secure funding program for the improvement of existing IMTS infrastructure and expansion of the system.

- Finalize the design of the Port Capital Grant Improvement Program, covering an estimated five years of port funding, subject to potential modifications due to the COVID-19 pandemic and necessary state financial responses
- Identify long-term, sustainable revenue streams allowing indefinite continuation of the Port Capital Grant Improvement Program at reliable and predictable annual expenditure levels
- Re-establish the Port Revolving Loan Fund to support short-term port and IMTS investment needs, such as local matches to discretionary grants or quick-response expenditures; loans could be funded out of an expanded Port Capital Grant Improvement Program or a parallel program, based on further exploration



#### Synergies with other IDOT modal plans and policies:

#### STATEWIDE LONG-RANGE TRANSPORTATION PLAN:

	<b>STEWARDSHIP CHAPTER</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
				✓	✓	

#### ILLINOIS STATE FREIGHT PLAN

FREIGHT GOALS					
					
<b>IMPROVE SAFETY</b>	<b>IMPROVE EFFICIENCY</b>	<b>GROW THE ECONOMY</b>	<b>PRESERVE EXISTING INFRASTRUCTURE</b>	<b>EXPAND INFRASTRUCTURE STRATEGICALLY</b>	<b>SUPPORT MULTIMODAL DISTRIBUTION</b>
		✓	✓	✓	

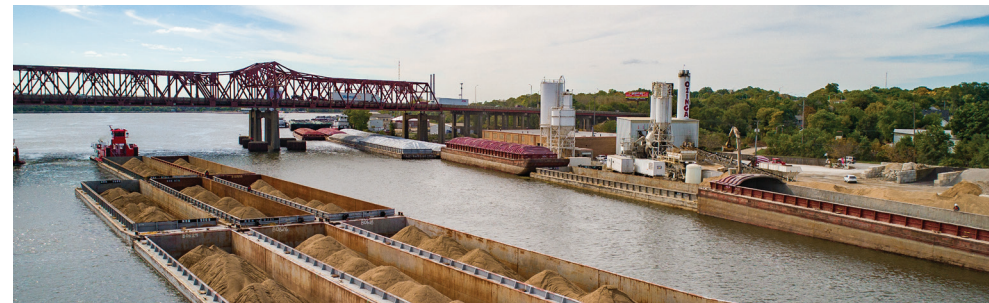
### 5.3 CRITICAL NEEDS FOR THE IMTS AND ITS STAKEHOLDERS

Through detailed discussions with stakeholders, analysis of IMTS infrastructure and operations, and review of peer and neighbor state best practices, the critical needs for the IMTS and its stakeholders were identified. The list of critical needs (see **Table 5.1**) is intended to focus on issues of statewide significance that impact the state’s entire IMTS infrastructure and operability of

all its port districts together; it includes only eight items, but each is important and challenging. Individual ports improvement plans and programs were investigated in the study but are not included in the list of critical needs, as they are and will continue to be addressed at a port districts level, with engagement with and by IDOT as appropriate.

TABLE 5.1 IMTS Critical Needs

TYPE	DESCRIPTION
<p><b>Port Development</b></p>	<ul style="list-style-type: none"> <li>▪ Funding and implementation support for port districts to develop, expand, and/or improve their terminal facilities, truck and rail access, berths and channels, supporting logistics facilities, and water-dependent non-freight activities</li> <li>▪ Technical support for port districts to document and communicate their capabilities, assets, and economic importance to a broad range of public and private stakeholders</li> <li>▪ Improved definition of port districts to capture IMTS opportunities and deliver IMTS improvements and services</li> </ul>
<p><b>Waterway Maintenance and Operations</b></p>	<ul style="list-style-type: none"> <li>▪ Improved regulatory, management, and funding practices for channel and berth maintenance dredging</li> <li>▪ Improved delivery of critical lock and dam maintenance, resiliency, and other projects through close collaboration with Federal Agency partners and through multi-state partnerships</li> </ul>
<p><b>Statewide Planning and Funding</b></p>	<ul style="list-style-type: none"> <li>▪ Improved IMTS planning capacity within IDOT</li> <li>▪ Improved IMTS planning coordination across Illinois agencies</li> <li>▪ Establishment of sustainable IMTS funding program</li> </ul>



## 5.4 BENEFITS OF ACTION

The benefits—considering only benefits to the State of Illinois—of implementing these programmatic recommendations can be evaluated and quantified on three dimensions: avoided loss of economic value; avoided impacts of freight transportation on other modes; and accommodation of future statewide business expansion and growth.

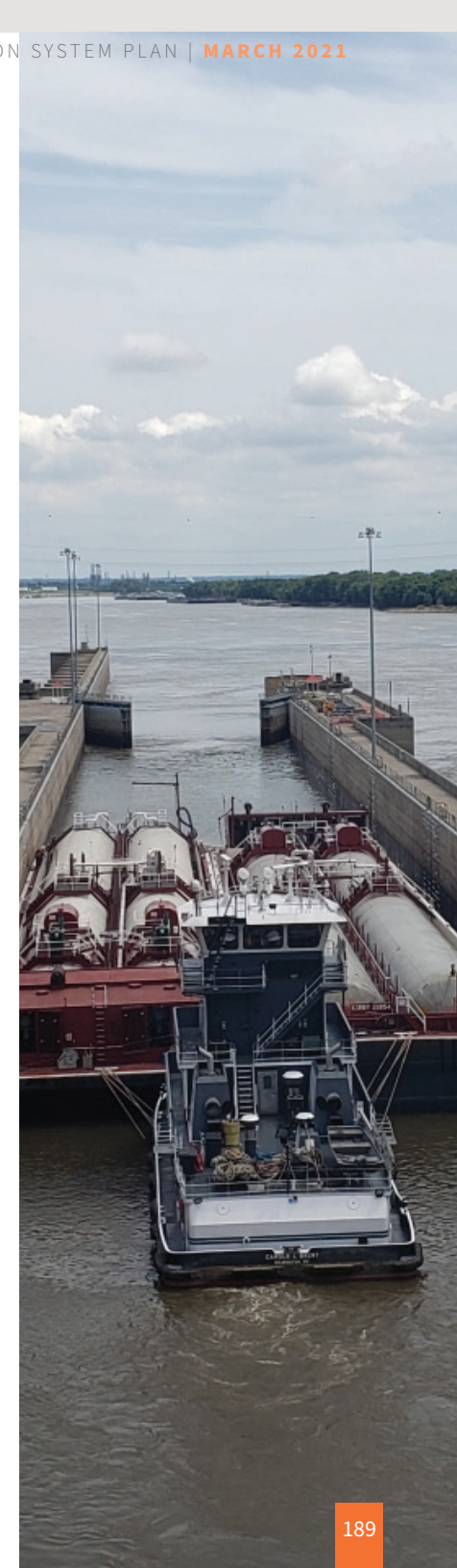
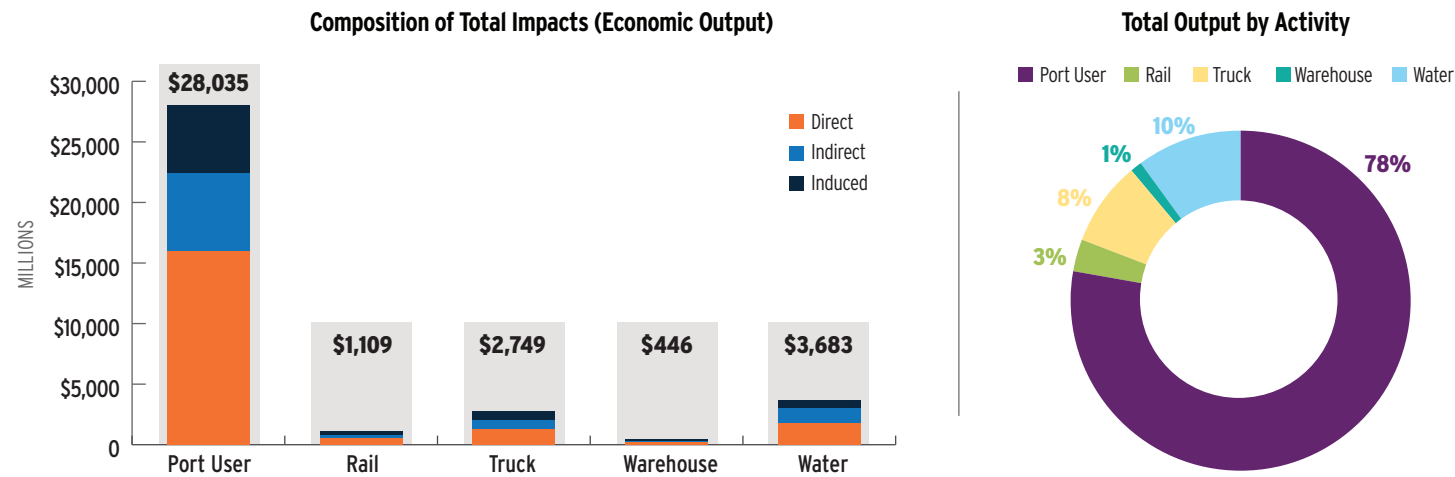
### Avoided Loss of Economic Value

This plan performed an extensive analysis of the economic value of the IMTS to the State of Illinois. The main findings were that direct economic benefits are extremely large (74,682 employees, \$7.9 billion in value-added), total economic benefits are even larger (166,629 employees, \$17.4 billion in value-added), and that port users (the businesses that benefit from marine transportation services) account for most of the calculated benefit (see **Figure 5.6**).

What could happen to these benefits if the IMTS is unable to maintain the capacity, performance, and services it currently offers due to lack of maintenance or insufficient investment?

- Direct water-related benefits (3,800 jobs and \$539 million in value added) would be most immediately at risk, were IMTS activity to decline.
- Close behind, direct port user benefits (59,000 jobs and \$6.2 billion in value-added) would be impacted. For port users, their jobs and value-added contributions could be significantly impacted if marine transportation services had to be replaced by truck and rail services, which can be substantially more expensive. In the best case, their costs for transportation spending would increase, impacting their bottom-line and reducing their ability to spend on labor, capital expansion, maintenance, and/or shareholder returns, but they would continue to operate. In the worst case, the cost impacts would be so severe that the businesses could not operate profitably in Illinois and would have to seek locations in other states or close entirely.

FIGURE 5.6 Summary of Statewide IMTS Economic Impact



### Avoided Impacts of Freight Transportation on Other Modes

In 2017, the IMTS moved 62.1 million tons of freight from Illinois origins to out-of-state destinations, 20.1 million tons from out-of-state origins to Illinois destinations, and 8.4 million tons between origins and destinations in Illinois. What could happen to these benefits if the IMTS is unable to maintain the capacity, performance, and services it currently offers due to lack of maintenance or insufficient investment?

- Most of the tonnage currently moved by water would likely be shifted to truck or rail. However, some portion of this tonnage would be likely lost, as the business generating the freight could no longer afford to remain in business or in Illinois.
- For traffic that could shift to rail, the transportation impacts (increased rail ton-mileage) might be manageable, but there might be significant impacts in terms of the need for improved rail transfer facilities at impacted businesses or for new or expanded multi-user rail terminals. Rail drayage to off-site terminals could generate significant increases in truck vehicle miles of travel (VMT) and congestion in certain areas. There would also be an increase in rail ton-mileage, although these effects might be manageable within the state's extensive rail network.

- The state's surface transportation system would see a significant increase in truck VMT, likely resulting in greater highway pavement damage, congestion, and emissions. If just 10% of annual IMTS tonnage moved instead by truck, it would mean 9.6 million tons of truck freight added to Illinois highways – equivalent to around 450,000 loaded truck trips per year. If each of those trucks moved an average of 150 miles in Illinois (the distance from Peoria to Chicago), they would generate around 67.5 million additional truck VMT each year – which, for perspective, is roughly 2,700 trips around the equator.

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### Accommodation of Illinois Economic Growth

Between 2017 and 2045, IMTS freight volume is expected to increase from 90.1 million tons to 94.8 million tons. Historically important commodities like coal and petroleum are projected to decline, but continued growth in agricultural products, fertilizers, food products, and other manufactured products – along with emerging commodities like plastics and agricultural by-products – will more than offset these losses. This represents a 5 percent growth in tonnage; the economic value capturing this 5 percent growth can be estimated at roughly \$870 million (current total value-added of \$17.4 billion times 5 percent).

## SUMMARY

This Plan is intended to document the diverse functions, roles, and benefits of the IMTS, its public Port Districts, and its private partners and stakeholders. The value of the IMTS to the state of Illinois – leaving aside its substantial additional benefit to other states and the nation as a whole – is extremely large. The Programmatic Recommendations identified in this Plan are designed to safeguard and preserve this value and to support continued and beneficial IMTS growth well into the future.