Center for
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Incorporating Inland Port Strategies into TxDOT Planning

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and Ajay Shakyaver

Intermodal Hubs
Freight Villages
Platformes Multimodales/Logistiques
Modal Generation Points
Freight Nodal Terminal
Nodal Centers

Inland Ports
Multimodal Inland Terminals
Interporti
Intermodal Terminals
Gueterverkehrszentren
Combi-terminal
Intermodal Freight Center

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INCORPORATING INLAND PORT STRATEGIES INTO TXDOT PLANNING: AN IMPLEMENTATION MANUAL

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Project 5-4083-01: Demonstrating the Inland Port Evaluation Guide

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Performing Organization:	**Sponsoring Organization:**
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Project conducted in cooperation with Federal Highway Administration and the Texas Department of Transportation.

Abstract:
In the year 2000 the Texas Department of Transportation (TxDOT) commissioned a research project (0-4083) on the growth of inland ports along transportation corridors in Texas and the United States. This project was staffed by a multi-institutional team comprising Jolanda Prozzi (CTR-UT), John McCray (UTSA), and Russell Henk (TTI), and was supervised by Robert Harrison (CTR-UT). Judy Friesenhahn, P.E. (San Antonio) was the Project Director and the Project Coordinator was Luis Ramirez, P.E. (District Engineer at Laredo). Upon completion, the research was selected as a 2002 TxDOT's Top Research Innovations and Findings Award winner. As part of the study, CTR, TTI and UTSA researchers developed an "Inland Port Transportation Evaluation Guide." The guide provides TxDOT planners with a planning and evaluation tool that can be used when local officials and developers approach TxDOT districts for assistance in the possible development of an inland port. The guide can also be given to potential developers and local officials so that they better understand TxDOT's procedures and data requirements. To increase the guide's usage and effectiveness, a follow-up implementation project was approved for FY04 and undertaken by CTR. The scope of the implementation project included training of district and metropolitan planning organization (MPO) personnel on (1) the functions of inland ports and (2) use of the guide as an evaluation tool. A second component of the implementation project was an assessment of the guide's effectiveness by using the West Texas Odessa District as an actual case study. The implementation project began in September 2003, and was completed in August 2004.

Keywords:
Inland port strategies, transportation corridors, port transportation evaluation guide, MPO, Texas.

No. of Pages:
42

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Introduction

Overview

In the year 2000, the Texas Department of Transportation (TxDOT) commissioned a research project (*0-4083 Impacts of Inland Ports on Trade Flows and Transportation in Texas*) that examined the growth of inland ports along transportation corridors in Texas and the United States. The multi-institutional research team included:

- Jolanda Prozzi, Center for Transportation Research–The University of Texas at Austin (CTR-UT)
- John McCray, University of Texas at San Antonio (UTSA)
- Russell Henk, Texas Transportation Institute (TTI).

The team was led by Robert Harrison (CTR-UT), who served as the Research Supervisor. Judy Friesenhahn, P.E. (San Antonio District), represented TxDOT as the Project Director. Additionally, Luis Ramirez, P.E. (Laredo District Engineer), provided a statewide perspective as the Program Coordinator.

In addition to documenting the growth of trade and inland ports, as well as their potential impact to the transportation network in Texas, the researchers produced the *Inland Port Transportation Evaluation Guide* to be used when inland ports or "large box" private development is being proposed. The *Inland Port Transportation Evaluation Guide*, herein referred to as the "Guide" provides TxDOT planners with:

- An understanding of how inland ports impact the transportation system; and
- Tools to best accommodate inland ports into state transportation planning.

Specifically, the Guide is a planning and evaluation tool that can be used when local officials and developers approach TxDOT districts for assistance in the possible development of an inland port (or "large box" development). The Guide can also be given to potential developers and local officials so that they better understand TxDOT's procedures and data requirements.

To increase the Guide's effectiveness, a follow-on implementation project (*5-4083 Demonstrating the Inland Port Evaluation Guide*), sponsored by TxDOT, was undertaken by CTR-UT in FY 04. The implementation project began in September 2003 and was complete in August 2004. The scope of the implementation project included training of district and metropolitan planning organization personnel on:

- The functions of inland ports; and
- Procedures on how to use the Guide as an evaluation tool.

A second component of the implementation project was an assessment of the Guide's effectiveness by using the Odessa District as an actual case study.

Based on experience and lessons learned taken from the case study in the Odessa District, this document was produced. Its purpose is to augment the Guide by supplying additional and more detailed information for district planners and engineers to use when working

with developers and local government officials who are proposing inland port or "large box" development. In addition to this report and the Guide, the *Inland Port CD-ROM Toolbox* contains other documents that can be used as inland port information resources. In total, these resources help promote a widespread understanding of inland ports and the procedures TxDOT can follow when planning for their development. The reader can refer to the "Read-me" MS Word file on the CD-ROM for a description of all the items contained in the Toolbox.

Acknowledgments

Luis Ramirez, P.E., was the implementation director for this implementation Ajay Shakyaver, P.E. the Project Director had an important role in this work that should be specifically recognized. He arranged district meetings with the two communities and worked closely with Research Supervisor Robert Harrison (CTR) in the development of the interface process to incorporate critical steps in the proposed development of Inland Ports into TxDOT's Project Development Process. He also worked closely with Lisa Loftus-Otway to develop the various flow charts produced as part of the implementation study. Lauren Garduño, P.E., the District Engineer at the Odessa District provided valuable advice and direction in the development of this report. Recognition is also due to Andrew Griffith, P.E. Research & Technology Implementation Office (RTI), who participated in the implementation review process, and Valerie Branca (International Paper, Inc.), who provided valuable contributions from the business perspective when she was an MBA student at UT.

Background

The growth of metropolitan Texas, driven by complex changes in both demographics and economics, is changing the way companies are distributing their products and services. The growth of traditional freight ports (such as Houston, Laredo, and DFW airport) is being complemented by a variety of inland ports (like Alliance at Fort Worth) and "big boxes" (like Wal-Mart distribution centers). Such projects are generally located at the edge of current metropolitan boundaries for a number of reasons including their ability to serve several smaller submarkets, lower cost of land, easier planning approval processes, and the opportunity for economic incentives to be awarded by the local economic community.

While the impacts on the transportation system may be large, particularly for highways, TxDOT planning staff—either at the district or at Austin—are frequently not brought in at an early stage of the planning process and are sometimes placed at a disadvantage by having to react to consequences of a project. This is particularly true for "big boxes" and the impacts can range from having to change the geometry of an intersection and traffic signaling into a facility to larger expenditures such as addition of ingress/egress ramps, auxiliary lanes, or even new interchanges promised to the tenant company by local authorities in absence of TxDOT's input or consent.

Mindful of the inevitable changes in Texan distribution systems, TxDOT sponsored study 0-4083 to examine the growth of inland ports, to identify a planning cycle for their growth, and to link it to the TxDOT planning and programming cycle to more successfully integrate sponsor and TxDOT planning at the district level.

Figure 1 presents the findings on the inland port life cycle and shows how such findings could be positioned to benefit both inland port sponsors (IPS) and TxDOT. Inland ports go through several stages of growth, although a majority do not reach the final stages. First, the

inland port has to be planned, financed, and developed (Stage I). Once implemented, the site operations grow and begin to impact the transportation system (Stage II). Logistics, modes, site management, and location can drive sustained expansion of the port (Stage III) to the point where operations are broadly stabilized and in equilibrium (Stage IV). Finally, for well established sites (some many decades old), port activities generate transport driven communities or even cities in their own right (Stage V).

IPS developing inland ports have a wide variety of types on which to base their ideas, and some are shown in Figure 1. Irrespective of the type, all will go through the same basic cycle just described, including interactions with transportation agencies like TxDOT to address their transportation needs. Some of the critical investments and activities needed to move a project through the stages for the IPS are provided on the left, while the way in which TxDOT can offer assistance at the various stages is given on the right. More details on this process are provided in the Guide, which should be read thoroughly by both TxDOT planning staff and the IPS. This structure is the cornerstone of the study findings and the remainder of this document details, in greater precision, the recommended steps for TxDOT planning staff to follow when dealing with inland ports, logistic parks, and—with some modifications—big box distribution hubs.

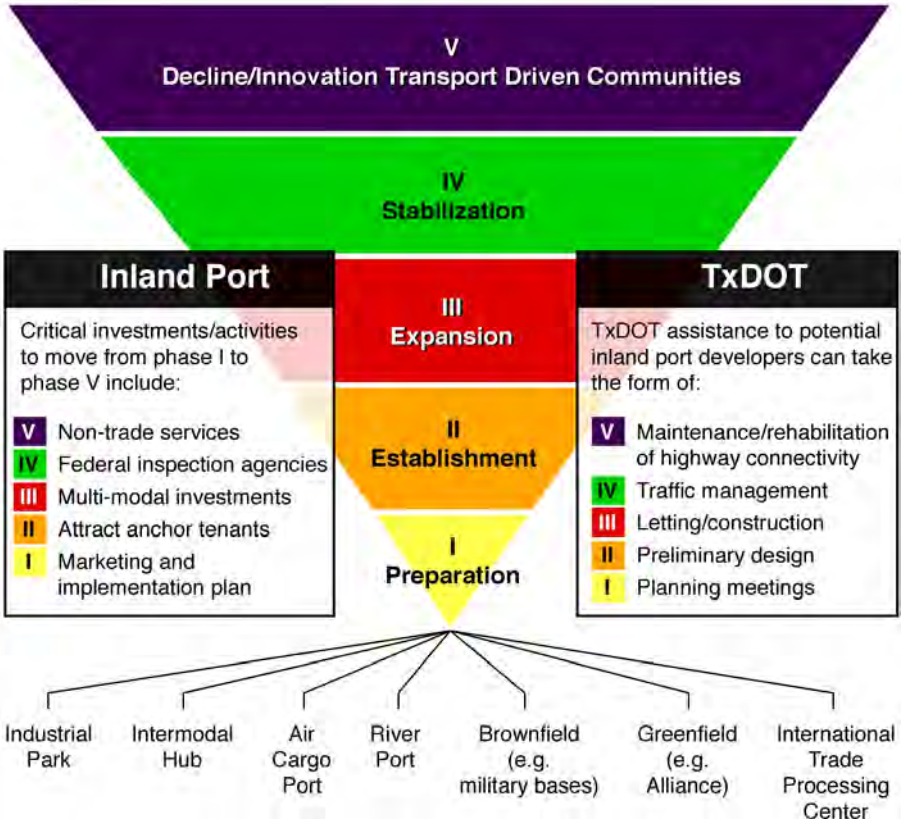


Figure 1. Development Life Cycle of Inland Ports

The response from TxDOT, including the level of support, will vary widely. Even in the early stages (I or II), the project may require a segment of highway to be built to allow the safe movement of freight. This implementation report takes the rigid assistance suggested by the

original research and modifies it so that it is *flexible* and permits multiple interactions at various stages of inland port development, where appropriate. The next section addresses district planning and inland port proposals.

1. District Planning and Inland Ports

Almost all Texas communities now support some form of economic development endeavor. New opportunities to promote locational advantages are being constantly scrutinized and since 2000 the benefits of inland ports have not escaped the attention of those responsible for economic development (Figure 2).

Interest in Inland Ports Continues to Grow

The North American Inland Port Network recently held its sixth meeting. The Network links Mexican, US, and Canadian cities along the I-29 and I-35 corridor. Among the cities are Kansas City, San Antonio, Des Moines, Winnipeg, Monterey, and Guadalajara. According to the definition adopted by the group, the city must have multi-modal capabilities, posses a Foreign Trade Center, or some other customs presence, and provide international transportation and trade links.

Source: G. Linn, "Inland Port Cities Enjoy NAFTA Benefits" American Journal of Transportation On-line, October 19, 2004

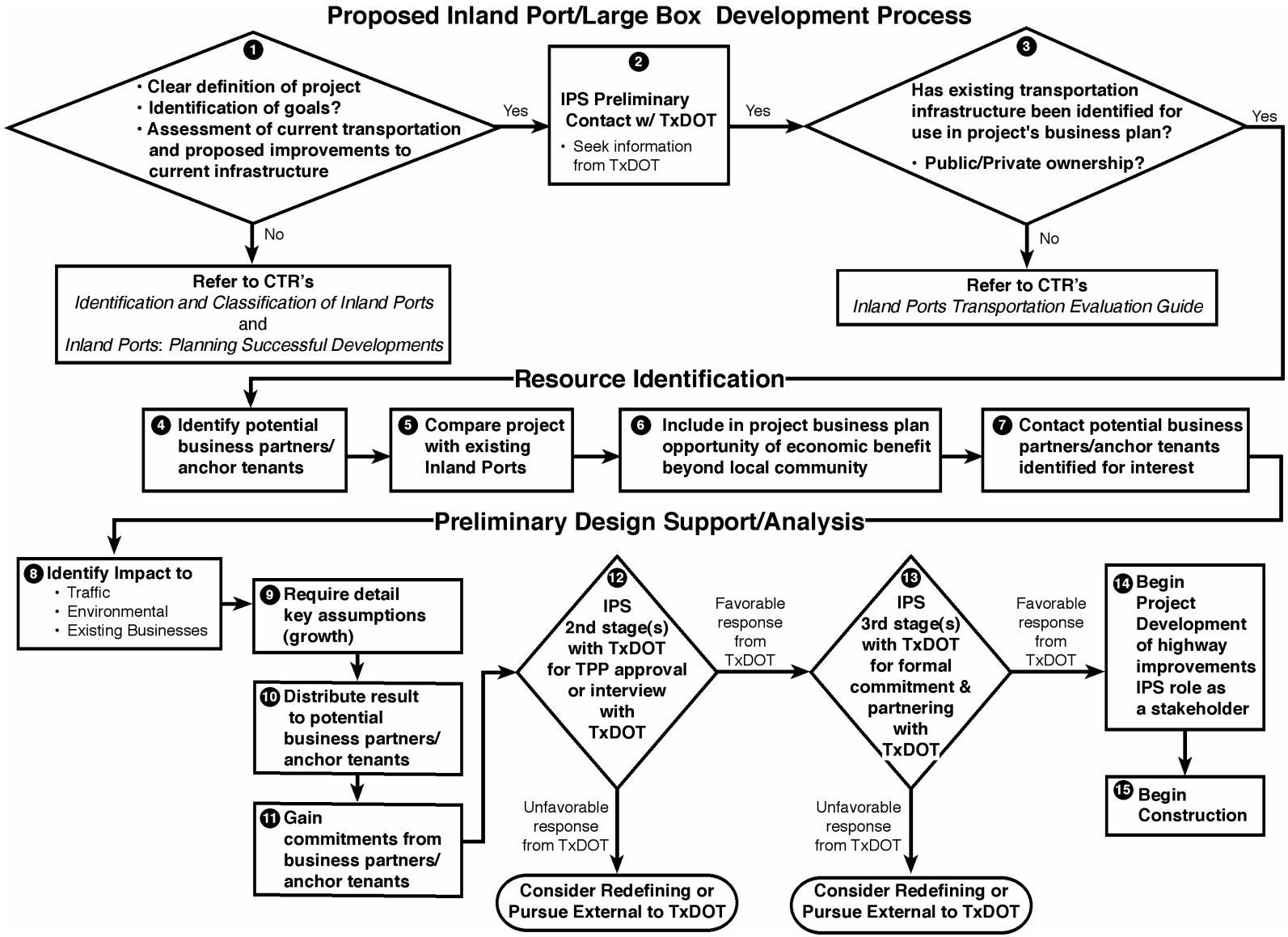
Figure 2. Interest in Inland Ports Continues to Grow

Generally, TxDOT district staff *react* to any proposal of an inland port, or may lack a clear direction to capture information relevant to TxDOT and deal with those sponsoring the proposal in a positive and consistent manner. The results of this implementation study provide a structured approach that TxDOT planners can use to manage that process and ensure it integrates into the TxDOT planning process in a timely manner.

Figure 3, titled "Proposed Inland Port/Large Box Development Process," was initially developed to highlight the typical community/business development process in creating an inland port. This flowchart encompasses three stages. The first stage is an initial concept and scoping stage (often determining the public/private components within the project with local jurisdictions) with a preliminary approach to TxDOT to discuss the concept. The second stage is a resource identification stage when the IPS identifies business partners and tenants and begins the process towards creating a viable business plan. The final stage begins the preliminary design and support analysis. During this stage the IPS will identify infrastructure and economic impacts and set these against key assumptions for growth, then use this analysis to approach and gain contractual commitments from potential business partners and anchor tenants. This last stage also includes further discussions and interviews with TxDOT planning staff, eventually leading, after successful negotiations, to partnering with TxDOT.

This flowchart was then integrated into the flowchart seen in Figure 4 (see the foldout page), which highlights how a proposed inland port or large box development could be incorporated into TxDOT's Project Development Process (PDP).

Figure 3. Proposed Inland Port/Large Box Development Process



2. Guidance for Reading the Flowchart(s) for Proposed Inland Port/Large Box Development Process and Proposed Inland Port/Large Box Development, as Incorporated into TxDOT Development Process

The flowcharts in Figures 3 and 4 should be read sequentially, and it should be noted that the box numbers from the first flowchart are listed on the second flowchart at their appropriate time stages. Figure 3 will aid both TxDOT staff and IPS to understand the major steps in the inland port development process that need to be completed prior to approaching TxDOT on proposed highway improvements. Figure 4 (the foldout section) is a flowchart that was developed to broadly represent a generic process by which proposals to develop inland ports can be appropriately managed by district staff. The flowchart has been separated into four stages (vertically separated) of development of the integration of processes between IPS development and TxDOT's (PDP). The vertical stages also show the time scale involved in incorporating an inland port/big box project into the transportation planning process.

i. ***Stage 1*** initiates a formal dialogue between TxDOT and IPS early in the development of a proposed inland port. It marks IPS first contacts with TxDOT on the project. Steps in Stage 1 provide an opportunity to seek and exchange relevant information to aid TxDOT in assessing the IPS proposal and set the stage for potential partnering.

ii. ***Stage 2*** formalizes IPS's second contact with TxDOT. This stage highlights the process for TxDOT to evaluate the commitment and feasibility of the IPS proposal to develop an inland port. It also provides the tools to TxDOT staff for assessing and evaluating potential impact to the TxDOT highway infrastructure.

iii. Given the positive outcome from the previous stage, ***Stage 3*** formalizes partnering initiatives between TxDOT and IPS in defining project-specific purpose and needs, including developing the scope of proposed highway improvements; priority of the proposed improvements; formal commitments from IPS to develop the proposed inland port; and formal financial partnering negotiated between IPS, TxDOT, and/or other agencies.

iv. ***Stage 4*** integrates the agreed proposed highway improvement project(s) into the TxDOT Project Development Process, inclusive of the IPS role as a stakeholder, or TxDOT's role as administrator, should the project be developed without any TxDOT assistance.

There are also four major horizontal flow-lines which could be pursued across the four stages of development of the integration of process between IPS development and the TxDOT PDP. Essentially the flow-lines follow the money trail.

1st Horizontal Flow-Line: The first horizontal flow-line titled "Inland Port Sponsor IPS Pursues Development with Funding External to TxDOT" accounts for project development when all funding is external to TxDOT. In this case TxDOT is mainly interested in knowing the full impact to its infrastructure, and jointly developing the scope for highway improvements proposed by IPS. If the project is proposed on the state highway system, or may have an impact on the state highway system, then TxDOT will

be actively involved, to the potential maximum extent of developing the detail design and letting the project on behalf of IPS. The least involvement here from TxDOT would be as a stakeholder, ensuring state interests are not overlooked.

2nd Horizontal Flow-Line: The second horizontal flow-line titled "IPS Pursues Project Development with Potential Financial Partnership with TxDOT" shows that the process moves forward only when TxDOT evaluation is positive in both vertical Stages 2 and 3. Until a positive evaluation occurs, the loop reverses back to boxes #12 or #13 to TxDOT's satisfaction or until an IPS decides to pursue funding external to TxDOT.

3rd Horizontal Flow-Line: The third horizontal flow-line titled "TxDOT Decision Making and Response" highlights TxDOT's decision-making process for evaluation of an IPS proposal until the eventual submission into the Transportation Plan Process. It should be noted that two sequential "negative" decisions will kick-start the IPS pursuit of the project external to the TxDOT flow-line.

4th Horizontal Flow-Line: The fourth horizontal flow-line titled "TxDOT Project Development Process Incorporating Inland Port Proposal" assumes that construction will be undertaken by TxDOT (i.e., TxDOT develops design, lets contracts, and manages the construction). The overall assumption here is that the IPS proposal directly affects TxDOT highway infrastructure. This is usually the way in which construction sponsored externally to TxDOT on its highway system is pursued. TxDOT will require IPS to escrow up front the estimated and agreed capital sum to construct the project upon execution of agreement. The construction can be undertaken by a private entity on a TxDOT Right-of-Way (ROW), but this is an exception as opposed to the rule. In this case, TxDOT may want the local entity to construct on behalf of the IPS. Here the minimum role of TxDOT would be as a stakeholder and administrator/inspector.

It should be noted that the solid flow-lines represent an integrated process between TxDOT and the IPS while the dashed flow-lines represent IPS pursuit of the project externally to TxDOT.

When state or federal money is to be expended for proposed improvements to the highway infrastructure or external financing is being utilized for proposed improvements to the on-system highways, State and Federal regulations and standards must be followed in the development of the proposed highway improvement. TxDOT's maximum level of commitment is defined under the 43 Texas Administrative Code (TAC) § 15.55(c). A copy of the Table is attached in the implementation CD ROM.

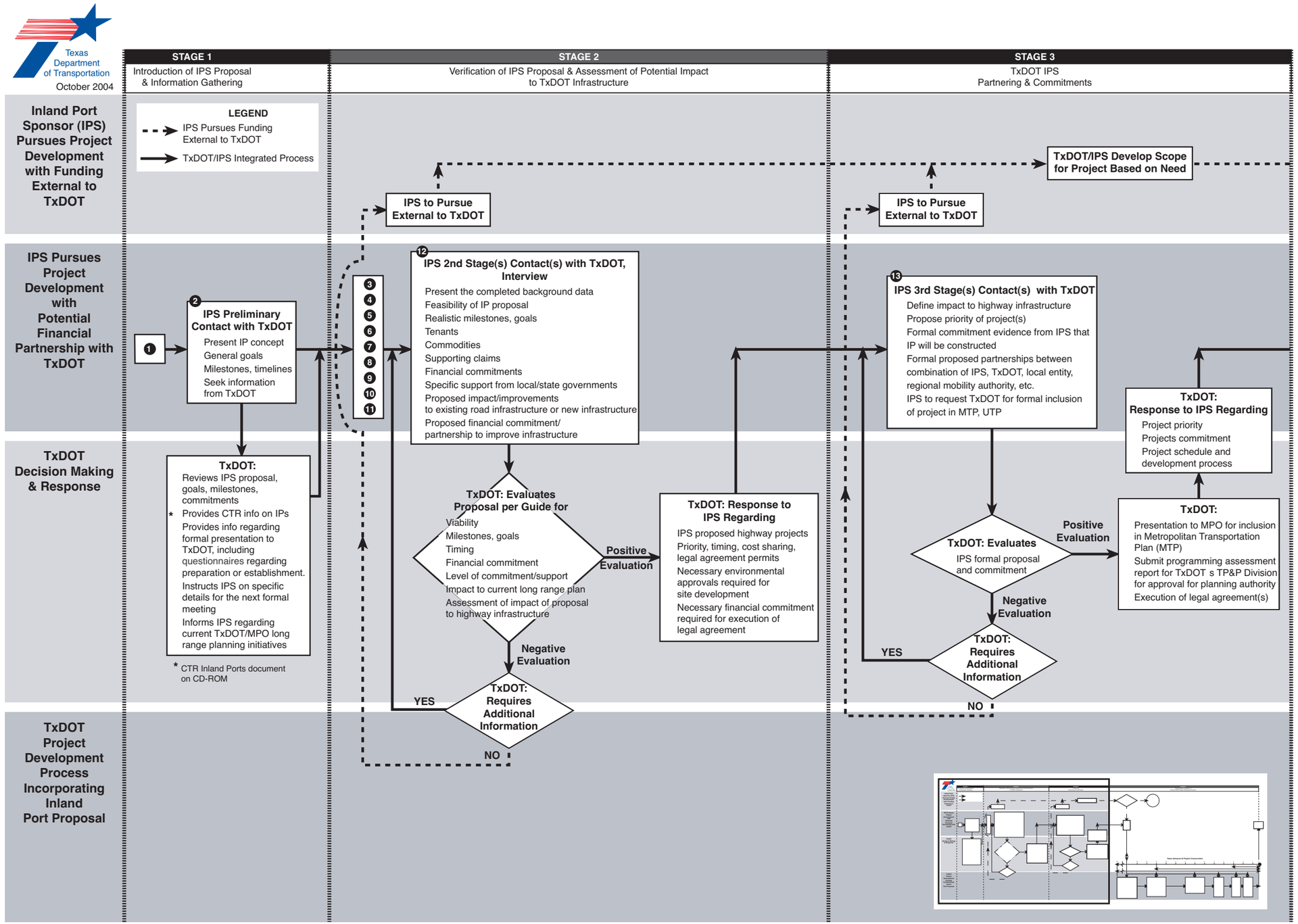
Naturally, the inland port sponsor would like to gain TxDOT approval to enhance marketing to prospective customers. In the implementation phase of this study, the TxDOT and CTR Implementation Team spent a substantial amount of time evaluating the value of offering formal designation to a proposal meeting the inland port criteria. It was decided that such designation issues would need to be addressed separately from this report with the Texas Transportation Commission, or even at the State Legislative level. TxDOT, however, does recognize the impacts and benefits of such proposed developments to communities and existing highway infrastructure as part of its strategic mission statement.

The material provided in this implementation guide is structured both to help those proposing new sites and to help the TxDOT district staff consider how best to incorporate them into the department's planning. It enables the identification of key deficiencies ("fatal flaws") in an inland port proposal and keeps IPS focused on what is most important to the department—

namely the transportation consequences of a proposed inland port—especially those related to current and future patterns of highway demand.

More specific information on inland ports is provided in the next section.

Figure 4. Proposed Inland Port/Large Box Development, as Incorporated into TxDOT Project Development Process.



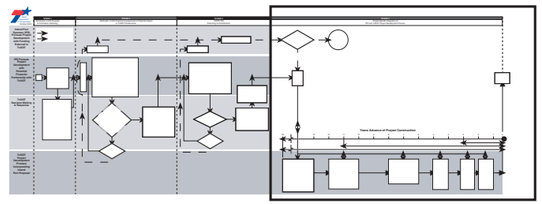
STAGE 4

Project Specific Integration of
IPS and TxDOT Project Development Process

TxDOT/IPS: Execute Legal Agreement Based on: External Funding

NO → **IPS Proposed Highway Project Deferred/ Terminated**

YES



14 IPS Input in Project as a Stakeholder

15 Transportation Project Begin Construction

Years Advance of Project Construction

25 13 12 11 10 9 8 7 6 5 4 3 2 1 0

Transportation Improvement Plan (TIP)

Statewide Unified Transportation Plan (UTP)

MPO Metropolitan Transportation Plan (MTP)

TxDOT Starts Project Programming & Authorization

- Identify construction funding
- Present to MPO for inclusion of project in the MPO-Metropolitan Transportation Plan (MTP) 25 year plan
- District applies to TP&P division for inclusion of project in the Unified Transportation Plan (UTP)

TxDOT Starts Project Planning

- Obtain project authorization to plan
- Compliance with planning requirements
- Project study requirements determination

TxDOT Start Preliminary Design

Deliverables:

- Preliminary design schematic drawings
- Environmental document
- R.O.W. map
- Utility adjustment plan

TxDOT Receives Environmental Clearance

- District develops Urban TIP
- Inclusion of project in TIP
- Authority to construct

TxDOT Start Design

- R.O.W. appraisal & acquisition
- Implement utility adjustment

Assemble Plan, Specification, and Estimate (PS&E)

- Final review
- Project let for construction

2.1. Inland Ports and TxDOT Planning: General Comments

The process of incorporating inland port strategies into the TxDOT district planning can begin in a variety of ways. However, it should be emphasized that the term inland port implies that:

- There are multiple tenants; and
- A proportion of the trade handled is international in terms of origin or destination. Work undertaken in the implementation phase strongly suggests the recommended evaluation procedure can be easily modified by TxDOT planning staff to address "big box" distribution centers (single company) and distribution parks (not handling international merchandise).

As previously noted, it is recommended that TxDOT follow certain sequential steps before the formal evaluation of an inland port is undertaken. These are as follows:

1. Staff arrange a short (30-45 minute) initial interview with those proposing an inland port and use the contents of this Guide as material for IPS.
2. The IPS should read all relevant material produced in research project 0-4083 to understand how the inland port concept best fits the TxDOT planning conference.
3. The person or group proposing a formal evaluation thoroughly reads and rereads the Guide, to become familiar with its contents. Another information source is the research Project Summary Report (PSR), which provides a concise summary on inland ports and how their development can be aligned with TxDOT planning processes. The PSR is located on the *Inland Port CD-ROM Toolbox*.
4. It is critical that IPS of the inland port demonstrate clear community support at the formal evaluation to make a persuasive case for the site's inclusion into the early planning and programming process at the district.
5. If further information is needed, the PowerPoint presentations (found on the accompanying CD-ROM) can be used by IPS to reinforce the major points of the findings. Finally, IPS must be prepared to offer specific transportation milestones related to the project that TxDOT can consider as potential trigger points demonstrating project growth and success. More information on milestones is given in sections 3.1.4 and 3.2.4 of this document.

Who are those likely to ask TxDOT to help partner in an inland port concept? First, there are the communities and individuals (or corporations) that intend to develop an inland port. Second are those that have an inland port—perhaps in the early stages—comprising key customers with various commodity flows and modal movement. Finally, there are those with an established port who will have a clear understanding of how TxDOT planning works and how best to expedite the planning process.

At an early stage, unless some structure is provided, discussions can meander and lose focus. It is therefore important to impose a relatively simple but effective structure in terms of the questions being asked and the information that IPS should provide TxDOT. It is also important to remember that IPS will present information that reinforces their belief that the site is appropriate for development. In considering these arguments, the TxDOT evaluation team should interpret them primarily in terms of the TxDOT transportation responsibilities. As an example, if the sponsor claims that a key company has signed a contract to build a facility and

employ 50 people, the TxDOT evaluator needs to recognize that while this is an important feature in demonstrating the success of the venture, the critical questions are how much product will come in and out of the facility, on what mode will it travel, and what are the potential impacts on the current highway infrastructure. The resulting need to improve current highway facilities may range from modifying the highway turn geometry and traffic signals into the facility, to a more complex solution of integrating multi-modal use of modes (such as rail) that takes commodities off of the highway network and so lengthens roadway life.

During the implementation phase of this work, various forms of questionnaires were tried, including relatively complex scoring and rating processes to detailed types of questions at early stages of growth. Finally, it was decided to adopt the following three stages.

Stage 1. For those proposing a "start-up," a fairly simple questionnaire is used. Milestones would then be established to represent the successful implementation of the key characteristics of this phase. More will be stated about milestones in the next section.

Stage 2. As the site begins to operate and grow, a more detailed second questionnaire is used to determine the types of commodities, flows, numbers of loads, different modes, and other transportation needs. This sharpens the focus on what transportation improvements (by mode) are needed.

Stage 3. Finally, for facilities that are well established, a formal questionnaire is not needed. At that time, facility staff and IPS will be familiar with the TxDOT process and will come with specific cases structured to meet TxDOT needs.

To strengthen partnering and facilitate the evaluation process without putting undue responsibility on the TxDOT planning staff, it is recommended that the IPS be asked to set the milestones by which the project will be judged a success. Again for TxDOT purposes, *success is measured in terms of transportation impacts* and it is important to identify those milestones that have a direct link between economic activity at the site and the transportation network which is of importance to the district. Details on the interview process taken from the Odessa District case study experience and how the inland port evaluation process (refined during its application in the Odessa District) fits into the TxDOT planning process are provided in the next section.

3. Interviews

An IPS with an inland port proposal should be given the questionnaire entitled “Preparation” (Figure 5) while those with sites that are operational (i.e., traffic and goods are moving) should be given the questionnaire entitled “Establishment” (Figure 6). Note that the questionnaires provided in this section are for the evaluators, *not* the IPS, as these questionnaires have a column for scoring.

The most important thing is for the IPS and the district to understand the intersection of their two worlds and be able to partner together to a mutually beneficial outcome.

In their formal presentation (45 minutes), IPS will be credited if they offer supporting information that can be rated by the evaluation team. TxDOT staff should score the presentation on the first two sections only *during* the presentation. The evaluation team should then confer immediately after the presentation (around 30 minutes) to review the milestones given by the sponsor and select only those that have transportation consequences of concern to TxDOT.

3.1. Instructions for TxDOT on Scoring the Preparation Phase: Background Data on Proposed Facility

An IPS with an inland port proposal would be scored using this questionnaire.

Project:	
Section 1. Inland Port Market Analysis	**Score**
Potential anchor tenants identified	
Commodity-origin-destinations	
Demand forecasts (potential market)	
Projected site-generated traffic	
International trade commodities (ITC) specified	
Estimate of ITC as percentage of total business	
Available funding for connectivity (leverage)	
Access to economic development funds	
Local support	
Other(s)	
Section 2. Inland Port Location, Modes, and Planning	**Score**
Locational Advantage	
Favorable zone/site classification	
Access to existing markets (i.e., metropolitan areas, trade corridors)	
Proximity and constraints to existing highway infrastructure	
Proximity and constraints to existing rail infrastructure	
Proximity and constraints to exiting air infrastructure	
Multi-Modal Elements	
Implementation of proposed roadway improvements–timing and commitment	
Residential/business limits to the site	
Other(s)	
Section 3. TxDOT–Site-Specific Impact	**Score**
Estimated costs of proposed improvements to the existing and new highway infra-structure	
Project Milestones (1–3 years) TIP–CONSTRUCT CYCLE	**Score**
1.	
2.	
3.	
4.	
Project Milestones (4–10 years) UTP–DEVELOP CYCLE	**Score**
1.	
2.	
3.	
4.	
Project Milestones (11–25 years) MTP (outside UTP)–PLAN CYCLE	**Score**
1.	
2.	
3.	
4.	

Figure 5. Evaluator's Questionnaire for Preparation Phase: Background Data on Proposed Facility

3.1.1. Inland Port Market Analysis

These are suggestions, based on the Odessa District case study, for ranking the responses the preparation questionnaire raises and that the sponsor should address. The sponsor should be given the appropriate copy of the Guidelines—either the Preparation or the Establishment phase—and asked to prepare the presentation based on the questionnaire provided. The elements are listed below, together with remarks intended to help the evaluator rate the quality of response by the IPS for each element.

Potential anchor tenants identified
This identification should include information on both anchor and auxiliary tenants—their industry and type, details regarding negotiations that are in play, and any potential contractual agreements.

- Vague mention of tenants 5
- Negotiations begun with potential tenants 10
- Firm agreements–name, dates, industry type 15

Commodity-origin-destinations
This information should include commodity types, routes and relational impacts.

- Vague information 5
- Commodity types, general data 10
- Specific data, routes, O/D data 15

Demand forecasts (potential market)
These should include information regarding forecasts and timing for both tenants and data.

- General information only 5
- Different forecasts by tenant 10
- Detailed forecasts with timing, demand, and annual data 15

Projected site-generated traffic
These estimates for both inbound and outbound traffic impacts and timing should refer to immediate and future needs, i.e., at the start of the IP site, threee years in operation, and ultimate build-out.

- Little information given 5
- Information given with focus on infrastructure needs 10
- Specific information on immediate needs (e.g., "big box") or future needs (e.g., signals when traffic volume reaches *x*) 15

International trade commodities (ITC) specified

- International commodities missing or unconvincingly presented 5
- Some international data provided but insufficient to support IP status 10
- Good information by tenant, commodity type, and volume 15

Estimate of ITC as percentage of total business
This is the percentage of total business that is related to international trade.

- None given 5
- Estimate only 10
- Supported by data from tenants 15

Available funding for connectivity (leverage)
This information should detail the type of proposed connection, source of donated land and right-of-way, and the availability and sources of financing/funding.

- No funds available 5
- Some form of partnering and financing 10
- Sponsor undertakes this task—commitment of specific dollar amount or percentage amount 15

Access to economic development funds
These would fall into two categories: public and private. Public funding sources could include infrastructure grants or improvements, transportation improvement districts, job tax credits, and bond issuance, e.g., industrial revenue bonds. Private funding sources could include bank loans or financing.

- No access to economic development funds 5
- Access to either public and/or private economic development funds 10
- Access to both public and private economic funds 15

Local Support
Support here would fall into two categories: local and economic. Economic support could include tax rebates or deferrals (state, city, county, commercial, and/or property), development grants, assistance grants, job tax credits, industrial revenue bonds issued by city or county, infrastructure grants, and local training programs at community colleges. Local support would include city and/or county support, community association or group support, e.g., Chamber of Commerce, Round Tables [see 4083-2, pg 22–23].

- Support is only local (only one local jurisdiction is in favor), with no financial and/or economic incentives 5
- Local support that has been verified through resolution and is coupled with more than a single financial incentive 10
- Local support (city and county), community support and economic support (e.g., tax abatements, etc.) and multiple financial incentives are in place 15

Other(s)
Since proposals will vary considerably, this section provides an opportunity for both IPS and TxDOT to include additional elements unique to the proposal that may not be included in the guideline. Inclusion of new elements should be negotiated between the IPS and TxDOT at the initial visit, *prior* to the formal interview.

3.1.2. Inland Port Location, Modes and Planning

The following items fall in the subcategory Locational Advantage.

Favorable zone/site classification
This information should provide detail regarding the zoning of the proposed site (e.g., light and/or heavy commercial use, light and/or heavy industrial use, industrial park, major industrial, and business and government use zoning categories), the current status of zoning or any changes anticipated, and any potential problems if any amendment to zoning is required.

- Zoning for this site requires amendment that will be politically difficult to obtain 5
- Zoning for the site is either easy to obtain or is pending 10
- Correct zoning for the site is already in place 15

Access to existing economic markets (i.e., metropolitan areas, trade corridors)

- Access only to a local market 5
- Access to a local and metropolitan area 10
- Easy access to the regional area 15

Proximity and constraints to existing highway infrastructure
This should show how close the site is to existing state highway infrastructure and if connections will be required.

- Travel in excess of 5 miles on/off state highway system or no access in place 5
- Short connection to state highway system 10
- Abuts state highway system 15

Proximity and constraints to rail infrastructure
This should show how close the site is to existing rail infrastructure and if connections will be required.

- Travel in excess of 10 miles or no rail connection available 5
- Short distance to rail infrastructure—connections in place 10
- Abuts rail infrastructure 15

Proximity and constraints to air infrastructure
This should show how close the site is to existing air infrastructure and if connections will be required.

- Travel in excess of 30 miles to airport infrastructure or no connection available 5
- Short distance (15 miles) to airport infrastructure—connections in place 10
- Abuts airport infrastructure 15

The following items fall in the subcategory Multi-Modal Elements.

Implementation of proposed roadway improvements—timing and commitment
As part of the presentation, some form of implementation plan should be provided. Preferably this should be multi-year, perhaps with a short, medium, and long time frame. Results from this study suggest that IPS typically have distinct elements which are the milestones and goals of the project. This part of the evaluation is focused on transportation related milestones. It is suggested that evaluators rate this section on an overall impression of the quality of the implementation plan and that related milestones be specified in the separate category in the preparation phase.

- Poor—few, if any, milestones given, vague plan, no timing proposed for implementation, or not constructible 5
- Average—more compelling plan and some critical milestones, only short-term timing proposed and constructible 10
- Good—provides a clear plan with specified milestones broken into multi-year categories—short term (1–3 years), medium term (4–10) years, and long term (>10 years)—of timing proposed and constructible 15

Residential/business limits to the site
This addresses land constraints, in the form of

(a) Land availability that allows any expansion of the proposed facilities; and
(b) Right-of-way issues constraining modal connectivity especially related to highways.

Evaluators should insure that any information presented to support growth is accompanied by evidence of how this fits the land constraints at the proposed location. In addition to the physical proximity of other activities, the IPS should be asked about

(a) Potential zoning restrictions; and
(b) Any known environmental impediments.

Please note that rankings are the inverse of the effect.

- Poor—substantial limits 5
- Average—few limits 10
- Good—no known limits 15

Other(s)
Since proposals will vary considerably, this section provides an opportunity for both IPS and TxDOT to include additional elements unique to the proposal which may not be included in the guideline. Inclusion of new elements should be negotiated between the IPS and TxDOT at the initial visit, *prior* to the formal interview.

3.1.3. TxDOT—Site-Specific Impact

This part of the evaluation relates to the impact of the proposed improvements by the IPS to the existing highway or new infrastructure, and other projects currently officially programmed for improvements.

Estimated costs of proposed improvements to the existing and new highway infrastructure
Please note that ranking is the inverse of the effect.

- High—if proposed improvements are minor revisions and estimated cost of ≤$1.0 million — 15
  - e.g., intersection improvements, intersection signalization, right/left turn bay
- Medium—if the proposed improvements are localized capacity improvements and estimated cost of >$1.0 million to ≤$5.0 million — 10
  - e.g., major intersection improvements, partial improvements to an interchange, short segment of an additional lane
- Low—proposed improvements are significant upgrade to segment of a highway or a new location route and an estimated cost of ≥$5.0 million. — 5
  - e.g., new interchange, new location roadway, significant capacity improvement to existing highway corridor(s)

3.1.4. Milestones

Milestones, defined as *transportation related impacts*, are a critical consequence on this first evaluation review. A sponsor approaching TxDOT will have a range of achievements in mind related to the successful implementation of an inland port, many unrelated to TxDOT's central mission. An example is job creation. While part of the department's mission is to support the state economy, job creation is a poor indicator of transportation demand. Job creation is a social benefit but the central question is what the jobs are creating in terms of freight flows on the transportation system. Based on the Odessa District case study, it is recommended that a two-part strategy is adopted. First, the sponsor gives the milestones (which will include goals) expected from the project in both immediate and long-term periods. Next, the key transportation milestones on this list are identified and agreed upon by both the evaluation team and the sponsor. The latter list containing transportation improvement milestones is then prioritized within the time periods of 1–3 years, 4–10 years, and beyond 10 years to relate to TxDOT's Construct Transportation Improvement Plan (TIP), Unified Transportation Plan (UTP), and Program Metropolitan Transportation Plan (MTP) periods, respectively.

List of transportation related milestones and their realistic timeline for implementation

- Score highest if IPS's milestone is already in the TIP — 15
- Score lowest if IPS's milestone is NOT in the TIP (greatest challenge to prioritize inside TIP ahead of currently programmed projects) — 0
- Score second highest if IPS's milestone is already in UTP — 10
- Score second lowest if IPS's milestone is NOT in UTP (lesser challenge to prioritize inside UTP when strategic or earmarked funds will be available or significant external funding will be used as leverage) — 2
- Score third highest if IPS's milestone is already in MTP — 5
- Score third lowest if IPS's milestone is NOT in MTP (least challenge to program project through the TxDOT's project development process) — 3

3.2. Instructions to TxDOT for Scoring the Establishment Phase: Operations and TxDOT Planning

An IPS of an inland port currently in operation would be scored using this questionnaire.

Project:	
Section 1. Inland Port—Operations	**Score**
Facilities on IP site	
Number of tenants (anchor and auxiliary)	
Yearly throughput (container TEUs, volumes, tons)	
Land available for future development	
General funding	
Other(s)	
Section 2. Inland Port—Operations and Modes	**Score**
Commodity types	
Modal use	
Origins and destinations	
Tons/volumes of freight handled by mode	
Forecasted daily trips by mode	
Multi-modal investments attracted (capacity)	
Number of tenants using rail, road, and air	
Mode split	
Construction, including engineering and on-site costs	
Foreign Trade Zone status	
Impacts on air quality	
Impacts on noise	
Traffic volumes (current and forecasted) generated as a result of IP site	
Percentage of truck traffic generated as a result of IP site	
Traffic impacts on state highway network (level of service and safety)	
Funding/donating right-of-way for the proposed roadway improvements	
Public-private partnership—value of private sector contribution	
Adequacy of current modal capacity	
Other(s)	
Section 3. TxDOT—Site-Specific Impact	**Score**
Extent of proposed improvements to the existing highway infrastructure	
Project Milestones (1–3 years) TIP—CONSTRUCT CYCLE	**Score**
1.	
2.	
3.	
4.	
Project Milestones (4–10 years) UTP—DEVELOP CYCLE	**Score**
1.	
2.	
3.	
4.	
Project Milestones (11–25 years) MTP (outside UTP)—PLAN CYCLE	**Score**
1.	
2.	
3.	
4.	

Figure 6. Evaluator's Questionnaire for Establishment Phase: Operations and TxDOT Planning

3.2.1. Inland Port—Operations

This is a list of suggested ratings as they relate to the elements raised in the Establishment Phase questionnaire. These ratings are issued once the facility is in operation, milestones have been reached, and freight is flowing through the site on various modes. This stage is important to TxDOT since it is collecting and ranking data related to the actual use of transportation modes, even those—like rail—that might lie outside TxDOT's direct field of control. It is at this stage that critical decisions might arise over whether to formally include aspects of the facility needs into district planning (see 4083-2, pg 6).

Facilities on IP site
This requires no detailed definition, except to note the some sites will have empty facilities (ask about condition).

- No facilities 5
- Some facilities, possibly empty or needing rehabilitation (including internal site rail or roads) 10
- Operational facilities, adequately described 15

Number of tenants (anchor and auxiliary)
The 0-4083 study clearly identified the importance of anchor tenants who often generate other auxiliary activities. Both should be specified and a question on international trade asked.

- Single 5
- Anchor/auxiliary domestic US 10
- Anchor/auxiliary domestic US and International 15

Yearly throughput (container TEUs, volumes, tons)
This section represents the transportation output of the facility. The data become easier to identify as the facility gains momentum, generates jobs, and moves freight.

- Vague assertions 5
- Some data provided 10
- Higher degree of detail with some forecasting 15

Land available for future development
This is a follow-up from the section in the first questionnaire, so evaluators should go back to the forms completed as part of that inland port appraisal and see what was answered and whether those conditions still hold, and then ask more detailed questions to insure that there are no real land constraints to the further expansion of the site. If this section was *not* completed by the IPS at the preparation phase, information on land availability must be given at this stage. Proof must be given that land needs are to be fully met for all stages of development advocated by IPS.

- Little land available 5
- Adequate (may require some rezoning) 10
- Adequate with no planning restrictions 15

General funding
This examines how the proposal is to be funded and what funding needs still exist, particularly those related to facility expansion. This should include level of funding (the percentage that is available and the amounts and terms), the source of funding, whether public or private or both, and local commitment to funding.

- Low level of commitment, no discernable source of funding or levels of funding 5
- Commitment secured, and source of funding is known 10
- Commitment secured and ratified by resolution; source of funding is committed and available with amounts, percentages, and calendar terms delineated 15

Other(s)
Since proposals will vary considerably, this section provides an opportunity for both the IPS and TxDOT to include additional elements unique to the proposal that may not be included in the guidelines. Inclusion of new elements should be negotiated between the IPS and TxDOT at the initial visit, *prior* to the formal interview.

3.2.2. Inland Port—Operations and Modes

The following rating categories list important details about the IP's operations and modes.

Commodity types
Broad categories only (use Statewide Analysis Model (SAM) category types), preferable by tenant (see 4083-2, pp 67–70).

- None given 5
- Some 10
- Detailed by tenant 15

Modal use
Description of the various modes of transportation directly linked to the Inland Port, including details of the interconnectivity (see 4083-2, pg 12).

- Little information 5
- Single mode 10
- Multi mode 15

Origins and destinations
Link this to the categories given above; give by Texas and then national/international O/Ds.

- Vague 5
- Incomplete by tenant 10
- Detailed by tenant 15

Tons/volumes of freight handled by mode
In daily and annual volumes and should be aggregated to give flows to and from the facility (see 4083-2, pgs 78 and 82).

- Vague 5
- Annual only 10
- Monthly 15

Forecasted daily trips by mode
This is difficult, but if the sponsor is asking for TxDOT support, then some aspect of demand should be given—hence this section. It should not be TxDOT's responsibility to undertake this work without good reason.

- None 5
- Broad estimates 10
- Detailed estimates 15

Multi-modal investments attracted (capacity)
This covers links to nearby or linked facilities such as an airport or seaport. The latter are candidates for consideration since they are being evaluated in different parts of the U.S. with the inland port allowing expansion of the seaport without the need to push the current port boundaries further out.

- None 5
- Single mode 10
- Multi-modal 15

Number of tenants using rail, road, and air
Self explanatory; give by percent.

- Vague 5
- Incomplete 10
- Complete inventory by tenant 15

Mode split
Self explanatory; give by percent.

- None 5
- By site 10
- By tenant 15

Construction, including engineering and on-site costs

- Vague 5
- Broad averages 10
- Detailed figures 15

Foreign Trade Zone status
Obtaining this status will emphasize that the proposed project fulfills the elements of an inland port and not merely a logistics or manufacturing hub.

- No mention of acquiring this status 5
- Status is discussed but has not been formally proposed or placed into inland port's work plan 10
- Status is a milestone to be achieved and forms part of the inland port's growth work plan 15

Impacts on air quality
IPS to undertake air quality analysis as outlined in TxDOT Environmental Manual, Chapter 2, Section 5.
Please note that ranking is the inverse of the effect.

- High 5
- Medium 10
- Low 15

Impacts on noise
Based on IPS noise analysis, which will include the ambient noise, and the increase due to anticipated needs (increase in traffic volumes). Use FHWA noise model (and data from MPO/TCEQ/TxDOT Districts).
Please note that ranking is the inverse of the effect.

- High 5
- Medium 10
- Low 15

Traffic volumes (current and forecasted) generated as a result of IP site
Self explanatory; give Average Daily Traffic (ADT) volumes.

- Vague 5
- Current 10
- Forecasted, given likely tenants 15

Percentage trucks
Self explanatory.

- Not given/assertions 5
- Low percentage 10
- Higher percentages 15

Traffic impacts on sate highway network (level of service and safety)
Self explanatory.
Please note that ranking is the inverse of the effect.

- Low—High level of service (A–B) 15
- Medium level of service (C–D) 10
- High—Poor level of service (E–F) 5

Funding/donating right of way for the proposed roadway improvements
This links closely with previous questions in this section regarding the availability of land for future development.

- None 5
- Little 10
- More substantial (percentage and dollar amounts) 15

Public-private-partnership—value of private sector contribution
Self explanatory.

- None 5
- Little 10
- More substantial (percentage and dollar amounts) 15

Adequacy of current modal capacity
Sponsor material on this issue needs to be closely overlaid with previous information related to this topic. TxDOT is interested in freight coming on to highways, going from highways to other modes, or staying longer on those modes and avoiding highway use. The IPS proposal is to indicate how it will affect the roadway capacity now and in the future.

- Adequate 15
- Predicted growth will impact capacity 10
- Capacity impacted if facility operates 5

Other(s)
Since proposals will vary considerably, this section provides an opportunity for both the IPS and TxDOT to include additional elements unique to the proposal which may not be included in the guideline. Inclusion of new elements should be negotiated between the IPS and TxDOT at the initial visit, *prior* to the formal interview.

3.2.3. TxDOT—Site-Specific Impact

This part of the evaluation relates to the potential impact of the proposed improvements by the IPS to the existing highway or new infrastructure, including other projects currently officially programmed for improvements.

Extent of proposed improvements to the existing highway infrastructure
TxDOT and the IPS jointly should prepare a brief description of proposed roadway improvements which will be required per IPS proposal.
Please note that ranking is the inverse of the effect.

- High—if proposed improvements are minor revisions and estimated cost of ≤$1.0 Million 15
  - i.e., intersection improvements, intersection signalization, right/left turn bay
- Medium—if the proposed improvements are localized capacity improvements and estimated cost of >$1.0 million to ≤$5.0 million 10
  - i.e., major intersection improvements, partial improvements to an interchange, short segment of an additional lane
- Low—proposed improvements are significant upgrades to a segment of a highway or a new location route and an estimated cost of >$5.0 million. 5
  - i.e., new interchange, new location roadway, significant capacity improvement to existing highway corridor(s)

3.2.4. Milestones

Milestones, defined in section 3.1.4 as transportation related impacts, remain a crucial element of the TxDOT review process in the establishment phase. It is recommended that IPS first review the agreed milestones from the preparation phase and decide on any revisions, additions or changes that may have taken place once the inland port begins operations. Analysis of U. S. inland ports strongly suggests that the needs of either anchor tenants as they grow, or new tenants attracted to the location, create new demands or needs that are transportation related. These need to be conveyed to the TxDOT district planning group in the most efficient way. It is suggested that IPS first identify the alternative needs and then place them in a prioritized form as recommended in 3.1.4. These were within the time periods of 1–3 years, 4–10 years, and beyond 10 years to relate to TxDOT's Construct Transportation Improvement Plan (TIP), Unified Transportation Plan (UTP), and Program Metropolitan Transportation Plan (MTP) periods, respectively.

- Score highest if IPS's milestone is already in the TIP. 15
- Score lowest if IPS's milestone is *not* in the TIP—greatest challenge to prioritize inside TIP ahead of currently programmed projects. 0
- Score second highest if IPS's milestone is already in UTP. 10
- Score second lowest if IPS's milestone is *not* in UTP—lesser challenge to prioritize inside UTP when strategic or earmarked funds will be available or significant external funding will be used as leverage. 2
- Score third highest if IPS's milestone is already in MTP. 5
- Score third lowest if IPS's milestone is *not* in MTP—least challenge to program project through the TxDOT's project development process. 3

3.3. Guidance for Interpreting the Evaluation Scores

The interpretation is a crucial step in accurately and fairly evaluating the TxDOT team responses to the proposal. The use of this guide and the suggested scoring system provide a facilitation tool that will assist TxDOT in clearly assessing the merits of the proposal at hand. Since the questions can be aggregated, there are three types of team response that the planner can use, namely individual, group, and overall. The team responses in each category highlight both positive and negative aspects of the presentations which can be used when the District Planning Officers respond to the IPS with a feedback letter and complete the office file for future use. This material should also be used both in future analyses and for reference when future discussions and decisions take place between the IPS and TxDOT.

The scoring range (5, 10, 15) was selected because it is straightforward and captures the key elements of the planning process realistically. Not only does it provide an overall score for the proposal but also it points to both strengths and weaknesses that can be used by the TxDOT staff when corresponding with the IPS over the results of the presentation. Both letter and scored questionnaires should be retained at the TxDOT district files for further action and a copy sent to TPP at Austin. The reasons for linking to TPP/MMO operators is to ensure that the various departments within TxDOT impacted by inland port transportation activities are kept informed of (a) the various proposals and (b) their status in terms of operations and scale.

An interactive spreadsheet program has been developed to assist the TxDOT Planners in interpreting the scores that are given during the evaluation interview (this can be found on the CD-ROM accompanying this manual). The spreadsheet program allows the TxDOT planning staff to insert the scores given by the evaluation team and then view the average scores and frequencies for each individual question as well as the sections within the questionnaires. Graphic charts are automatically produced to show these scores visually. The frequency charts and histograms were chosen to show trends and themes that occur within the scoring process. This will provide the TxDOT planner with a visual impression of the strengths and weaknesses within the three sections and with the evaluation as a whole.

The spreadsheet itself is easy to use. Scores are inserted into columns and the spreadsheet automatically calculates the averages, frequencies and the graphs. Excel was chosen because the package is easy to operate and district staff would be familiar with using Excel. District staff can also use Excel to perform further statistical analysis on the merits of the evaluation using this package if they so chose.

This approach to scoring was adopted because it was thought that interpretation of scores could not be an exact science with a one-size-fits-all approach within rigid and inflexible boundaries, but rather a process that evaluates each proposal on its merits. Another reason for developing this approach was that it provides flexibility to district staff to evaluate each proposal both on its individual merits and in conjunction with the transportation (and economic) needs of the district where it is located.

So how should the different questionnaires' scores be evaluated? First and foremost the fatal flaw considerations discussed in 4083-1 should form the backbone in determining whether a project is weak. Fatal flaws, particularly the lack of a business plan and the absence of anchor tenants, would kick start a negative evaluation into gear and would be visually represented as trends and scores on the lower ranges. For example, if the histograms and graphs show that the range of scores to be mostly 5s with sporadic 10s and 15s, the evaluation team might consider that the business proposal is relatively weak and that further work will be required before TxDOT will consider partnering on this project. If the histogram and graphical analysis show

that the range of scores leans further towards more 10s and 15s, then the project is obviously a stronger contender and TxDOT will consider moving forward with the project. In essence, the histograms and graphs should supplement the decision that the evaluation team will have already made when they discuss the merits of the proposal after the presentation is made and the milestones are being discussed.

The two different questionnaires should be evaluated in different manners:

Preparation Stage Questionnaire. If Section 1 is weak (regarding site general aspects and the business plan itself), this would be a fatal flaw in the developmental process and TxDOT would need further guidance or information before this could be supported. If Section 2 (inland port location, modes and planning) is weak but section 1 is relatively strong, this would not be a fatal flaw to the developmental process. However, if Sections 1 and 2 are weak, obviously the presentation (and the business plan) of the project is weak and flawed. If Section 3 is weak (TxDOT site-specific impact), this should not be considered necessarily as a fatal flaw because the time scales involved from concept of inland port to presentation might be extremely short-term and the IPS would be unfairly penalized for not having transportation milestones in the TIP and UTP.

Establishment Stage Questionnaire. If Section 1 is weak (regarding inland port operations), this would not necessarily be a fatal flaw unless both land available for future development and zone/site classification were scored poorly—this is because these two elements would be required for growth of an inland port, as described in Report 4083-1. However, if Section 2 is weak (inland port operations and modes), this would kick start fatal flaw elements and would lead to a project that was weak and could not be supported financially by TxDOT. Similarly, a poorly scored Section 3 (TxDOT site-specific impacts) should not be considered an automatic fatal flaw because different inland ports will generate different transportation outcomes and these must be evaluated in conjunction with the needs of each different district.

In interpreting the milestones aspect of Section 3, it is suggested that the milestones (in both questionnaires) be considered trigger points for future partnering. This way, projects that have been developed quickly will not be penalized because they do not appear in the shorter-term planning process (TIP/UTP). The milestones should also be evaluated as a signal to the sponsor that they may need to work with TxDOT to incorporate any extra infrastructure needs into the formalized planning process. The closer the proposed project is to the TIP window (within 3–4 years of construction), the more difficult it becomes for the district to reprioritize currently programmed projects, program and fund new projects, and develop new projects in such a short time frame. Therefore, in such a case, the district's focus should be to encourage the proponent to leverage as many resources as possible over and above the minimum participation required by 43 TAC §15.55 to meet the desired timeline.

4. Conclusions and Recommendations

Many future transportation investments in Texas are going to require multiple financial resources, many conducted through a partnering process. This will require substantial rethinking on the part of transportation providers as they move from single to multiple modes and do so with greater complexity, be it planning or financing (or both). This implementation project demonstrated the evaluation process for inland ports associated with the IPS presentations and interviews conducted in the Odessa District case study. Based on the case study, a systematic representation (depicted in a detailed flow chart) was developed to illustrate how partnering between the IPS and TxDOT might take place. It shows the progression of an inland port from concept to concrete within the context of the private and TxDOT planning processes.

The various pieces of information—reports, guides, and presentations—available both to the TxDOT planners considering inland ports (or "big boxes") and those proposing them should help establish a sound base for successful partnering at the district level. The questionnaires provide guidance on both the strengths and weaknesses of the concepts or nascent ports beginning operations which permit TxDOT to more fully understand the proposal and its transportation consequences. It is recommended that scores developed during and after (TxDOT evaluators only) the formal interviews be used to form correspondence with those sponsoring the project. And those milestones associated with transportation goals and impacts are the keys—the triggers—for further meetings. In this way, district staff can both monitor *and* manage the process as it impacts TxDOT planning in an effective manner. Finally, it is recommended that the results of all district initiatives related to emerging inland ports be transmitted to TTP main offices—perhaps via the Multimodal Section (MS). This will ensure that all relevant planning levels within TxDOT are made aware of the project and can contribute, where appropriate, to the development of a comprehensive response to an inland port sponsor.

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