Research Project Statement
Fiscal Year 2005

Title: Planning for Container Growth Along the Houston Ship Channel

Duration (# of years): ______
Total Budget: __________

Budget by year:
First Year FY
Second Year FY
Additional FYs

Project Description:
Global trade, after September 11, 2001, has slowed but is expected to slowly recover and grow substantially over the next two decades. Containerized trade had previously been predicted to grow by around 300% by 2020, a number which has now fallen to 200% but one that still represents a substantial increase in container volumes moving through deep-water ports.

This has important implications for transportation in the Houston area. Despite the best efforts of other Texas deep-water ports, Houston is likely to remain an element in the efficient movement of containers into the state. At the moment, the Port of Houston uses Barbours Cut (apparently at, or near, capacity) and leases facilities at Galveston (although few boxes were moved last year). For a number of years the Port of Houston has been planning a second terminal at Bayport, with approximately the same capacity as Barbours Cut, of about 1.2 million TEUs. This would give a total capacity for the Port of Houston of around 2.5 million TEUs.

Texas City has also been planning a new container facility on Shoal Point, near the Texas Gulf and has a 50-foot channel permit, which would allow access to all sizes of current container ships. The facility has a second-stage capacity of around 1 million TEUs giving a total regional capacity of some 3.5 million TEUs.

What is interesting is that the sites of Barbours Cut, Bayport, Galveston, and Texas City lie on the southern sides of the Ship Channel. If all come into operation, then large numbers of containers will move in a relatively small area, many bound for the Houston metropolitan area. What are other ports, facing increases in container flows, doing to address this similar problem? The port of New York/New Jersey is proposing an intermodal solution of barges, secondary ports, rail, and inland ports. At Los Angeles/Long Beach, the Alameda Corridor has been constructed, linking two Class One railroad yards with the port container facilities. Now, plans are afoot to extend the corridor out to an inland port.

TxDOT should plan for continued growth of containers in the southern area of the Houston Ship Channel and needs to evaluate the alternatives to moving these containers solely on the current highway system. Accordingly the project will:
(a) document solutions at other deep-water ports to this problem,
(b) examine each container port operations and describe how it proposes to deal with connectivity to landside markets,
(c) develop a series of modal/intermodal proposals for the Houston ship channel system, and recommend a plan of action.

**Deliverable Products and Reports:**
- **P1.** Assessments of current and projected future container movements at each Houston area port and the port’s strategy for improved connectivity to landside markets.
- **P2.** A series of modal/intermodal proposals for the Houston ship channel system, and a recommended plan of action including costs and funding mechanisms.
- **R1.** A research report.
- **PSR.** Project Summary Report.

**Implementation:**

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<tr>
<th>Pre-Proposal Meeting:</th>
<th>Yes ☒ No</th>
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<tr>
<td>Sole-Source Project:</td>
<td>Yes ☒ No</td>
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<tr>
<td>Proposal Submission:</td>
<td>Proposals are required to be submitted in both hard copy (4 copies) and PDF format (1 PDF file per proposal). Both formats are used within TxDOT for evaluating the proposals and must contain identical information.</td>
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<td>The “Background and Significance” portion of the proposal should be limited to 10 pages.</td>
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<td>All proposals from researchers should be sent directly to your university’s Research Liaison for submission to RTI. The Research Liaison is TxDOT’s official contact with the university.</td>
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**Additional Information:**

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<th>Deadlines (for RTI use only):</th>
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<td>1. All individuals interested in proposing are encouraged to contact the PC or PD by February 12, 2004.</td>
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<td>2. Proposals are due to RTI by 4:00 p.m. CST on March 24, 2004.</td>
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