

Overview of NETS

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NETS research guidelines

Corps Planner have planning models which:

- Have field ownership, and are designed to be user friendly.
- Are acceptable to outside experts.
- Are reasonably transparent, with key assumptions and sensitive variables easily discerned for virtually all applications.
- Are computationally accurate and solidly grounded in both reality and theory.
- Yield results which are nationally consistent, yet are flexible enough to readily recognize and account for unique local conditions.

NETS

- This research effort will address evaluation issues for both inland and deep draft navigation.
 - Some issues are fundamentally the same.
 - the deep draft multi-port analysis.

NETS Work Units

- Revealed Choice and Event studies
- Stated Preference and Qualitative Choice Methods
- Spatial Equilibrium – Theory and Models
- Spatial Equilibrium – Model Development
- Estimating Economic Value of Externalities
Associated with Inland Navigation
- Deep Draft Navigation Desk Top Tools

Revealed Choice and Event studies

Objectives:

- To estimate the elasticity of demand for inland navigation services using two methods recommended by a panel composed of external and Corps experts. The revealed choice approach examines shipper's actual behavior. Market conditions are empirically quantified and participant behavior is examined to reveal actual choices under differing market conditions. Event Studies examine market participation behavior before, during and after an event. Events are defined as short-term market conditions, usually random in nature.

Stated Preference and Qualitative Choice Methods

Objectives:

- To estimate the elasticity of demand for inland navigation services using two additional methods recommended by a panel composed of external and Corps experts. Stated preference method yields a direct estimate of willingness to pay for varying improvements in the waterway. Qualitative choice estimates the responsiveness of transportation demand base on the characteristics that determine demand.

Spatial Equilibrium – Theory and Models

Objectives:

- The objective of this work unit is to document the existing state of the art of inland navigation transportation modeling with respect to spatial equilibrium analysis. The identification of the data and methods needed to incorporate spatial equilibrium analysis into these models and the development of a design document to guide the next generation model development or enhancement.

Spatial Equilibrium – Model Development

Objectives:

- The objective of this work unit is to develop, test and field a spatial equilibrium model to evaluate inland navigation transportation system improvements. The model will be based on the design document that is a product of the NETS work unit “Spatial Equilibrium - Theory and Models.”

Estimating Economic Value of Externalities Associated with Inland Navigation

Objectives:

- To develop, test, and recommend methods to quantify external costs and benefits related to inland navigation. This will aid in decisions on waterway maintenance and rehabilitation, investment, and management.

Deep Draft Navigation Desk Top Tools

Needs & Problems Addressed:

- No standardized model to evaluate economics of deep draft harbor improvements.
- Need more realistic evaluation of project performance

Objectives:

- Develop sub-modules in suite of coastal navigation economic evaluation tools
- Improve decision making
- Reduce study time and costs
- Develop state of the art evaluation tool
- Integrate engineering, planning, and operations information.

Questions?