

# Strategic Freight Transportation Analysis

## Presentation

to

*WSDOT Freight Working Group*

*“SFTA: Supporting Transportation  
Decision-Making”*

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## ***Our Mission Today....***

✓ **What is Strategic Freight Transportation Analysis (SFTA) ?**

✓ **SFTA's Origins**

- **Eastern Washington Intermodal Transportation Study (EWITS).**

✓ **Who's involved with SFTA ?**

- **Steering and Advisory Committee**

✓ **SFTA Studies and Work Tasks**

✓ **SFTA Data and Examples of Results.**



## **What is SFTA?**

*SFTA is a six year, comprehensive research and implementation analysis that will provide information (data and direction) for local, state and national investments and decisions designed to achieve the goal of seamless transportation.*

**"SFTA's desired outcome is improved freight mobility for economic vitality"**

*To achieve this, the SFTA research and implementation project, with its collaborative partnerships and integrated dynamic freight data warehouse will aid in strategic infrastructure investment choices, including transportation support for economic development, responding to freight congestion and chokepoint locations, and other emergent issues.*

## **SFTA's Origin?**

### **Eastern Washington Intermodal Transportation Study (EWITS)**

- A six year study (1992-1998) that was funded jointly by the Federal government and the Washington State DOT as part of ISTEA.
- First statewide Origin-Destination Freight Truck Survey, 27 locations, collected over 28,000 questionnaires regarding specific freight movement attributes.
- Generated 39 analytical reports and working papers, over 40 presentations and invited talks and directly contributed to several infrastructure improvements and analyses, including:
  - Utilized for the Puget Sound Regional Council travel demand modeling for the MPO.
  - US 395 North Safety Improvement Project, Deer Park to Kettle Falls. Project has been completed.
  - North-South Corridor Justification - travel savings, freight value, truck percentages. North-South Corridor is now under construction.

## **SFTA's Steering Committee**

<p><b>Jerry Lenzi</b>                  Chair, SFTA Steering Committee                  Regional Administrator,                  Washington State Department of Transportation</p>			
<p><b>Deborah Stephens</b>                  Senior Policy Advisor,                  Washington State Office                  of Trade &amp; Economic                  Development</p>	<p><b>John Doyle</b>                  Director,                  Freight Policy                  &amp; Strategy                  Washington State Dept.                  of Transportation</p>	<p><b>Karen Schmidt</b>                  Executive Director                  Freight Mobility                  Strategic Investment                  Board</p>	<p><b>Andrew Johnsen</b>                  Executive Policy                  Advisor                  Governor's Executive                  Policy Office</p>
<p><b>Jay Weber</b>                  Executive Director                  County Road                  Administration Board</p>	<p><b>Scott Merriman</b>                  Policy Director,                  Washington State                  Association of Counties</p>	<p><b>Jackie White</b>                  Transportation                  Coordinator                  Association of                  Washington Cities</p>	<p><b>Patrick Jones</b>                  Executive Director,                  Washington                  Ports Association</p>

## **SFTA's Advisory Committee**

SFTA's Advisory Committee currently includes over 75 transportation stakeholders representing a statewide, multi-modal spectrum from private industry, and local, city and state government. Below is a small example of these individuals.

<p><b>Peter D. Beaulieu</b> Principal Planner, Puget Sound Regional Council</p>	<p><b>Steve Frasher</b> President, Tidewater Barge Lines</p>	<p><b>Mary Beth Clark</b> Program Manager, Colville Tribes Planning Department</p>	<p><b>Jim Miller</b> Executive Director, Whatcom Council of Governments and IMTC</p>
<p><b>Glenn Miles</b> Transportation Manager, Spokane Regional Transportation Council</p>	<p><b>Larry Pursley</b> Exec. Vice President, Washington Trucking Association</p>	<p><b>Brad Smith</b> General Manager, PCC Railroad</p>	<p><b>Glen Squires</b> Senior Analyst Washington Wheat Commission</p>

## **SFTA Work Tasks**

### **I. Statewide Freight Origin-Destination Study**

- 2002 Data Collected over Four Seasons
- Allows comparisons between 1993 and 2002
- Cooperation of WSP, U.S. and Canadian Customs, Service Clubs, etc.
- Results will be posted on the website!

### **II. Strategic Resource Road Network:**

- Identification of the critical road network by layering the transportation infrastructure characteristics and mobility needs of the following:
  - Grain Freight Flows
  - Fruit and Vegetable Movements
  - Mining Access Routes
  - Grape and Wine Transportation
  - Forest Products Movements

## **SFTA Work Tasks**

*(continued)*

### **III. Short Line Railroad Issues and Analysis**

- Methods of Estimating Impacts from Abandonment Including Environmental Related Pavement Deterioration
- Abandonment Impacts on Shippers
- Short Line Abandonment and Transportation Competition

### **IV. Adaptive Research Management**

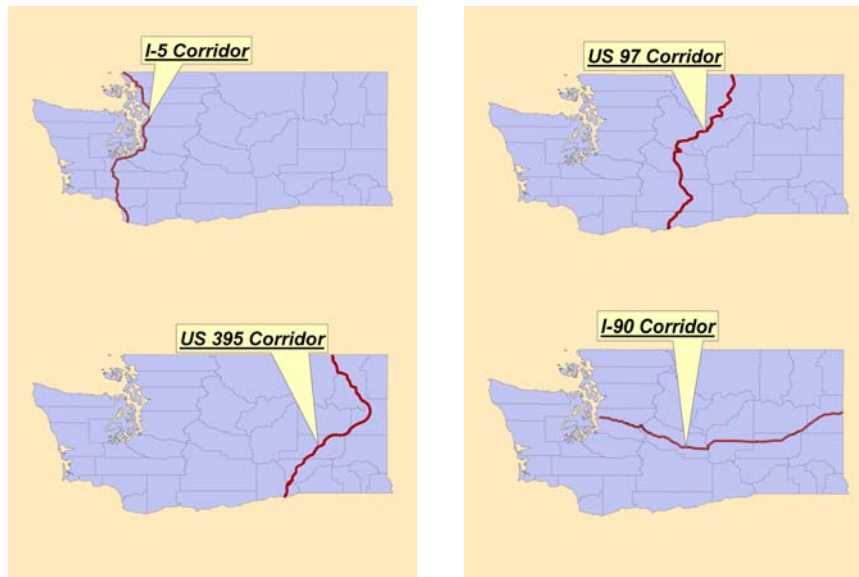
- Development of Methodology for Identifying Freight Chokepoints
- Increased Demand for 24-Hour Canadian Border Crossings
- Ability to Address Emergent Issues Identified by Steering Committee

**For a full description of SFTA Deliverables and Reports:**

<http://www.sfta.wsu.edu/>

## **O-D Study Preliminary Results**

*Examples*



## I-5 Total Daily Truck Trips

	<i>Northbound</i>	<i>Southbound</i>	<i>Total</i>
<b>1993</b>	3,284	2,433	5,717
<b>2002</b>	5,401	5,590	10,990
<b>% Change</b>	64%	130%	93%

\* Includes loaded and empty trucks.



## I-5 Truck Configuration

### Total Daily Truck Trips

	<i>Straight Truck</i>	<i>Straight Truck and Trailer</i>	<i>Tractor Only</i>	<i>Tractor and Trailer</i>	<i>Tractor and Two Trailers</i>	<i>Other</i>	<i>Total</i>
<b>1993</b>	903	974	97	2,848	876	18	5,717
<b>2002</b>	1,506	1,848	228	6,292	991	125	10,990
<b>% Change</b>	67%	90%	135%	121%	13%		93%



## I-90 Total Daily Truck Trips

	<i>Eastbound</i>	<i>Westbound</i>	<i>Total</i>
<b>1993</b>	715	897	1,613
<b>2002</b>	1,200	1,543	2,743
<b>% Change</b>	68%	72%	70%

\* Includes loaded and empty trucks.



## I-90 Truck Configuration

### Total Daily Truck Trips

	<i>Straight Truck</i>	<i>Straight Truck and Trailer</i>	<i>Tractor Only</i>	<i>Tractor and Trailer</i>	<i>Tractor and Two Trailers</i>	<i>Other</i>	<i>Total</i>
<b>1993</b>	113	257	17	913	303	9	1,613
<b>2002</b>	191	465	23	1,756	296	12	2,743
<b>% Change</b>	70%	81%	30%	92%	-2%		71%



## US 97 Total Daily Truck Trips

	<i>Southbound</i>	<i>Northbound</i>	<i>Total</i>
<b>1993</b>	81	167	248
<b>2002</b>	172	422	594
<b>% Change</b>	112%	153%	140%

\* Includes loaded and empty trucks.



## US 97 Truck Configuration

### Total Daily Truck Trips

	<i>Straight Truck</i>	<i>Straight Truck and Trailer</i>	<i>Tractor Only</i>	<i>Tractor and Trailer</i>	<i>Tractor and Two Trailers</i>	<i>Other</i>	<i>Total</i>
<b>1993</b>	24	45	2	134	41	2	248
<b>2002</b>	47	120	4	352	67	4	594
<b>% Change</b>	96%	165%	72%	163%	64%	-	140%





## US 395 Total Daily Truck Trips

	<i>Northbound</i>	<i>Southbound</i>	<i>Total</i>
<b>1993</b>	345	841	1,186
<b>2002</b>	643	2,004	2,647
<b>% Change</b>	86%	138%	123%

\* Includes loaded and empty trucks.



## US 395 Truck Configuration

### Total Daily Truck Trips

	<i>Straight Truck</i>	<i>Straight Truck and Trailer</i>	<i>Tractor Only</i>	<i>Tractor and Trailer</i>	<i>Tractor and Two Trailers</i>	<i>Other</i>	<i>Total</i>
<b>1993</b>	69	175	12	675	248	8	1,186
<b>2002</b>	183	362	21	1,741	331	8	2,647
<b>% Change</b>	164%	107%	80%	158%	34%	-	123%



## Average Payload Weight

### Tons

	<u>I-5</u>	<u>I-90</u>	<u>US-97</u>	<u>US-395</u>	<u>Total</u>
<b>1993</b>	15.3	16.9	17.7	19.2	17.1
<b>2002</b>	18.0	19.0	19.3	19.4	20.5
<b>% Change</b>	18%	13%	9%	1%	20%

## Data Request and Inquiries

### Examples

- | <u>Agency</u>                                    | <u>Purpose</u>   |
|--|--|
| 1. <b>U.S. DOT</b>                               | <ul style="list-style-type: none"> <li>Used in "The West Coast Corridor System" Phase I report, funded as part of the Borders and Corridors budget of USDOT. The analysis and data were used to confirm and in some cases to establish levels of freight activity within the corridor system.</li> </ul> |
| 2. <b>Benton-Franklin Council of Governments</b> | <ul style="list-style-type: none"> <li>Requested for use in RTPO's and MPO's planning.</li> </ul>  |
| 3. <b>Washington Wheat Commission</b>            | <ul style="list-style-type: none"> <li>Utilized to evaluate industry changes and transportation shifts over the last 10 years.</li> </ul>  |
| 4. <b>Transportation Ministry, Seoul, Korea</b>  | <ul style="list-style-type: none"> <li>Methodological information was requested to help in the development of freight collection techniques for Seoul, Korea.</li> </ul>   |
| 5. <b>Oregon Department of Transportation</b>    | <ul style="list-style-type: none"> <li>SFTA methodology incorporated into the development of an urban and metropolitan freight data collection technique.</li> </ul>   |
| 6. <b>City of Reardan, Washington</b>            | <ul style="list-style-type: none"> <li>Utilized to compare and contrast changes in freight flows, by vehicle type and commodity, between 1994 and 2002.</li> </ul>   |

# Data Request and Inquiries

## Examples

<u>Agency</u>	<u>Purpose</u>
7. <b>Freight Strategy and Planning: WSDOT</b>	<ul style="list-style-type: none"><li>• Provide data for use in reports, presentations and freight policy plans.</li><li>• Address private citizen concerns regarding freight traffic and safety issues.</li></ul>
8. <b>Planning and Data Offices: WSDOT</b>	<ul style="list-style-type: none"><li>• WSDOT Planning and Data offices are developing a planning data depository where multiple types of data will be stored.</li></ul>
9. <b>Cambridge Systematics</b>	<ul style="list-style-type: none"><li>• Development of survey design and sample frame for Port of Portland for freight data collection.</li></ul>
10. <b>WSDOT / WSP</b>	<ul style="list-style-type: none"><li>• The data are being utilized to develop and design a process for locating future weigh-stations and weigh-in-motion locations based upon freight vehicle frequencies, truck type, commodity, etc.</li></ul>
11. <b>Puget Sound Regional Council</b>	<ul style="list-style-type: none"><li>• Utilized to validate truck travel demand models used by the MPO.</li></ul>
12. <b>City of Lind, Washington</b>	<ul style="list-style-type: none"><li>• Used by consultants hired by the City of Lind, WA to profile changing freight truck travel through town.</li></ul>
13. <b>Texas Transportation Institute</b>	<ul style="list-style-type: none"><li>• Used in designing statewide origin and destination freight study for Texas.</li></ul>

