



Filling the Gaps in Vital Freight Data

Mike Ruane Delaware Valley Regional Planning Commission

June 8, 2015



AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS



Presentation Overview

- Freight Issues in the Delaware Valley
- PhillyFreightFinder web tool
- SHRP2 Freight Demand Modeling and Data Improvement (C20) proof of concept project
- What to expect
- Data needs and data sources
- Outcomes and benefits



Freight: The Economy in Motion

Changing Needs

- Rising freight volumes
- Dramatic shifts in global and domestic supply chains
- Changing consumer purchasing habits
- MAP-21 freight planning provisions





DVRPC's web-based freight mapping and data platform

- 400 unique features
- 20 layers
- 7 categories
- County profiles
- Goal to compile for 352 municipalities
- <u>http://www.dvrpc.org/webmaps/PhillyFreightFinder/</u>

ødvrpc PHILLY FREIGHT FINDER

FINDER \land Home

🕼 Our Region 🛛 🛇 About 🗸

🖽 View Map

Welcome to *PhillyFreightFinder*, the freight mapping and data platform for the Delaware Valley!

PhillyFreightFinder is a dynamic, web-based mapping application that pinpoints freight facilities and freight activity in the Philadelphia-Camden-Trenton region. In addition, this tool also highlights how the various freight system components intertwine and complement one another.

PhillyFreightFinder contains 20 individual layers and over 350 features of infrastructure and facilities that are organized into seven categories. These elements form the core of the region's extraordinary freight network and services that link the region to the global economy.

PhillyFreightFinder is fully customizable, giving you-the user, the ability to easily control both the extent of the mapping window and the combination of layers to be displayed.



Our Region Learn about the DVRPC region and view county-level freight statistics

Freight Planning Learn more about DVRPC and our freight planning program

Our Data

View our data sources and download the data behind PhillyFreightFinder





PHILLY FREIGHT FINDER @dvrpc

A Home Our Region III View Map





SHRP2 Freight Demand Modeling and Data Improvement (C20)

A **road map** leading to improved freight data sets and freight modeling practices:

- Organizational approach to identify freight modeling and data priority needs
- Framework for a Strategic Plan
 - Analysis of the current state of the practice, freight decision making needs, and the gaps between current freight forecasting models and real-world needs
 - Seven strategic objectives to guide both nearterm and long-term implementation activities

Data Sources

- Freight Network Supply
- Freight Activity by Mode
- Freight Economic Data
- Commodity Flow
- Freight Performance Measures

uniting Wighters .	2013	DVRPC PERMIDIT, NI DOT	2015
(man)	Incorregience	DAMPC, Personal	
1 895	'score ats	FYIMA FAP	
1100	112NTE	ATM Speed ties	2054
Court Phi truch	THEFT.	and the state	3004
ANT 35/83 PTORCEOPS	NAMES AND POST OF TAXABLE POST.	CV87C	
for and/out/and/k Did.s	2009	THITPE	
a market fl.	2009	CONTRACT OFFICE AND	2015
Truck Party of the	the second state of the second state of the	TOO IN THE JAKE	2035
AN OVER OVERTIEN CONTINUES	2012	CILEBC, PETRONO, NO COT	
(inclusion)	incerrolette	ENTER PETERDON, HE MANY	
NHS COMMENTER	manand.	the property of the party of	2015
Lanes Des Conternes	Contract of the local division of the local	THEFT	2015
AFD' MININA BL	and the second sec	neidon hutburtten	2015
Cars Co Chargen		Status Automatics	
Habarra Champad		mail ins. Davis	
LAFATY ACARD CODEN		Status	
Half Ann Bir drid		and the strength of the streng	and the second se
All Archan Activity		Address (1) Address	-
C (MARCE		1012	
www.		2012 NO44	
Provide Street		2012 NOAA	
- we Terminal	Design	and Division	
Cargo ser		ANONO	
Berth		2013 Children Charles	
Grane KOANT + Jan	The second se	2013	
Winnet	Contract of the local division of the local	AND AN	
Arrestotole space		Provide and the second second	
Children and P		the second second second second second	
arriento		2012 Port Char	
		2012 For Chatters	
Auports		2012 Por contrators	
Airport	2	012 Agra parators	
Au	2	713 Pour Operators	
n and and (a)		A. Operation	
The second and the second second	Sec.	THEY THEY END	
increage "Bm (range)	Active and	NE CONTRACTOR	
ADDEN/ Chan	where Could	Sources	
- ALLEY'S	-1005	Public	
Ciphe c	-2006	Otor	
Centery .	2004	Dun Aslation	Nortin
ent Owters	2000	Dan Aniation	- 0/14
scrag		OWNER ANIMUM	
(14) FTMAN	0	Anine Anine	
CTOWNER &	Alatin Materia	Contraction of the second	2
ACUARY	and they bear	2Dates	-
	2012	international designments	-00
C.	Window	Party Constant of	30;
	minut	DYRIC Man State In L	News
	and the	DVENC AL	Opdate
		DUNPY I GOLD	
Time	Matur	THEFT	

Data Collection Plan

Freight Data Goal and Challenges



Overall Implementation Goal:

- Establish a data integration framework
- Core freight database

Challenges

- Competition between modes
- Competition within modes
- Obtaining current and comprehensive data
- Lack of continuity in collections and analysis

DVRPC's Approach

Evaluate and integrate *diverse* **freight** data:

- Data essential to understanding the intermodal supply for freight movements;
- Data that explains freight demand and supplychain logic; and
- Data that measures system performance.

DVPRC's Approach



Evaluate and address *data* **issues**

- Develop methods to apply national data to the local level
- Bridge different datasets
- Automate data importing and updating
- Establish a standard portfolio of core freight data
- Improve web-based tool for regional data

Open Freight App



• Easy to replicate template for cost-effective communication of freight data.



Expected Outcomes

- Visualization tools and the portrayal of freight flows and trends for a variety of audiences.
- Setting of a foundation for freight performance measures and the identification of freight-specific bottlenecks.
- Establishing a process to **prioritize** candidate projects seeking federal funds (TIP).
- Creation of an analysis framework to connect regional economic development with freight transportation improvements.
- Data for developing and **calibrating** an advanced regional freight demand model.

Reaping the Benefits

- Greater capacity to identify relevant and important commodity flows
- Ability to communicate data to partners
- Elevation of the discussion of the freight network as it relates to the economy and to other transportation issues
- Bottom Line: Safer and more reliable freight movement throughout the region!

Take the Next Step



For more information:

- Ed Strocko at FHWA, <u>Ed.Strocko@dot.gov</u>
- Matt Hardy at AASHTO, <u>mhardy@aashto.org</u>
- <u>http://www.fhwa.dot.gov/goshrp2/Solutions/C</u> <u>apacity/C20/Freight_Demand_Modeling_and</u> <u>Data_Improvement</u>

For information on DVRPC's project:

 Mike Ruane, Office of Freight and Aviation Planning, DVRPC, <u>mruane@dvrpc.org</u>