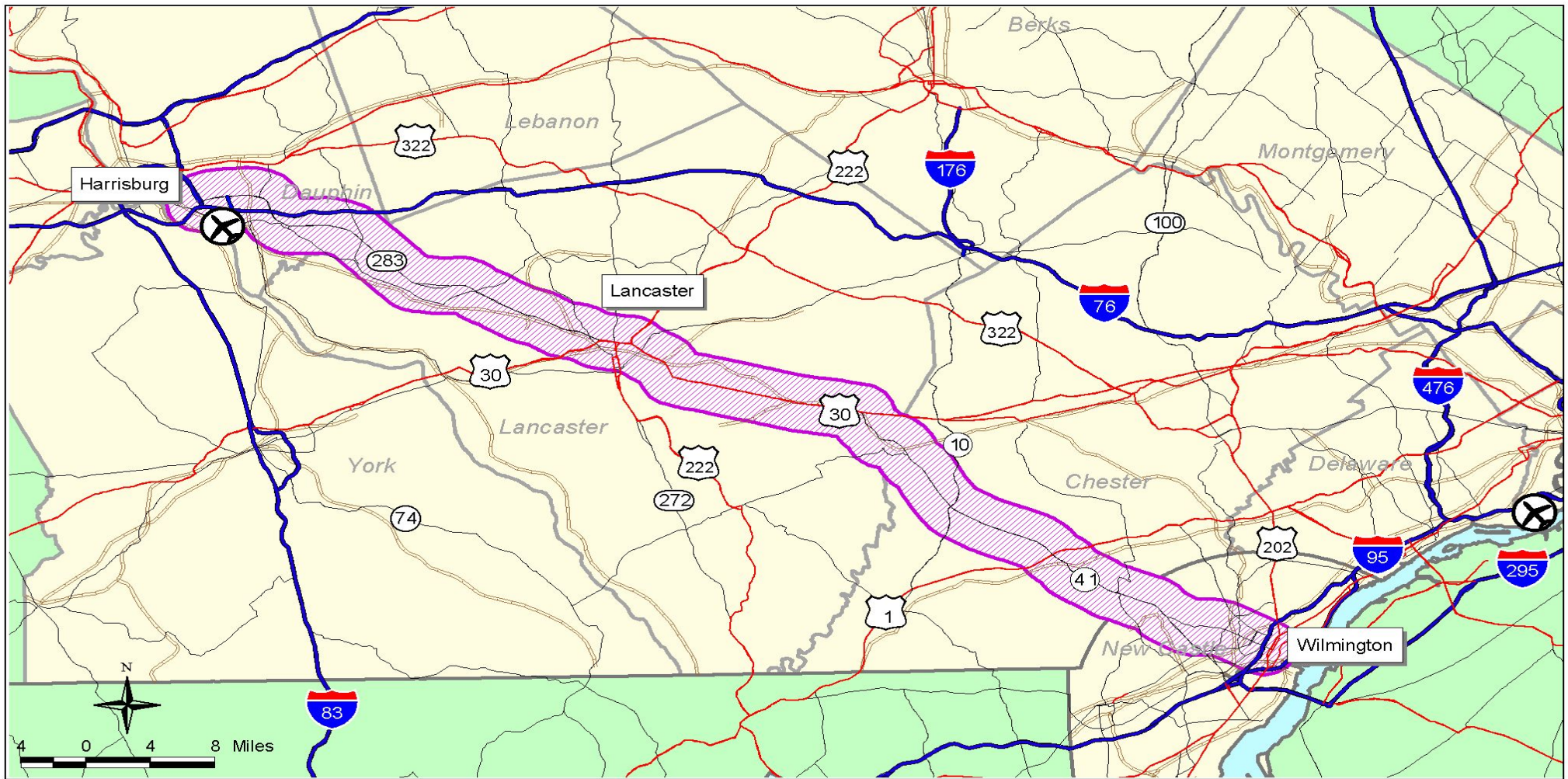








Wilmington-Harrisburg Freight Study



**Presentation to the
Delaware Valley Regional Planning Commission
April 16, 2003**



LEGEND

-  Interstate
-  U.S. Highway
-  State Highway
-  Rail
-  Study Area
-  Airport

Study Area Map

Wilmington - Harrisburg Freight Study



Retail, Residential



Farming



Small Towns



Manufacturing



Tourism



Warehouses/DC



STUDY GOAL

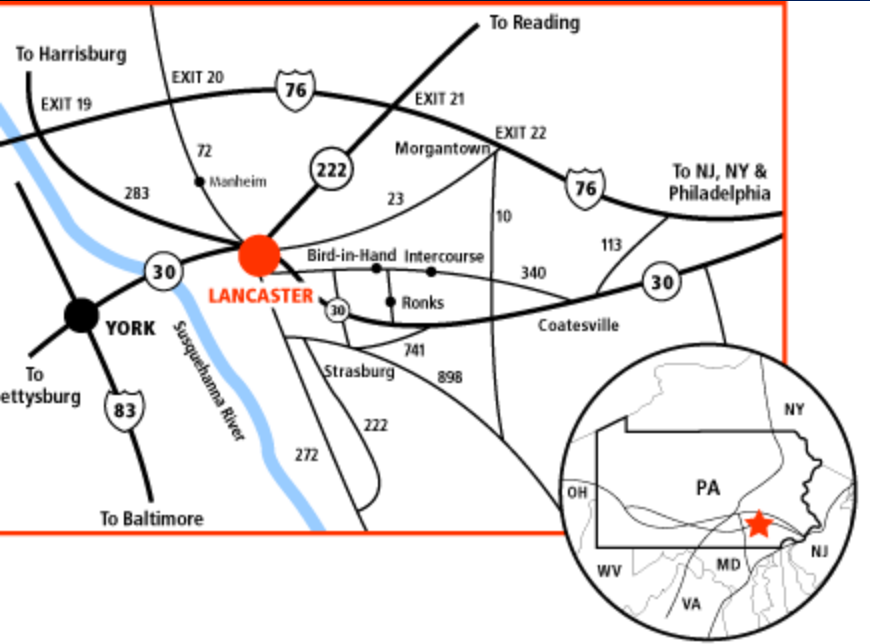
**To more efficiently move freight in the
Wilmington-Harrisburg Corridor, with
special consideration for...**

Safety Issues

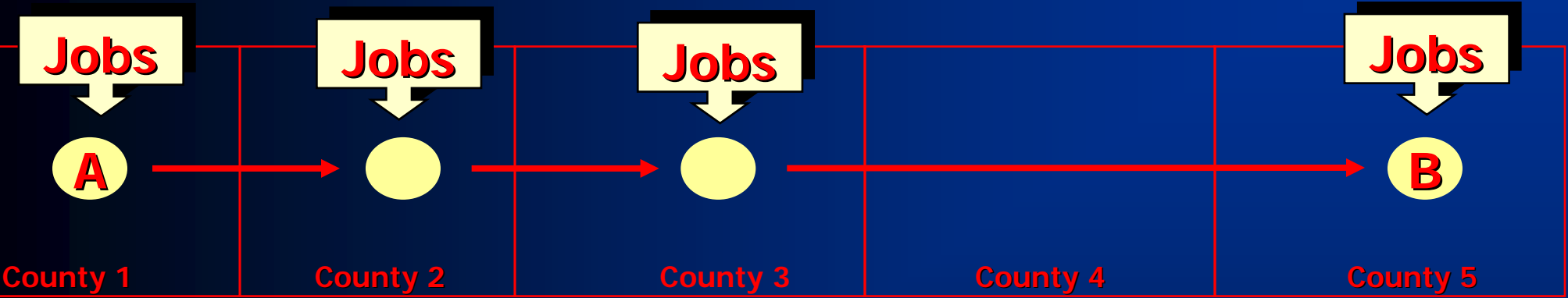
- Car/Truck Interactions
- Horse & Buggy/Traffic Interaction
- Increasing Traffic Volumes (Year round)
- Roadway Geometry/Conditions (Rt. 41 & 30)



Quality of Life



Economic Growth



Freight markets transcend boundaries

**Competitive
Distribution
System (Ports, others)**

Project Team

**Wilbur
Smith**

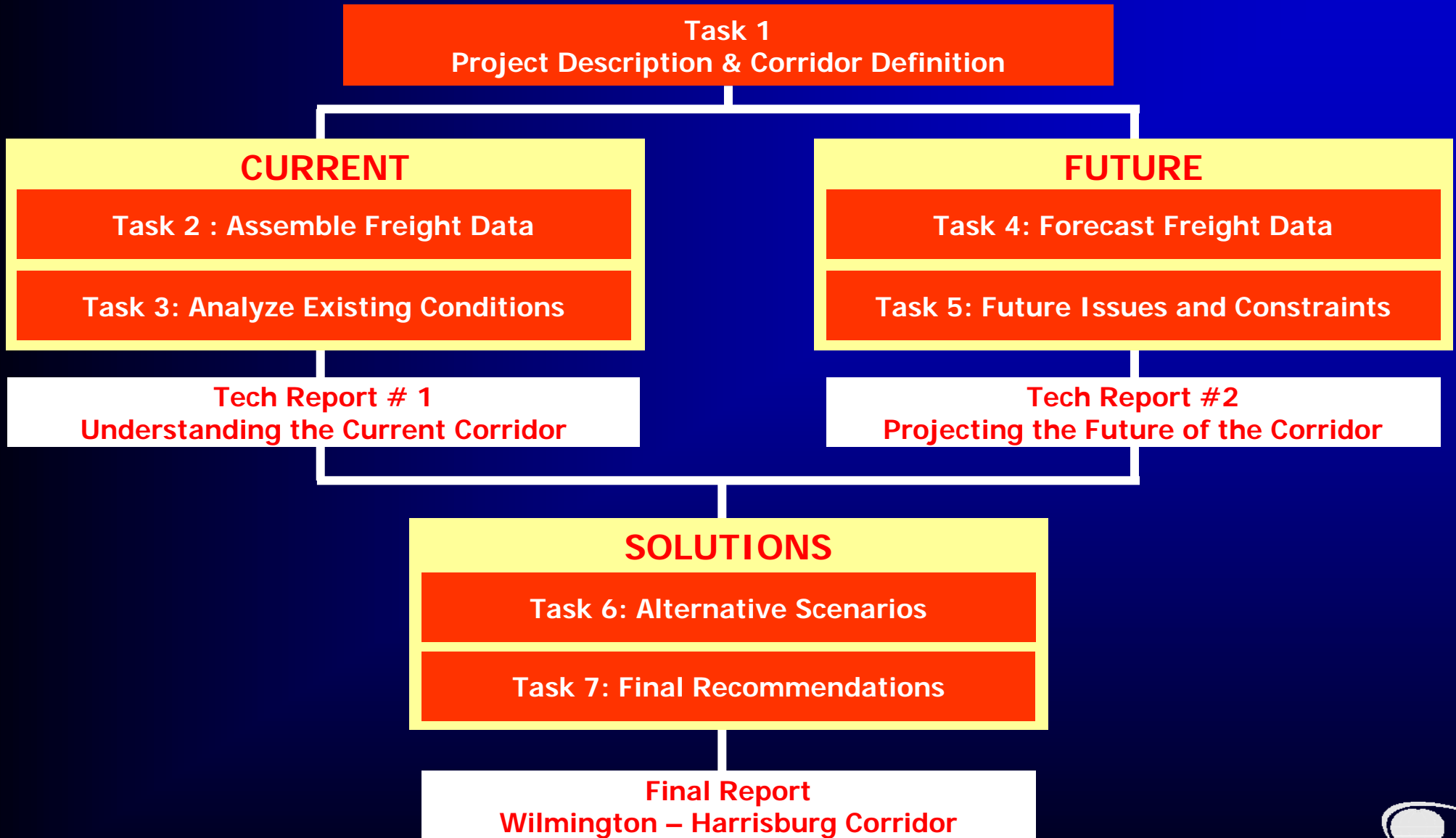
**Lancaster
County Planning
Commission**

**Steering
Committee**

**Reebie
Associates**

**Martin
Associates**

PROJECT FLOW CHART



Average Annual Trucks Per Day Averaged Over All Road Segments in the Corridor

Rte 41 – 3,331

US 30 – 14,001

PA 283 – 8,880

Delaware River Port Traffic Using the Corridor

280
Daily
Truck
Trips



Port of Wilmington – 70% Local to Corridor

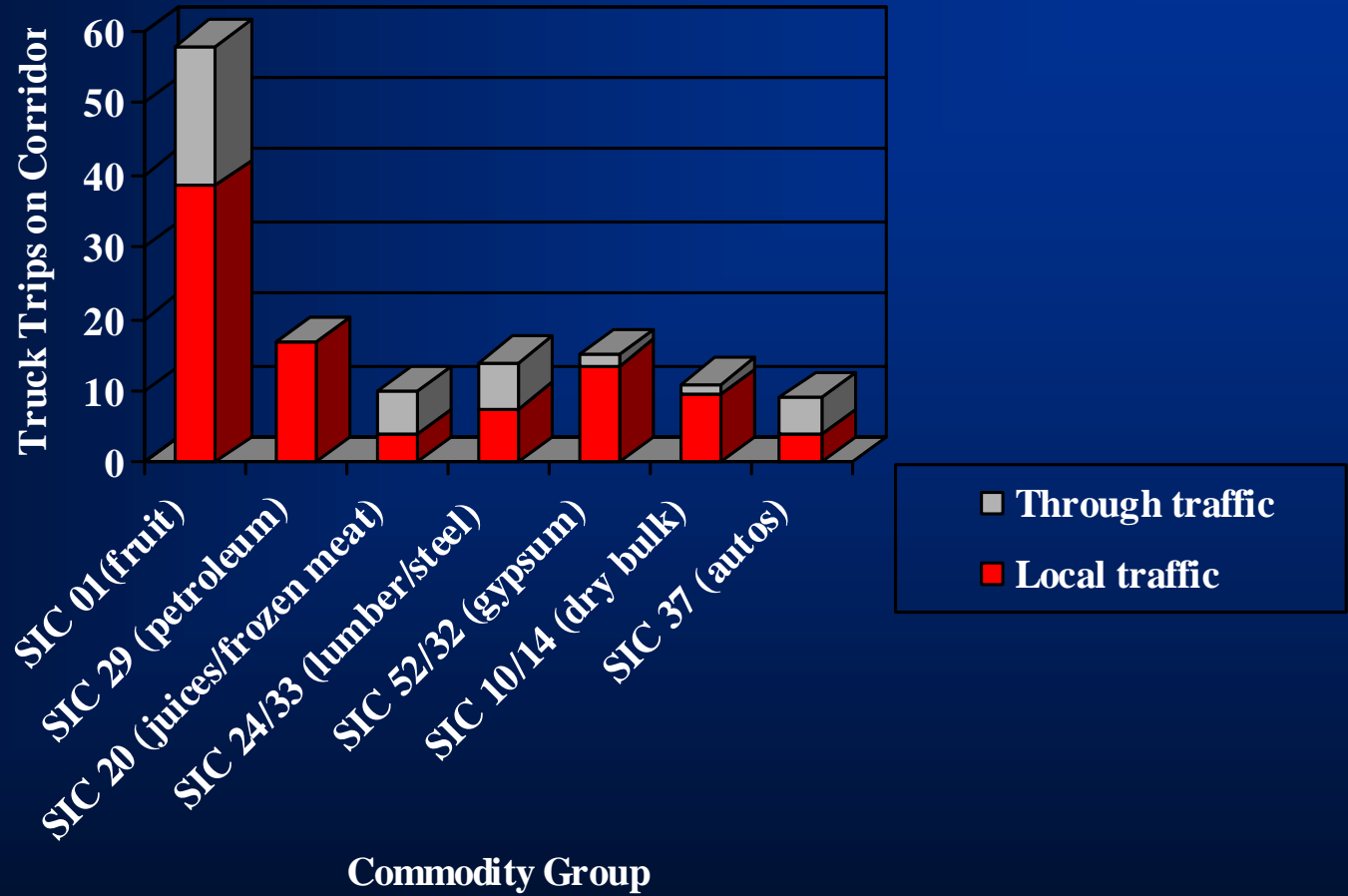
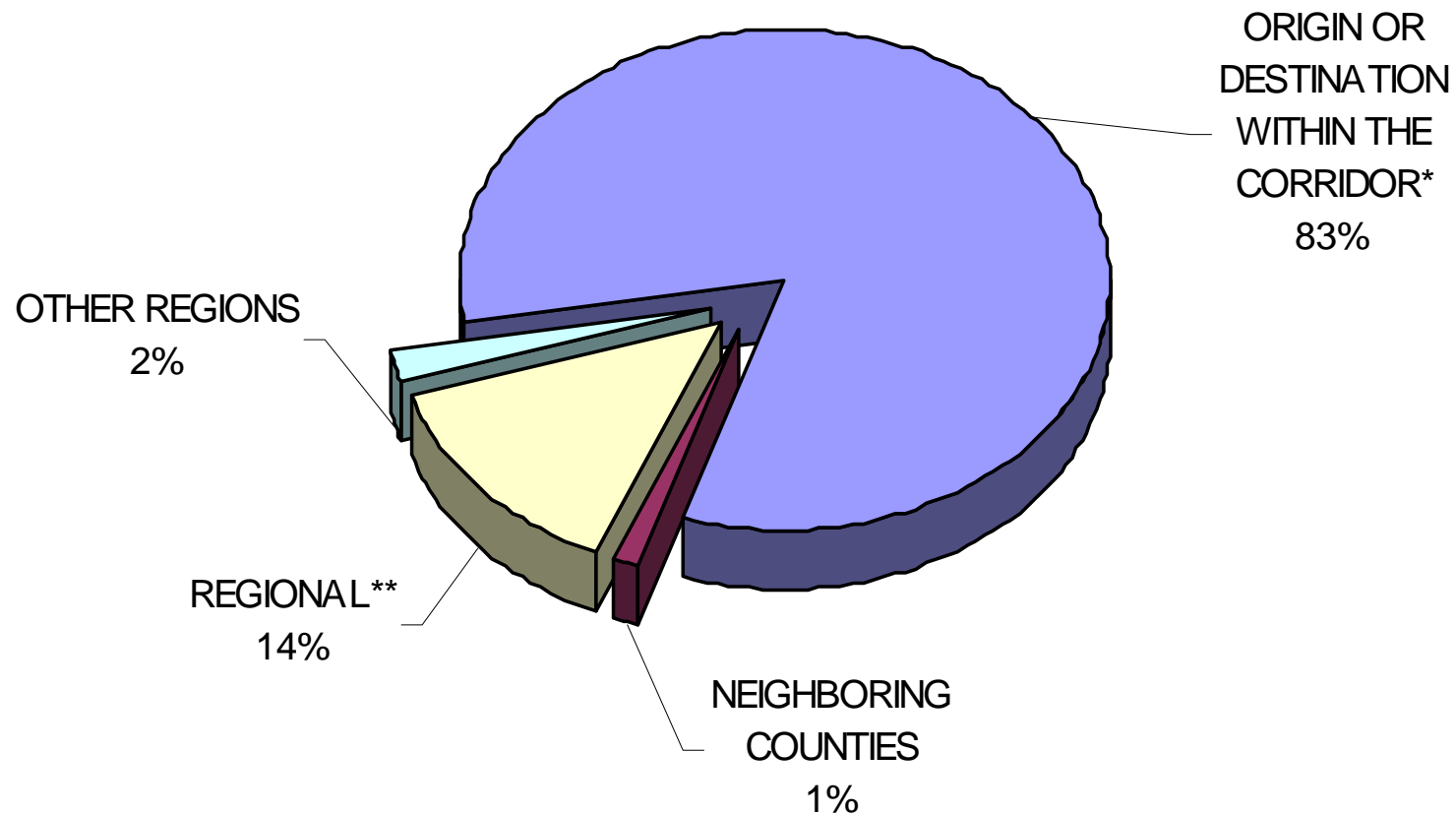


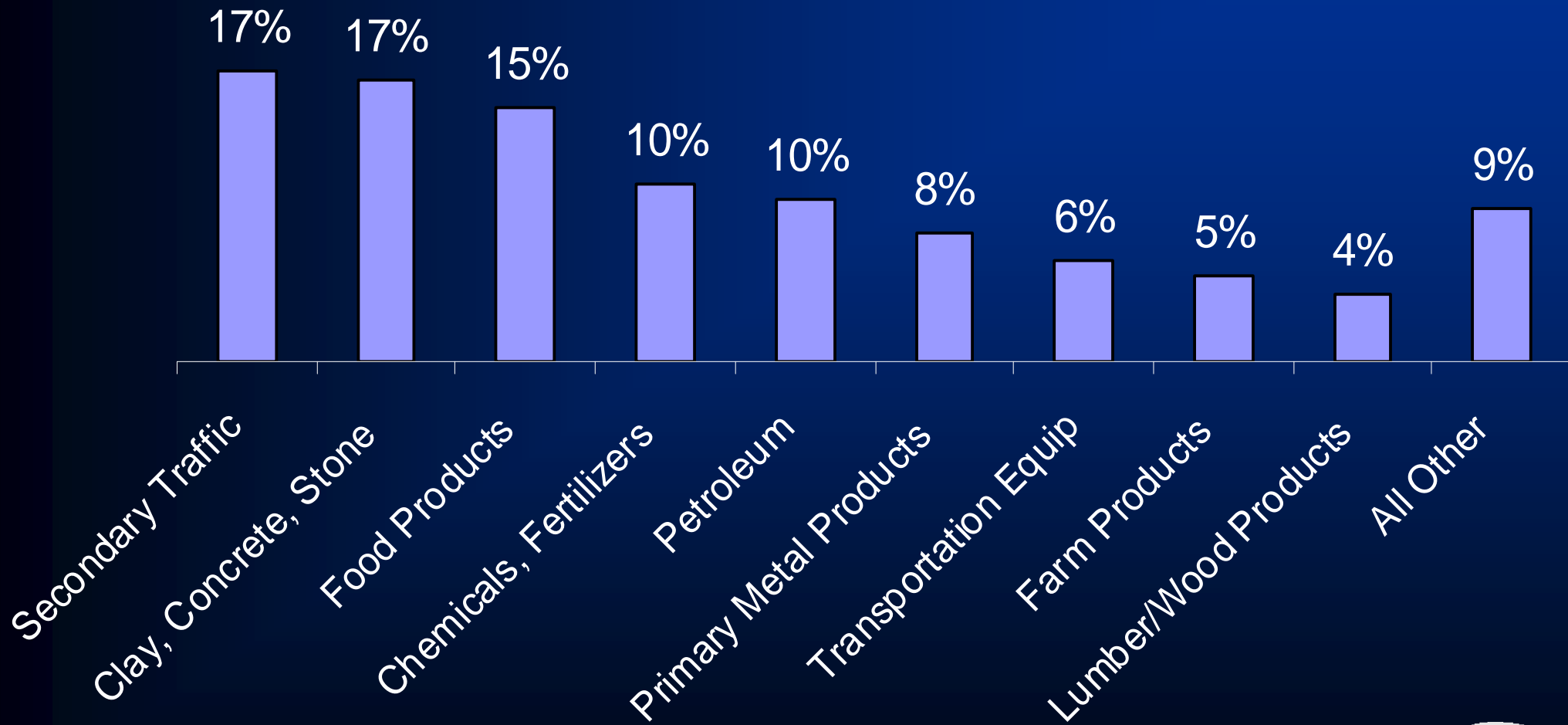
Exhibit 2-2 Distribution of Traffic Base-Year Non-Port Freight Volumes on Corridor



* Includes traffic originating or terminating in New Castle County, DE; and Chester, Lancaster, or Dauphin Counties in PA

** The remainder of PA, DE, and Southern NJ.

Distribution of All Commodities on Route 41 (Percentages Based on Tonnage)



Potential For Corridor Traffic Diversions

	Base	Long-Haul	Pct
Rte 41	3,331	1,125	33.8%
US 30	14,001	1,522	10.9%
PA 283	8,880	1,522	17.1%

**What does
the data tell
us?**

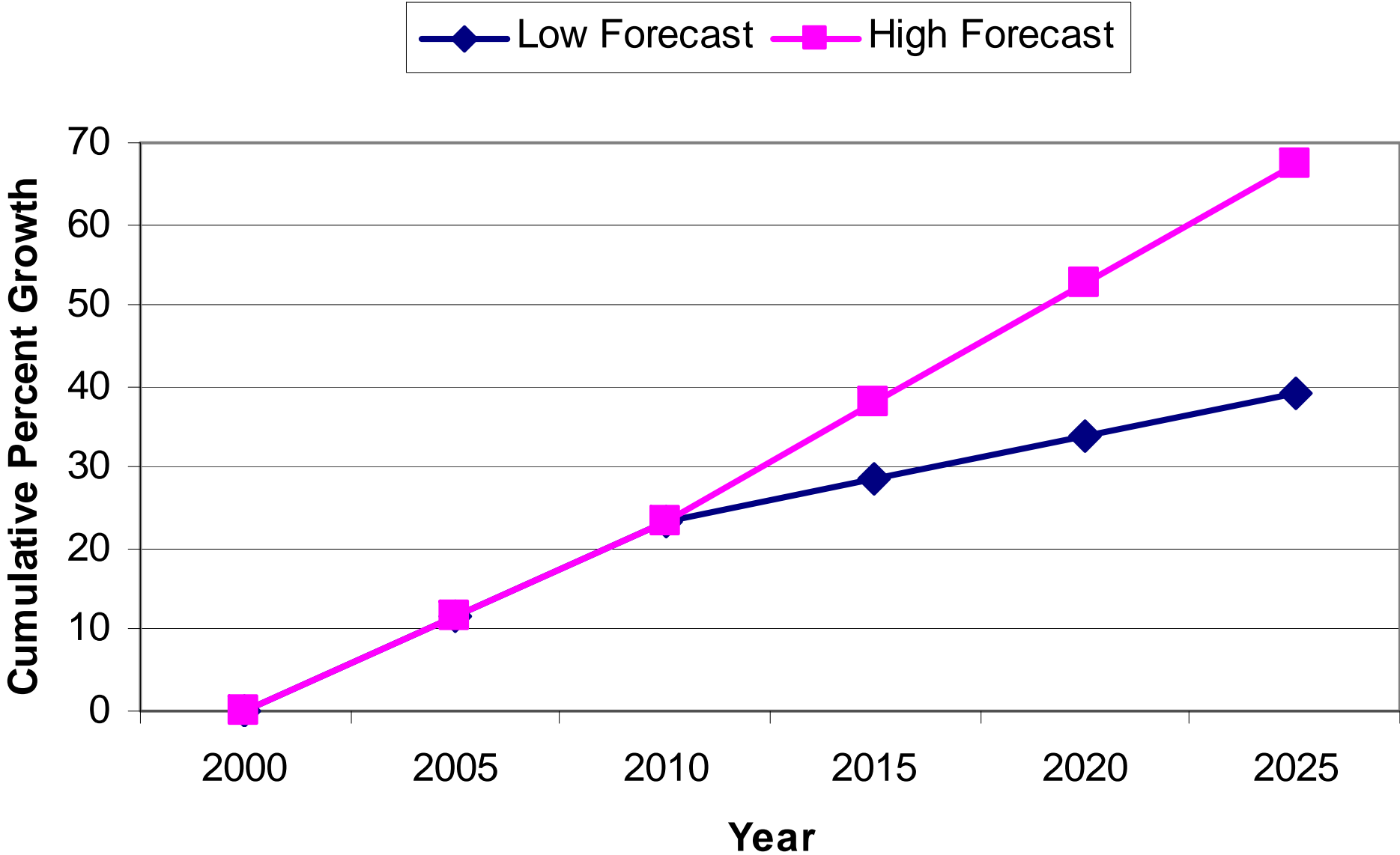
Port Truck Traffic – Small Role

- Seasonal traffic - FRUIT
- Not extremely divertible
- Mostly local – not long haul

Overall Truck Traffic – Significant Role

- Food, secondary traffic, construction materials
- Bulk is to/from New Castle County
 - Wilmington/Newark
- Much is local.....but
- Significant long haul densities

Forecasts



**What does
this all mean?**

Growth in Freight Traffic

- 0.62% annual population growth
- 23% total growth in freight by 2010
- 40-69% total growth in freight by 2025

Nothing on Horizon to Shift Patterns

- No major modal shifts (Shellpot Bridge?)
- No major route shifts
 - TIP's mostly reconstruction, maintenance
 - Major plans (bypasses, I-95/PA TPK) are in early planning

Scenarios

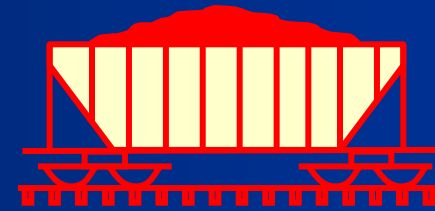
- **Railroad Scenario** – explores the extent to which investment in the railroad system can provide a more efficient transportation network in the Corridor.
- **Shipper Scenario** – gain a better understanding of the supply chain patterns of key shippers and identify potential strategies for improved freight flow.
- **Proposed Local Improvements** – look at the combination of local proposals along the Corridor to examine their impact on freight movements.
- **Pennsylvania Turnpike Scenario** – explore what is required to entice through trucks to use the PA Turnpike, rather than the shorter, toll free route over the Corridor.

Local Traffic

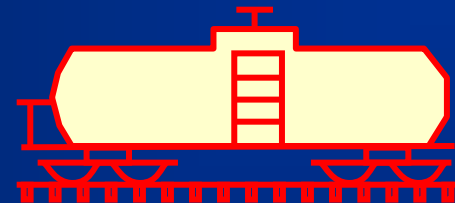
Through Traffic

Rail Scenarios

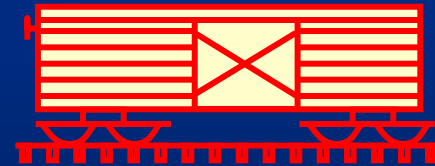
- Dedicated Rail Freight Mainline Adjacent to NEC
- New Castle County Intermodal Terminal
- Brandywine Valley Railroad
- Shellpot Bridge



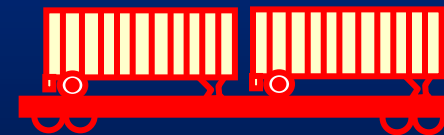
Hopper



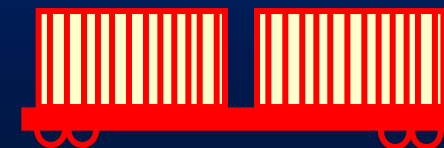
Tank



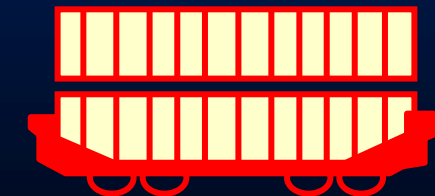
Box Car



Trailer-on-Flat-Car



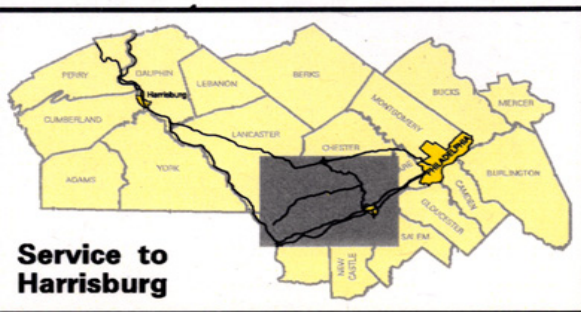
Container-on-Flat-Car



Double Stack-on-Well-Car

PA 41 Study Area Freight Rail Lines

BV = Brandywine Valley
 DV = Delaware Valley
 NS = Norfolk Southern
 CSX = C.S.X. Transportation
 Note: Owner in parenthesis
 Ex. (Amtrak)



Service to
Harrisburg

Norfolk Southern (via
Amtrak)

Brandywine
Valley

CSX

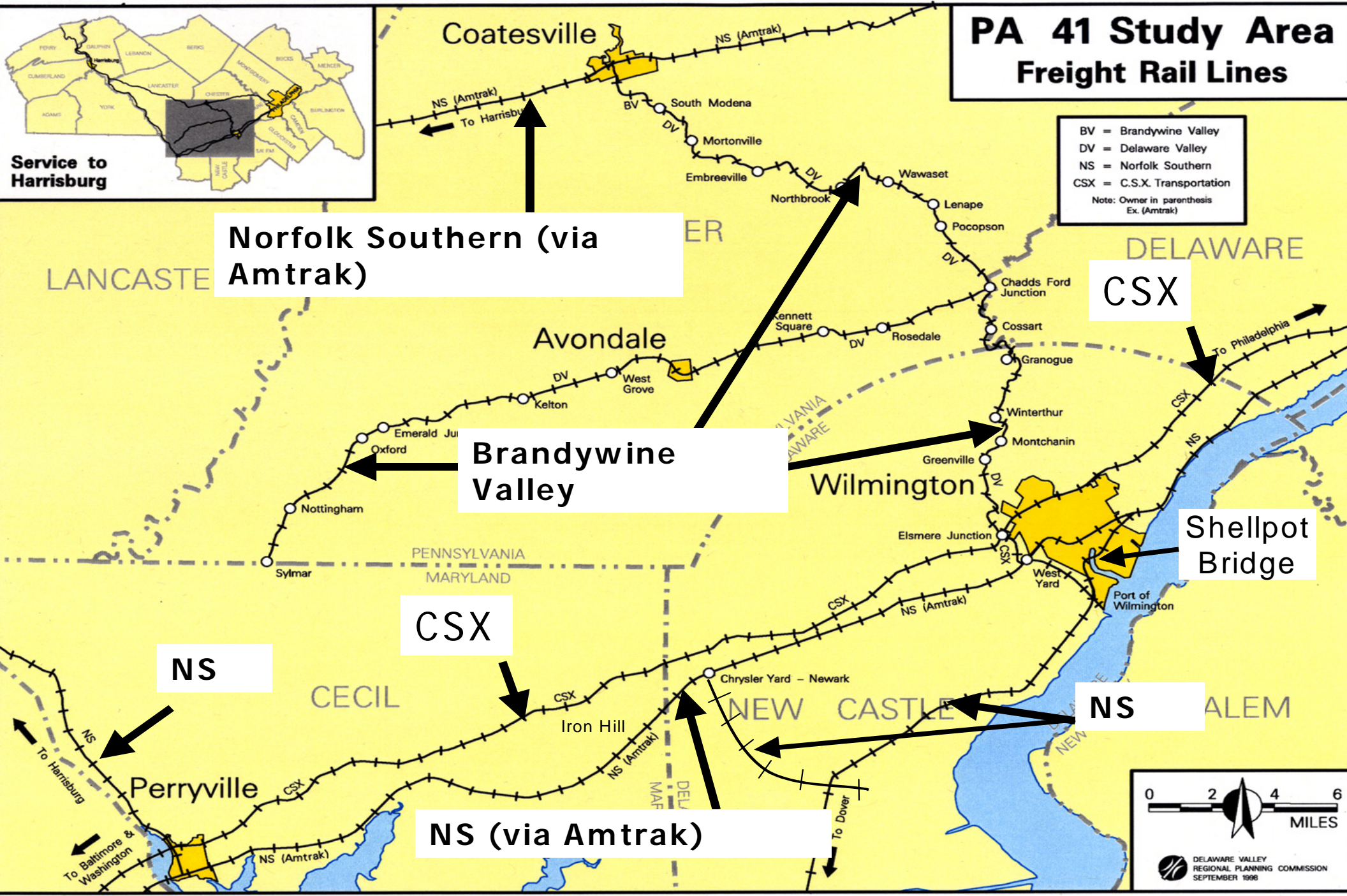
CSX

Shellpot
Bridge

NS

NS (via Amtrak)

NS



Shipper Scenario

"Community Friendly Logistics"

- Many shippers have sophisticated logistics programs
 - Wal-Mart
 - Home Depot
- Target small to mid-sized shippers
- Promote best practices
 - Off-peak deliveries
 - Logistics webs
 - DCs for converting between local pick-up/deliveries and long-haul
- Public sector role in CFL
 - Educator of best practices
 - Facilitator of enhanced communications
 - Provider of infrastructure and freight facilities
- Under CFL, public sector involved in planning and operations

“Community Friendly Logistics”

Different Goals – Common Solutions

	Carriers	Shippers	Communities
Consolidating Loads	Reduces fleet size, fleet costs	Reduces per unit transportation costs	Reduces number of trucks
Identifying Backhauls	Reduces non-revenue miles	Reduces one-way rates	Reduces number of trucks
Reducing Transit Times	Reduces fleet size, fleet costs	Reduces inventory carrying costs	Reduces congestion, air pollution

Proposed Local Improvements Scenario

- **Improving Freight Traffic Flow**
 - **U.S. 30 Corridor Improvements**
 - **Route 41 Improvements**
- **Managing Freight Traffic Flow**
 - **Through Truck Ban**
 - **Traffic Calming**
 - **Enhanced Enforcement (speed, weight)**

Pennsylvania Turnpike Scenario

- Value Pricing Study Between Exit 19 (Harrisburg) and Exit 23 (Downingtown)
- Longer Combination Vehicles (LCV)



Future of the Wilmington-Harrisburg Freight Study Steering Committee

- Need to continue working together to progress the ideas in this study
- Need to add shippers to the committee
- Need to adopt a goal and set of objectives for freight movement in the Corridor

DVRPC

(Role within Steering Committee/Local Impact)

- Rail Freight Line along NEC (Support/Medium)
- New Castle County Intermodal Terminal (Support/Medium)
- Brandywine Valley RR (Lead/Medium)
- Industry Solutions – Community Friendly Logistics (Lead/Medium)
- U.S. 30 Improvements – (Monitor/High)
- PA 41 Improvements – (Lead/High)
- Truck Ban – (Monitor/High)
- Traffic Calming – (Monitor/High)
- Increased Speed/Weight Enforcement – (None/Low)
- PA Turnpike/Tolls – (Support/Low)
- PA Turnpike/LCV's – (Monitor/High)

Conclusion

No one magic solution....

....many partial solutions