

**Special Committee to Study and Make
Recommendations Regarding Truck Traffic &
Freight Movements
Along SR 41, SR 48 & SR 7**

PREVIOUS STUDIES

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July 12, 2017

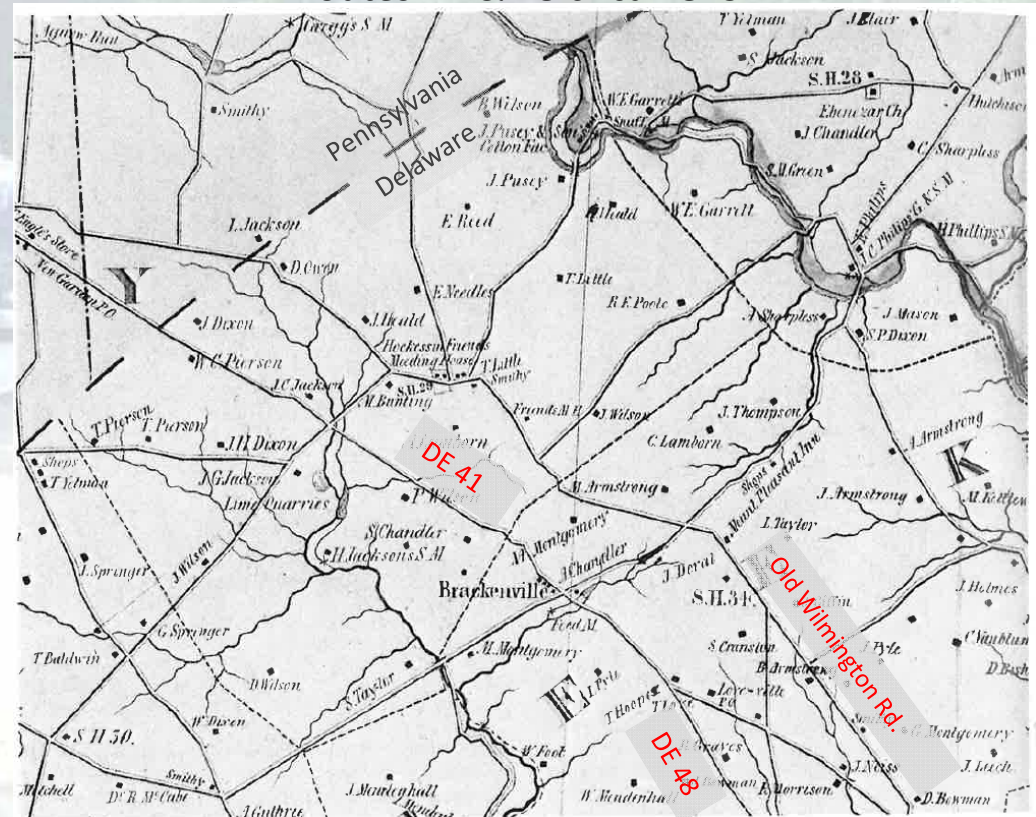
Looking back to move forward.....

Purpose:

- Several efforts to manage traffic along routes 7, 41 and 48 have been examined over the past decades....and earlier
- Previous studies contain a wealth of data and information to help guide this current task
- Seek to build on the “common threads” that have developed by other efforts
- Summaries in notebook
- Full versions on WILMAPCO website

www.wilmapco.org/SR10

Routes 41 & 48 circa 1849

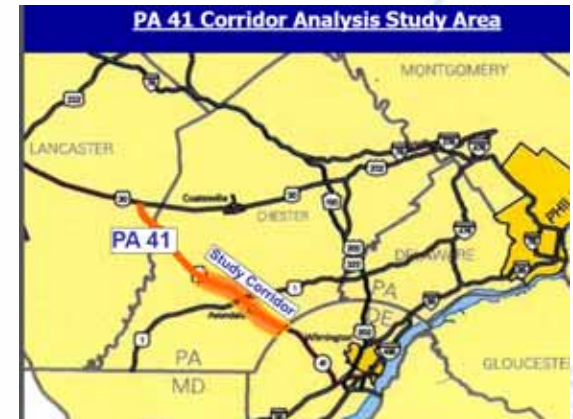


1. PA 41 Corridor Analysis

(Delaware Valley Regional Planning Commission, 1999)

Summary:

- Study needs/deficiencies of the PA 41 corridor
- Evaluated traffic safety, increasing auto and truck traffic and the existing roadway structure
- Large amounts of data collected on truck volume, commodities and origin and destination including a truck survey
- Examines feasibility of truck reduction/diversion along corridor



Takeaways:

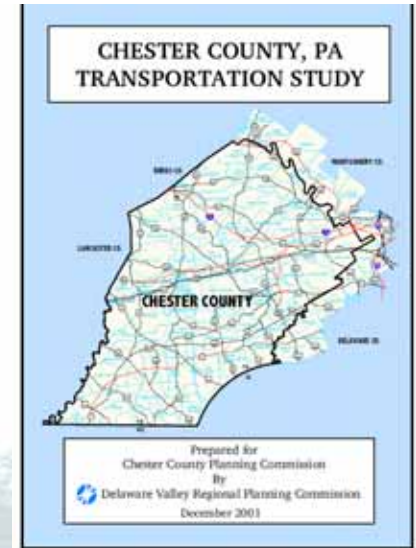
- Study was a precursor to the larger Wilmington-Harrisburg Freight Study.
- Small number of trips associated with Port of Wilmington
- Few trips are considered "long haul" on corridor (400+ miles)
- Over 80% of the truck trips travel the corridor on a daily/weekly basis. 1/3 are empties
- Studied possible shifts to other routes and modes
 - Rail: no option: too few making long enough haul (145/day); does not link origins with destinations; time-sensitive cargo
 - Trucks: no diversion/alternate routes: PA 896 and PA 82 are parallel routes but have numerous size/weight/geometry restrictions.

2. Chester County, PA Transportation Study

(DVRPC, 2001)

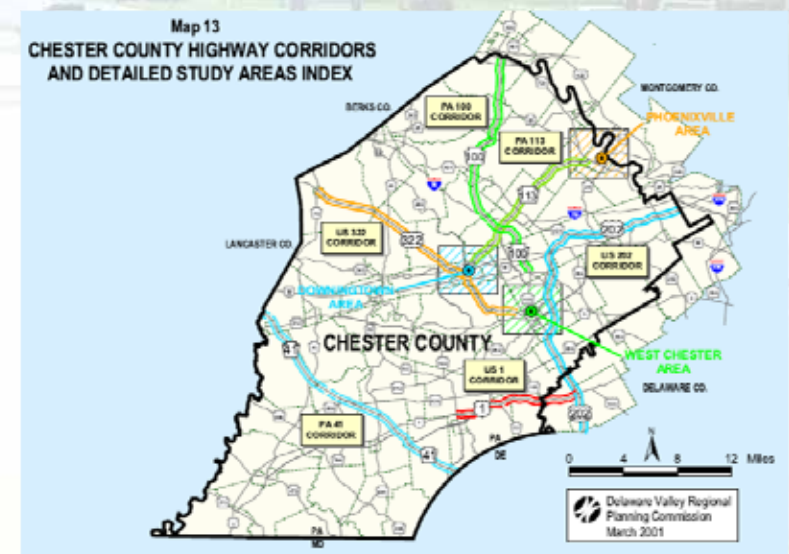
Summary:

- Performed a travel demand model forecast analysis of traffic conditions from 1997 (base year) to 2020.
- Performed analysis of various transportation scenarios, some included widening of PA 41 to 4 lanes and bypasses around Chatham and Avondale
- PA 41 was highlighted for detailed study. Traffic volumes forecasted to increase by 50% by 2020 in all scenarios tested



Takeaways:

- Provides first modern effort in long range planning for the corridor using better modeling software

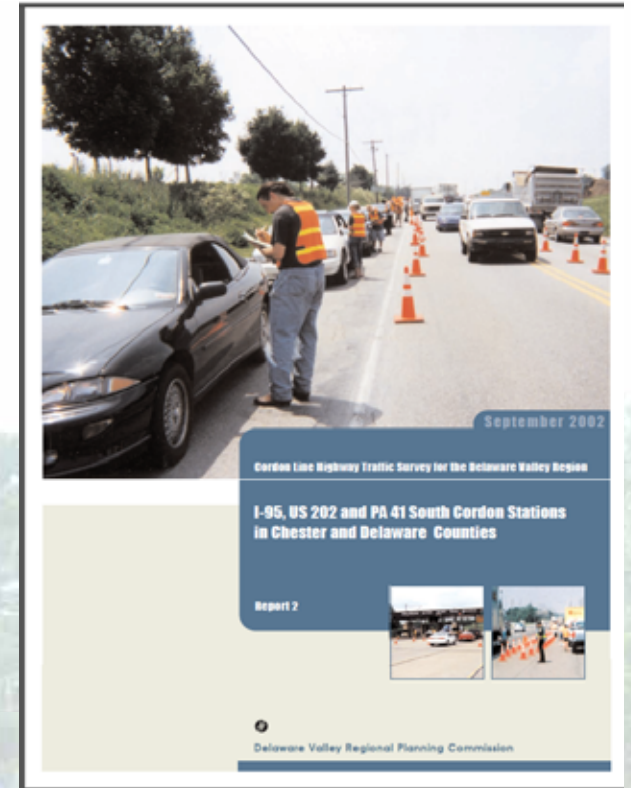


3. Cordon Line Traffic Survey, PA 41, N. of SR 41/7 Interchange

(DeIDOT/DVRPC, 2002)

Summary:

- Manual Survey of vehicles entering/leaving PA via PA 41 just North of SR 41/7 interchange. Asked origin/destination information, trip length/frequency/reasons for using road



Takeaways:

- Building materials #1 commodity (25%), empty trucks comprised (20%); refrigerated products (6%). Refrigerated products moving equally in both directions
- "Saves time" and "most direct" were the greatest reported truck reasons for using PA 41 south, with 71 percent and 24 percent respectively. Approx. same as passenger traffic
- 37% of trucks from DE into PA have destination in New Garden and London Grove areas

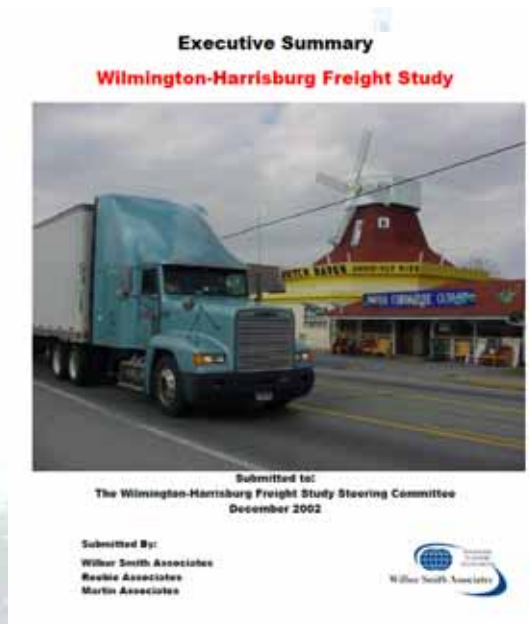
4. Wilmington- Harrisburg Freight Study

Lancaster County Planning Commission (2003)

Summary:

- Comprehensive study of truck and intermodal freight traffic along the Corridor between the Ports of Wilmington and Philadelphia and the Harrisburg/Carlisle area
- Very good truck info about trucks leaving Port of Wilmington and routes of choice; varies significantly by commodity
- Multi-regional effort including DeIDOT & WILMAPCO

- 4 alternative scenarios were studied in detail:
 1. Shipper Scenario: “Community Friendly Logistics”, off-peak deliveries, strategic warehousing and distribution centers
 2. Combined local roadway improvements: Managed freight flows, truck bans/restrictions, traffic calming and heavy truck enforcement
 3. Rail mode shift scenario: Dedicated freight line along NEC from Perryville to Newark/Wilmington; other improvements
 4. PA Turnpike scenario: Value pricing study on PA Turnpike and allowing combination vehicles allowed on PA Turnpike and other routes

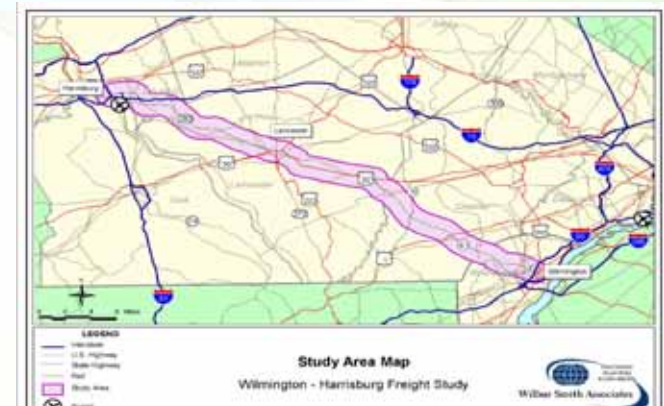
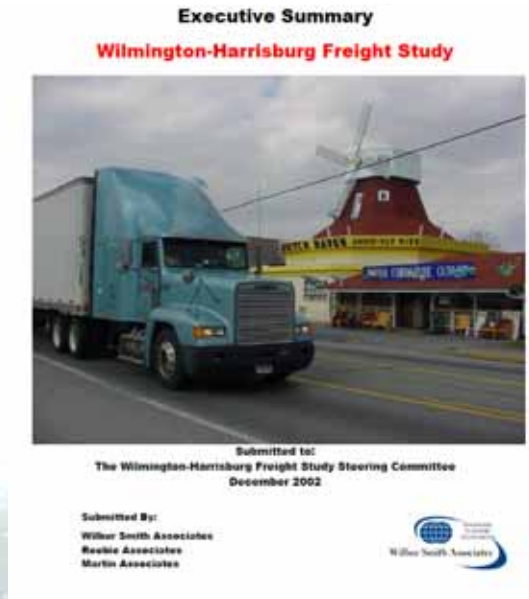


4. Wilmington- Harrisburg Freight Study

Lancaster County Planning Commission (2003)

Takeaways:

- There is no “silver bullet” solution; Freight movement is a significant issue not only in terms of adding to traffic conditions but supporting local jobs and employers.
- All scenarios need significant additional resources for better understand conclusions
- Freight sources AND solutions of crosses County and State boundaries. Freight issues must be addressed at the County, State, and multi-State levels.
- Regular dialog among agencies along corridor highly recommended



5. WILMAPCO Regional Freight & Goods Movement Analysis (2007)

Summary:

- Initiated by WILMAPCO to examine freight as a system, focusing on truck movement
- Summarizes what is known about freight movement in the region currently (2005) and in the future (2030)
- Identifies potential deficiencies and bottlenecks in the freight system.

Takeaways:

- Portions of SR 41, 48 and Kirkwood Highway were identified in the regional bottleneck scoring analysis, showing minor to moderate scores for potential bottlenecks
- Bottleneck Scoring based on:
 - AADT
 - Volume/Capacity
 - Truck %
 - Truck-Involved Crashes
 - Deficient travel speeds

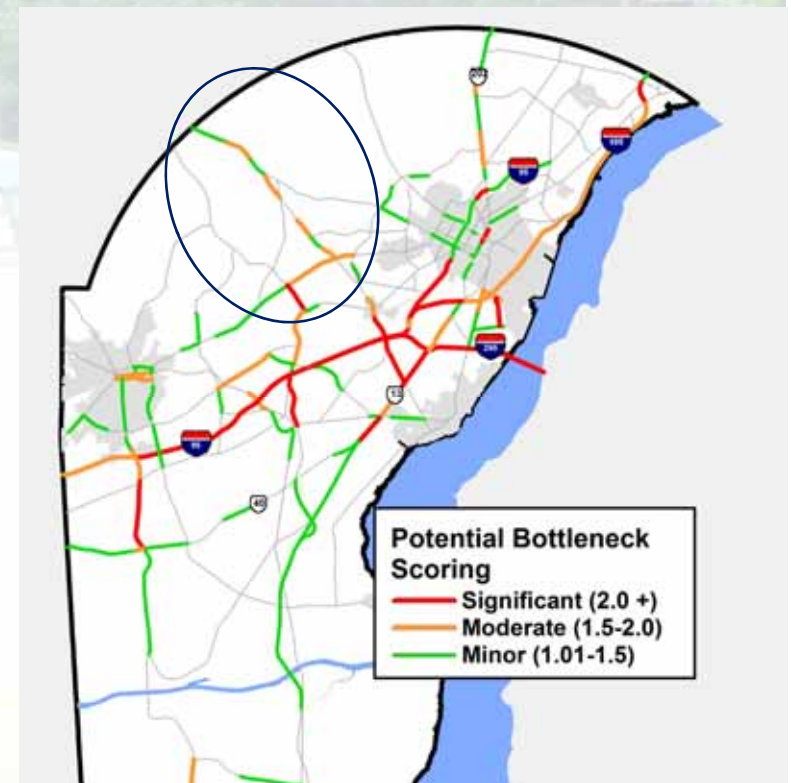
WILMAPCO Regional Freight and Goods Movement Analysis

final
report

presented to
WILMAPCO
prepared by
Cambridge Systematics, Inc.
with
Global Insight, Inc.

September 2007

www.wilmapco.com



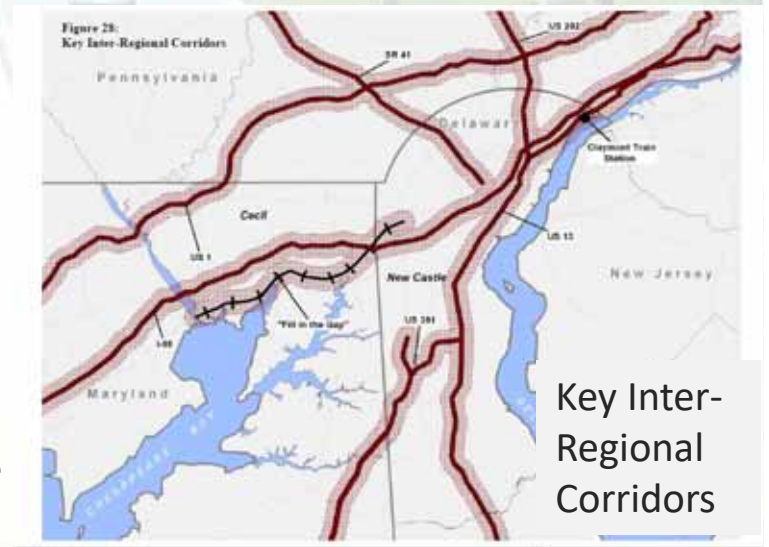
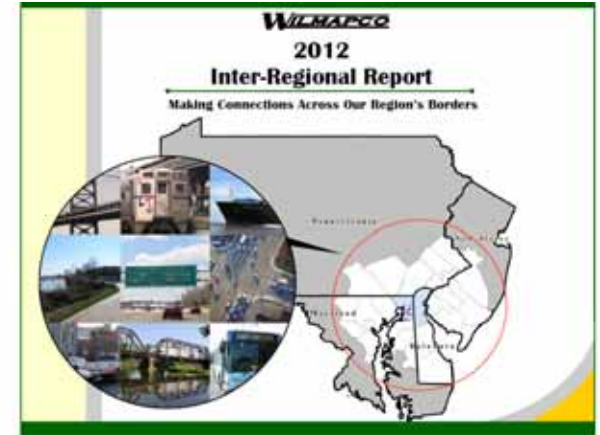
6. WILMAPCO's Inter-Regional Report: Making Connections Across our Region's Borders (2004, 2008, 2012)

Summary:

- Broad view of current and future demographic and travel behavior profile of the counties surrounding the WILMAPCO region (PA,NJ,MD)
- Understanding of the effects of growth on transportation infrastructure spanning multiple jurisdictions
- Identify potential conflicts within the interregional transportation system
- Use of Freight Analysis Framework (FAF) data to report truck volume/tonnage forecasts (2007-2040)

Takeaways:

- Illustrates the expanding urbanized areas along the US 30/PA 41 corridor since 1990, thus creating additional local needs for goods and services along corridor.
- SR 41 identified as one of seven Key Inter-regional corridors which would benefit from wider, multi-state planning/coordination efforts



7. PennDOT Route 41 Planning Study (2010)

Summary:

- Update of previous studies performed in 1988, 1994 and 2001.
- Revisit of 4-lane solution for PA 41
- Performs revised future analysis of corridor from Comprehensive Plans out to 2030
- Acknowledges changing urban/rural land use changes

Takeaways:

- More isolated, easier to program, intersection-centric solutions that seek to address:
 - Safety conditions
 - Accommodate future corridor mobility
 - Improve intersection operations
 - Improve existing infrastructure
- More attention given to landuse & transportation linkages (i.e. Landscapes, DVRPC Long Range Transportation Plan)



Route 41 Planning Study

SR 0041, Section STY
Chester County, PA



January 12, 2010

8. Delmarva Regional Freight Plan

(DeIDOT, MDOT, VDOT WILMAPCO, D/K MPO, 2015)

Summary:

- Multi-State study to summarize current and future freight planning and transportation needs on the Delmarva Peninsula
- Supports need for enhanced freight mobility and economic development at the local, state, and national level
- Developed a travel demand model w/ freight component (Cube CARGO) to analyze various freight scenarios with various economic/infrastructure changes



Takeaways:

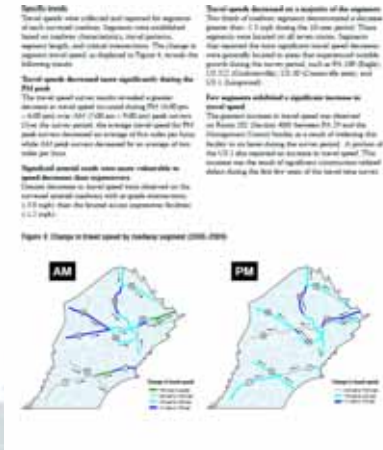
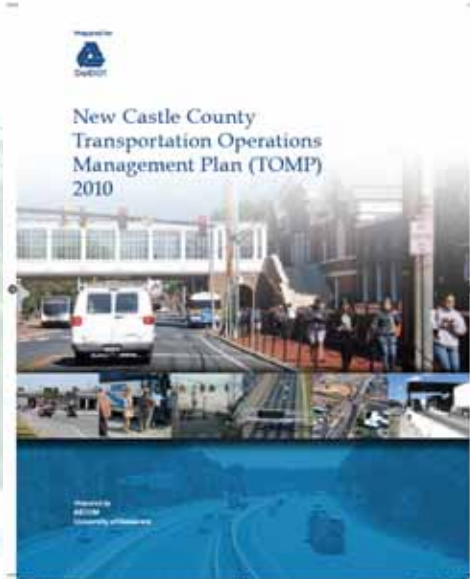
- Routes 41 and 48, along with US 202 included in the “Piedmont Corridor”, which highlights the transportation linkages with US 30, US 322, PA 283 and the Pennsylvania Turnpike
- SR 7, 41 and 48 all listed as candidates for performing a Corridor Study / Concept Design for freight management upgrades



Other Reports

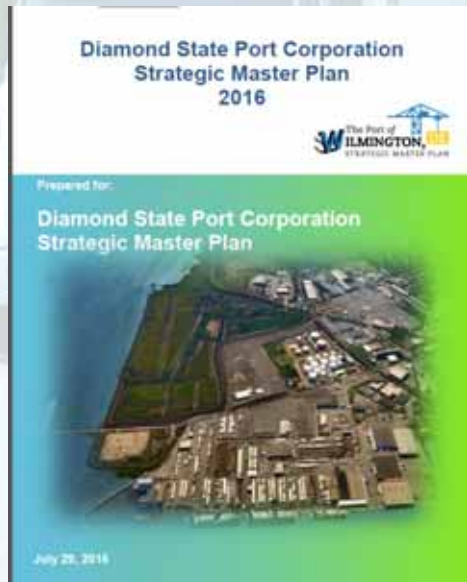
Traffic Operation Management Plans (2001, 2010)

- Historical Intersection and vehicle classification info



Chester County Planning Commission Travel Time Runs 2000-2009)

DSPC Master Plan (2016)



WILMAPCO Congestion Management Summaries



Common Threads:

- SR 7, 41 & 48 corridors have been moving commerce since the 1800's and a topic of discussion ever since.
- There is no “silver bullet” solution; Freight movement is a significant issue not only in terms of adding to traffic conditions but supporting local jobs and employers.
- Efforts to seek possible shift of trucks to other routes or modes have proven to be difficult:
 - Time sensitivity
 - Cost and the reliability of alternatives
 - Nature of the commodity
 - infrastructure needed to match origins with destinations
- Sources of freight AND solutions cross County and State boundaries. Freight issues must be addressed at multi-jurisdiction levels.
 - Large portion of truck traffic using 41 in PA originates/terminates in one of four counties: (NCC, Dauphin, Lancaster, Chester).



Thank You