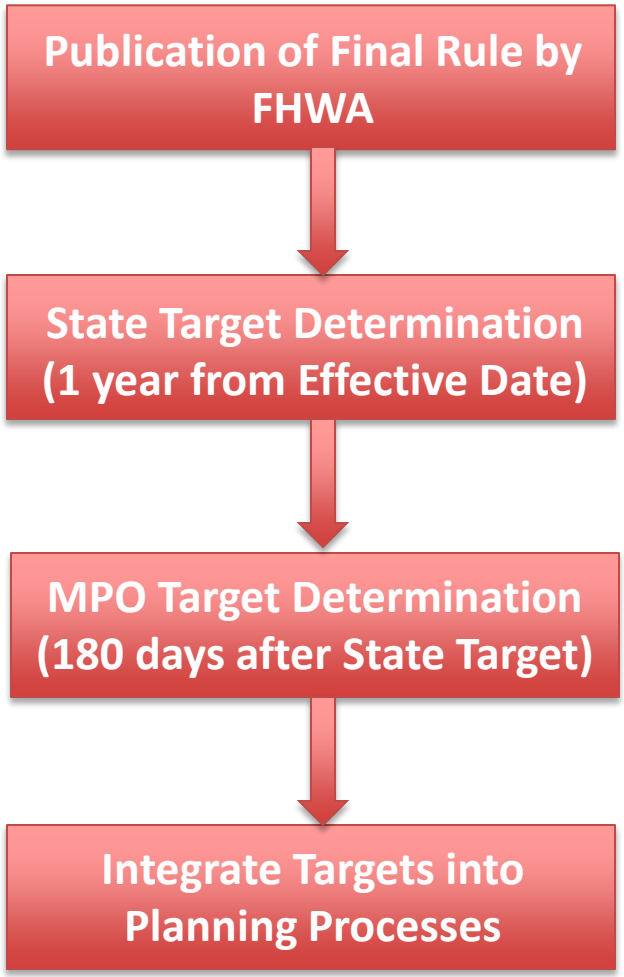
MIAMI VALLEY
Regional Planning Commission

Miami Valley Regional Freight Profile

April / May 2017

Purpose

- Provide a Regional Snapshot of freight industry trends
- Develop existing freight transportation system inventory profile
- Analyze freight movement in the Region using new capacity, performance and usage data
- FAST Act & MAP-21 Provisions - Emphasis on Performance-Based Freight Planning

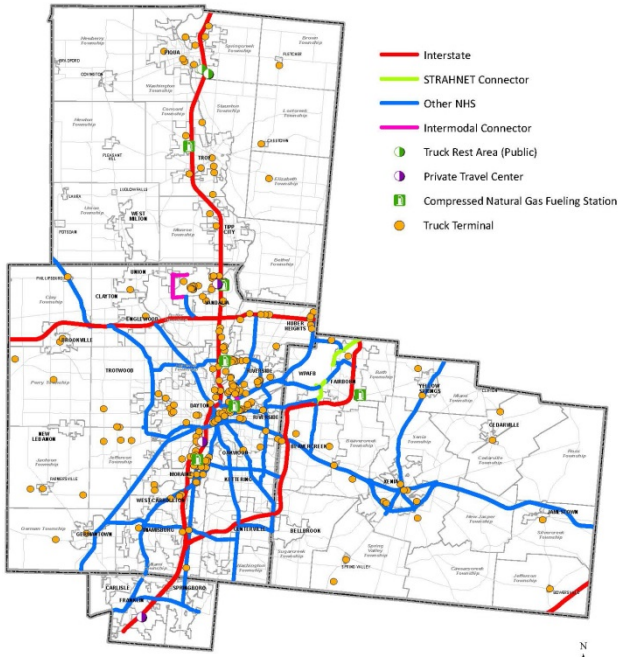


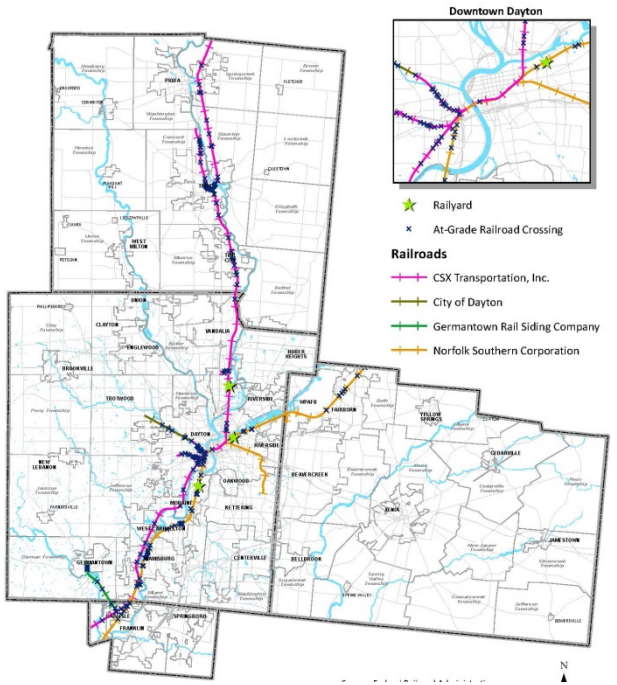
Overview

- Regional Freight Transportation Infrastructure
- Economic Trends
- Freight Flows
- Road Network Reliability
- Safety
- Future Trends and Innovations

Freight Infrastructure

- **Four modes and Intermodal Connections**
  - **NHS + Ancillary Facilities**
  - **Railroads**
  - **Air Cargo**
  - **Pipelines**
  - **Intermodal Connections**





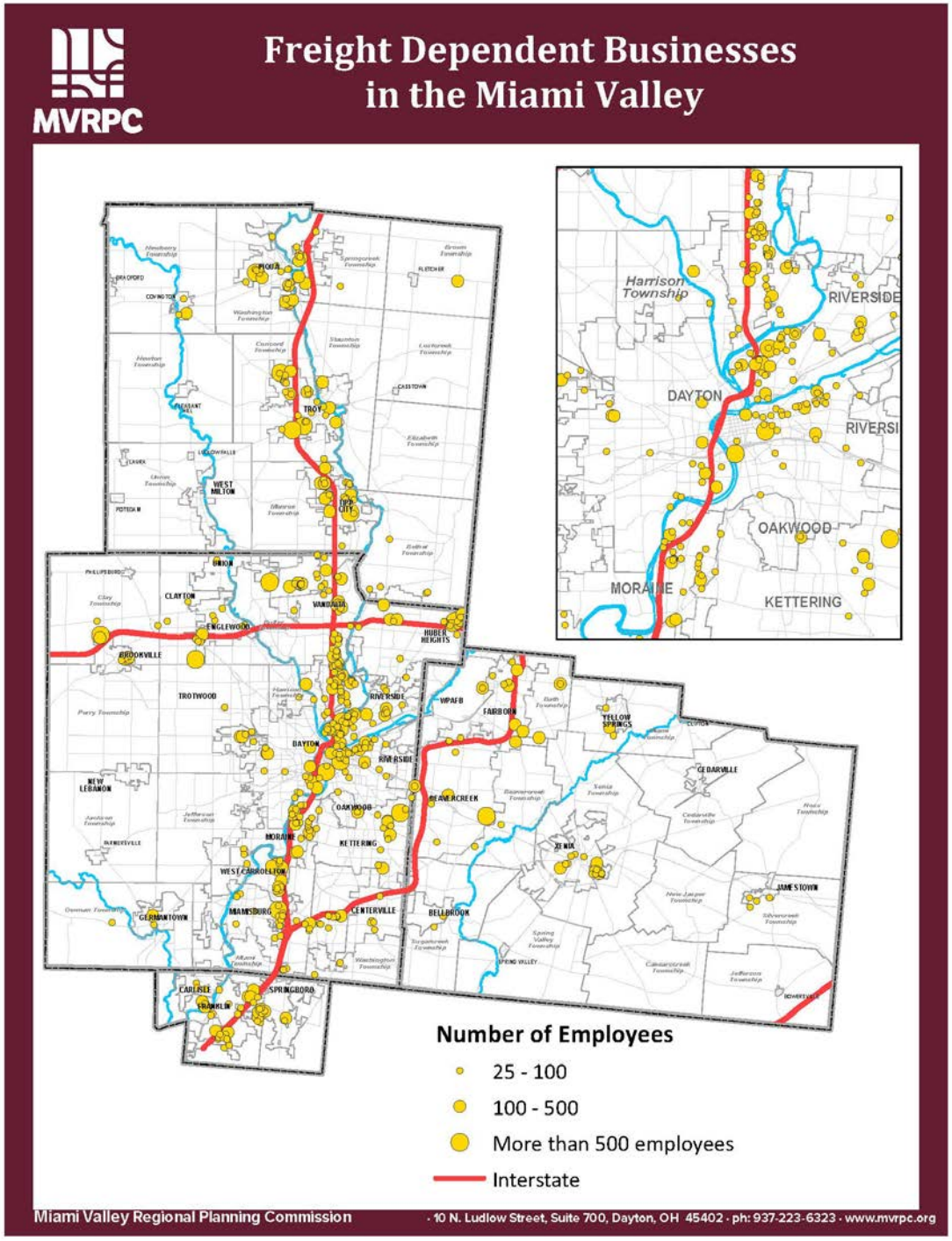
Economic Trends

- **Employment Projections: 2010-2050**
- **Nearly 30% of the Region's economy is employed in "freight-intensive" industries**

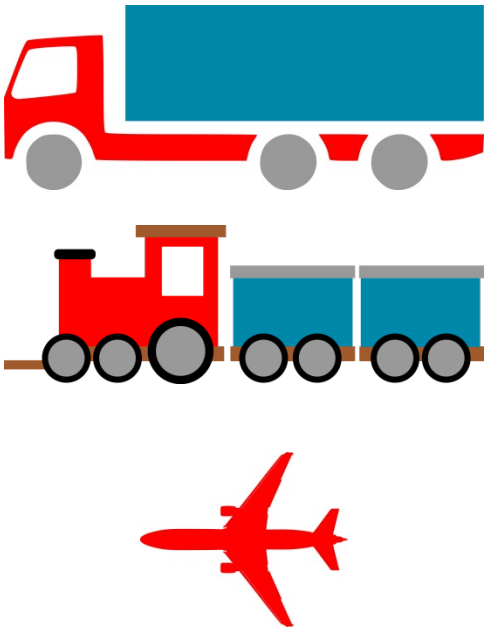
- **Transportation and warehousing sector estimated to grow by over 60% by 2050**
- **MVRPC supported regional investments**

Economic Trends contd.

- Freight Generation Characteristics by Industry
- Identification of Freight Dependent Businesses
- Importance of Manufacturing and Logistics to Ohio's and the Region's Economy



Freight Flows

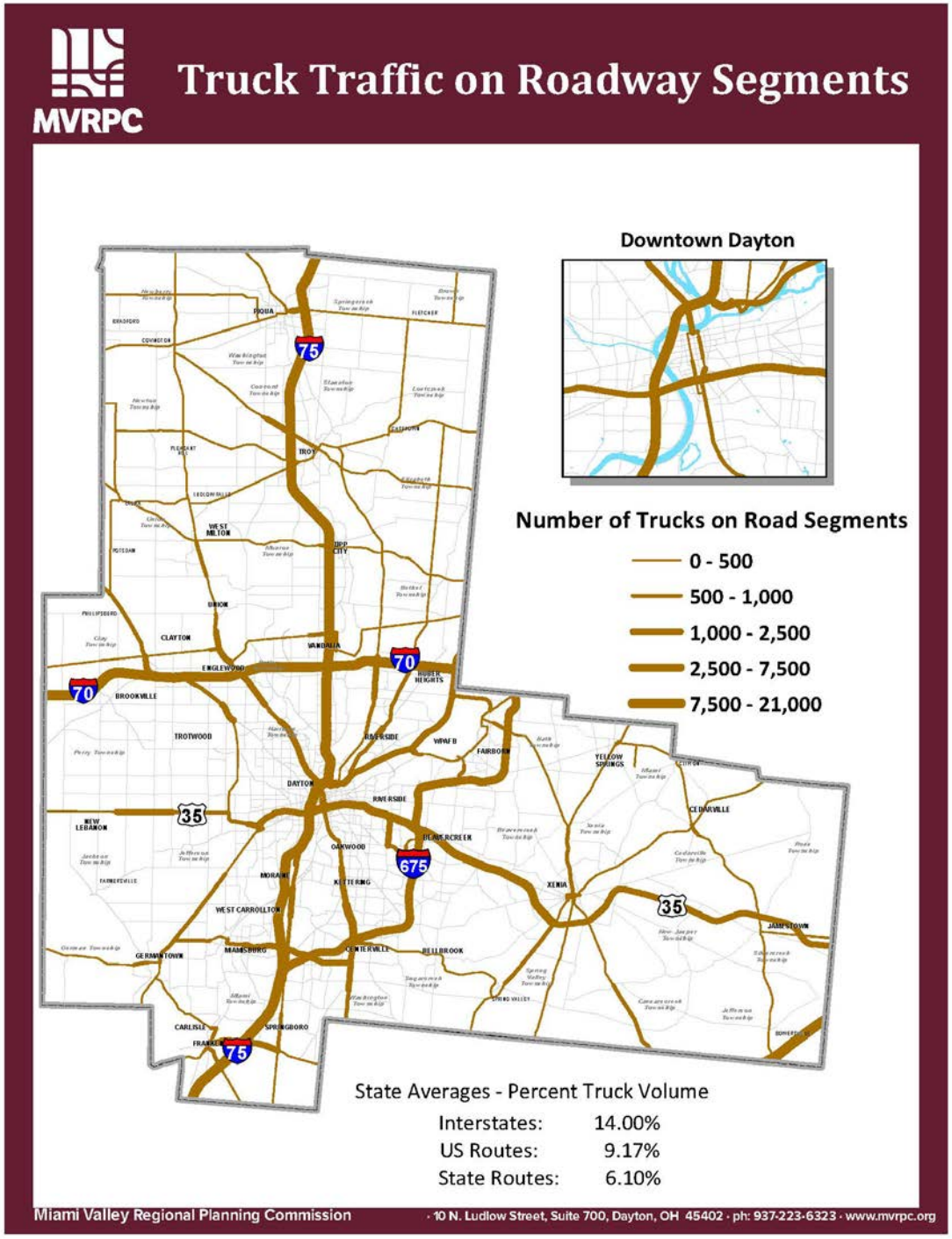


Tons (Thousands)			Value (Millions)		
2009	2040	% Change	2009	2040	% Change
142,962	288,986	102.1%	$222,488	$635,667	185.7%
2,824	3,912	38.5%	$1,409	$1,743	23.7%
7	15	114.3%	$511	$1,213	137.4%

Mode Splits

Commodity Mix

Trading Partners



Truck Flows

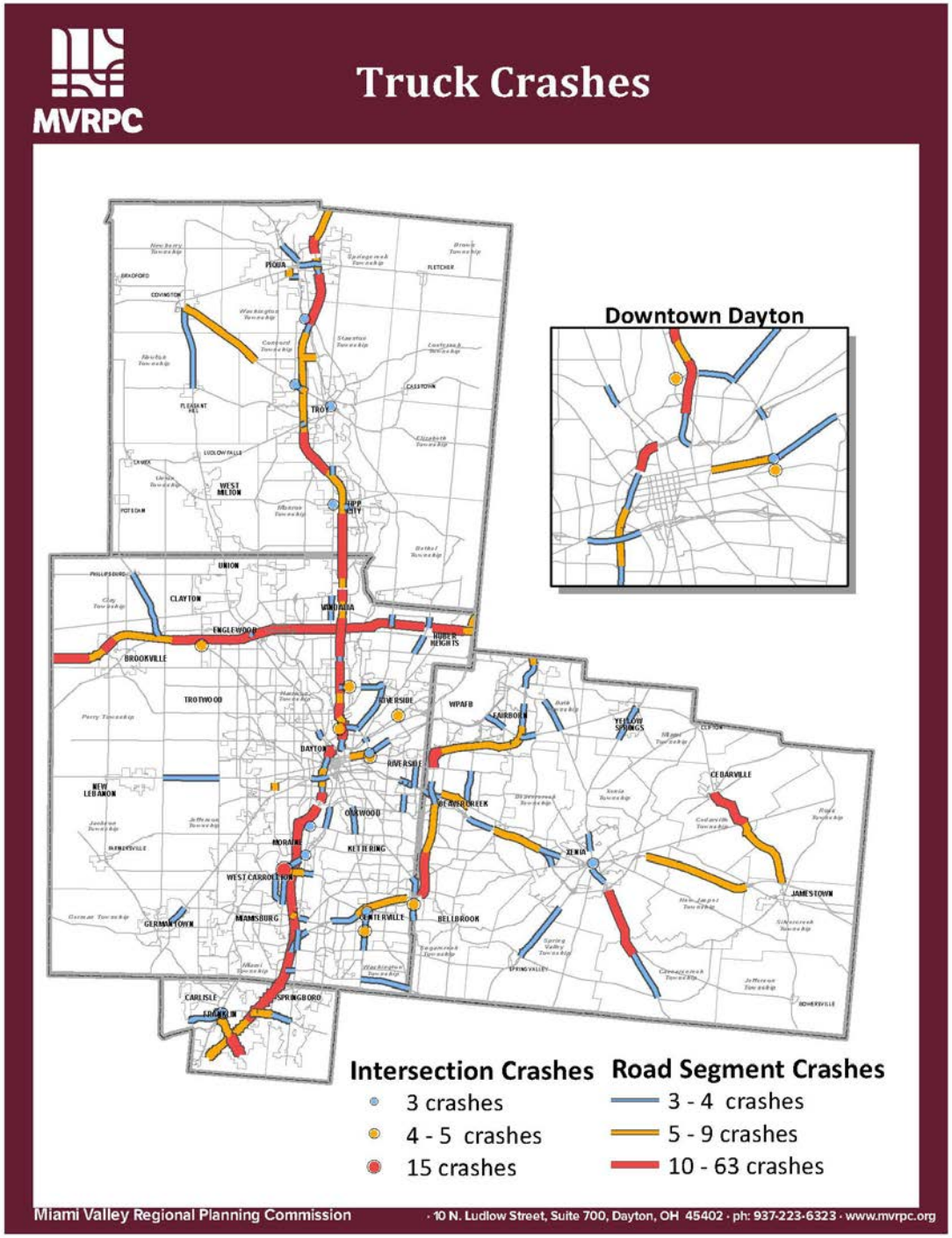
- **High Volume Truck Corridors**
  - **I-70 through Montgomery County**
  - **I-75 through Miami, Montgomery and Warren County**
  - **I-71 through Greene County**
  - **US 35 in Greene County**

Reliability

- Nationally, trucks represent 18% of the urban "congestion invoice", but only 7% of urban travel
- INRIX data used to plot a map to determine regional road network reliability using travel time index values
- Overlapped this map with high volume truck corridors to identify major freight congestion bottlenecks in the Region
  - NB I-75, between US 35 and S. Dixie
  - NB I-75 at Needmore & SR 725, and
  - Keowee Street, between US 35 and SR 4

Safety

- **Analyzed truck-related crashes and crashes at railroad crossings**
- **Truck- Related Crashes:**
  - **Comprise 5.4% of the total analyzed crashes**
  - **Resulted in approximately 1% (21) fatal crashes and 2.4% (56) serious injury crashes**
  - **Were Sideswipe-Passing or Rear-End Crashes in nearly 50% of cases**
  - **Resulted in 52% of fatal crashes involving alcohol**



Safety (contd.)

- **High Volume Truck Crashes Intersections and Segments:**
  - **Intersection of Alex Rd and E. Dixie Dr in West Carrollton**
  - **I-75 in Miami County, east and south of Piqua**
  - **I-70 in Butler Township**

Future Trends

- Innovative Applications
- Emerging Technologies
- Trained Workforce Availability / Driver Shortage
- Role of MPOs

Questions and More Information

- **Website Link**

http://www.mvrpc.org/transportation/long-range-planning-lrtp/regional-freight

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