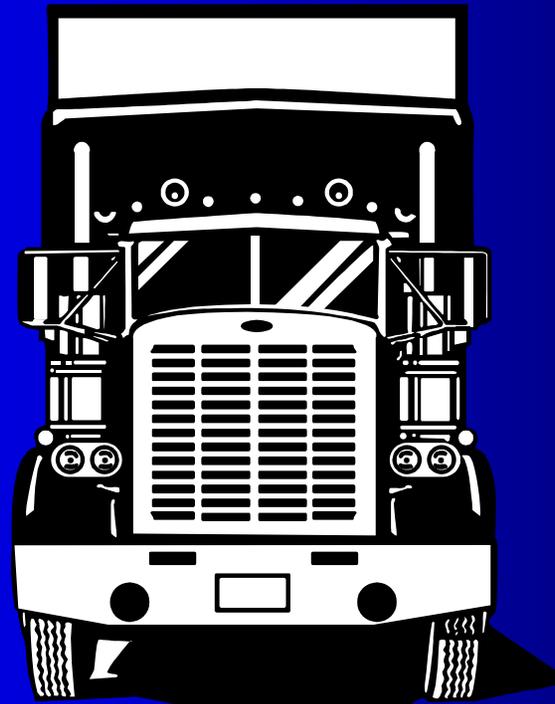


# Highways and Macro Corridors (Chapter 4)



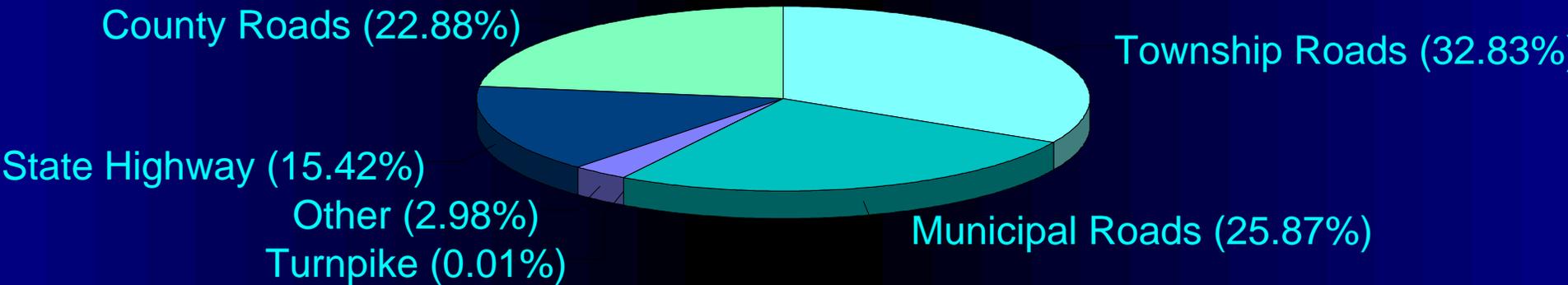
# Existing Conditions

- 2<sup>nd</sup> largest number of bridges
- 3<sup>rd</sup> highest value of freight; 14% of all US freight value travels touches system
- 4<sup>th</sup> largest Interstate system; (1,573 miles)
- 5<sup>th</sup> highest vol. traffic; (295,583,000 daily VMT)
- 10<sup>th</sup> largest highway network



# Ohio Public Roads by Ownership, 2003

## 124,885 Centerline Miles

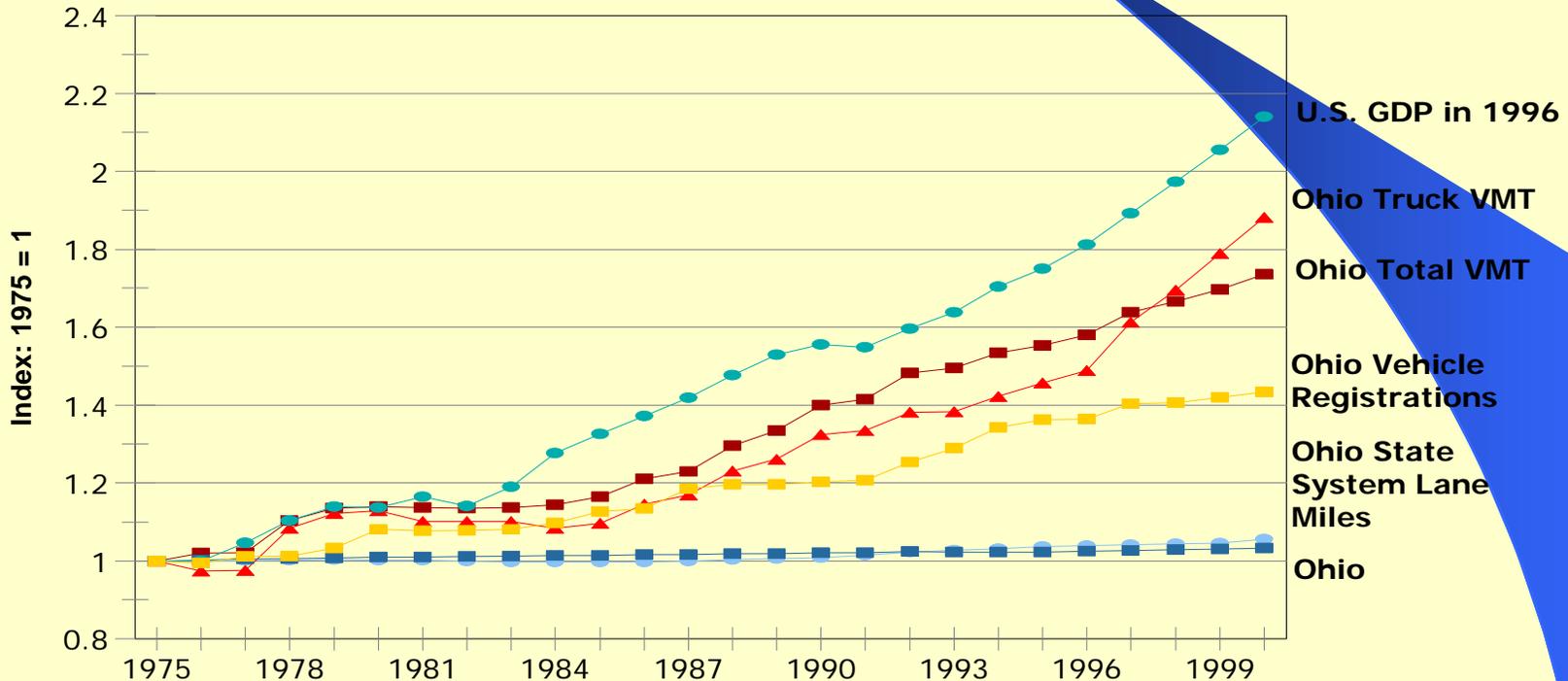


66 % of the daily 295,583,000 VMT  
is on State-owned system  
(Macros = 3% of total system carrying 28% DVMT)



# Travel & Demographic Indices

**Travel and Demographic Indices**  
U.S. GDP and Ohio Indices

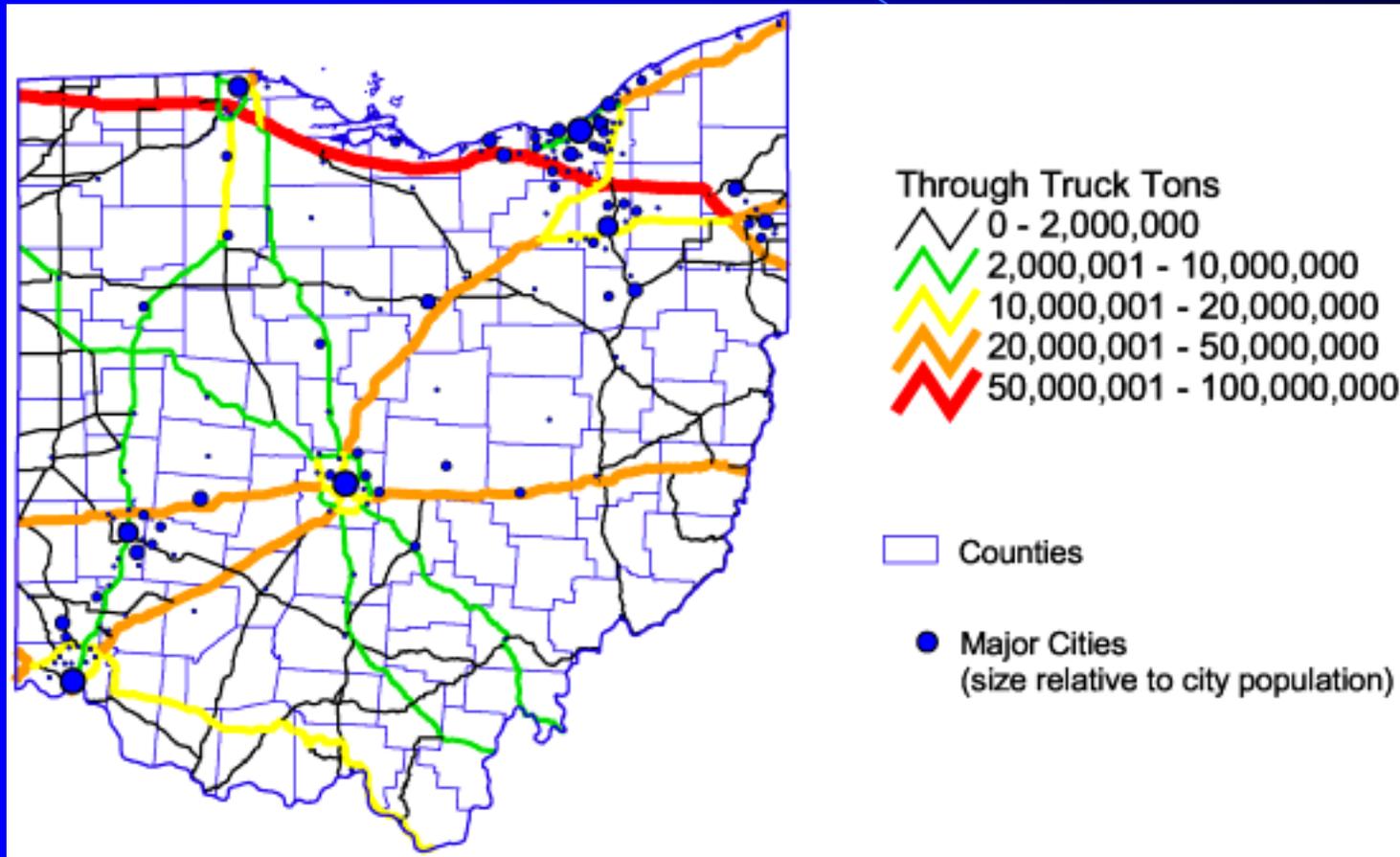


**Notes:** U.S. GDP in 1996 dollars from U.S. Bureau of Economic Analysis; Ohio population from U.S. Census; (Daily) Vehicle Miles of Travel and State System Lane Miles from ODOT Office of Technical Services; Vehicle Registration from FHWA "Highway Statistics," multiple Ohio Department of Transportation

**Source:** 2000 U.S. Census  
07/28/2005



# Truck Freight Density



# Macro Highway Corridor Criteria

## Table 4.4 *ACCESS OHIO 2004 - 2030*

**Be an Interstate route**

**OR**

**Meet the following criteria:**

**Carry, or has the potential to carry, traffic volumes that exceed 15,000 PCE (Passenger Car Equivalents; 1 truck = 2 cars);**

**Be at least 30 miles in length or primarily carry trips greater than 30 miles;**

**AND**

**Provide links to or between:**

- Population centers of more than 50,000;
- FHWA recognized Inter-modal Connections;
- STRAHNET (Strategic Highway Network);
- Major metropolitan centers in neighboring states; or,
- The Appalachian Highway system.



# Macro Highway Corridor Analysis

## Conclusion:

- All existing Macro Highway Corridors meet this criteria (3,348 miles)
- 9 additional roadway segments meet this criteria and are recommended to be added (296 miles)



# Using Statewide Model = New Macro Corridors

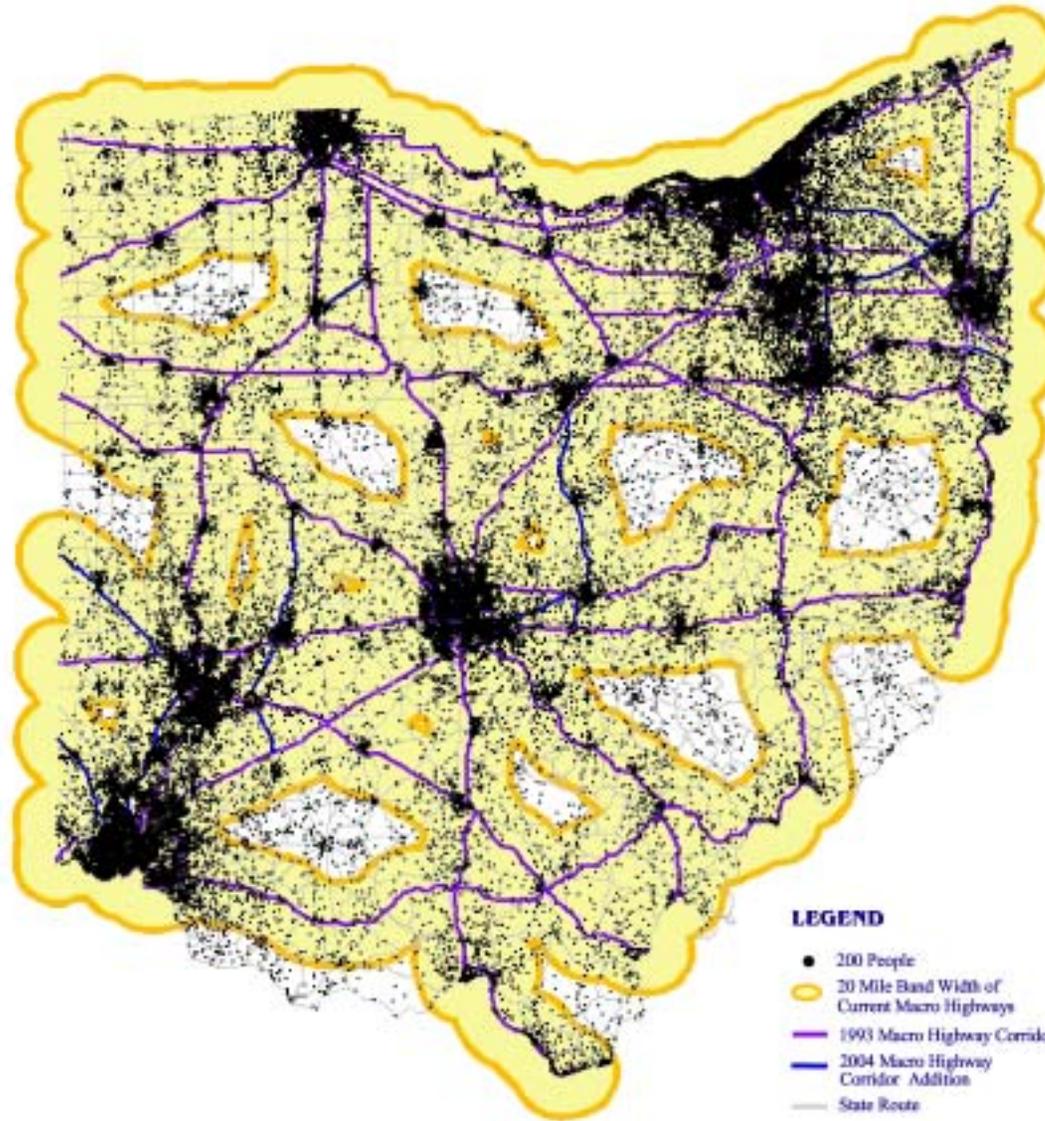
- **SR 18** in Medina and Summit counties from I-71 to I-77.
- **SR 5** in Portage and Trumbull County from I-76 to the PA state line.
- **SR 43** in Portage and Stark counties from US 62 to SR 14.
- **SR 14** in Columbiana County from SR 11 to the PA state line.
- **SR 13 & SR 79** in Licking, Knox, and Richland counties from I-70 to I-71.
- **US 68** in Clark, Champaign and Logan counties from I-70 to US 33.
- **SR 49 & SR 571** in Darke and Montgomery co. from I-70 to the IN state line.
- **SR 4** in Butler, Hamilton, and Montgomery counties from US 35 to I-275.
- **US 27** in Butler and Hamilton County from I-275 to the IN state line.



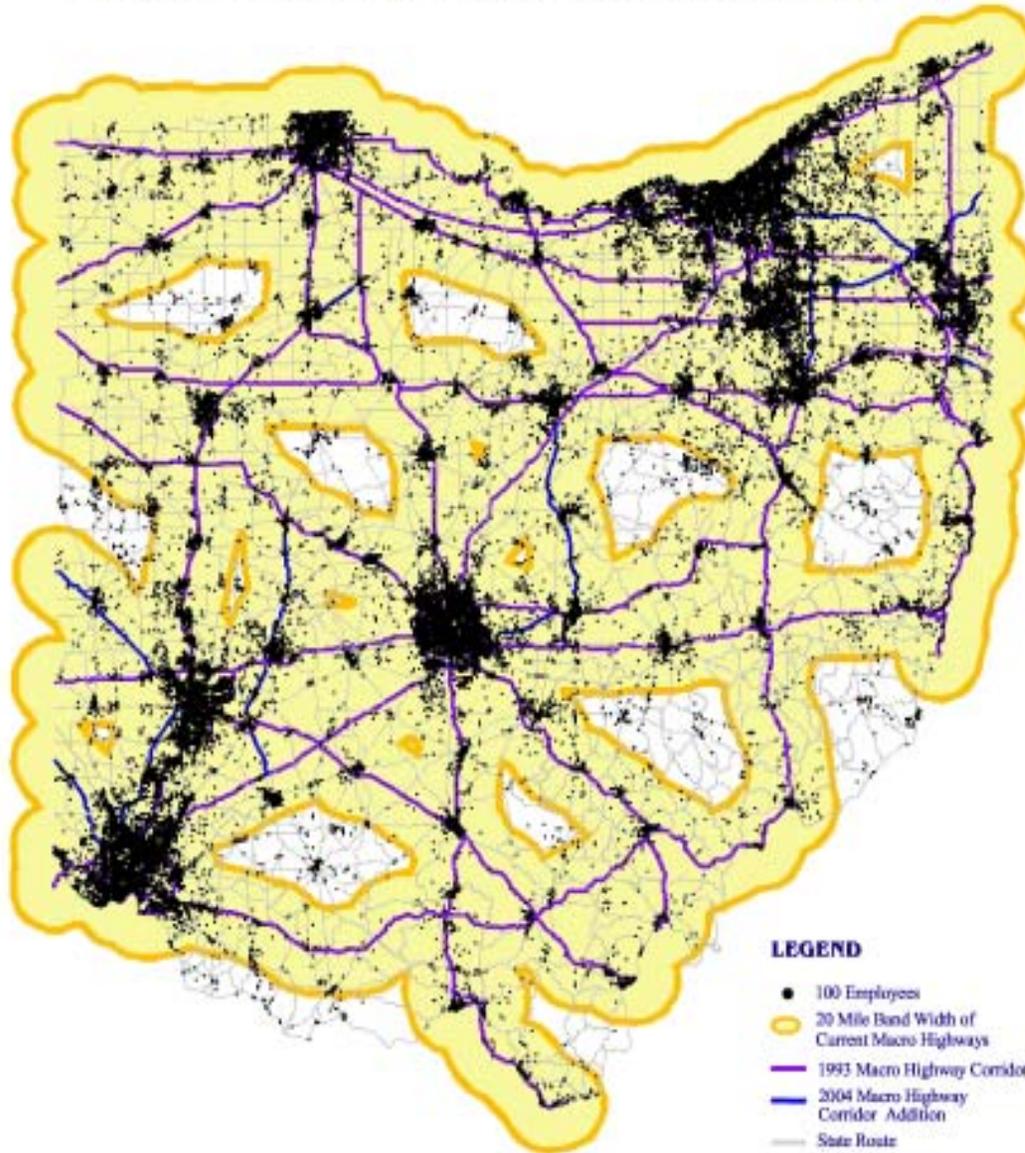
# Macro Highway Corridors



# Ohio's 2000 Population Density



# Ohio's 2000 Employment Density



# Macro Highway Corridor Completion

= segments achieve safety, operational, and design adequacy standards (Table 4.6)

**SAFETY:** Crash rate (accidents/annual million vehicles miles) less than 2.5/mi and crash density less than 75/ mi

**OPERATIONAL:** Volume/Capacity = 0.9 or less

**DESIGN:** Optimum - lane & shoulder widths, curves, grades, bridge approach widths, vertical clearance as defined by ODOT Sufficiency Rating System



# Significance of Designation As Macro Highway Corridor

- ODOT will:
  - Give priority to needed improvements relative to similar needs on other (less traveled) roads
  - Additional TRAC points
  - Strive to complete/meet adequacy standards
- Completion is limited by:
  - Financial constraints
  - Need to maintain a balanced program



# Significance of Designation As Macro Highway Corridor

- **DOES NOT MEAN:**

Every project or need will be constructed instead of or prior to other needs or prioritized projects

**SAFETY REMAINS ODOT'S  
Top Priority & # 1 GOAL**



# ODOT Sufficiency Rating

- ODOT sufficiency rating system used by *ACCESS OHIO* as basis for state-owned roadway system analysis.
  - Assessed the entire statewide system
  - Assessed the Macro Highway Corridors to identify “hot spots” – reconfirm project need and verify no problem area has been missed



# Findings from Sufficiency Analysis on the State-owned System

Based on the overall sufficiency rating / 100  
point scale:

- 37% has a rating of 90 or above
- 50% has a rating of 88 or above
- 90% has a rating of 77 or above
- 1% has a rating of less than 70 points

