



OHIO SHARED SERVICES COLLABORATIVE

Working Together to Accomplish More

**Optimizing School Transportation through Design, Planning and Analysis
Joint Education Oversight Committee Testimony
October 13, 2016**

Our purpose and goals

- 2014 - \$1.76m Straight A grant awarded to our shared services collaborative to reduce transportation costs
- Goal = reduce consortium fleet by 5 percent
- Goal = reduce operating costs by 2 percent
- Goal = save the 20 consortium districts **\$4m over five years**
- Cost savings centered around four key components:
 - monitoring student ridership to analyze needs
 - reducing idle times
 - improving bus routes
 - sharing transportation services and facilities where it makes sense



Using A Systematic Approach

Pupil Transportation

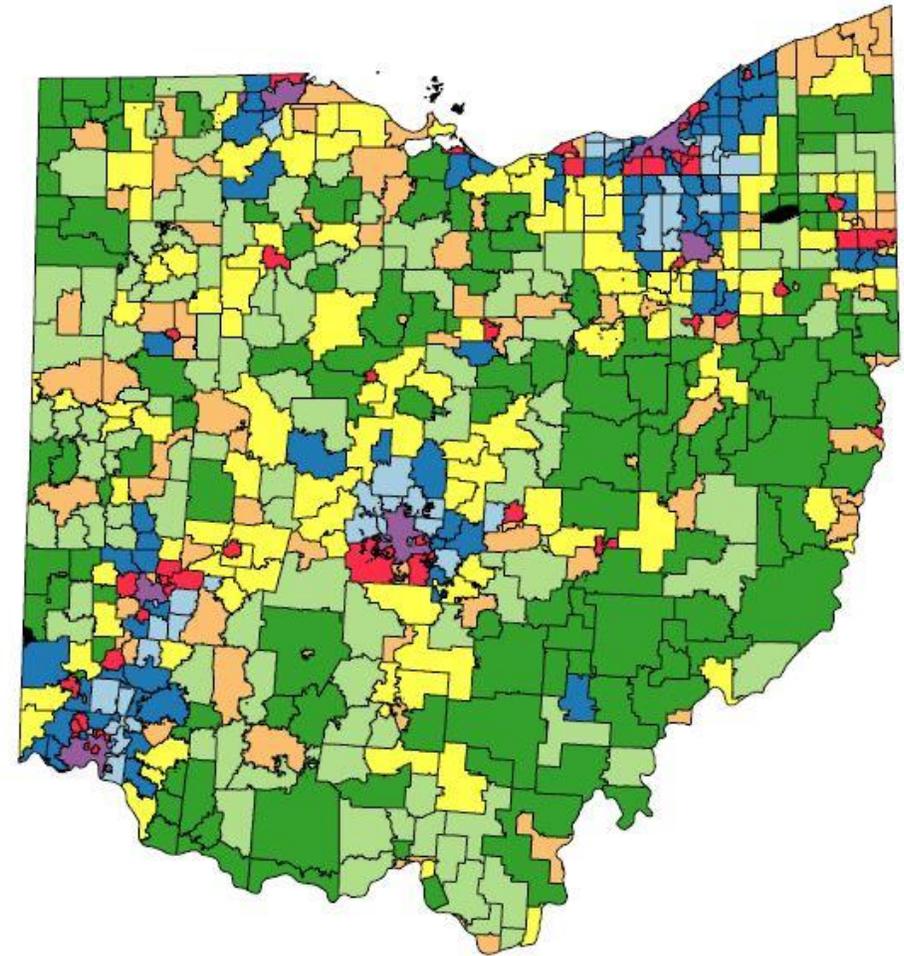
- Significant complexity
 - Interdependent variables
 - Boundaries – More than 600 districts
- Many stakeholders

Methodology

- 3 software platforms (ArcGIS, GPS and RFID) combined into a unique approach
- More than 1,000 lines of code developed to allow cross-platform analysis

Lean Six Sigma

- Fact based, data-driven philosophy
- Optimize processes through elimination of waste
- Pursuit of continuous improvement



- Installed GPS units on 450 buses
- Distributed nearly 35,000 bus rider Radio Frequency Identification Cards (RFID) and captured 2.5 million data points
- Used GPS analysis to monitor idle times and reduce fuel use. Reduced idle times = \$50,831 annual savings
- Developed and launched OSSC Routes & Riders, an online application to facilitate scheduling within and across districts
- Completed route analysis for 25% of consortium districts, resulting in:
 - 5 to 7 reduced routes; projected five-year forecast savings ranging from \$1.4m to \$2.1m
 - Annual savings ranging from \$242,000 to \$376,000
- Remaining district route analysis scheduled to complete in Year 3

Pilot Expansion

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Incremental Expenditure per pupil (133,670)	\$24.80	\$17.89	\$16.51	\$16.51	\$16.51	\$92.21

- Current Pilot
 - 35,000 pupils
 - 450 buses
 - 2,825 sq. mi.; 6% of Ohio
 - 20 districts
 - 1 Board of Developmental Disabilities
 - 4 Educational Service Centers
 - 2 Information Technology Centers

- Expanded Pilot
 - 133,670 pupils
 - 1,328 buses
 - 10,145 sq. mi.; 22% of Ohio
 - 82 districts
 - 22 Boards of Developmental Disabilities
 - 8 Educational Service Centers
 - 4 Information Technology Centers

Pilot Expansion

