#### Data for LGA Formulas

LGA Study Group June 15, 2012

# Any Data Used Should Meet the Following Basic Criteria

- Accurate and consistent
- Available on a regular basis
- Consistent over time
- Measures what you think it measures
- Is useful in meeting the program goals

### Reasons Data is Rejected From a Formula

- Doesn't meet the basic criteria in slide #1
- Other data "explains" more of the variation in need (too many factors)
- Data is highly correlated with data already included in the formula (multicollinearity)
- Data does not show the expected relationship

### Possible Program Goals

- Tax base equalization
- Revenue sharing
- Ensuring the ability to meet basic minimal needs
- Ensuring the ability to provide an average level of service at an average level of effort

## Measures of Ability to Pay/Effort used or Proposed in the Past

- Property tax base (Adjusted net tax capacity)
  - current formula, most proposals
- Property tax rate early LGA formulas
- Income plus exporting approach (Ladd study)

### Current Need Measures in Basic LGA Formula

	Small City Formula	Large City Formula
Pre-1940 housing percentage	X	X
10-year population decline	X	X
Commercial – industrial market value percentage	X	
Population/adjusted population	X	
3-year average accidents per capita		X
Average household size		X
Location in Metro/non- Metro		X

## Other Need Measures in City or County General Aid Formulas

- Jobs per capita jobs aid for cities over 5,000 in LGA formula
- Part I Crime Rate used in county aid
- Average monthly households receiving food stamps – used in county aid
- Population over 65 used in county program aid
- Natural resource tax exempt property PILT payments

### Data Used in Proposed LGA Formulas

Ladd Formula	
Total part I and II crimes	Population
% of housing over 40 years old	Population density per square mile
# of accidents per capita on city roads	# of heating degree days
County cost of living index	# of heating degree days
# of city owned street miles	5-year % population change
Subsidized family housing units per capita	

### Data Used in Proposed LGA Formulas

CORE Study	
Traffic volume on city streets	# of non-resident workers in city
Soil type	% retail sales over expected for city size
Victimization rates by age and sex	% lodging over expected for city size
Population by age and sex	ISO rating (fire safety insurance rating)
% of population in female headed households	Average fire loss over 4 years (adjusted for mean home value)
Value per property type	Regional center
Median built year of housing	Interest rate on general debt

#### Other Variables Considered in 2003 Effort

City Characteristics	Demographics	Income	Housing characteristics
Land area of city	# of households	Household and family income	Vacant housing units
Water area in city	Population by age group	% below poverty levy	Rental housing units
County seat	Decline from peak population	Unemployment rate	Median home value
% of property by type	Education levels	Median earnings	Median rent
Surrounding population and distance to larger cities	Non-English speaking households	% of workers over 16 who work and live in the city	Subsidized housing per capita
Exempt property as % of market value	% Population in group living by type	% of rural and farm households	