The Arts as a Growth Engine?
Evidence from Selected Metropolitan Areas

Charles M. Gray
Professor of Business Economics
Senior Fellow, Center for Nonprofit Management
Economic Impact of the Arts

• Significant element of historic arts advocacy
• Founded on “export base” theory and multipliers
  - $E_t = kE_b$, where $E_t$ is total employment, $E_b$ is export base employment, $k$ is the multiplier
• Fundamental drawbacks
  - Assumes arts sector is part of export base
    - Most evidence contradicts this assumption
  - Even if true, doesn’t justify subsidy
  - Diverts subsidy argument from sounder foundations
• The “zombie justification” that won’t die
Arts and Quality of Life

• Business location decisions
  – Attracting and retaining employees

• Preponderance of evidence suggests otherwise
  – Skilled workforce
  – Access to markets
  – Access to suppliers
  – Infrastructure investments
Endogenous Growth

• Production function includes “artistic capital” $Q=f(K,L,A)$
• Subject to increasing returns, no equilibrium growth path
Creative Communities and Endogenous Growth

• Florida’s work re-invigorated economic impact arguments
  – Florida mentions Romer and “new growth theory” only in passing (*Economist* article)
  – Americans for the Arts embraced concepts

• Uncertain theoretical and empirical support
  Arts as subset of creative sector ⇔ economic growth
Impact Implies Causality

• Export base: $A_b \subset E_b \Rightarrow E_t$
  Arts sector as subset of export base “causes”
  total growth

• Endogenous growth: $A \subset C \Rightarrow Q$
  Arts sector as subset of creative sector
  “causes” growth through productivity
  enhancement
Granger Causality Tests

How much of current $E$ can be explained by past values of $E$? Does adding lagged values of $A$ improve the explanation?

- **Economic base**: shorter term impact (4 lags)
- **Endogenous growth**: longer term impact (8 lags)
Metropolitan Areas

- Atlanta
- Boston
- Chicago
- Cleveland
- Dallas
- Detroit
- Houston
- Los Angeles
- Miami
- Minneapolis-St. Paul
- New York City
- Philadelphia
- St. Louis
- San Francisco
- Seattle
Evidence of Arts-Induced Economic Base Impact

Five of 15 metro areas

- Dallas*
- Houston
- Minneapolis-St. Paul*
- New York City
- Philadelphia

*Appear on both lists
Evidence of Arts-Induced Endogenous Growth

Three of 15 metro areas

- Atlanta
- Dallas*
- Minneapolis-St. Paul*

*Appear on both lists
Evidence that arts respond to growth

**Short-term**
- Atlanta
- Boston
- Chicago
- Cleveland
- Detroit
- Miami

**Long-term**
- Houston
- Chicago
- Los Angeles
- Miami
- New York City
- St. Louis
Where next?

- Additional tests
  - More metro areas
  - Experiment with sector definitions
  - Address lingering data shortcomings
    - Changing metro area definitions
    - Withheld data
  - Better control variables