

Delivering What Users Want: the Evolution of Census Bureau Small Area Data

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This presentation is released to inform interested parties of ongoing research and to encourage discussion. The views expressed on statistical issues are those of the author and not necessarily those of the U.S. Census Bureau.



The Issue

- Users of Small Area Data Heavily Influenced the Creation of the American Community Survey (ACS) to Provide Timely and Reliable Small Area Data
- When Did the Need for Small Area Data Arise? How Has Their Usage Changed?

Outline

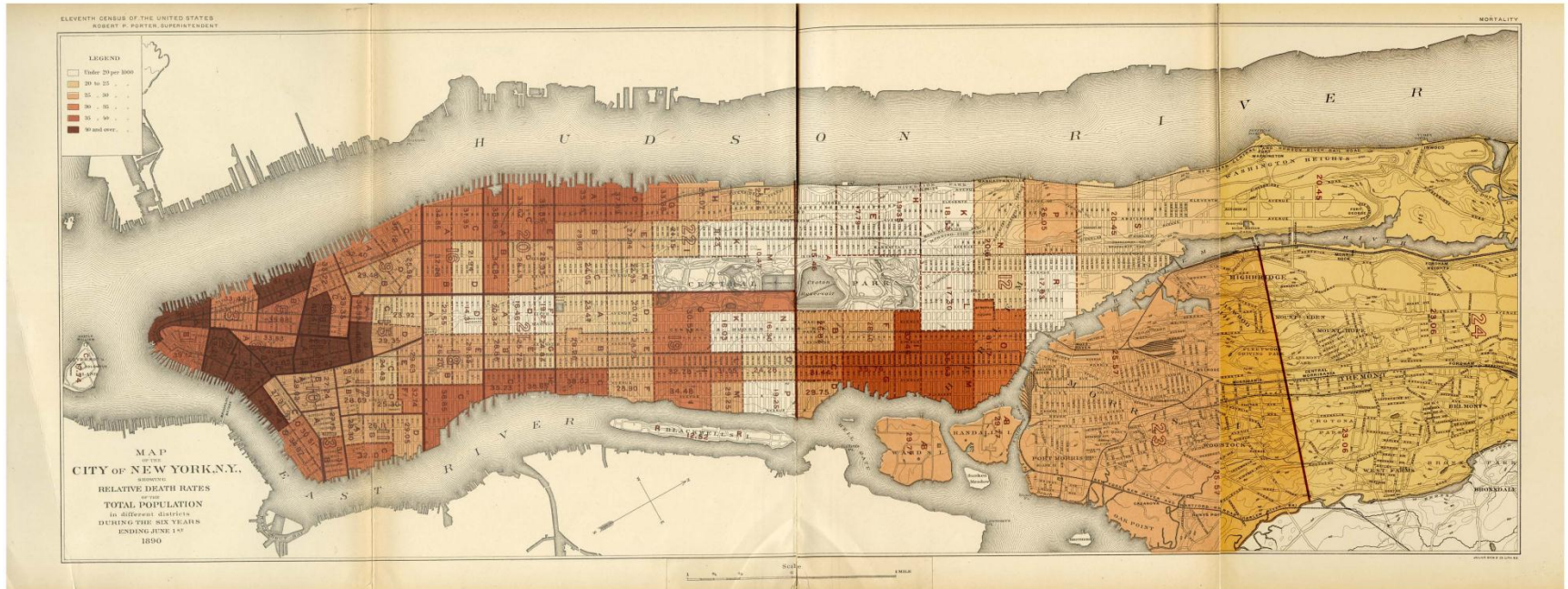
- Early Attempts to Expand Data Products: the 1880 and 1890 Censuses
- Uses of Newly Available Census Tract Data, 1910-1945
- Extension Beyond Large Cities, 1946-1964
- Demands for Data to Document Programs and Empower Communities, 1964-2010
- Small Area Data Users in the Creation of the ACS, 1993-2010



Early Attempts to Expand Data Products: the 1880 and 1890 Censuses

- Pre-1880: Civic Boosterism
- John Shaw Billings and Public Health

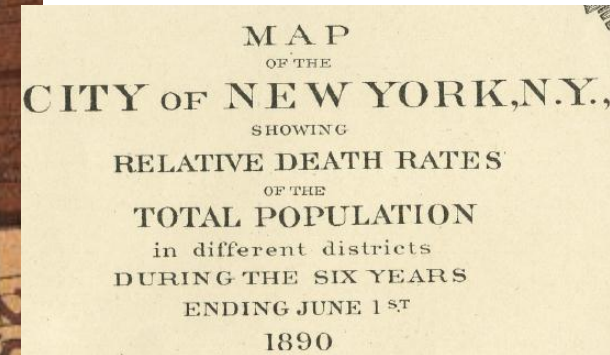
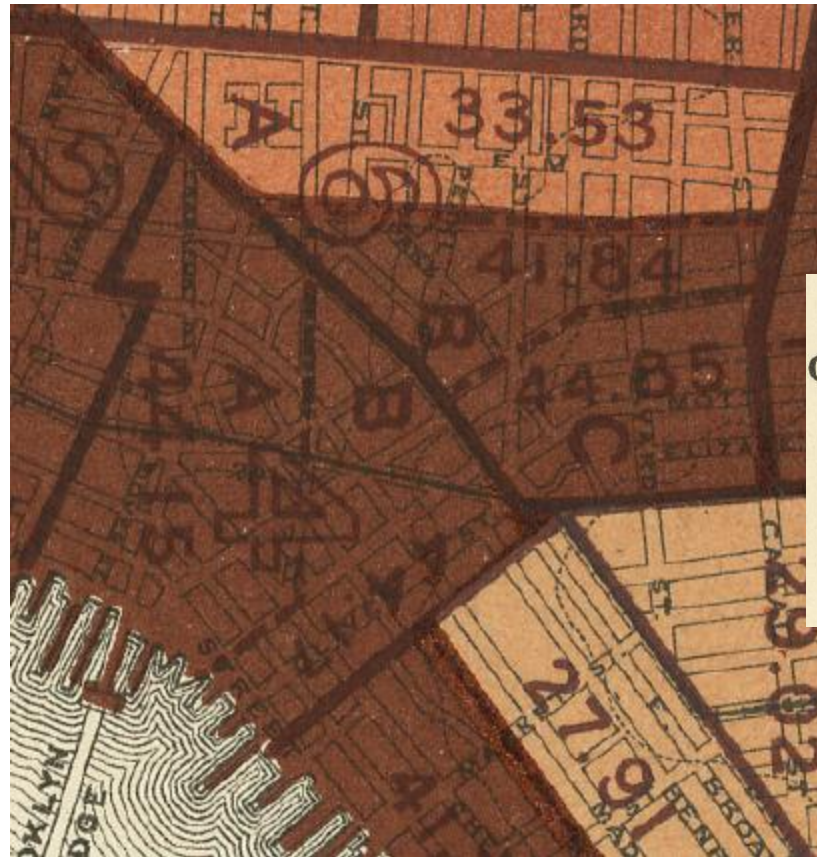
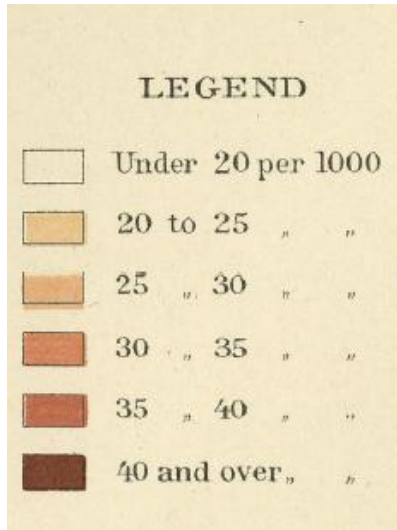
Map of Billings's Sanitary Districts in New York City



Source: John Shaw Billings, *Vital statistics of New York city and Brooklyn: covering a period of six years ending May 31, 1890*, Washington, D.C.: Government Printing Office, 1894, p. 164



Detail of Manhattan from 1894



Source: John Shaw Billings, *Vital statistics of New York city and Brooklyn: covering a period of six years ending May 31, 1890*, Washington, D.C.: Government Printing Office, 1894, p. 164



Uses of Newly Available Census Tract Data, 1910-1945 (Part 1)

- The Problem with Data by Wards

Rev. Dr. Walter Laidlaw

- Invention of the Census Tract
- Request for Block Data



Uses of Newly Available Census Tract Data, 1910-1945 (Part 2)

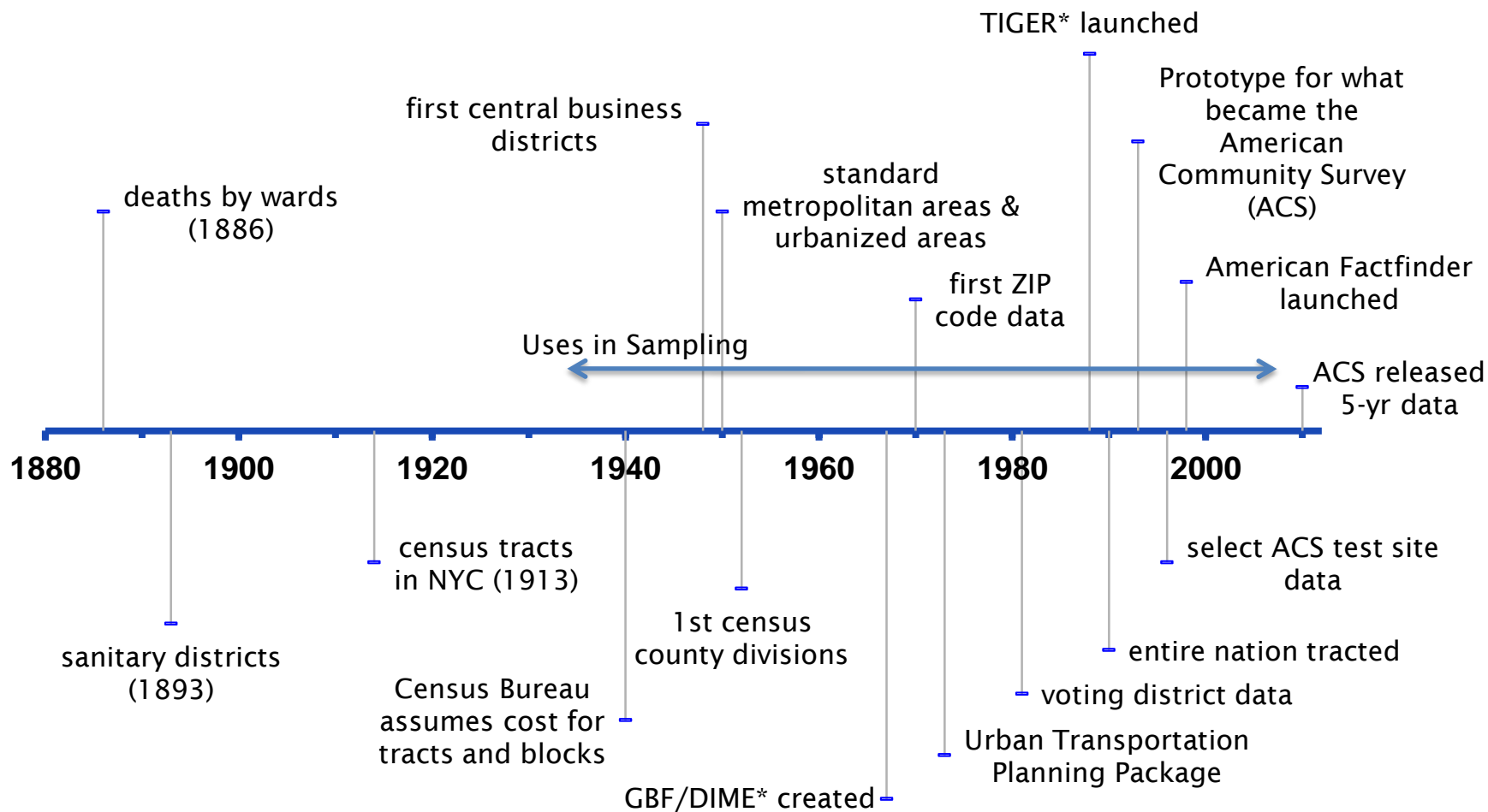
- Howard Whipple Green & Health Agencies in Cleveland
- Green's Outreach
- Expansion of Municipal Services
- Grants in Aid



Uses of Newly Available Census Tract Data, 1910-1945 (Part 3)

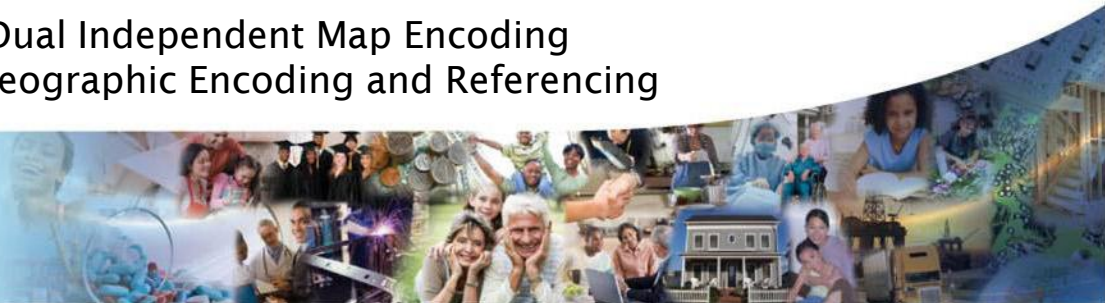
- Business Site Selection
- Marketing Products
- Increasing Business Requests for Block Data

Firsts in Publication of Small Area Data

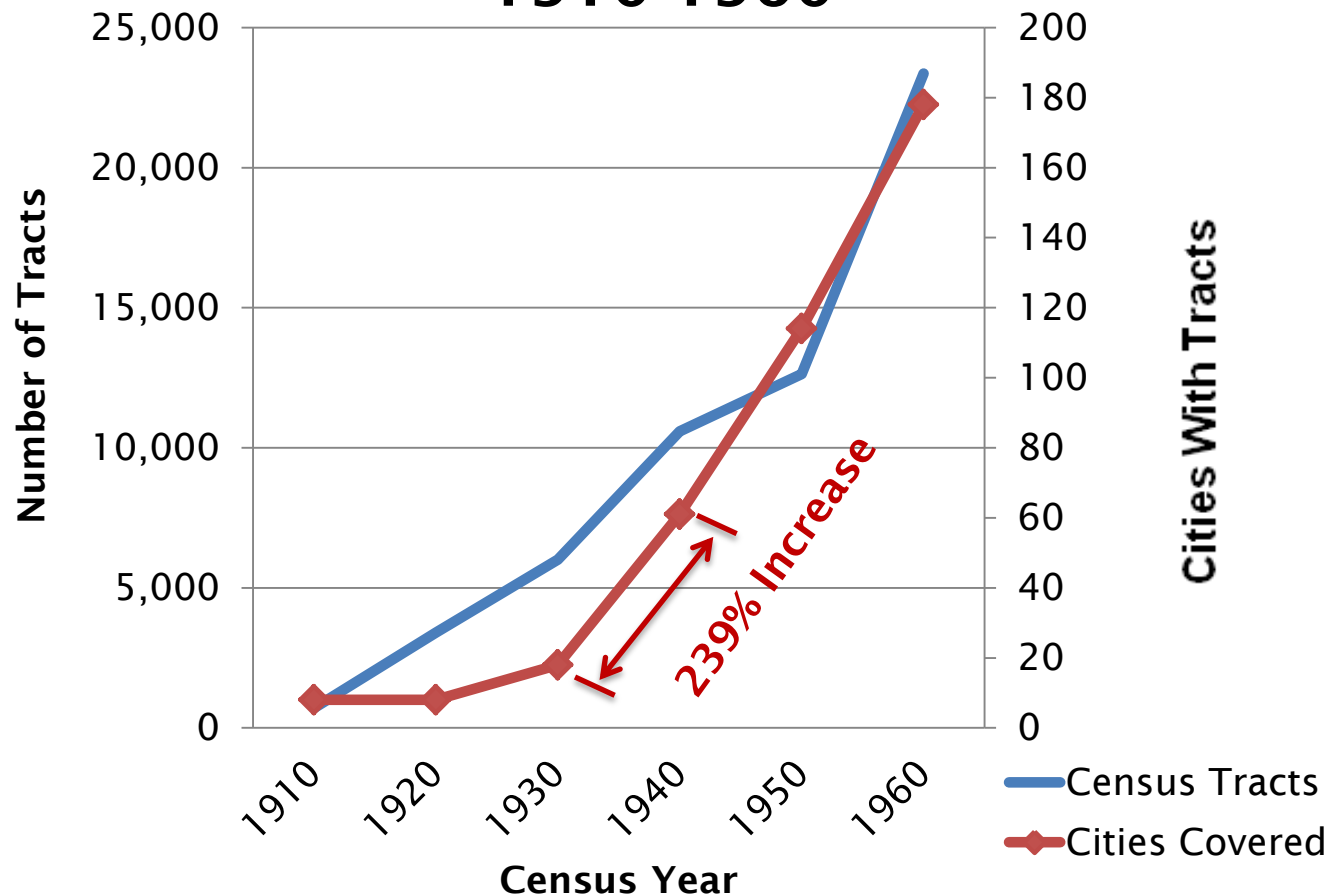


*GBF/DIME is Geographic Base File/Dual Independent Map Encoding

*TIGER is Topologically Integrated Geographic Encoding and Referencing



Growth of Census Tracts, 1910-1960



Source: Swift, "Dr. Laidlaw's Vision," 1956 and U.S. Census Bureau, *Census Tract Manuals*



Extending Beyond Central Cities, 1946-1964

Forces Leading to Demand for Data

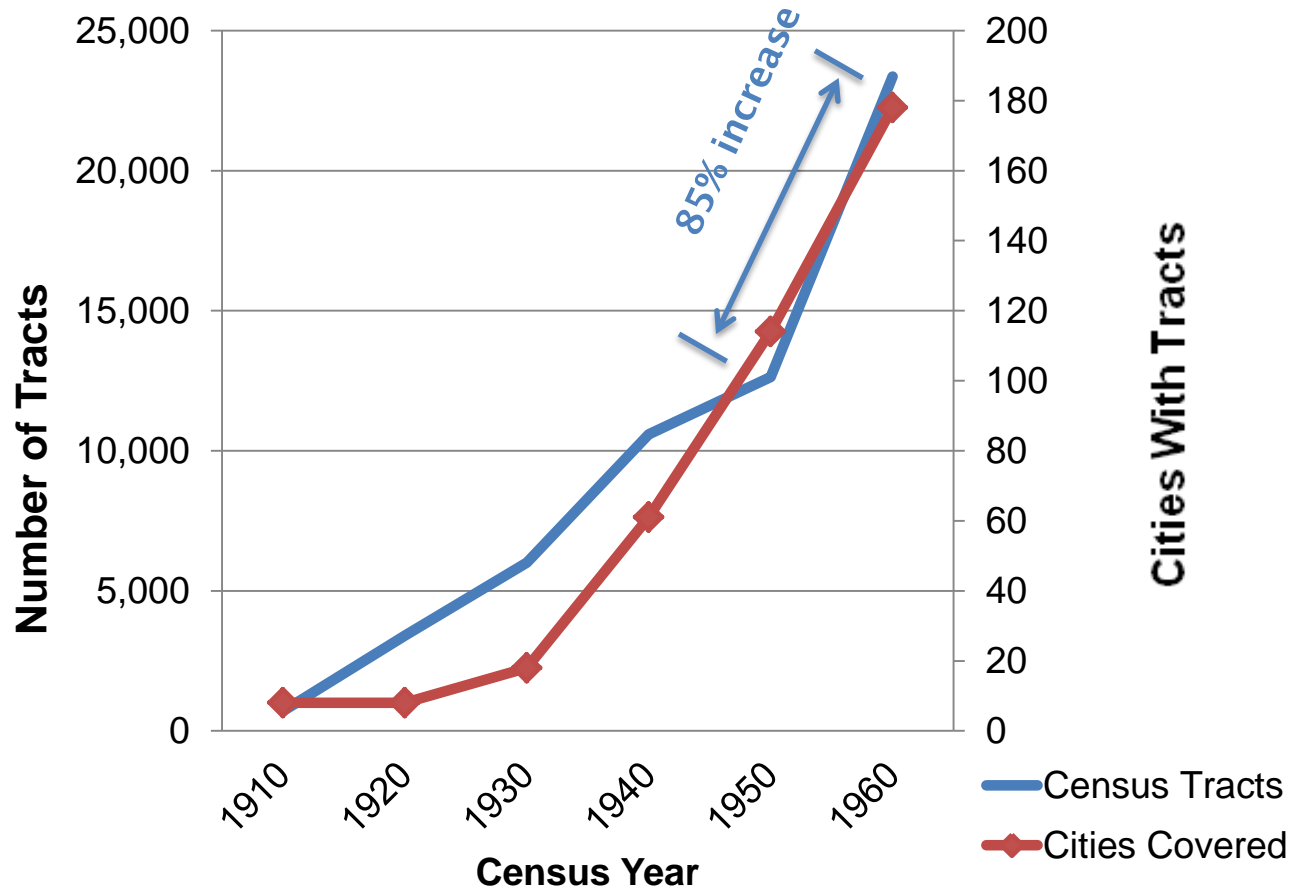
- Suburbanization
- Movement West & South

Census Bureau Responses

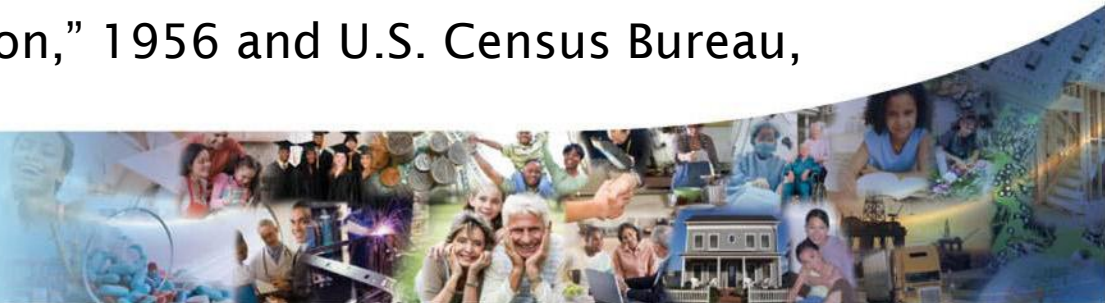
- Standard Metropolitan Areas (SMAs)
- “Tracting” entire SMAs



Growth of Census Tracts, 1910-1960



Source: Swift, "Dr. Laidlaw's Vision," 1956 and U.S. Census Bureau, *Census Tract Manuals*



Pittsburgh's North Side: an area slated for renewal

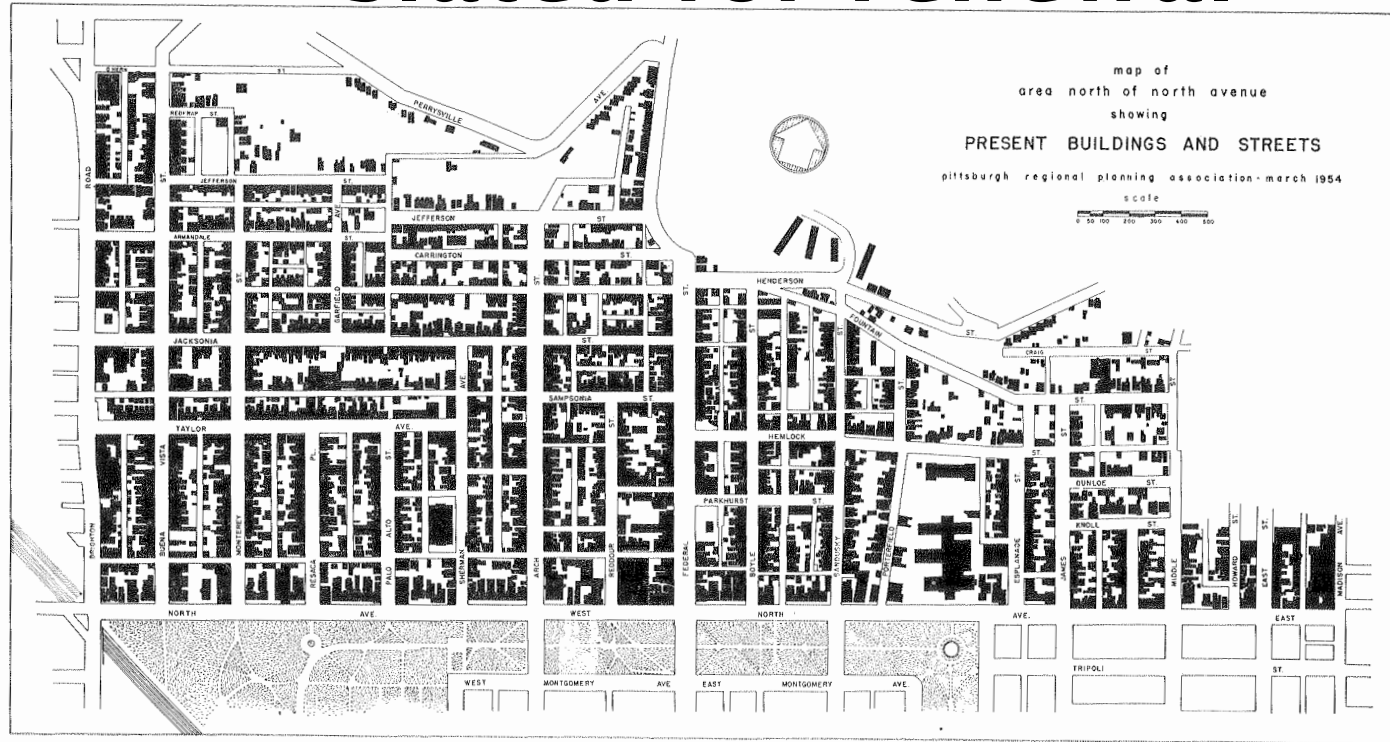


PLATE 25

Source: Pittsburgh Regional Planning Association and the Pittsburgh City Planning Commission, "North Side Study," April 1954, p. 44.



mands for Data to Document Programs and Empower Communities, 1964-1975

- Economic Opportunity Act
- Passage of the Voting Rights Act

mands for Data to Document Programs and Empower Communities, 1964-1975

- New Haven Census Use Study
- ADMATCH & Geographic Base File/Dual Independent Map Encoding



Monitoring Compliance & Use Expands with Access to Computers, 1970-1980 (Part 1)

- Redistricting & Public Law 94-171
- Voting Rights Act



Monitoring Compliance & Use Expands with Access to Computers, 1970-1980 (Part 2)

- Mass Transit and Traffic Analysis Zones (TAZs)
- Marketing & ZIP Code Data



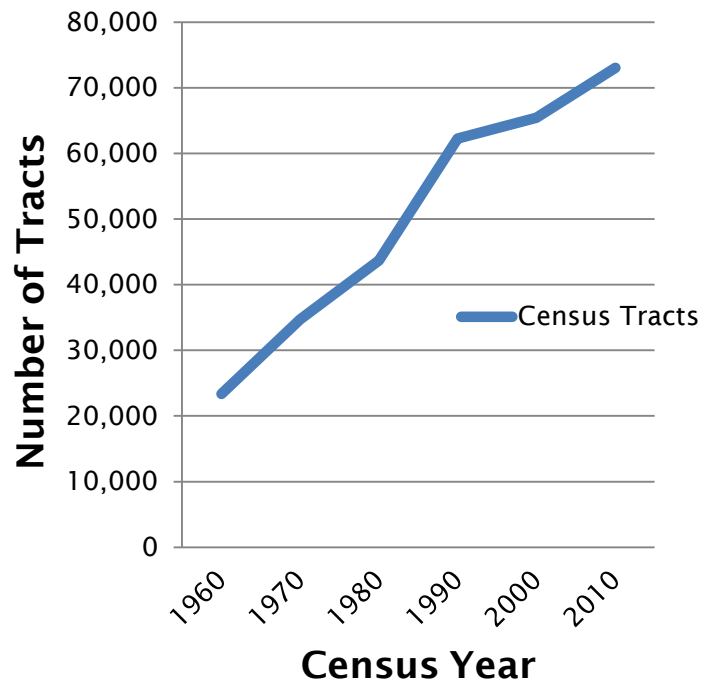
Measuring Effectiveness in the Age of Devolution, 1970-2010

- Revenue Sharing
- Block Grants

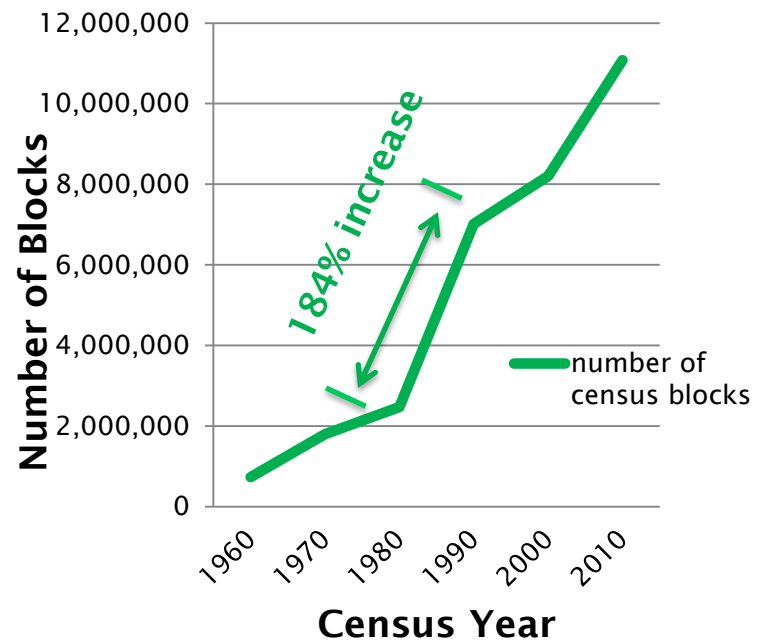


Growth of Small Area Data, 1960-2010

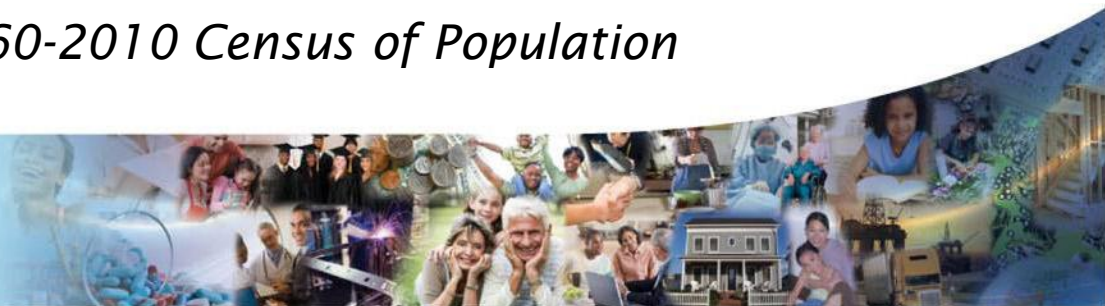
Number of Census Tracts/ BNAs 1960-2010



Number of Census Blocks



Source: U.S. Census Bureau, *1960-2010 Census of Population and Housing Histories*



Accessibility & the Internet

- Demands for Transparency
- Example: the EPA's EJView Website



Creation of the American Community Survey

- Efforts to Simplify the Decennial Census
- Lobbying by Data Users for More Frequent Release of Data
- Prototype 1993, Field Testing 1995-2003



Creation of the American Community Survey

- Prototype 1993
- Field Testing 1995-2003



Creation of the American Community Survey

- Issues Raised in Consultations with Small Area Data Users
- Reliability and Sampling Error
- Timeliness of ACS vs. Non-sampling Error/Bias in Years Old Decennial Data



Creation of the American Community Survey

- Look for the forthcoming, U.S. Census Bureau, *History of the American Community Survey*

For More Information

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Census Bureau History

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