

# Unit 7

## Cities and Urban Land Use

# Define “Urbanism”

- Population
  - Depends on the Location
    - Portugal
    - Ethiopia
    - Norway

# Define “Urbanism”

- Metropolitan Statistical Area
  - Census
  - Central City
    - Immediate Interacting Communities
  - Commuters
  - 50,000

# Define “Urbanism”

- Metropolitan Statistical Area
  - Overlap
    - Raleigh, Durham, Chapel Hill
    - Megalopolis
- Micropolitan Statistical Areas
  - Smaller
  - 10,000 – 50,000

# Define “Urbanism”

- Economic Diversity
  - Multiple Economic Activities
- Cultural Diversity
  - Larger Population
  - More economic activity
  - More Diversity

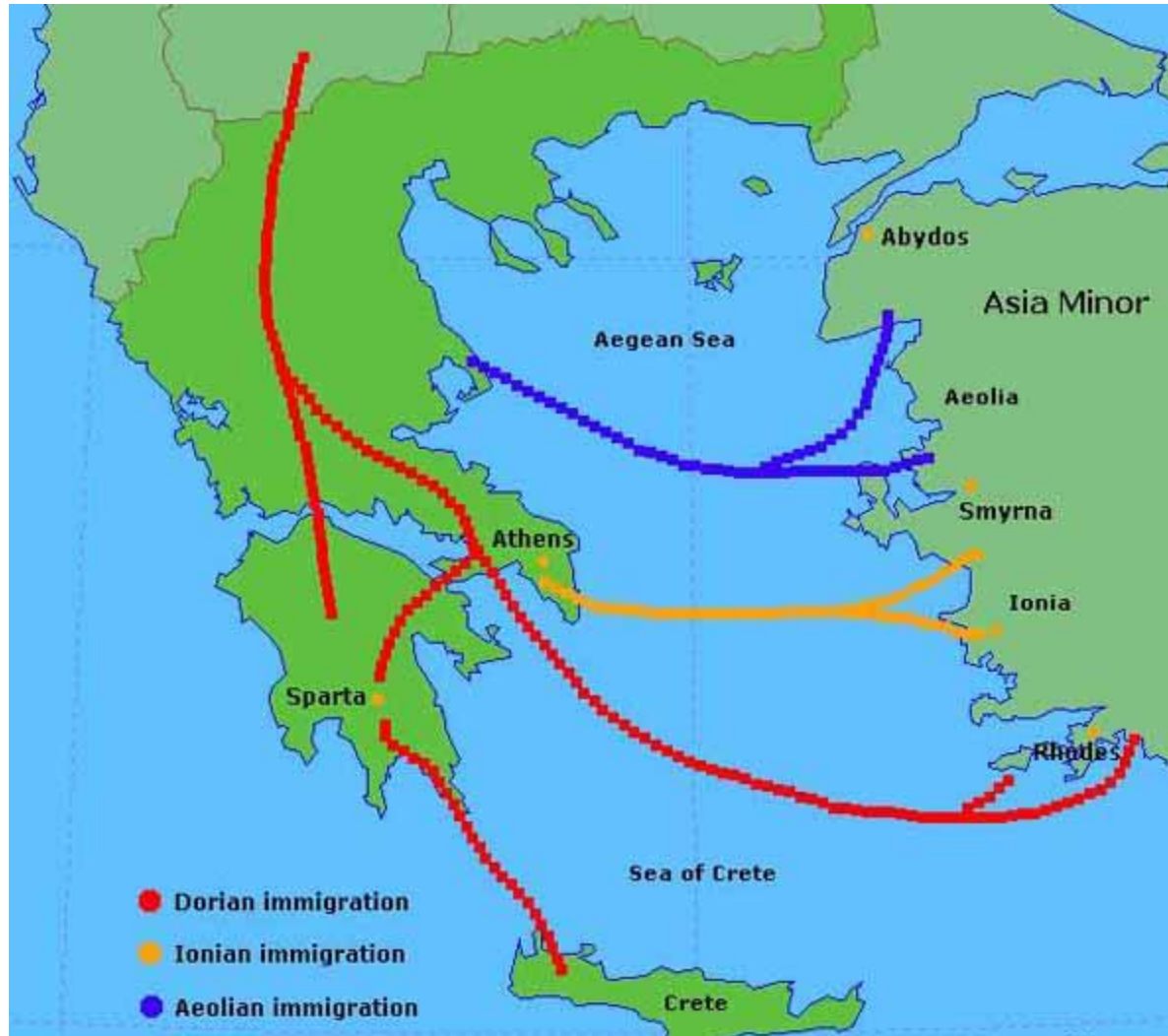
# Origin and Evolution of Cities

- Hearths
  - Agricultural Centers
  - Mesopotamia
  - Indus River
  - Nile River
  - Yellow River
  - Mexico
  - Peru

# Origin and Evolution of Cities

- Hearths
  - Trade Routes
    - Greeks
    - Romans
    - Phoenicians
  - Religious Significance

# Greek City States





# Roman Roads





# Phoenician (Yellow) and Greek (Red) Colonies



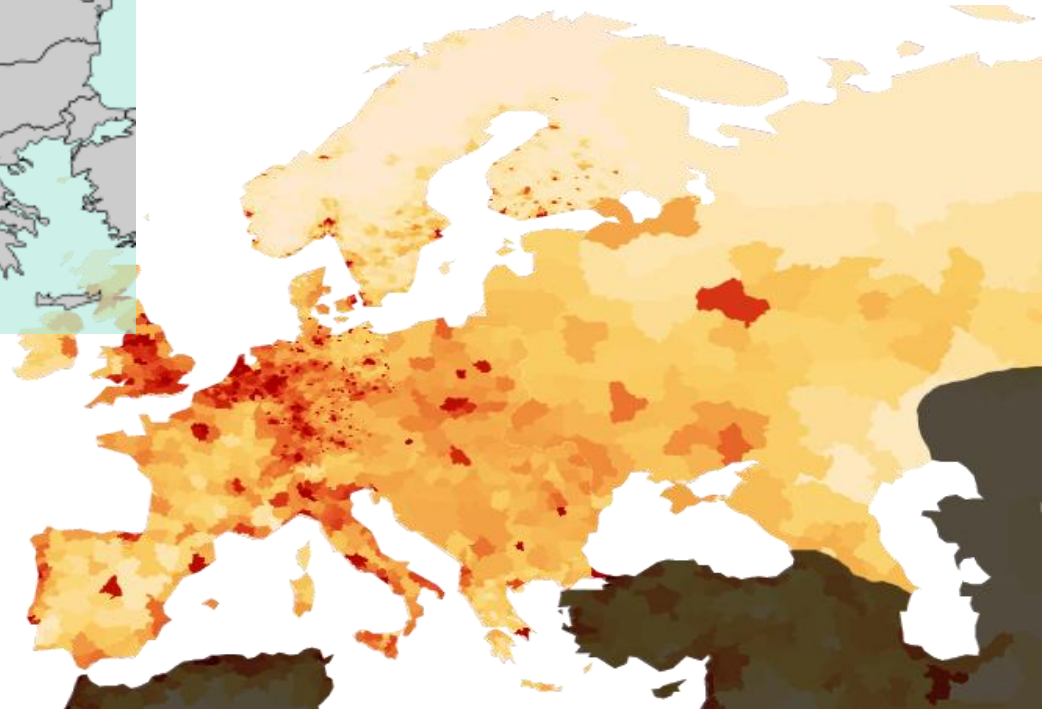
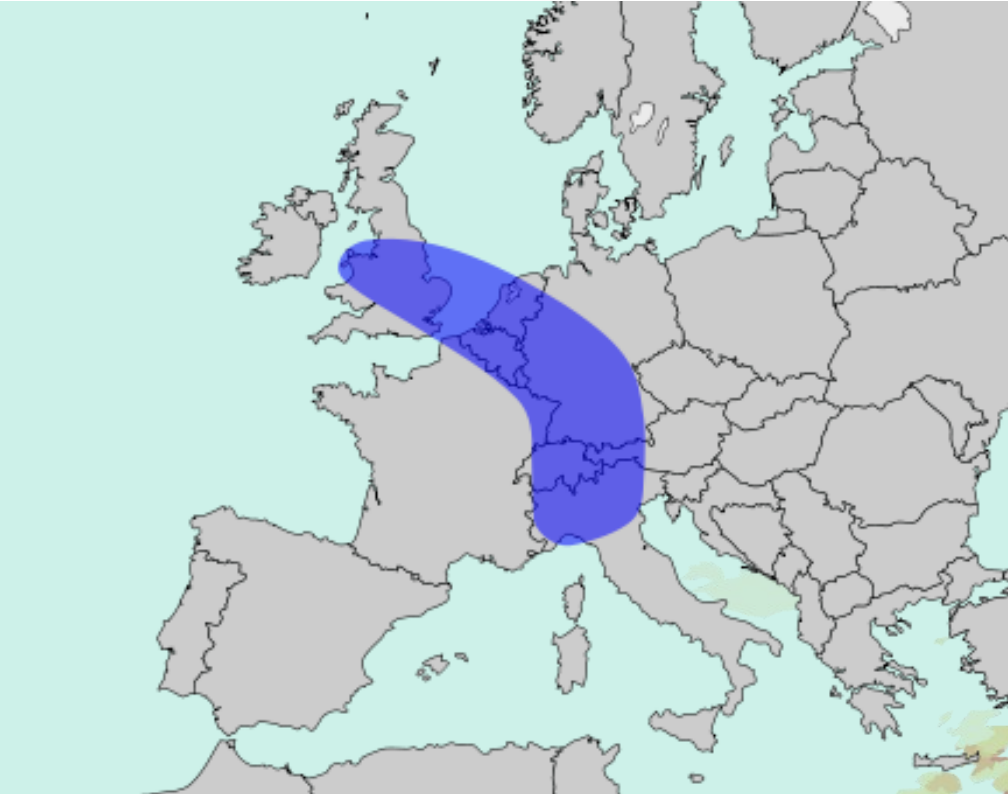
# Origin and Evolution of Cities

- Preindustrial
  - Surrounded by agriculture
  - Exchange goods and services
  - Trading Centers
  - Declined with Roman Empire

# Origin and Evolution of Cities

- Preindustrial
  - Age of Exploration / Mercantilism
  - Old and New World
- 1500
  - Urban Banana
  - London to Tokyo

# Europe's Blue Banana



# Origin and Evolution of Cities

- Pre Industrial
  - Cities of power
  - Political, Economic, Etc
  - Commercial / Residential
    - Upper and Lower
    - Rich = City Center
    - Poor = City Rim

# Industrialization and City Structure

- Urban vs Rural
- 1800
  - 5%
- 1950
  - 16%
- 2000
  - 50%

# Industrialization and City Structure

- MDC vs LDC
  - MDC = more urban
  - USA
    - 80%
  - Africa
    - 35%



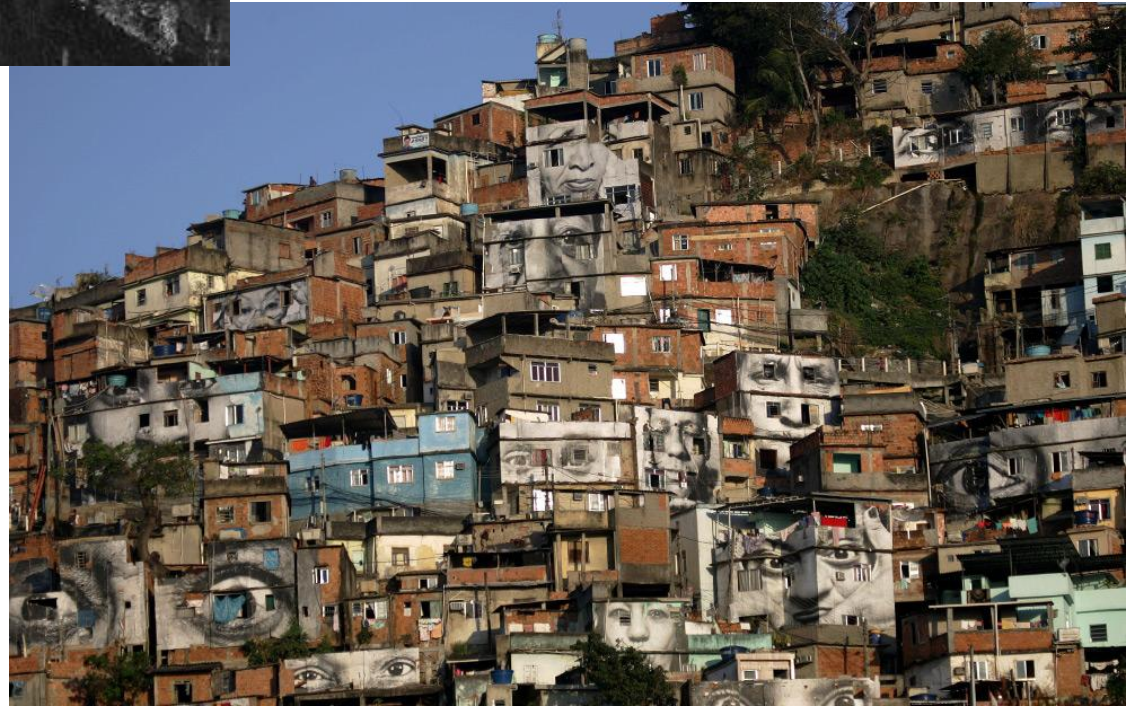
# Industrialization and City Structure

- Industrialization = Urbanization
  - Jobs
- Shock Cities
  - Rapid Urbanization
  - Manchester, England
    - 80,000 (1750) -> 500,000 (1850)
  - Chicago
    - 4,000 (1835) -> 1,500,000 (1900)



Manchester, England

Rio de Janeiro, Brazil



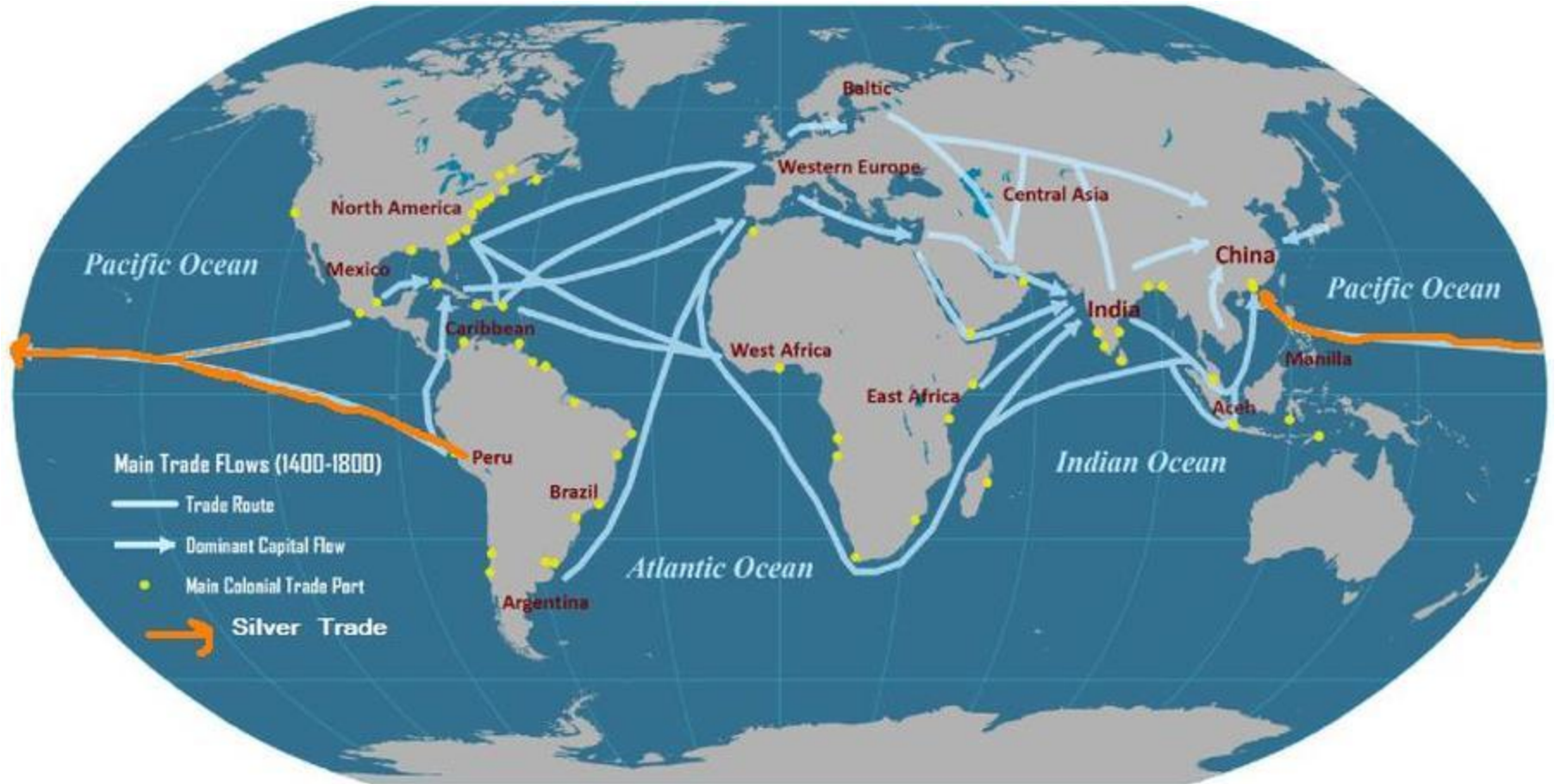
# Industrialization and City Structure

- Problems
  - Slums
  - Housing
  - Pollution
  - Fire Hazards
  - Children

# Industrialization and City Structure

- City Trends
  - Pre 1700
    - Land Based Trade Centers
  - Post 1700
    - Sea Based Trade Centers
  - Early 1900s
    - Industrial Centers

# European Colonial Port Cities





# Political Map of the World, September 2008

AUSTRALIA Independent state  
Bermuda Dependency or area of special sovereignty  
Italy / AZORES Island / island group  
★ Capital

Scale: 1:115,000,000  
Robinson Projection  
standard parallels 34°N and 34°S



**Antarctica**

Twenty-one of 28 Antarctic territories have made no claim to Antarctic territory although some assert claims. Some claim to be part of other countries. The map shows the status of the territories.

September 2008

Robinson projection by William Robinson

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# Industrialization and City Structure

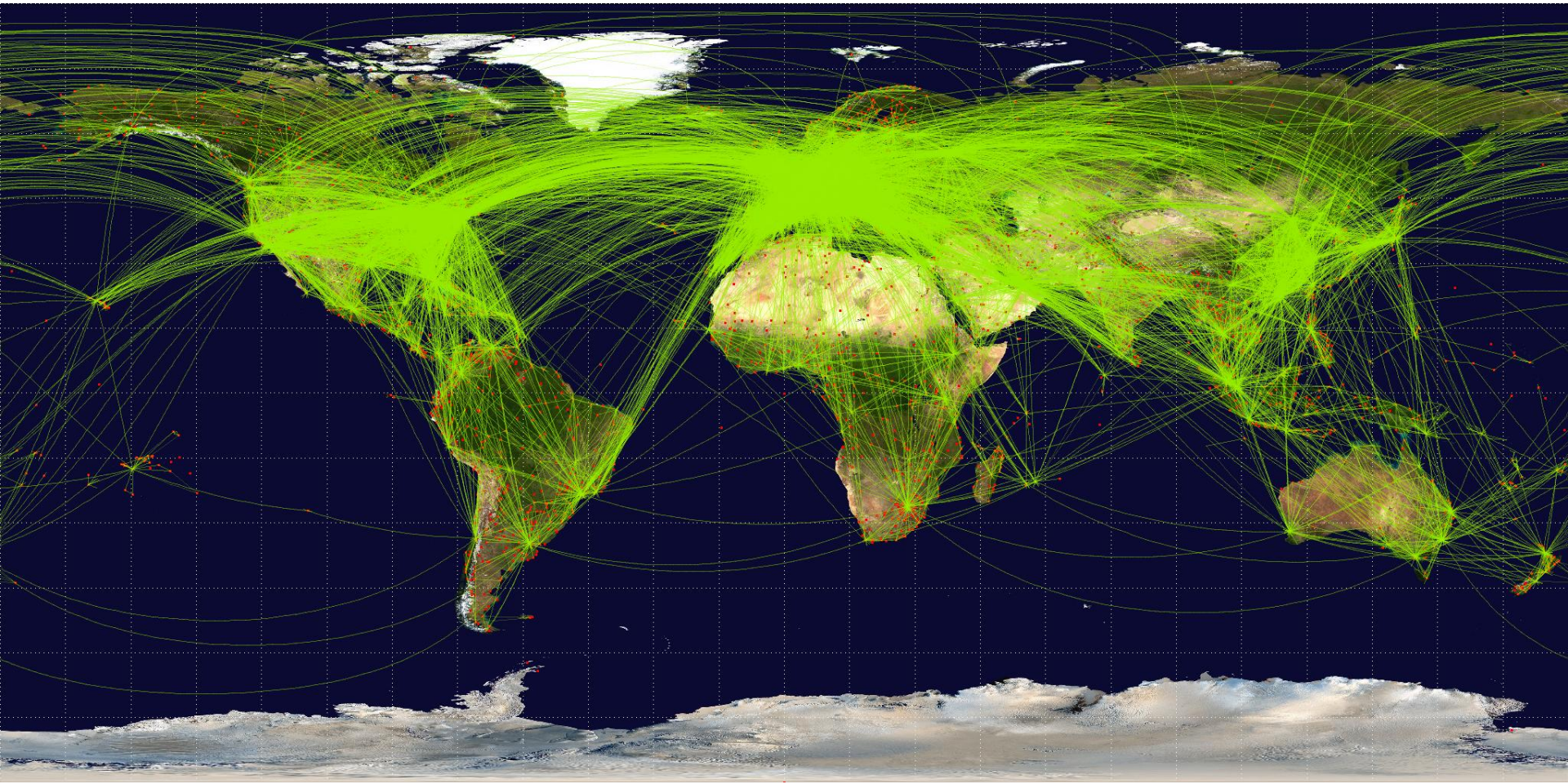
- Industrial Centers
  - No political connection
  - Located many places
  - Create / Distribute Products

# Urban Systems

- Connectedness of cities
  - Economics
  - Transportation
  - Population
  - Culture
  - Information



# Global Flight Patterns



# Urban Systems

- 3 Scales
  - Global
    - New York, London, Tokyo
  - Regional
    - New York, Chicago, Los Angeles
  - Local
    - Atlanta, Macon, Birmingham, Greenville, Charolette

# Urban System

- Why they develop?
  - What is their impact?
- Central Place Model
  - Christaller
  - Patterns of Urban Land Use
  - Ideal world
    - All things equal

# Urban System

- Central Place Model
  - 4 Main Points
  - Urban centers
    - Provide Services
    - Hinterland
  - Threshold
    - Minimum Number
    - More unique, higher threshold

# Urban System

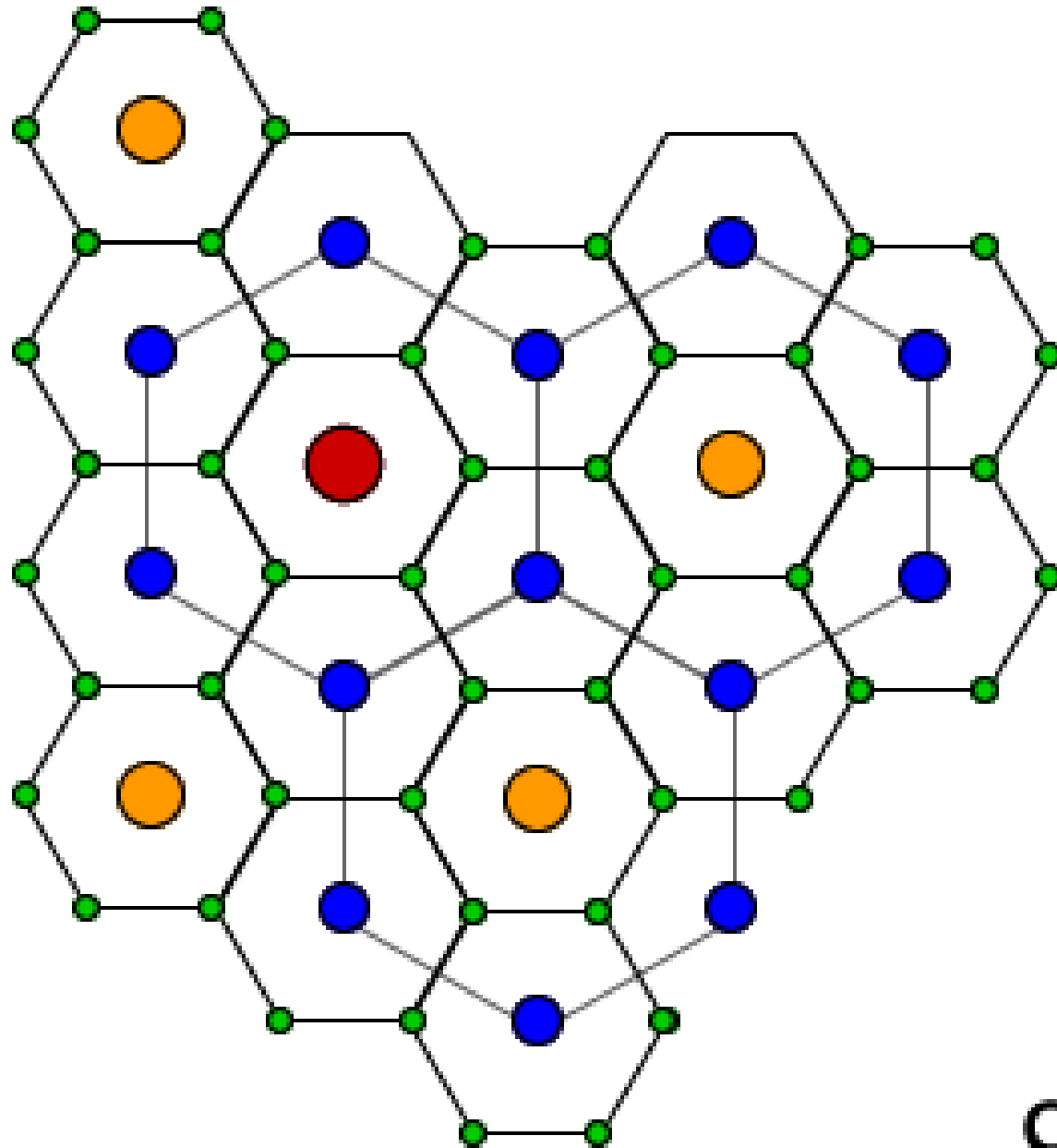
- Central Place
  - Range of Goods and Services
    - Maximum Distance
    - The further, the greater the range
  - Spatial Competition
    - Compete for Customers

# Urban System

- Christaller's Model
  - Economic functions dictate location
  - Central Place
    - High Population
    - High Threshold
    - High Range
    - Serve those around

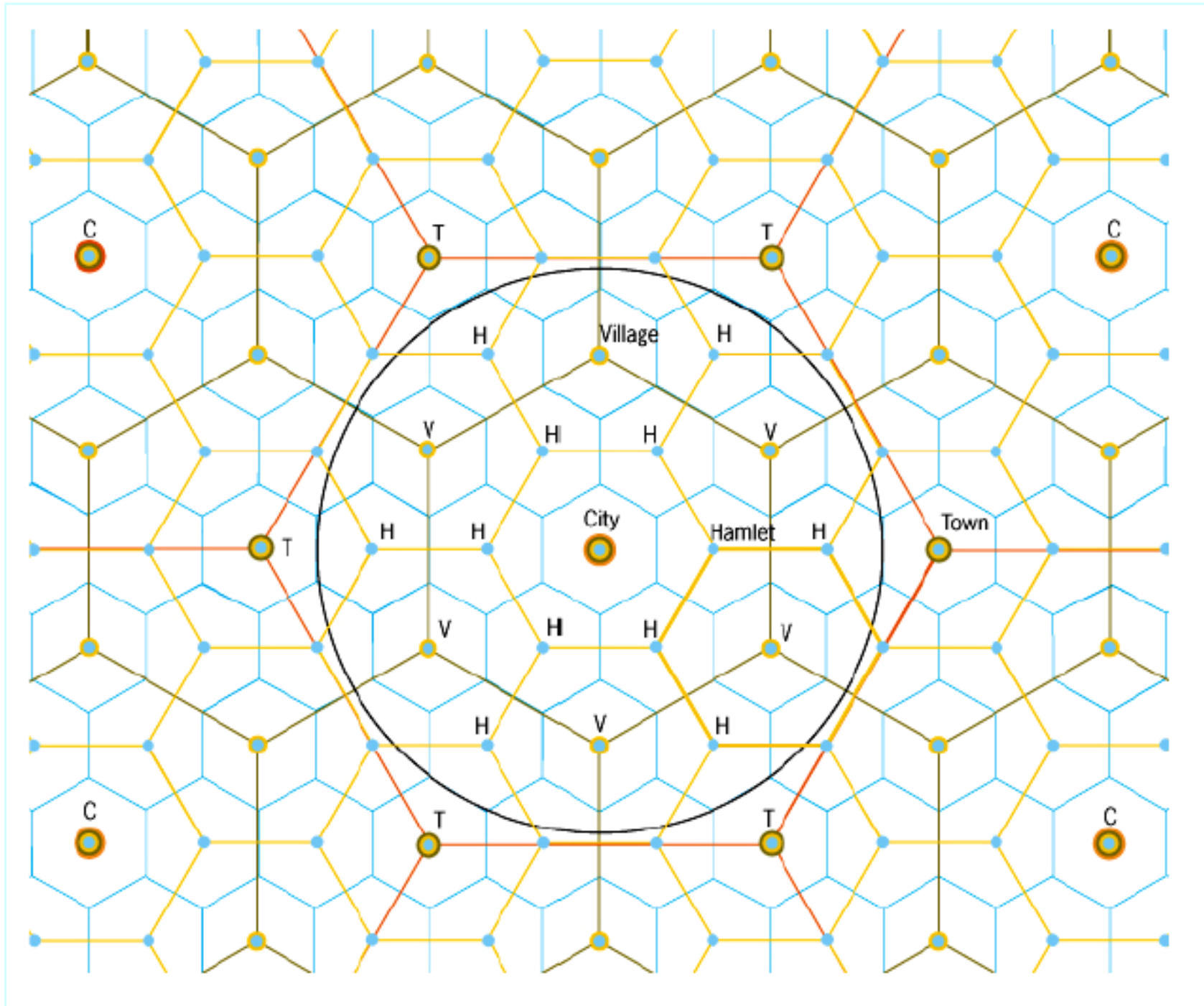
# Urban Systems

- Christaller's Model
  - Hexagon



**Central Place Theory**





# Urban Systems

- Central Place Theory
  - Urban Hierarchy
  - Determined by economic functions
  - Higher Range
  - Higher Threshold

# Urban Systems

- Central Place Theory
  - Rank-Size Rule
    - Population Size and Hierarchy
    - Population =  $1/\text{Rank}$
  - US
    - Not older Countries
    - Primate Cities

# Urban Systems

- World Cities
  - Global Cities
- World Economic, Political, Cultural Power
  - 1600 = London, Lisbon, Amsterdam
  - 1700 = Paris, Rome
  - Present = New York, Amsterdam, Milan
- Pararegional Influence

# Urban Systems

- Mega Cities
  - Step Down
  - Not global / But @ home
  - 10 million +
  - A connector
  - Beijing, Cairo, Jakarta, Mexico City

# Urban Systems

- Rate and Level
- Rate
  - Speed
- Level
  - Percentage
- LDC vs MDC

# Urban Systems

- In the future.....
  - MDC cities
  - LDC cities
- Why?
  - MDCs
  - LDCs
- Problems caused by rapid urbanization

# Models of Urban Systems

- Borchert's Model
  - Study of US cities
  - 4 categories
    - Transportation
- Stage 1
  - Sail Wagon Era
- Stage 2
  - Iron Horse Cities



# Boston Harbor



# Chicago



# Models of Urban Systems

- Borchert's Model
- Stage 3
  - Steel Rail
- Stage 4
  - Car and Plane
- Summary
  - Importance of cities



# Pittsburgh



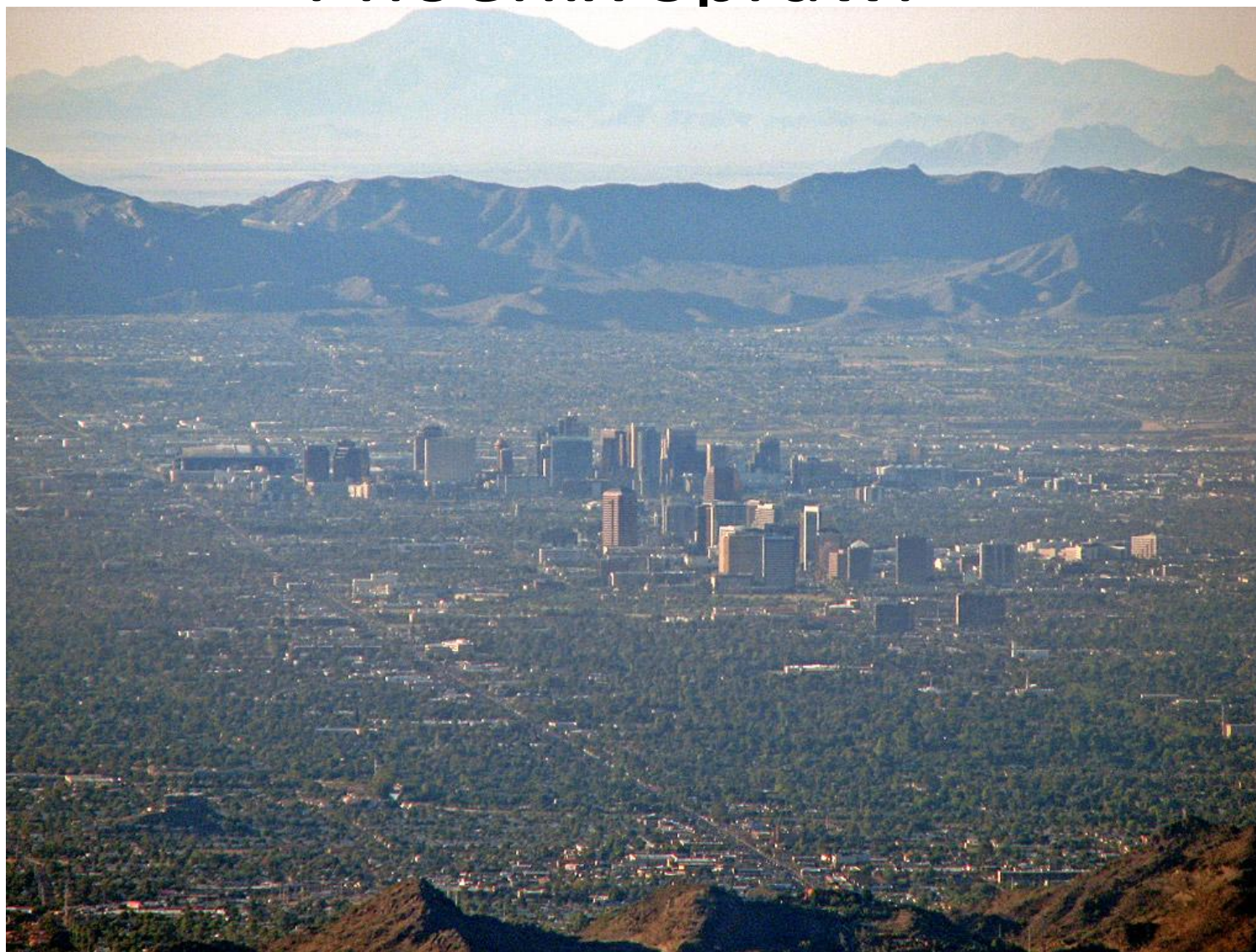


# LA Sprawl





# Phoenix Sprawl



# Functional Characteristics of Contemporary Cities

- Basic vs Nonbasic Jobs
- Employment Sectors
  - Types of people and jobs that can be found
- Basic
  - Gives city its function
  - Ex: Flint, Michigan

# Functional Characteristics of Contemporary Cities

- Nonbasic
  - Supports infrastructure
  - Teachers, firemen, dry cleaner
- Correlation
  - Larger the city....
- Basic sector defines the city



# Functional Characteristics of Contemporary Cities

- Exploit basic jobs
  - Create more nonbasic
  - Multiplier effect

# Functional Characteristics of Contemporary Cities

- Agglomeration
  - Business is industry leader
  - Becomes growth pole
  - Pull off of good reputation

# Functional Characteristics of Contemporary Cities

- Chapel Hill, NC
  - Medical Research
  - Growth Pole
  - Agglomeration
  - Nonbasic jobs
  - Infrastructure Problems
  - Backwash Effect

# Functional Characteristics of Contemporary Cities

- Employment Mix
  - Basic jobs sectors changing
  - America
    - Industry / Manufacturing
    - Service / Professional
  - Post Industrial Cities
    - Centers of Consumption

# Functional Characteristics of Contemporary Cities

- Post Industrial Architecture
- Cities moving backward
  - Centers of trade
  - Outside of cities

# Functional Characteristics of Contemporary Cities

- Decline of industrial jobs
  - Loss of jobs

# Comparative Models of Urban Systems

- CBD
  - Core of the city
  - Nucleus
- Concentric Zone Model
  - First model
  - Chicago
  - Series of rings
    - Remember von Thunen

# Comparative Models of Urban Systems

- Concentric Zone Model
- Rings added
  - City expands
  - New functions
  - Assumes invasion and succession / succession migration
    - Zone in transition / Skid Row
    - Constant Transition

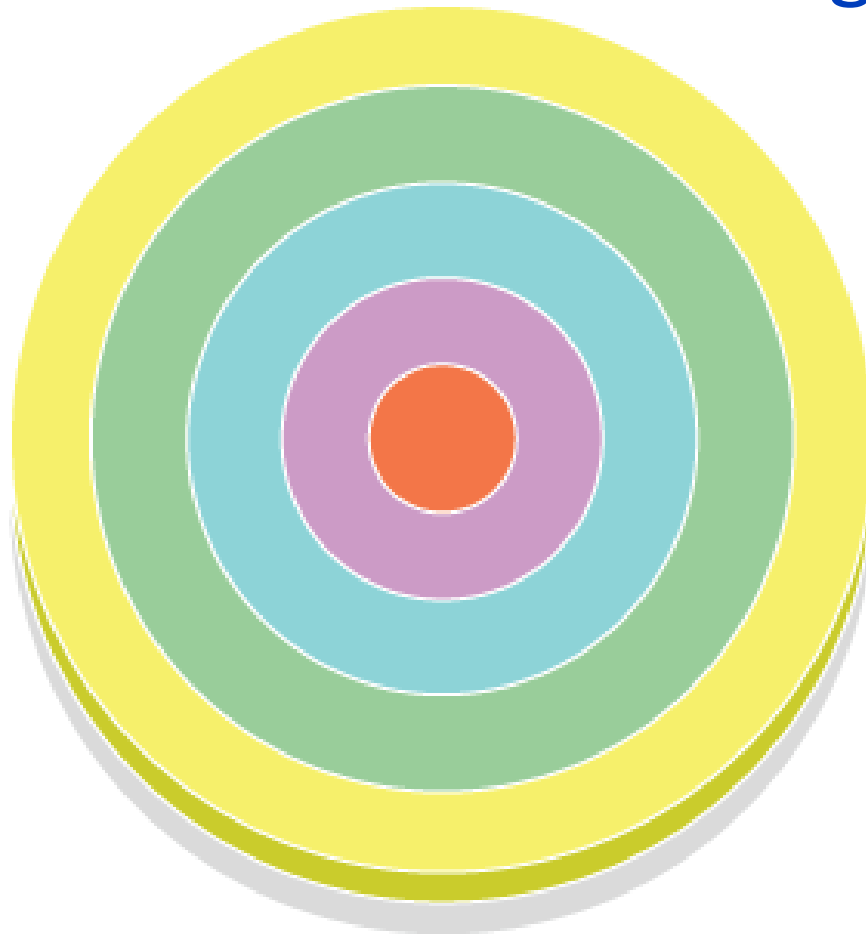


# Comparative Models of Urban Systems

- Concentric Zone Model
- CBD = Down Town
  - Maximum Accessibility / Visibility
  - Peak land value intersection
    - Highest real estate / Competition for Land area
  - Land value decreases
    - Bid-Rent Curve
      - Land price / population density decline

# Concentric Zone Model

## Ernest Burgess



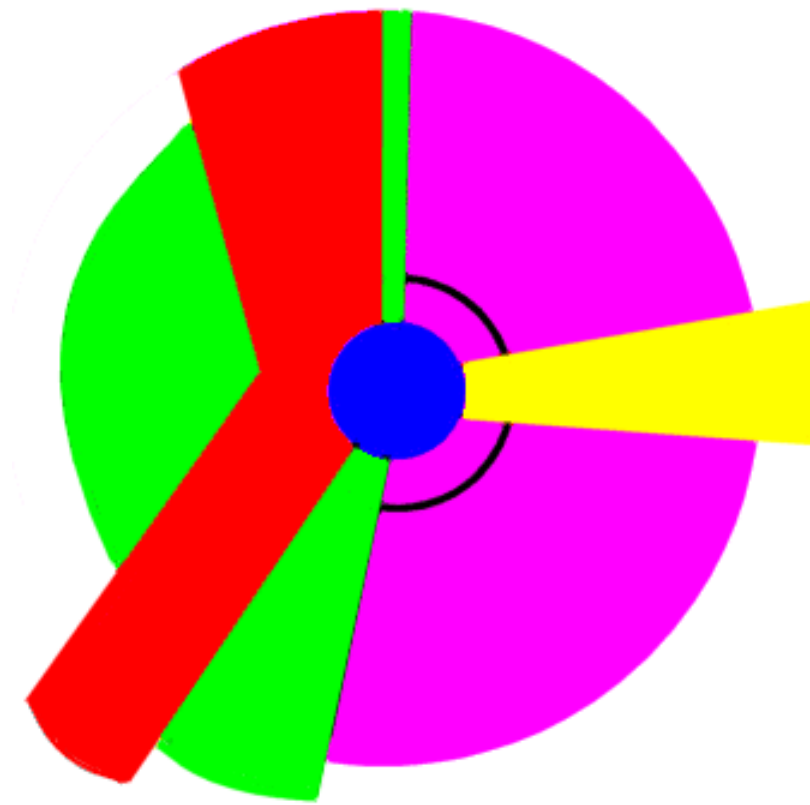
- Central Business District (CBD)
- Factories / Industry
- Working class housing
- Middle class housing
- Commuter zone

# Comparative Models of Urban Systems



- Sector Model
  - A response to the Concentric Zones Model
  - Zones do not develop as rings
  - Transportation routes
  - Strong, Central CBD

# The Hoyt Model

## Sector Model



### The Hoyt Model

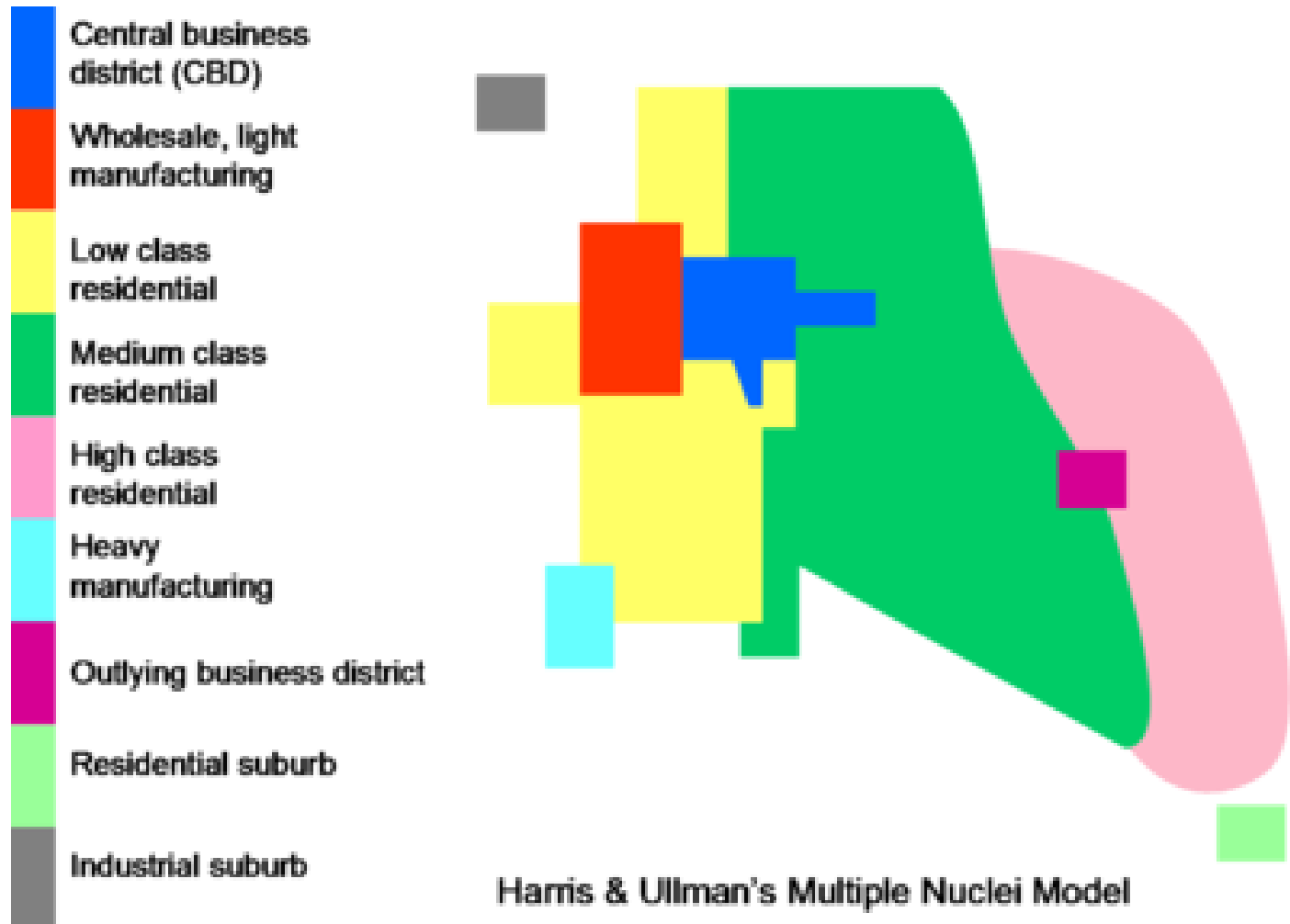
-  **CBD**
-  **Factories / Industry** (transitional)
-  **Low Class Residential** (old inner city area)
-  **Medium Class Residential** (inter-war period)
-  **High Class Residential** (modern suburbs)

# Comparative Models of Urban Systems

- Multiple Nuclei Model
  - No strong CBD
  - Strong focal points
    - Airports, Universities, Highway intersections, ports
  - Sectors are loosely dependent

# Multiple Nuclei Model

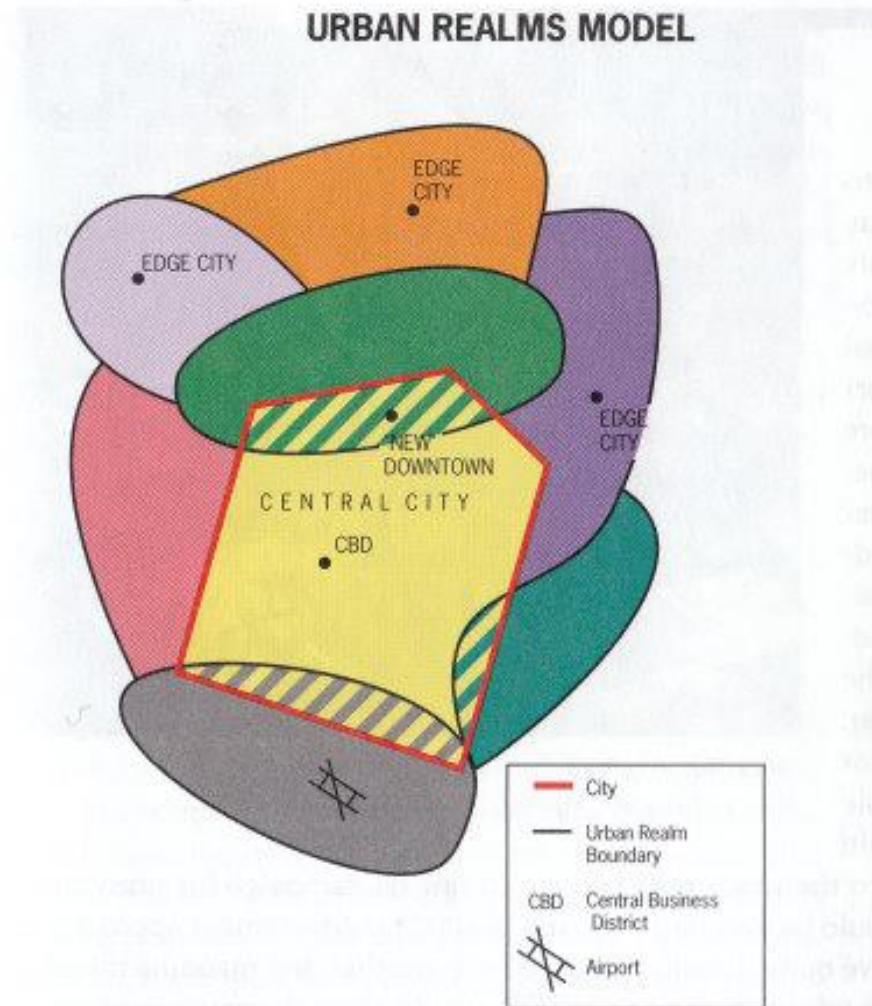
## Harris & Ullman



# Comparative Models of Urban Systems

- Urban Realms Model
  - Automobile
  - Suburban Regions
  - Live outside major metropolitan areas
    - Independent
  - Show effects of counter-urbanization
    - Transportation / Communication
    - Work related activities

# Urban Realms

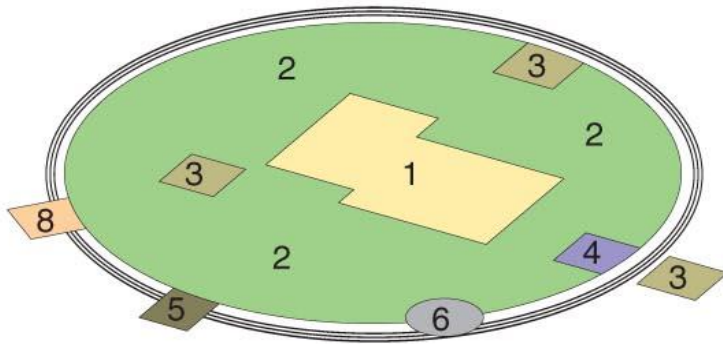


**Figure 9.23**

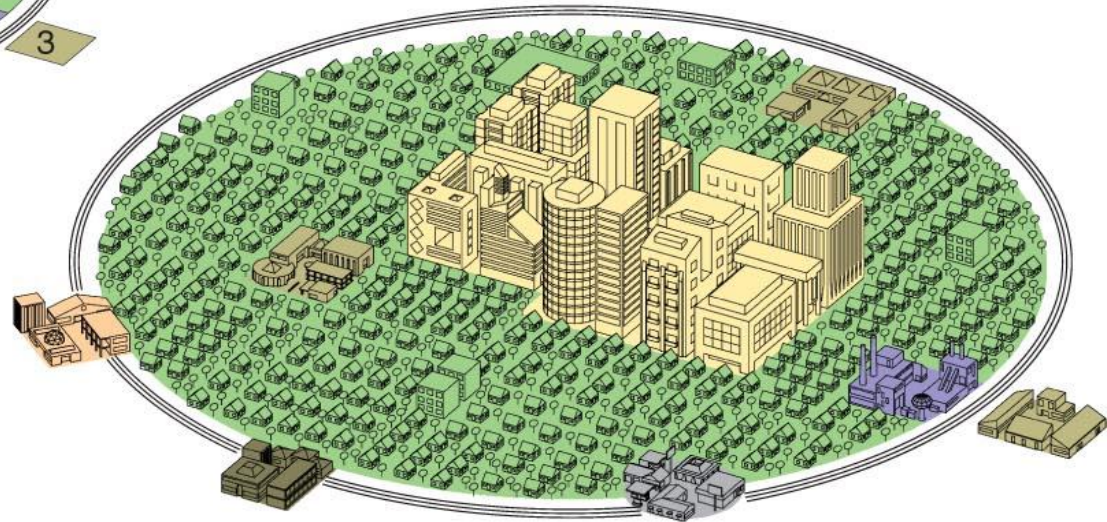
**Urban Realms Model.** The Urban Realms Model includes a central business district, central city, new downtown, and suburban downtown. *Adapted with permission from: T. Hartshorn and P. O. Muller, "Suburban Downtowns and the Transformation of Metropolitan Atlanta's Business Landscape," *Urban Geography* 10 (1989), p. 375.*



# Peripheral Model



1. Central City
2. Suburban Residential Area
3. Shopping Mall
4. Industrial District
5. Office Park
6. Service Center
7. Airport Complex
8. Combined Employment & Shopping Center



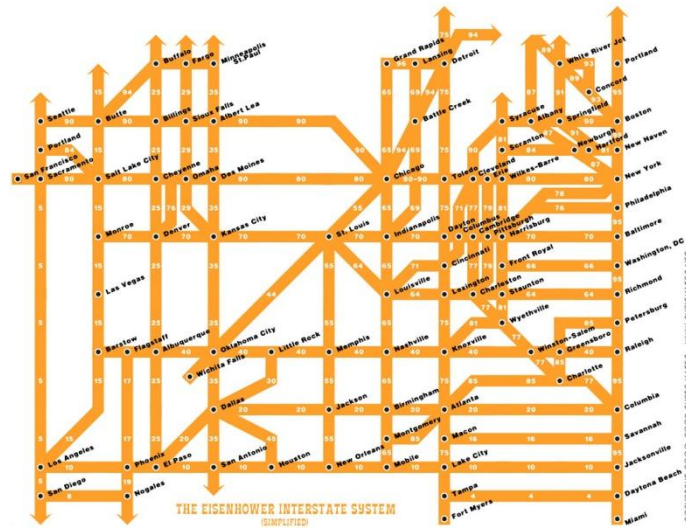
# Transportation and Urban Infrastructure

- Initially
  - Close together
- Transportation improves
  - Spread out
- Mode of transportation
  - Types of business

# Transportation and Urban Infrastructure

- National Defense Highways Act
  - 1950
  - Interstate Highways
  - Beltways
  - New Nuclei

# Interstate HWY System



# Urban Sprawl / Edge City

- Cities outside
- Greater Metro Area

# Metro-Atlanta

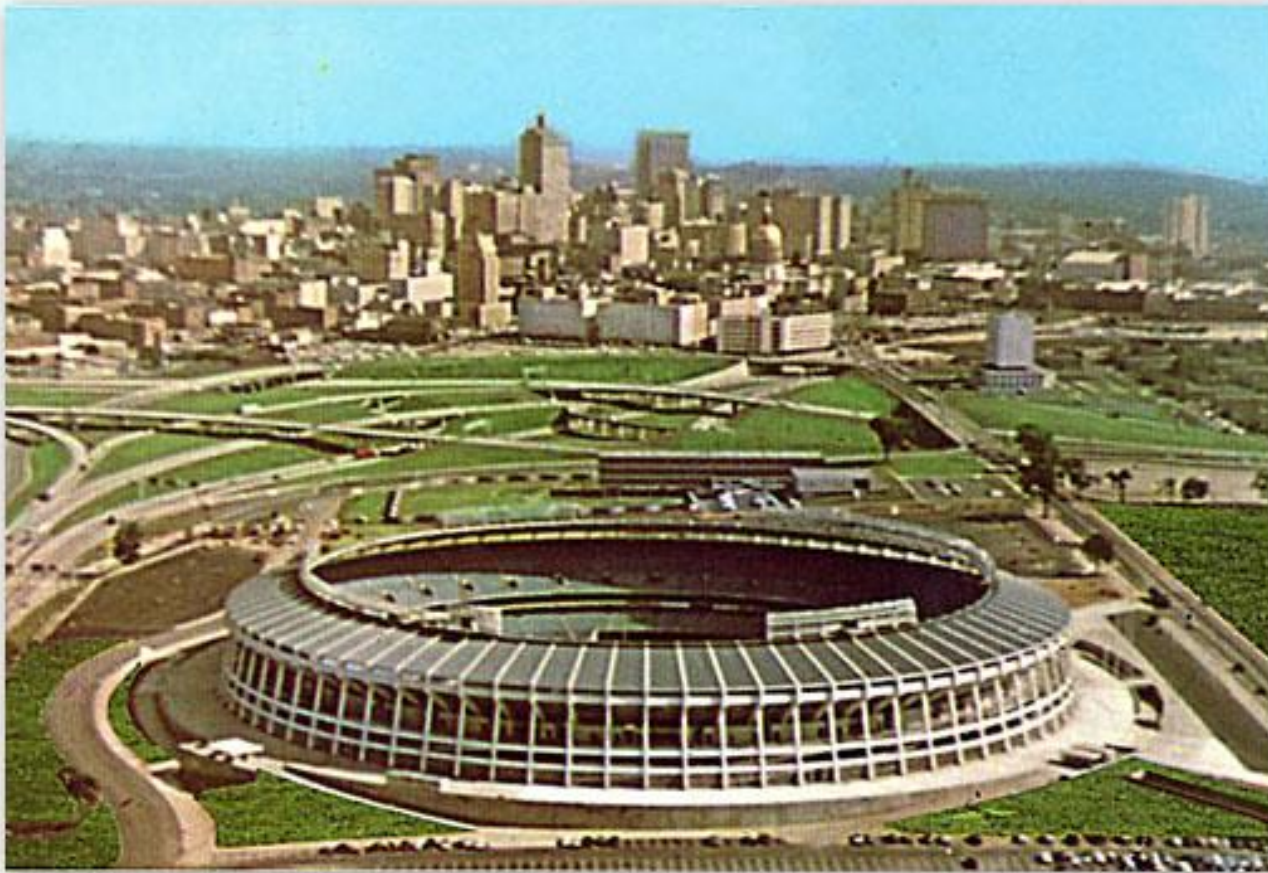


# Urban Sprawl / Edge City

- US HWY System
  - Spread of .....
  - Problems



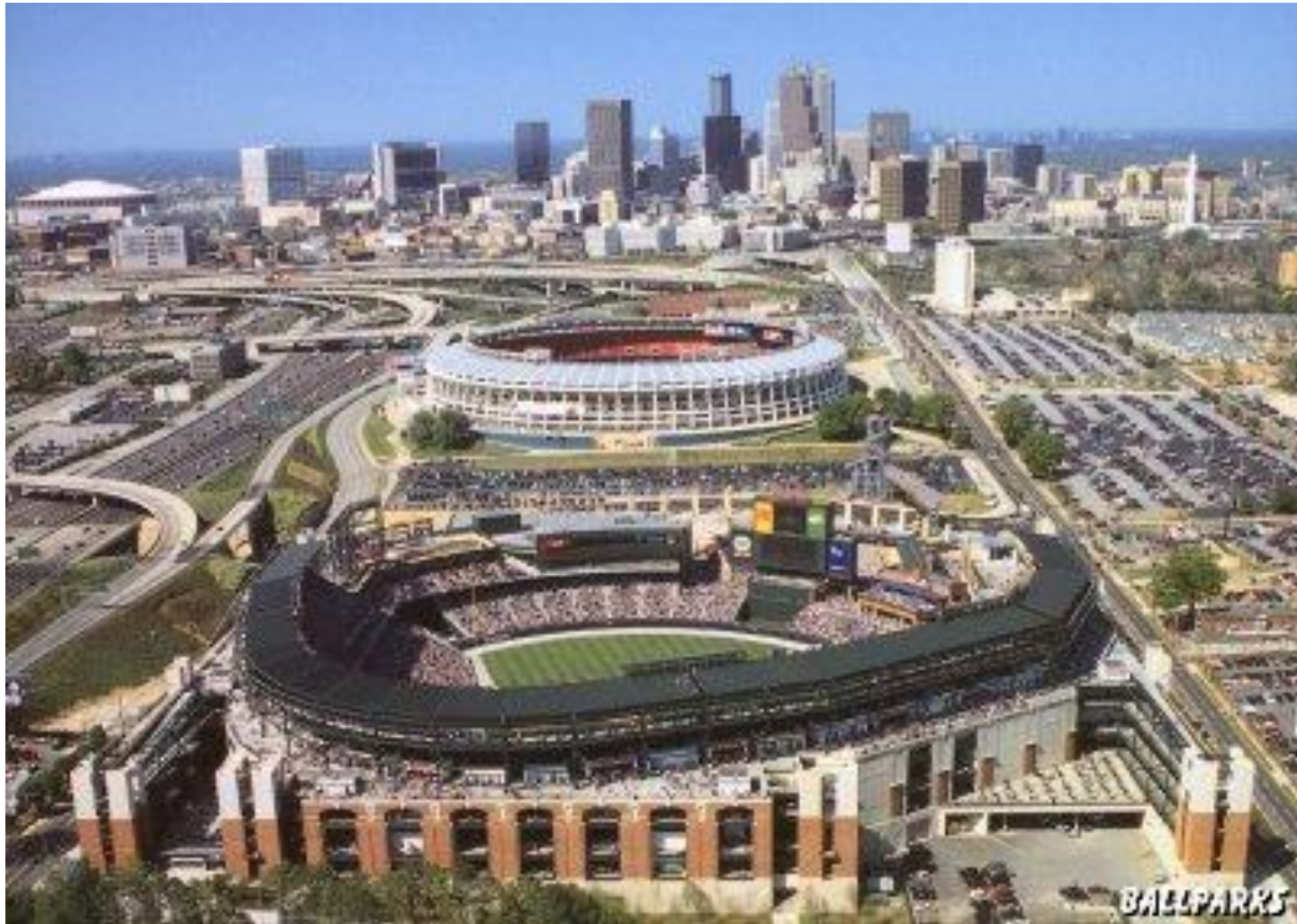
# Fulton Co Stadium



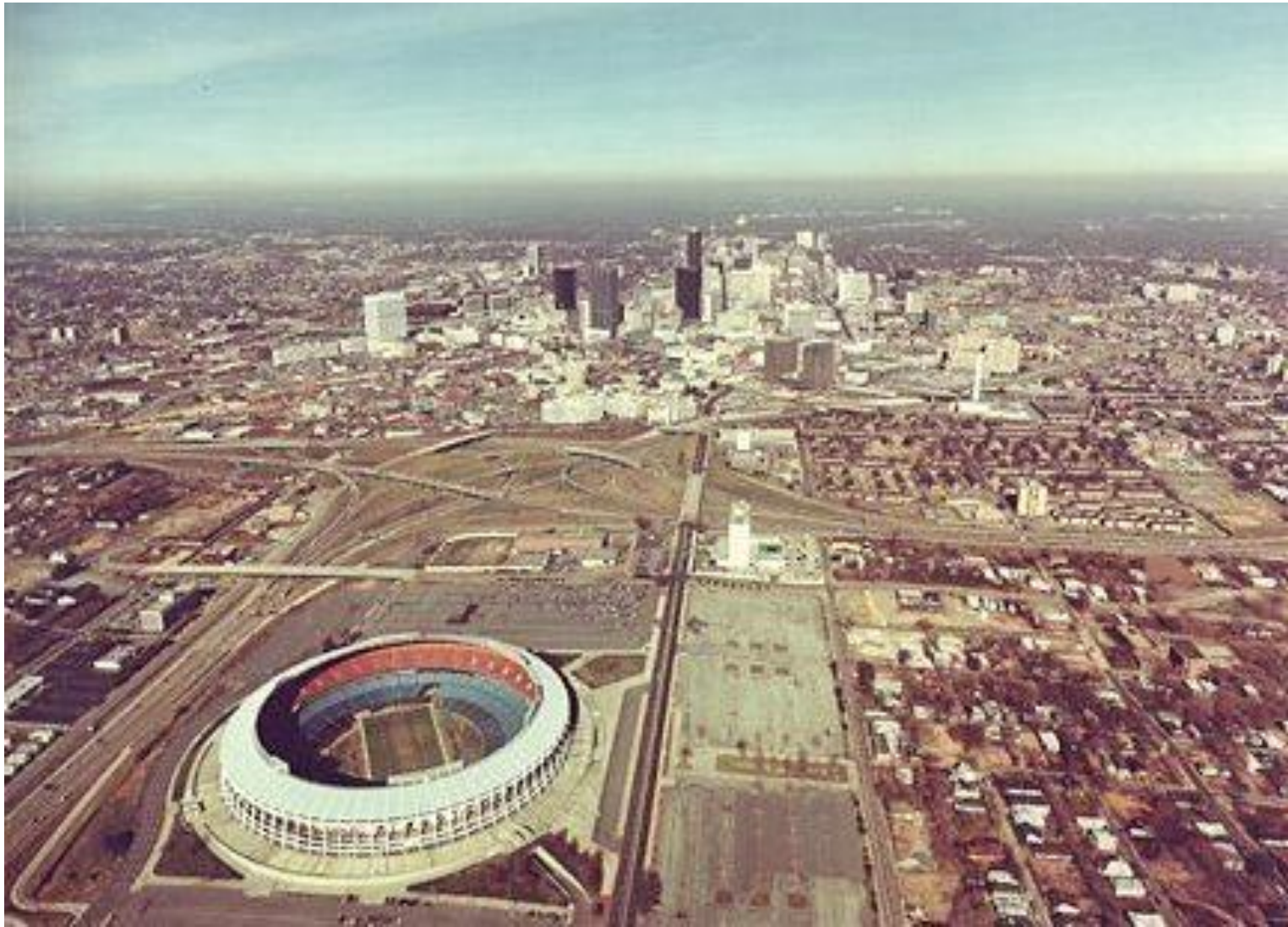
Collection of Ed Jackson



# Turner Field



# City of Atlanta 1980





# Atlanta 2009



# Political Organization and Urban Sprawl

- Creating cities
  - Gov't
  - Taxes
  - Gov't Services
- Taxes won't go to...
- Problems

# Political Organization and Urban Sprawl

- Financial Roadblocks to Poor
  - No low income housing
  - Fees

# Ghettoization and Uneven Development

- Ghettoization
- Uneven Development
  - Problems...
  - Cumulative Causation
- Why does this happen?

# Blockbusting / Redlining / Racial Steering

- Blockbusting
  - Real Estate Agents scare white families
  - Move out / move in
- Racial Steering
  - Encourage moving into like neighborhoods
  - Illegal



# Blockbusting / Redlining / Racial Steering

- Redlining
  - Banks
  - Lending practices
  - Why?
  - Illegal

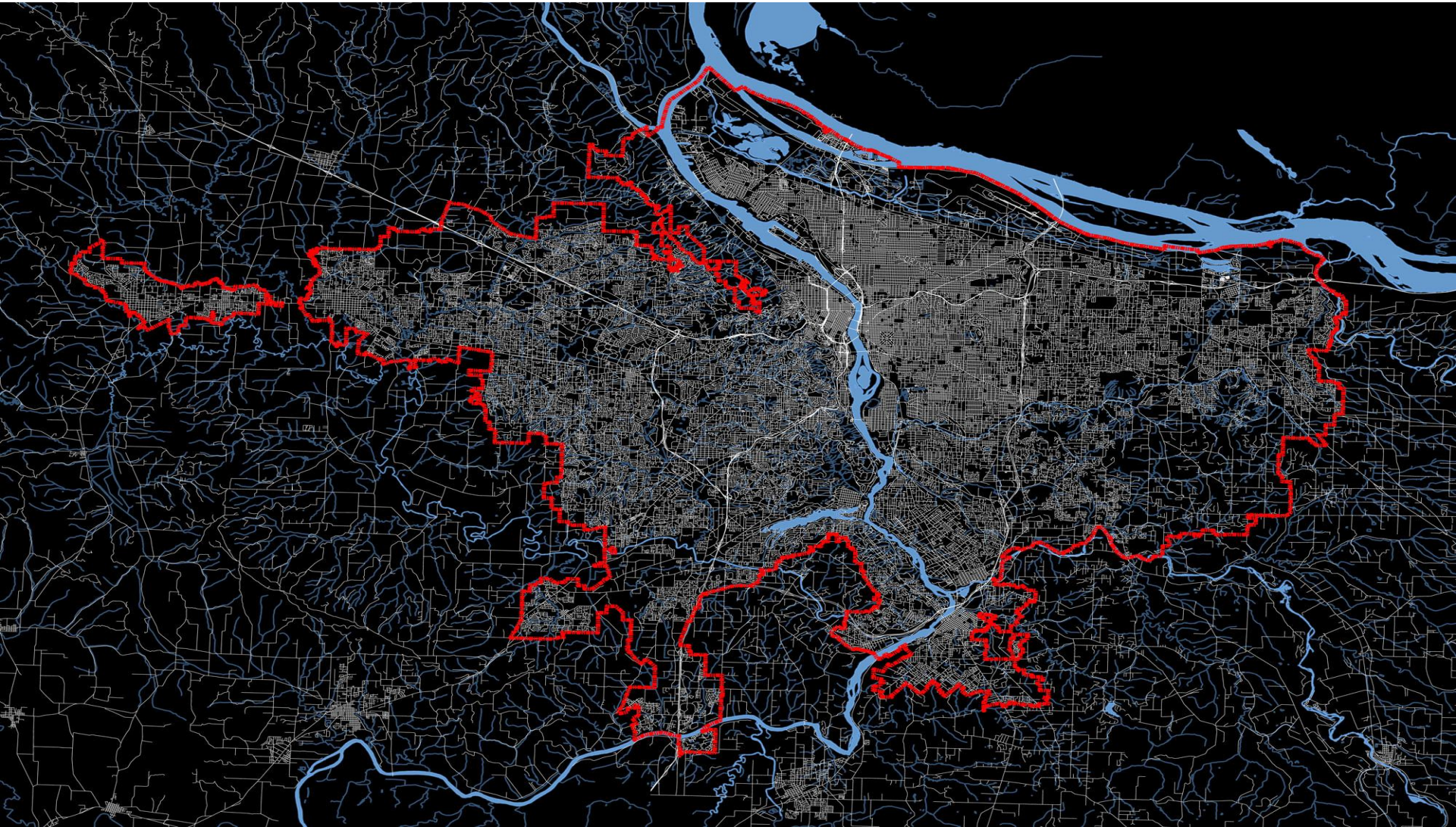
# Gentrification

- Improvement to urban areas
  - Move back in
- Positives
  - Improvements
- Negatives
  - No longer can afford

# Green Belts

- Contain Urban Sprawl
  - Development must remain inside
  - Forces revitalization
  - Portland, Oregon

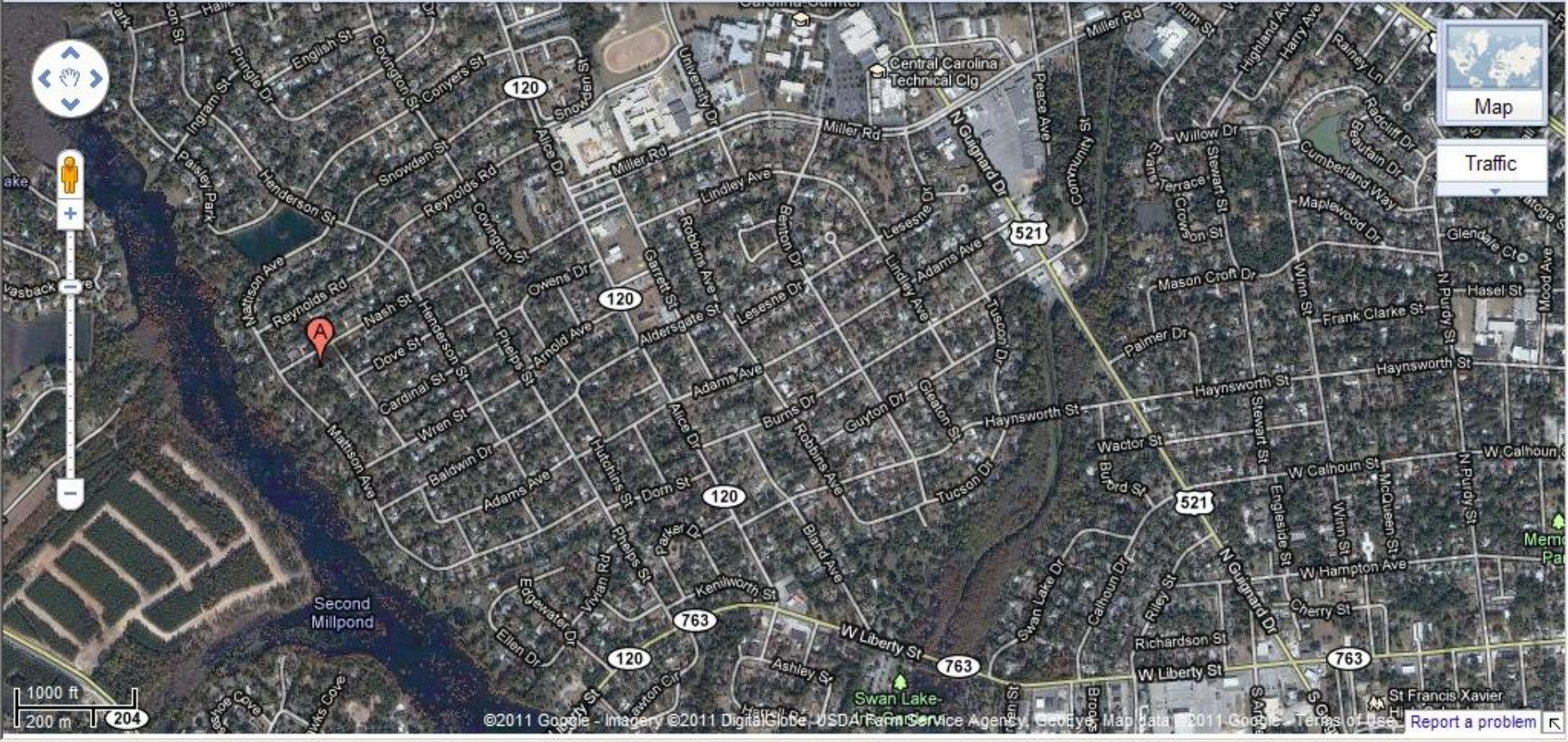
# Urban Growth Boundary Portland, Oregon



# Street Morphology

- Development of Street Patterns
  - Cul-de-sac
  - Replaces grid system
  - More privacy
    - Creates traffic problems









1650 tomahawk trail, cumming, ga

Search Maps





# Zoning Laws

- Prevent / Allow Development

# Recent Trends in Neo Urbanism

- Planned Community
- Livable City
  - Health / Environment Concerns
- Decrease Sprawl



celebration city, fl

Search Maps

