

View of the Valley in 2040



What are we leaving our grandchildren?

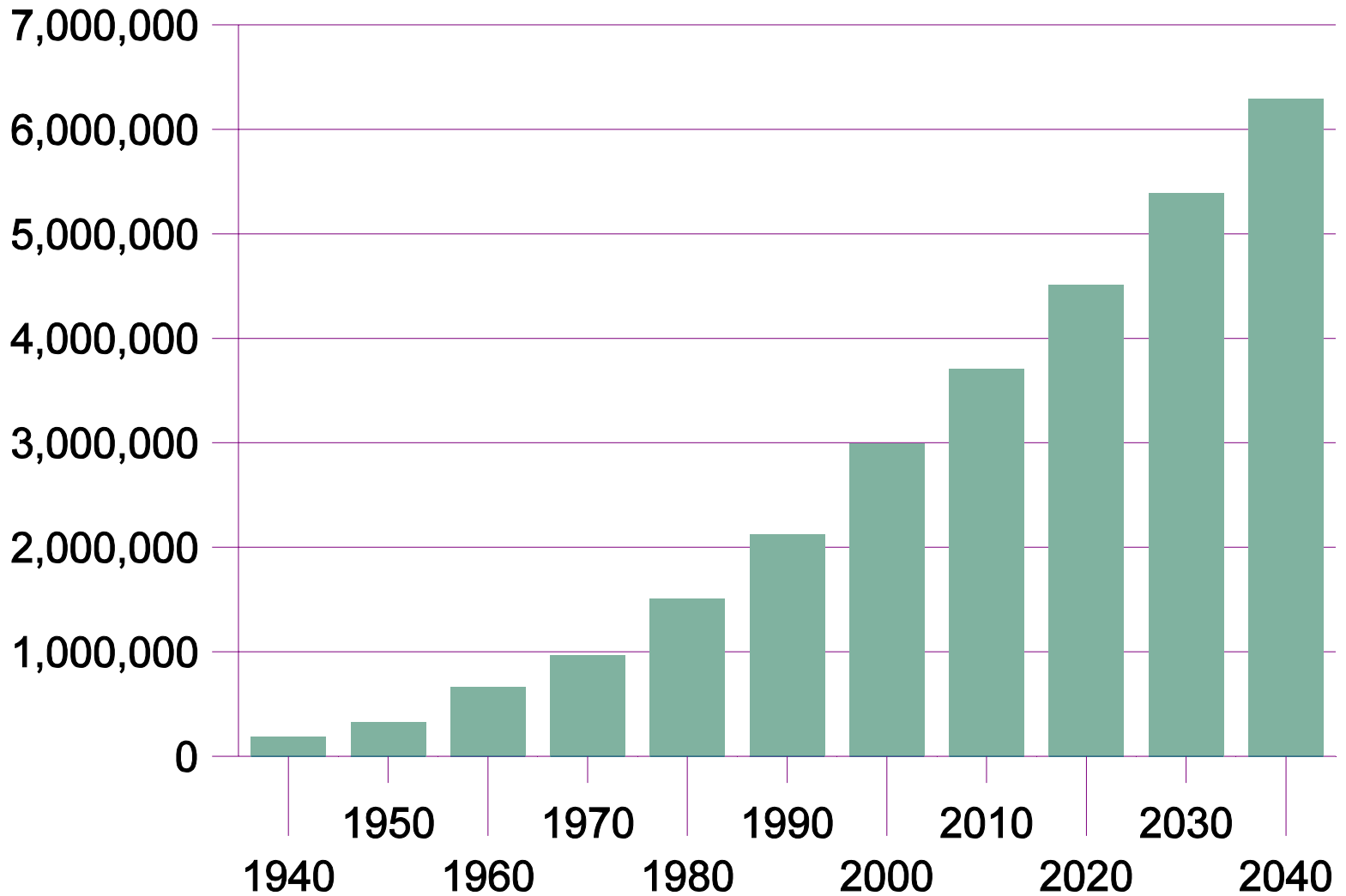
View of the Valley in 2040

- **Demographics**
- **Growth and Development**
- **Transportation**

Demographics

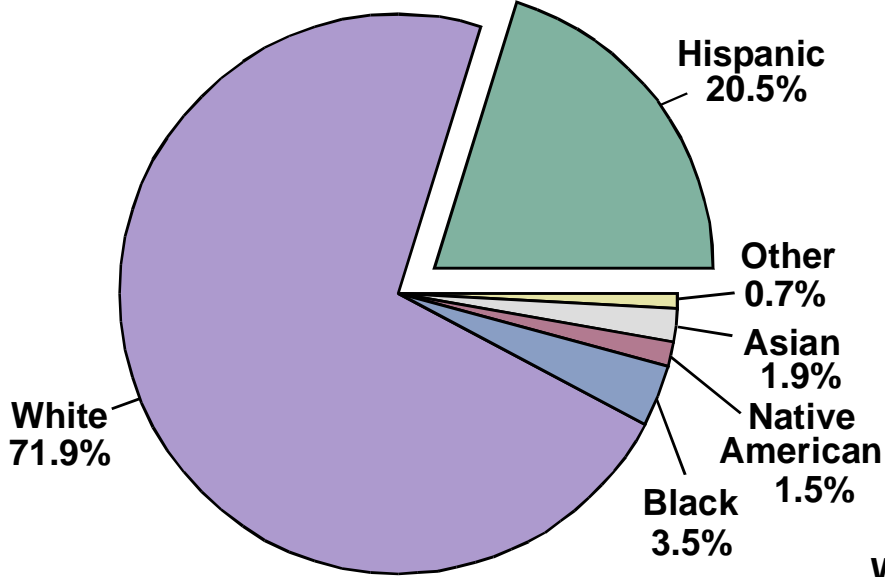


Total Population, Maricopa County: 1940-2040

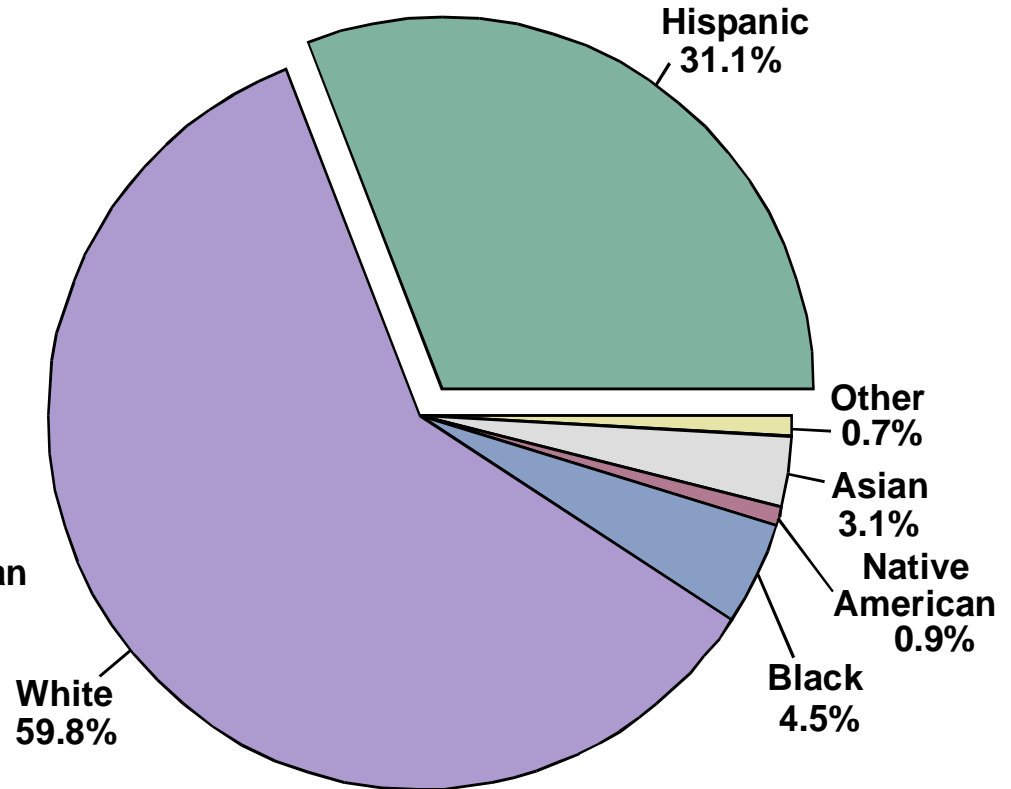


Race and Ethnicity

2000 (Population 3 Million)

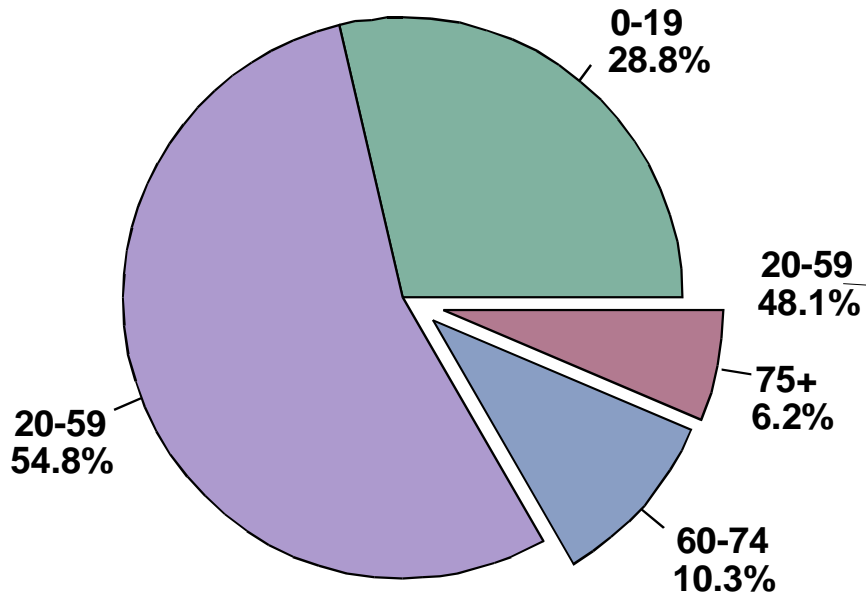


2040 (Population 6.3 Million)

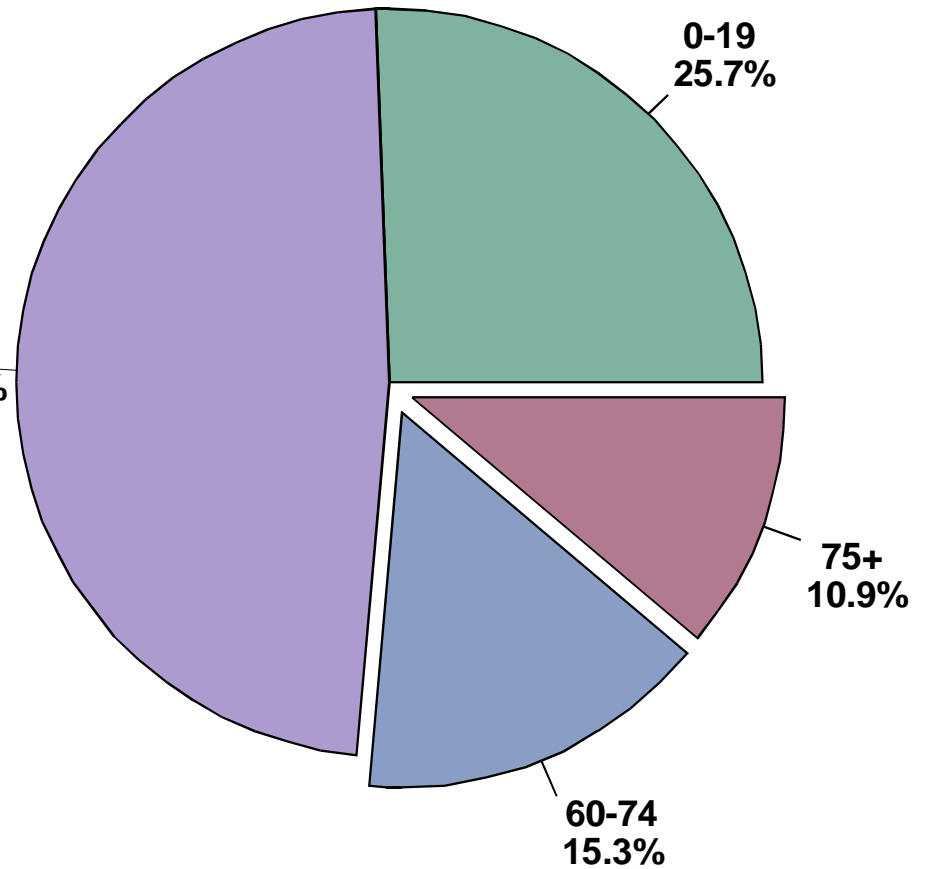


Age Groups

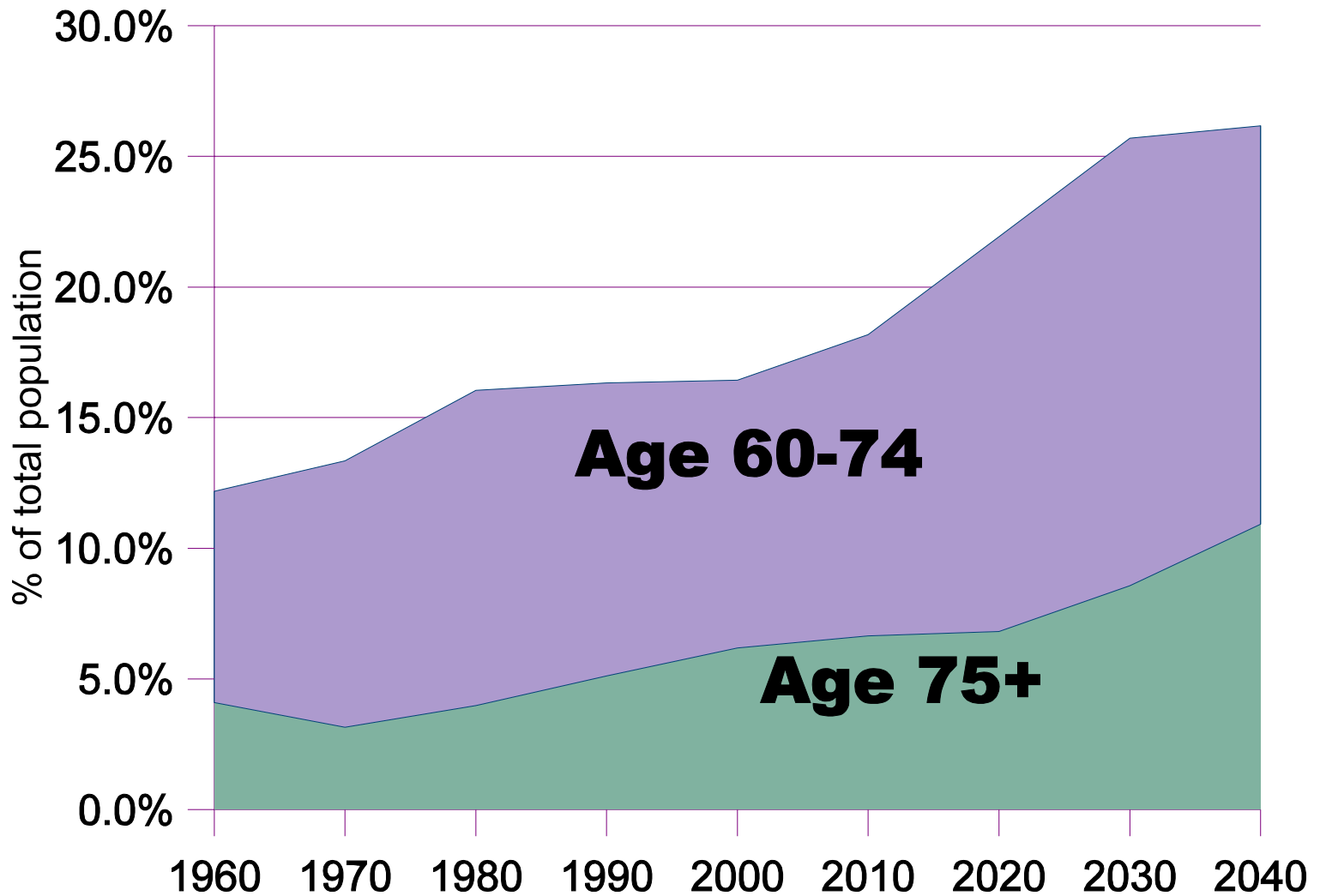
2000
(Population 3 million)



2040
(Population 6.3 million)

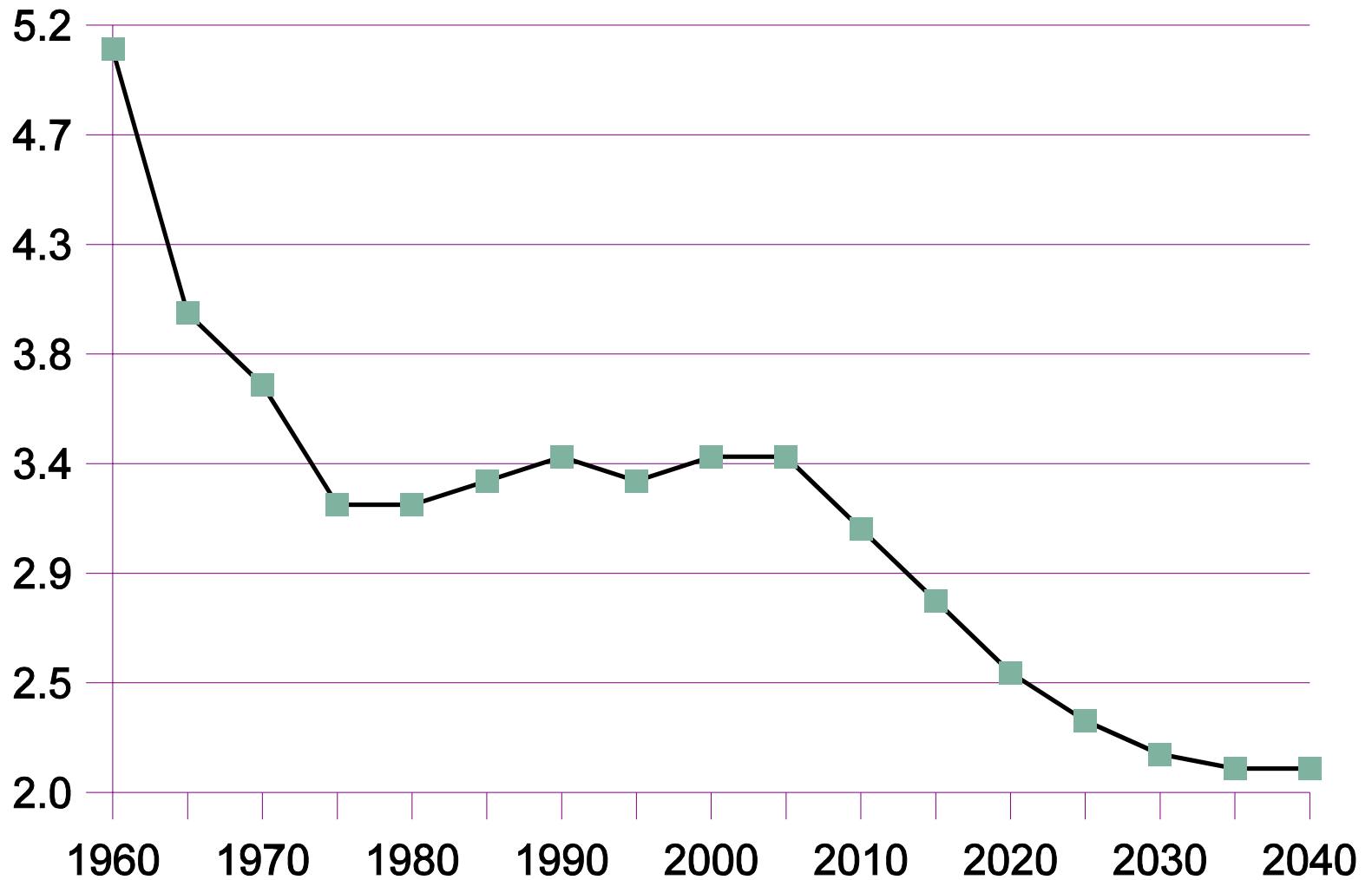


Aging of the Population



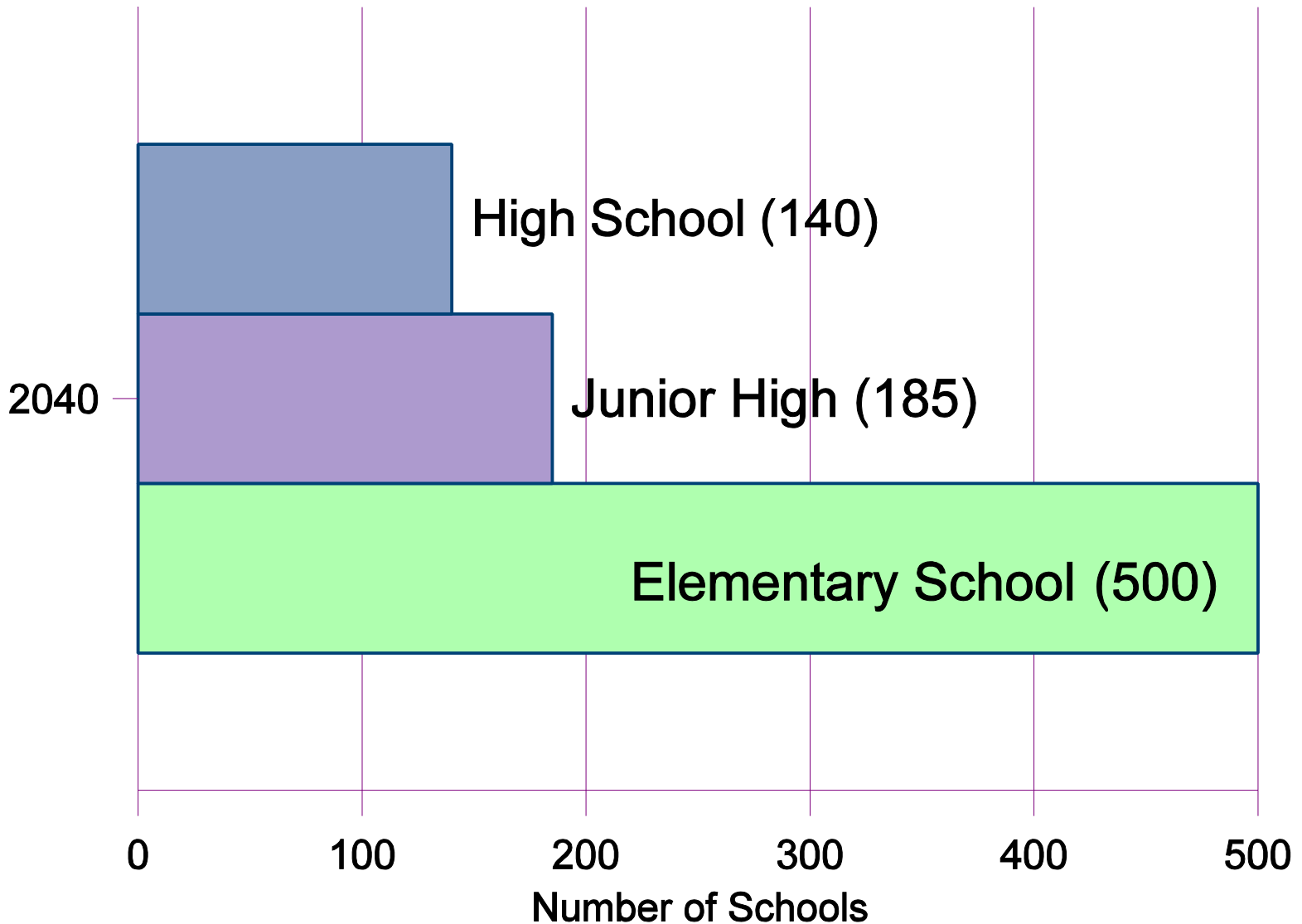
Social Security

Ratio of workers paying Social Security taxes to beneficiaries



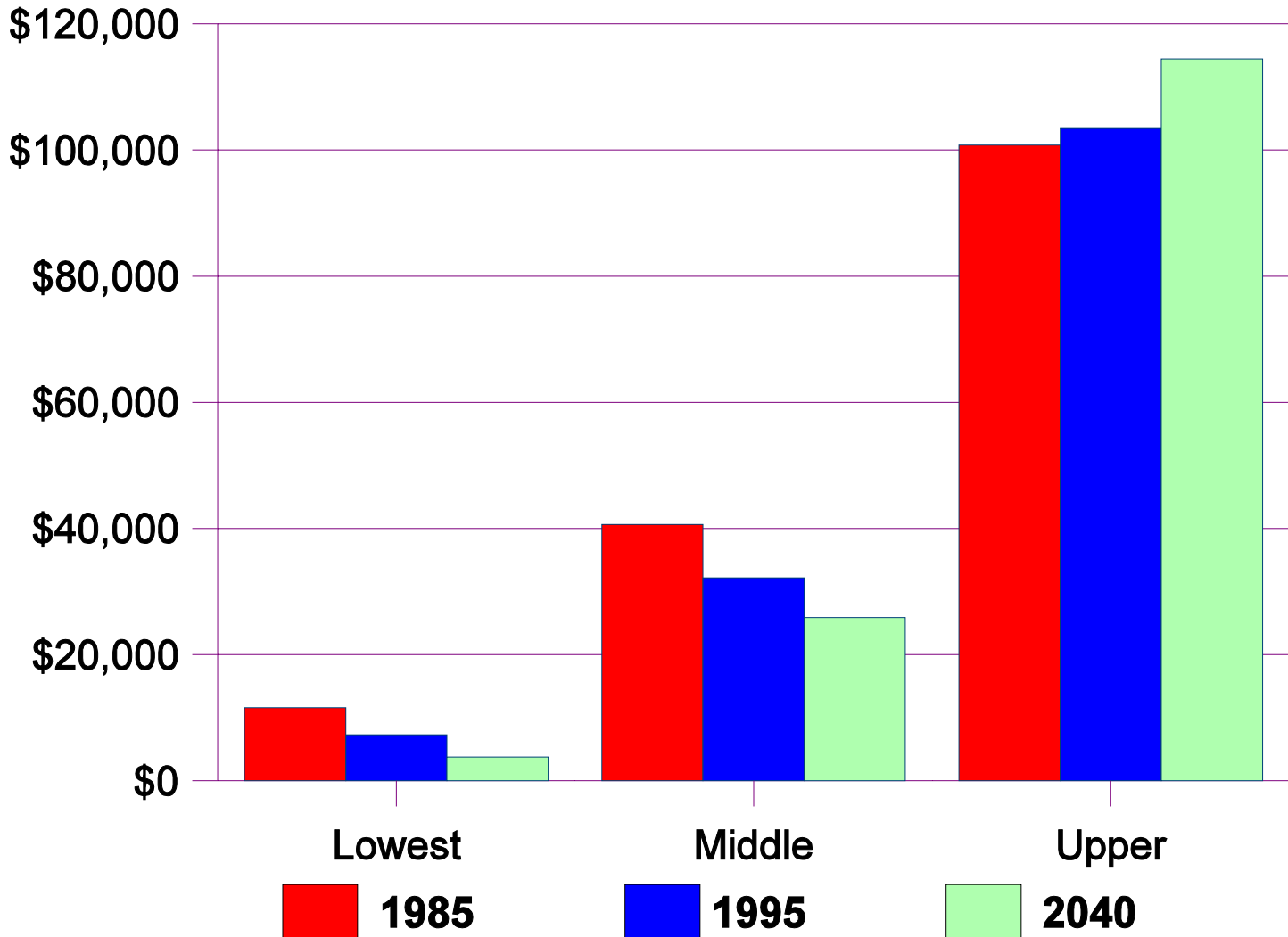
New Schools Needed

To Meet Student Enrollment Demand in 2040



Income Disparity

Average Household Income of Lowest, Middle and Upper Quintiles in 1985, 1995 and 2040



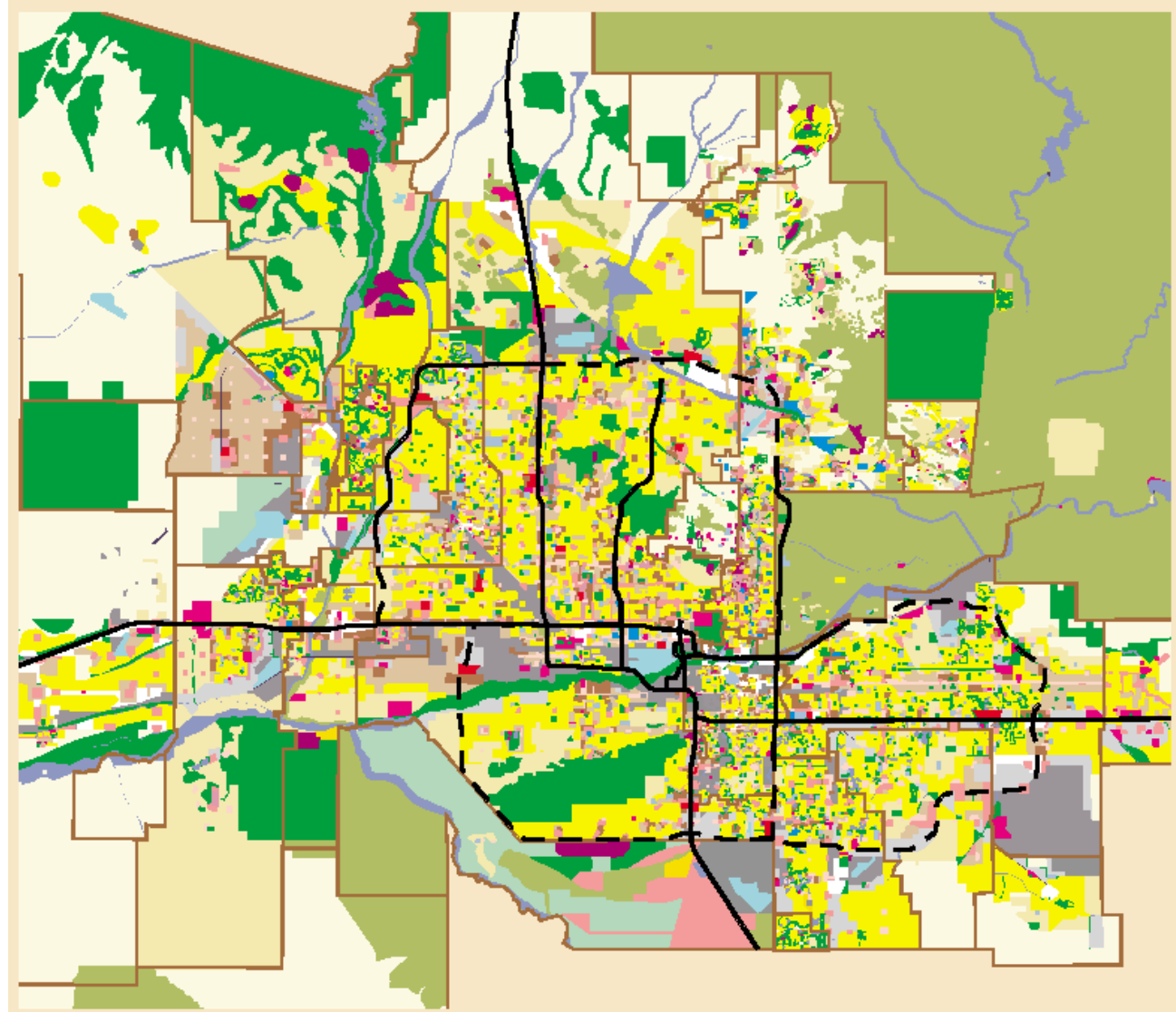
Demographic Impacts

- **Bigger cities**
- **More ethnically and racially diverse**
- **More elderly people**
- **Greater income disparity**
- **Increased and different service demands**

Growth and Development

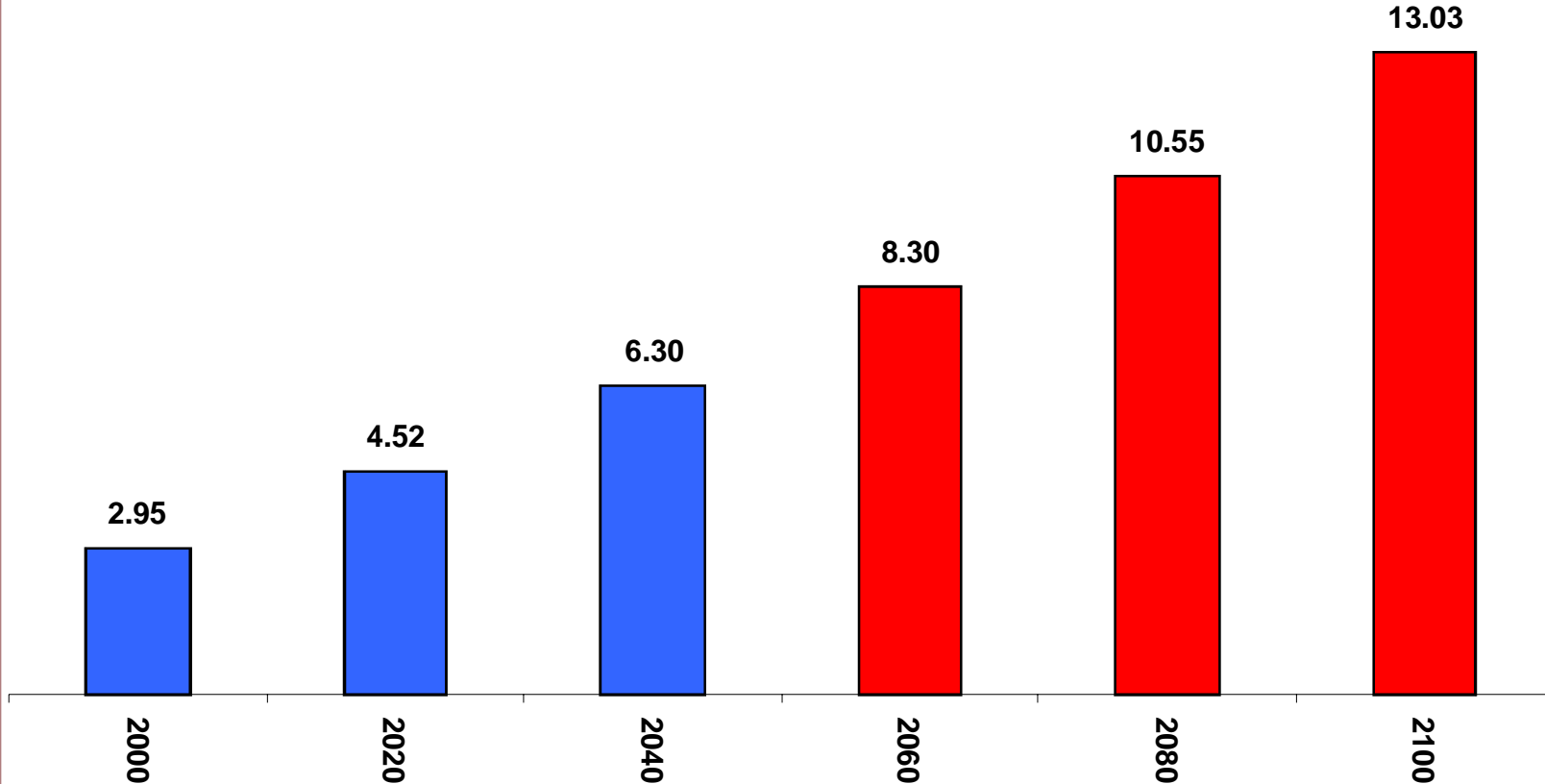


Regional “Plan” – Composite of Local General Plans



100 Years to Buildout

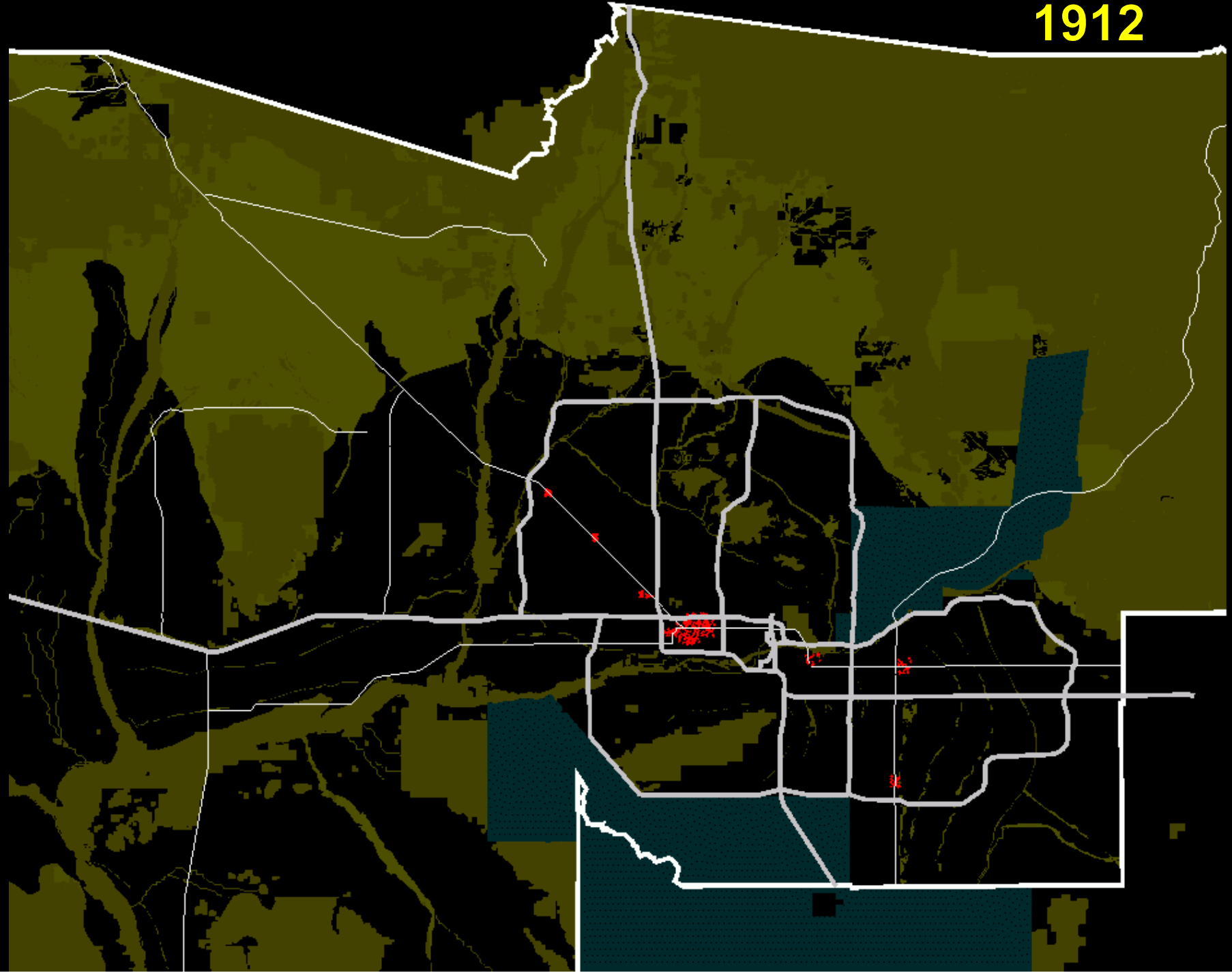
**Total Population, Maricopa County
2000-Buildout (Millions)**



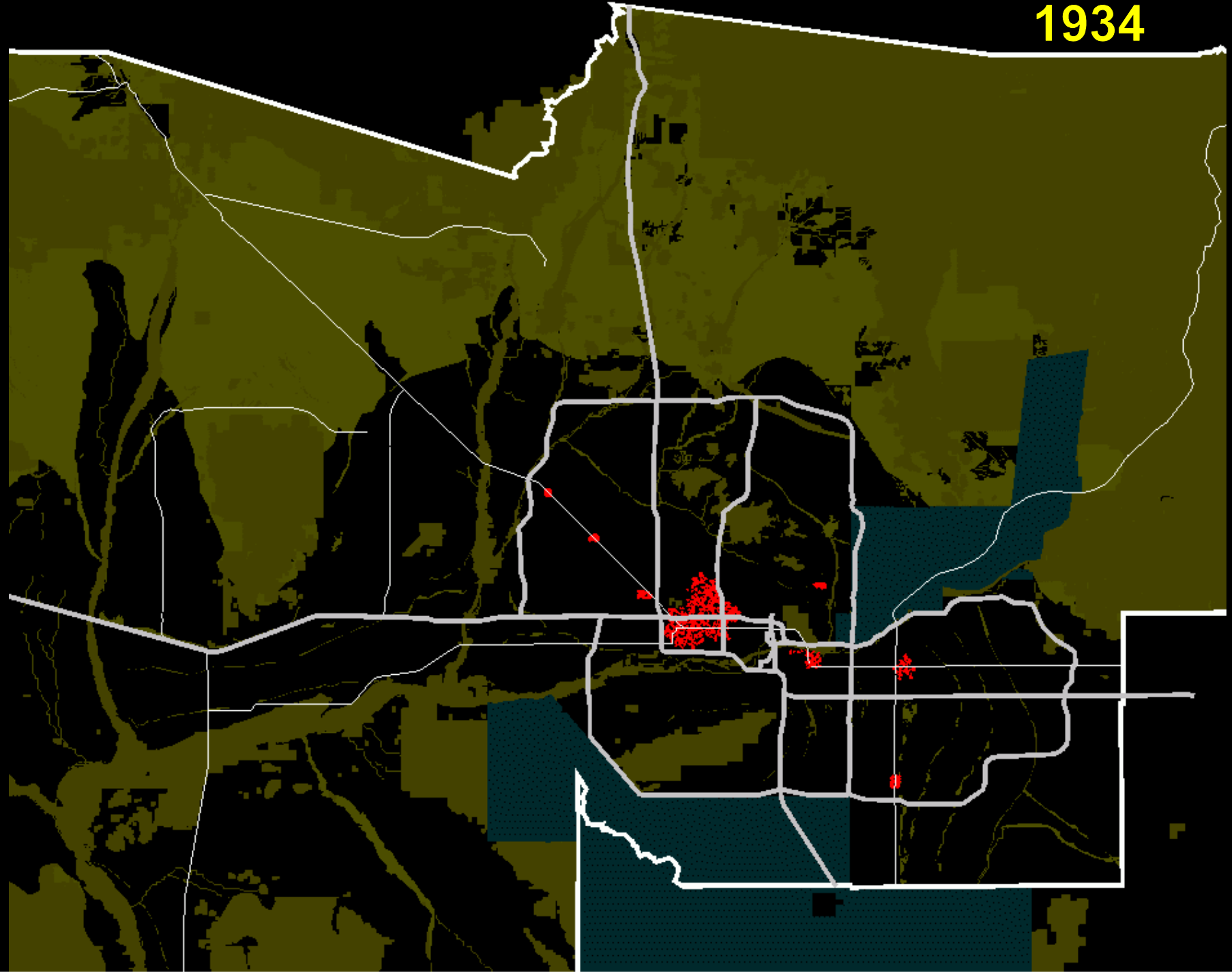
No Constraints on Continued Expansion

- **Developers lead on fringe**
- **Fringe areas want urbanization**
- **Favorable combination of urbanization factors**
 - Developable land
 - Transportation access
 - Neighboring urbanization

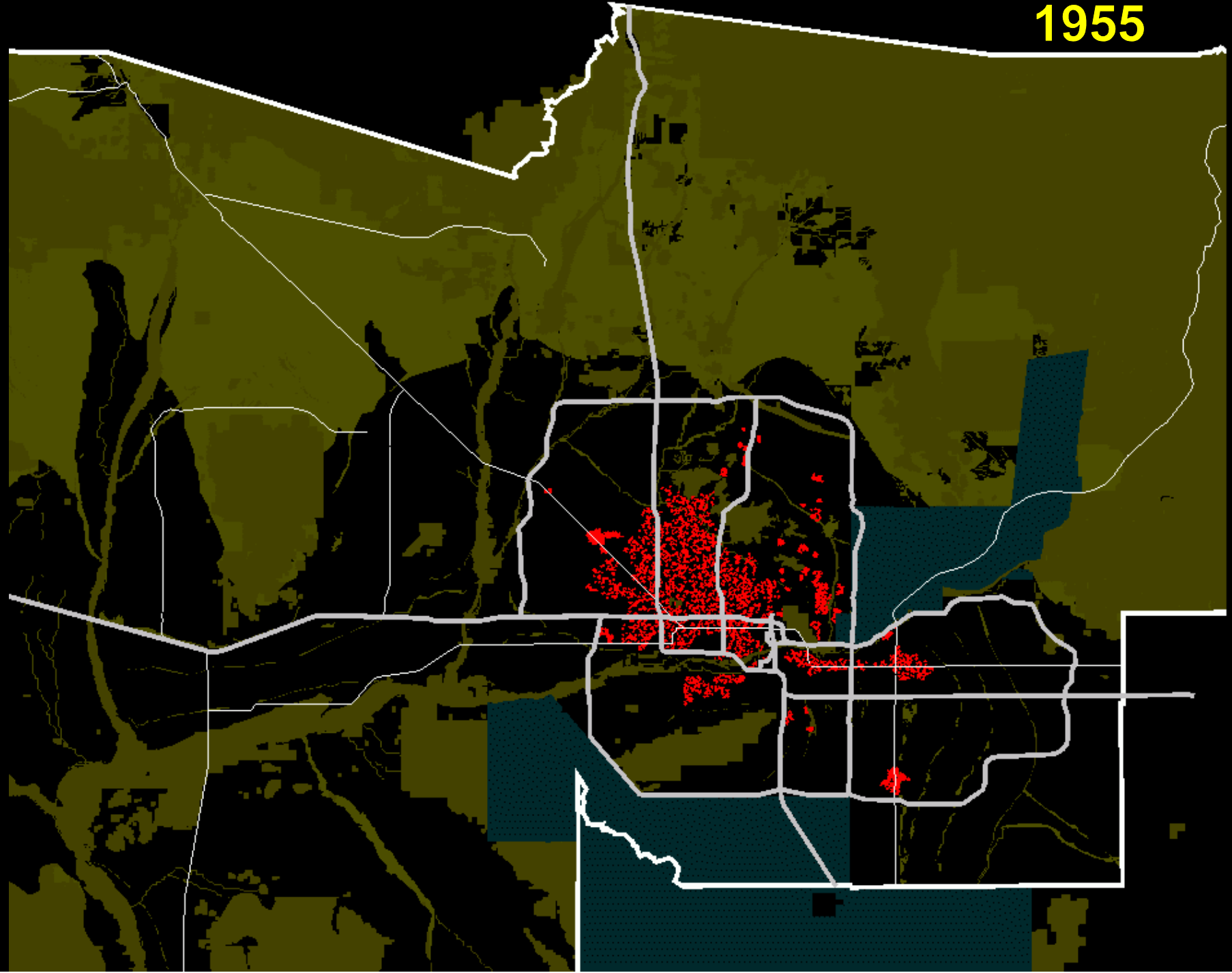
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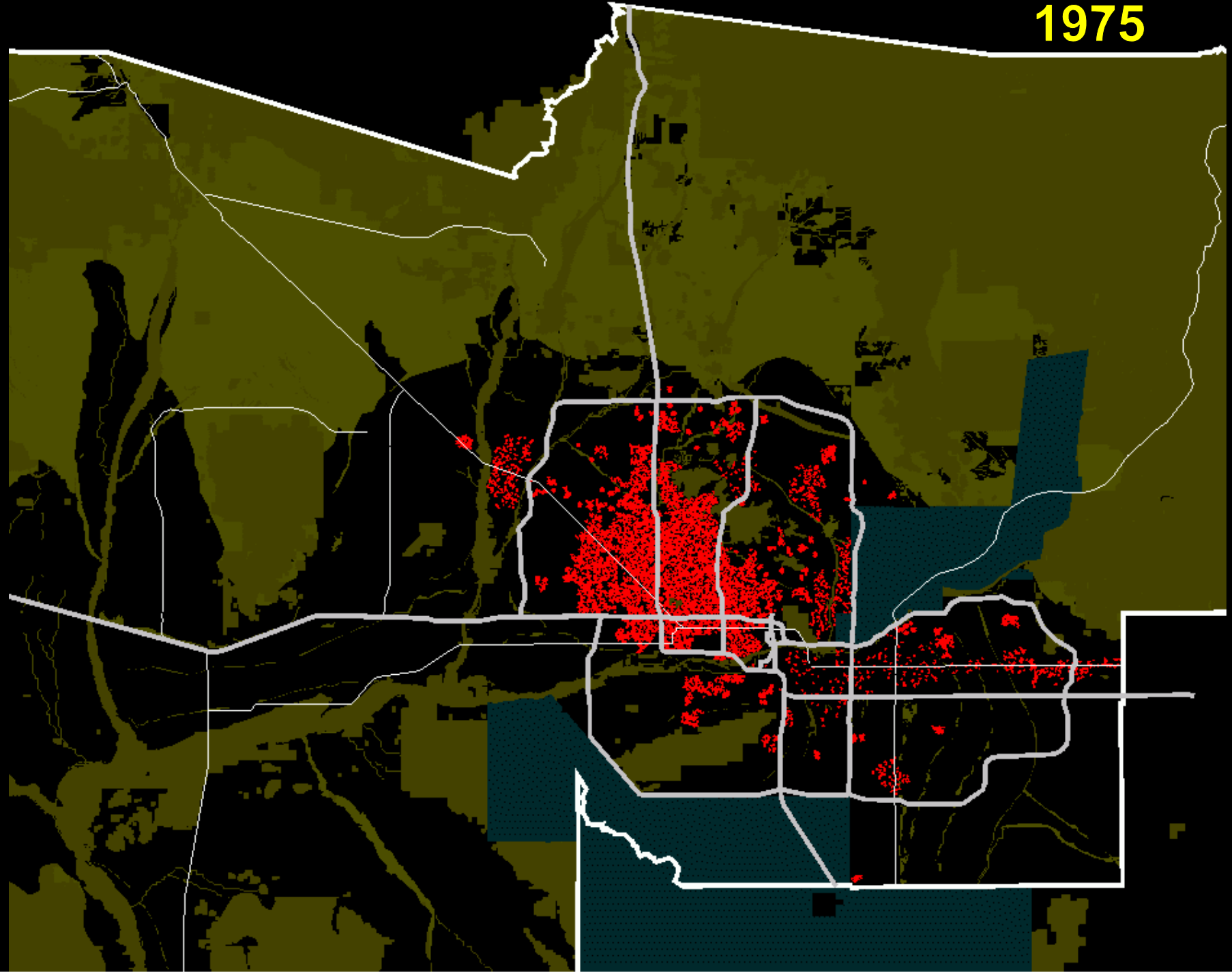
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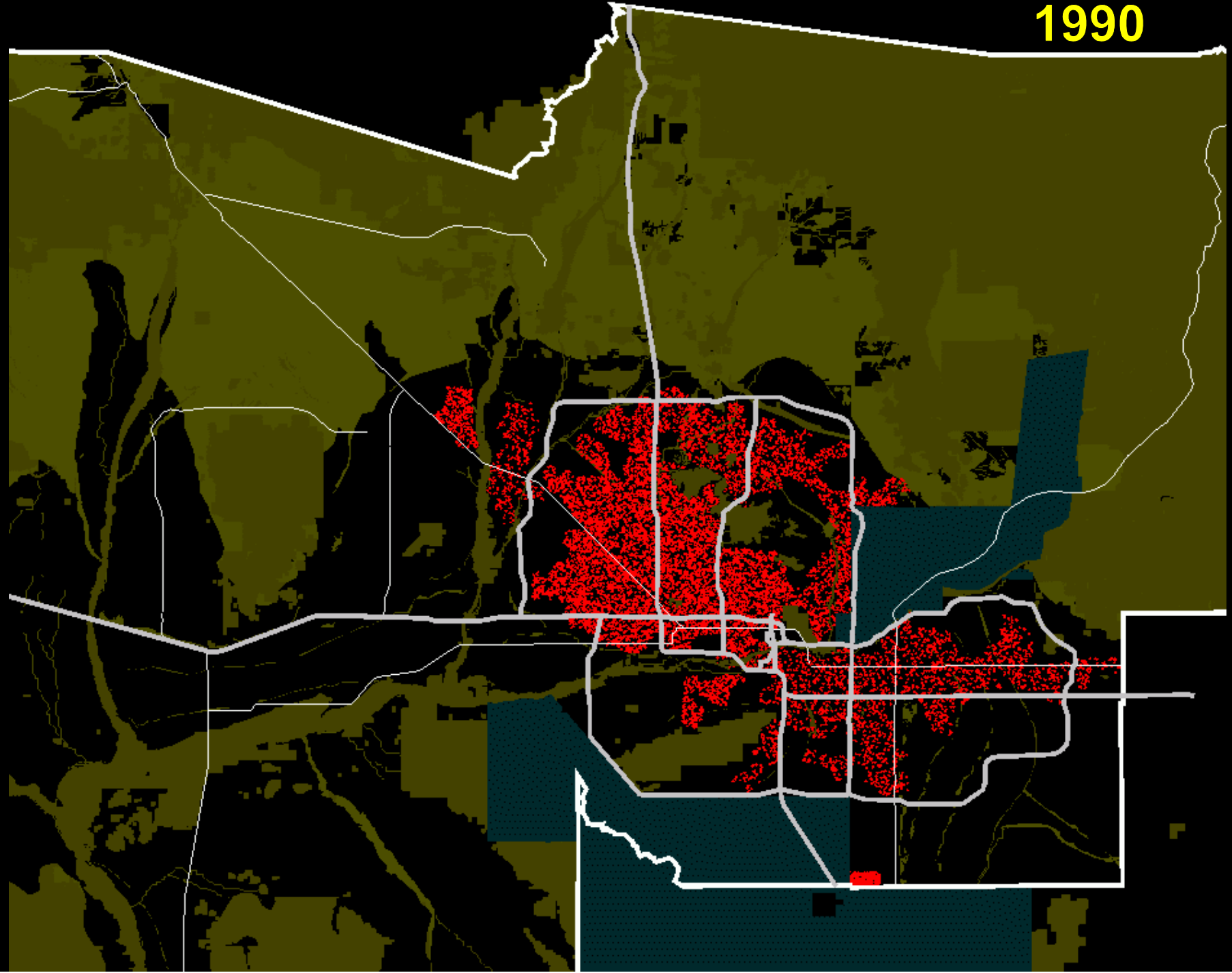
1955



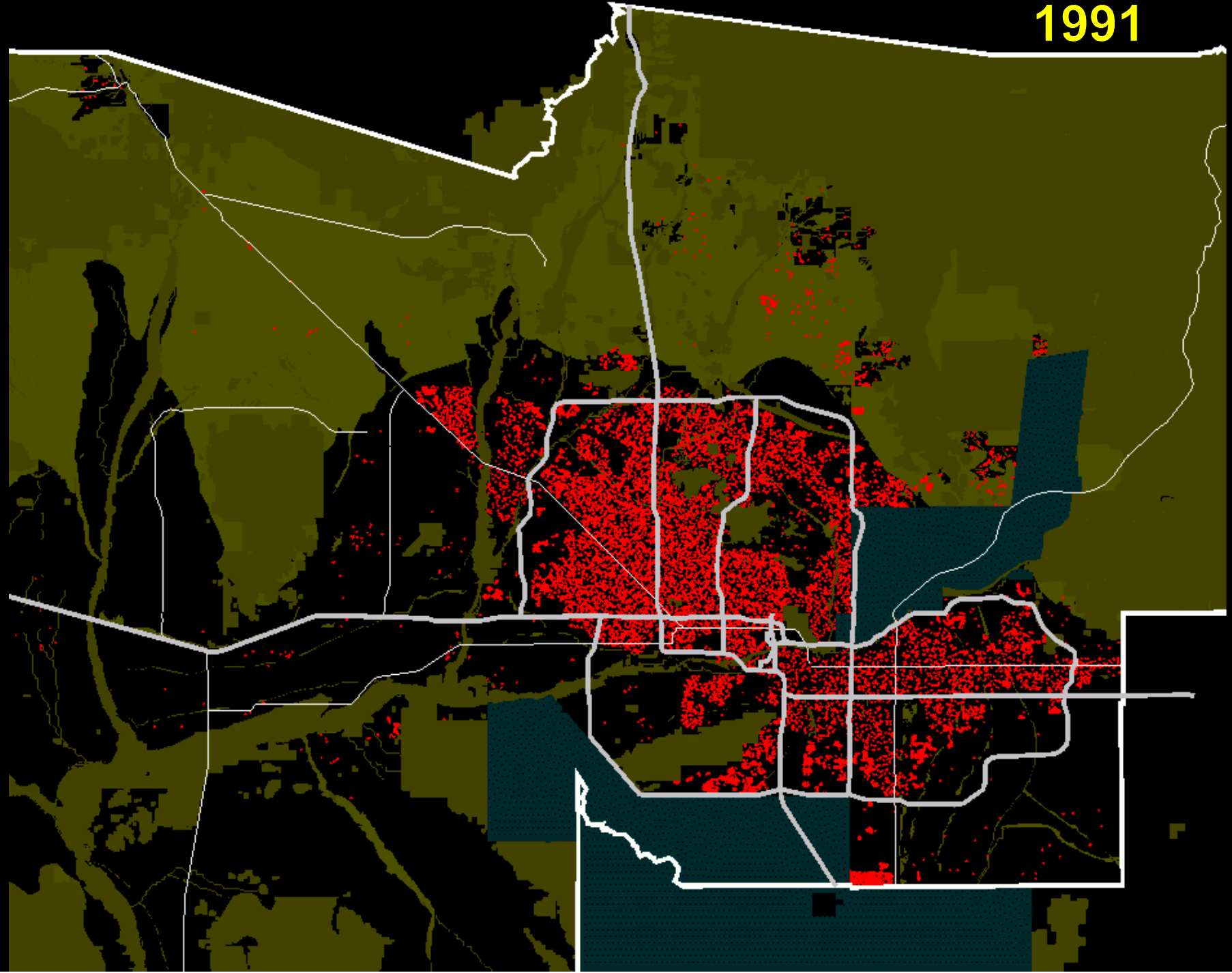
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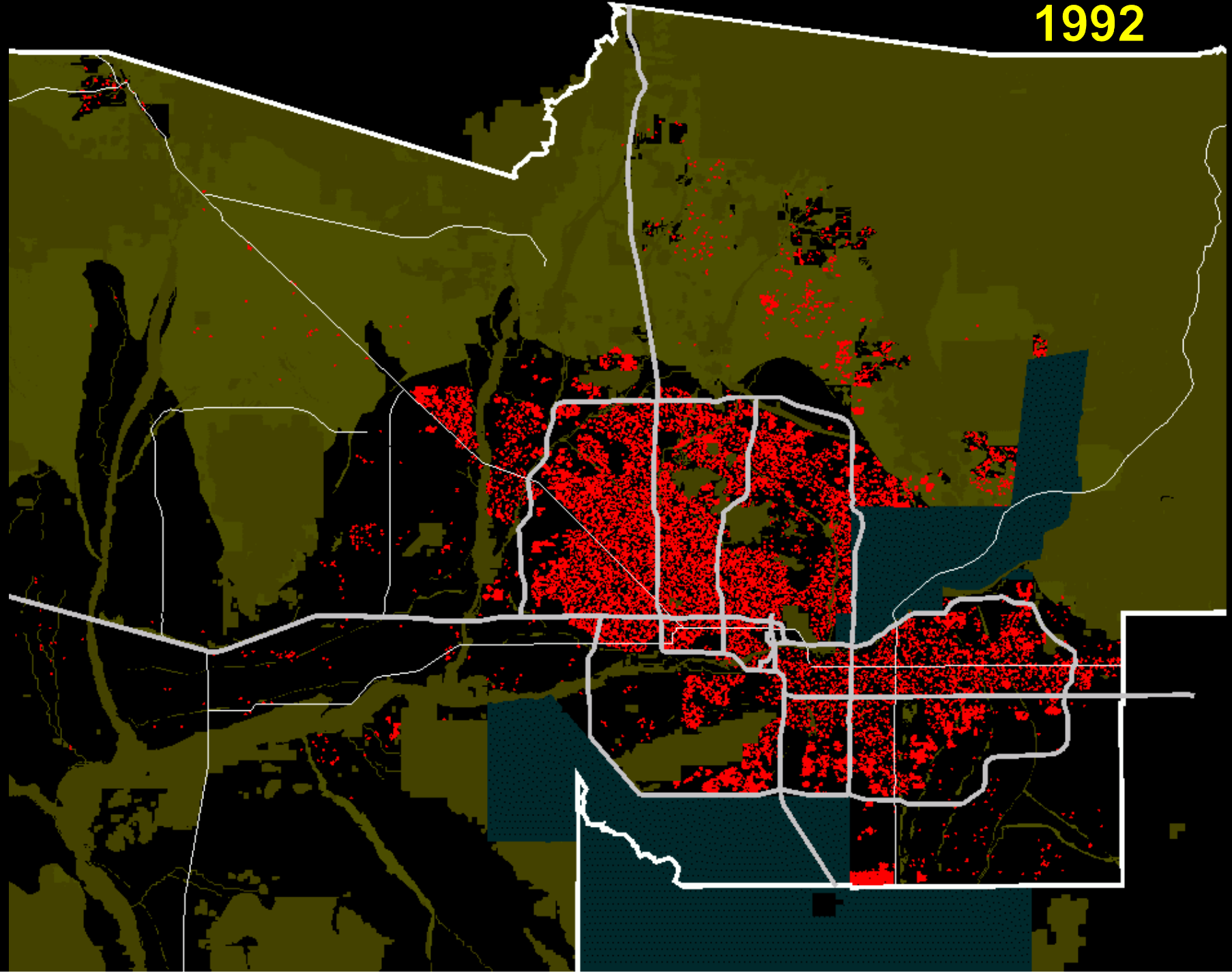
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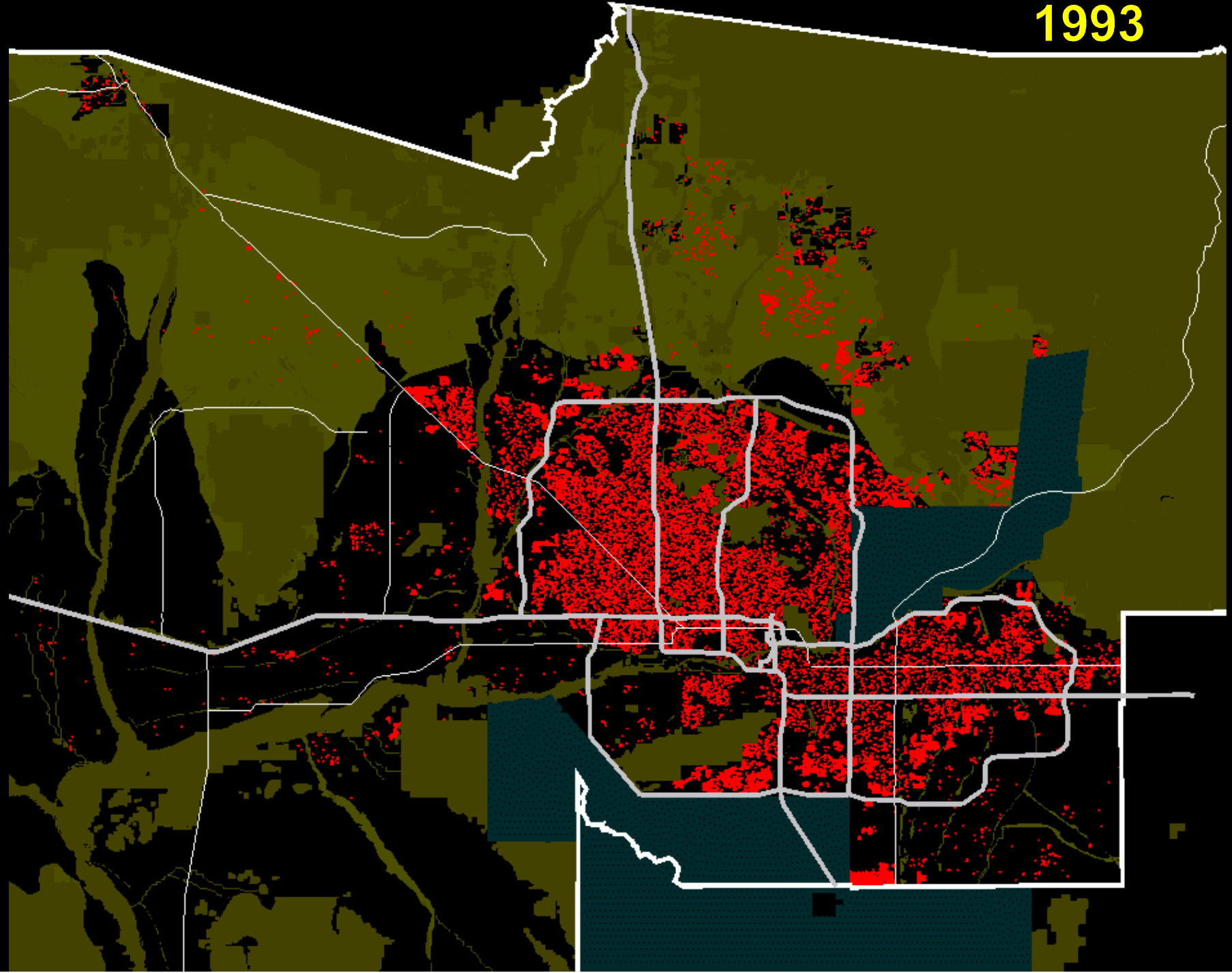
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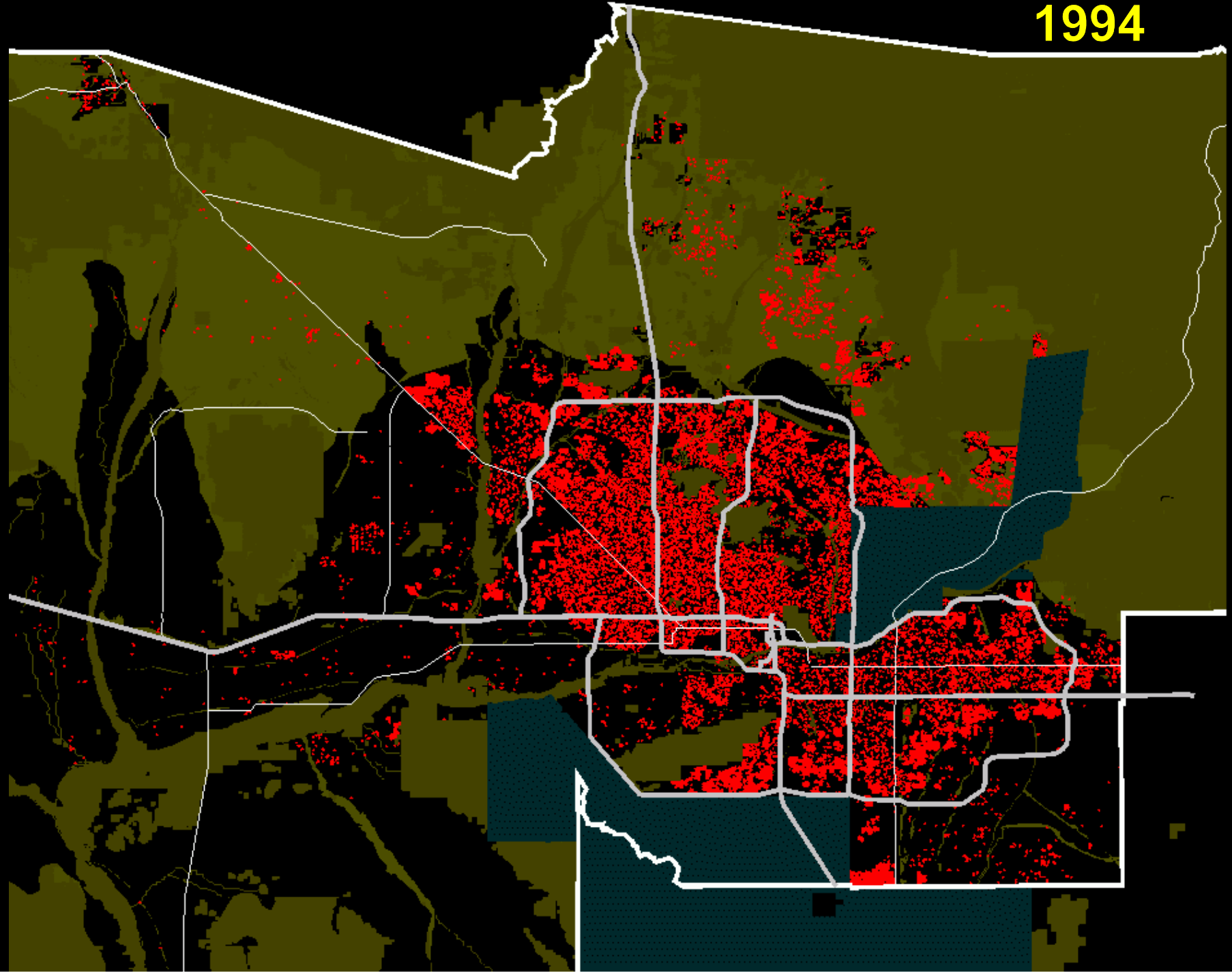
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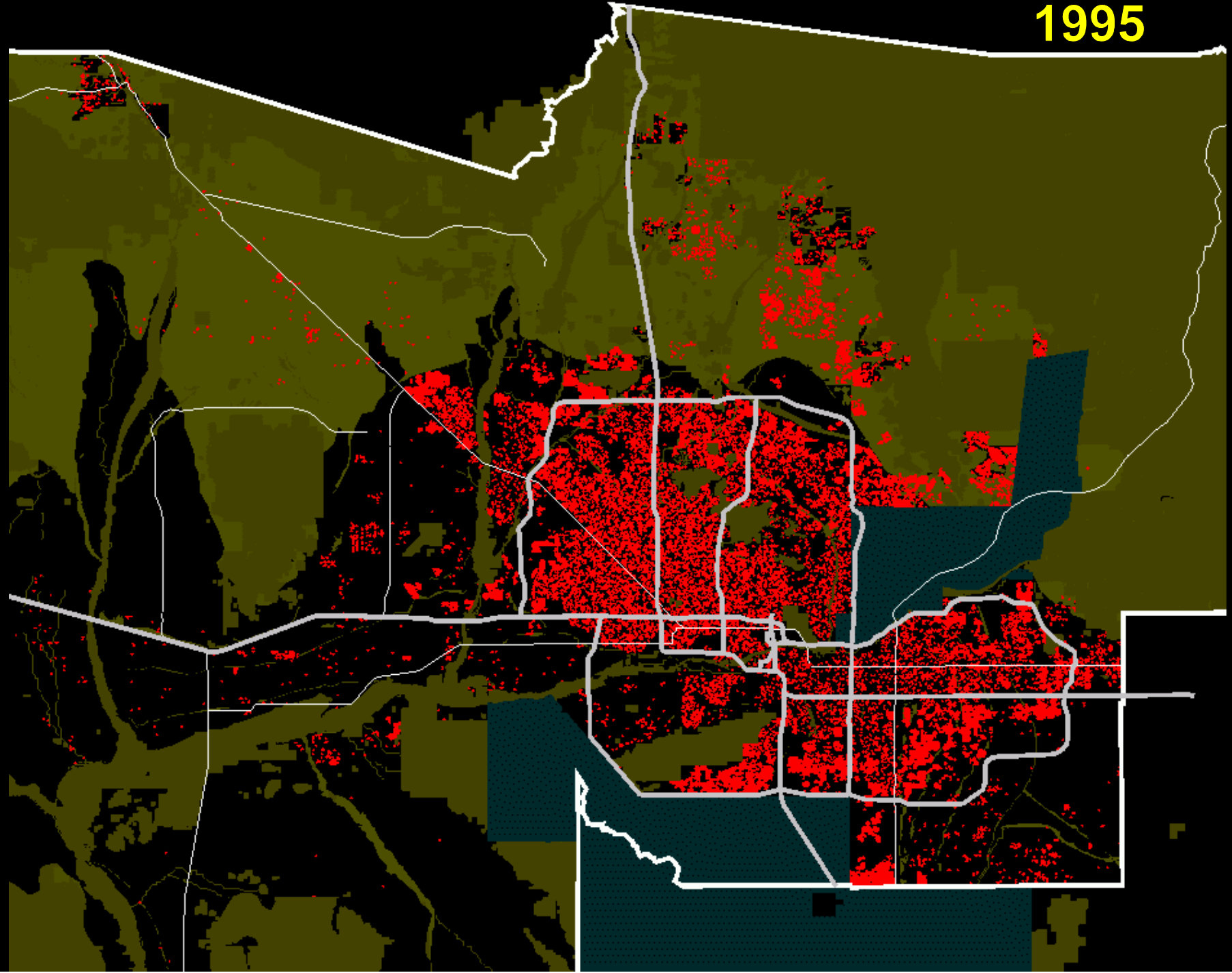
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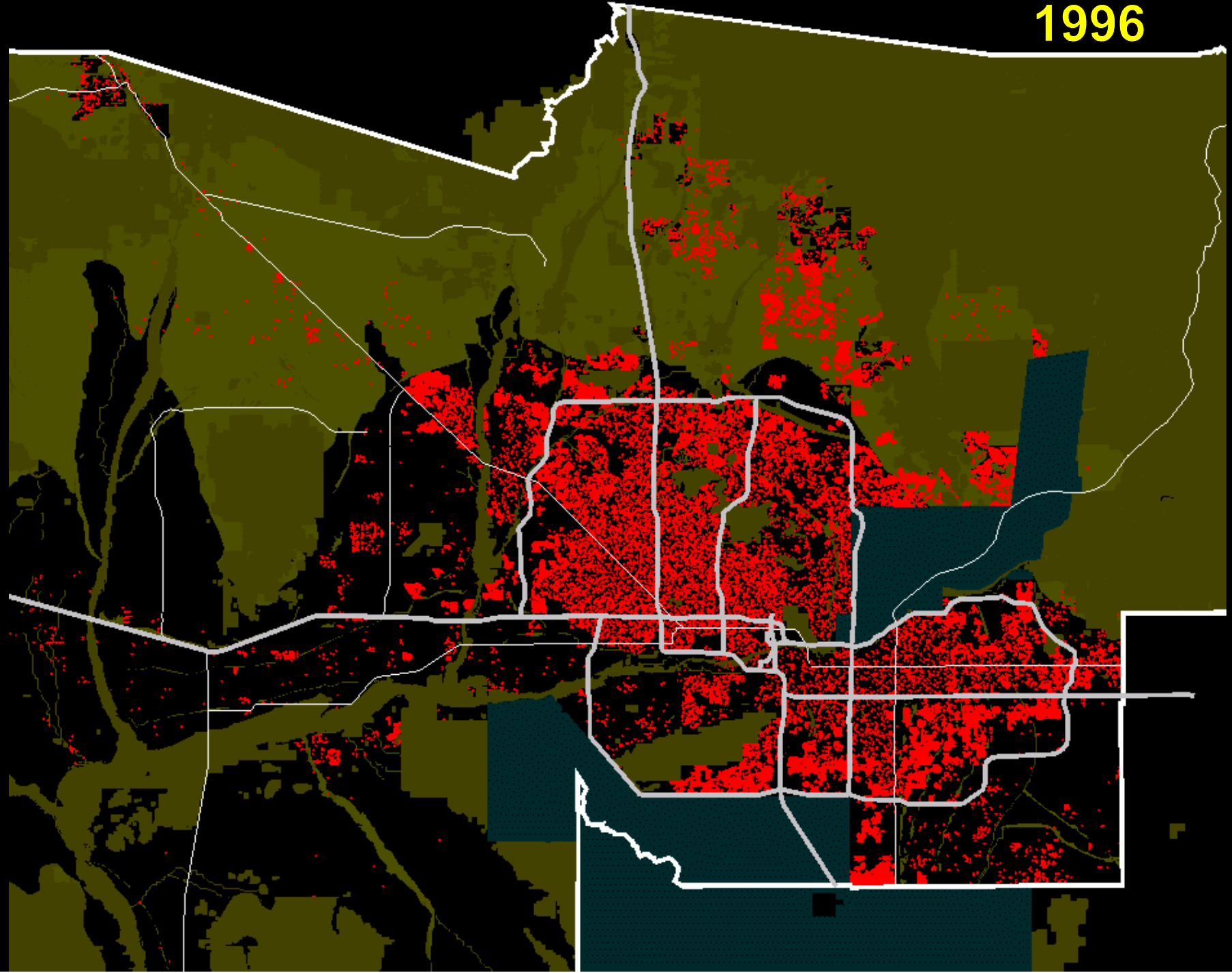
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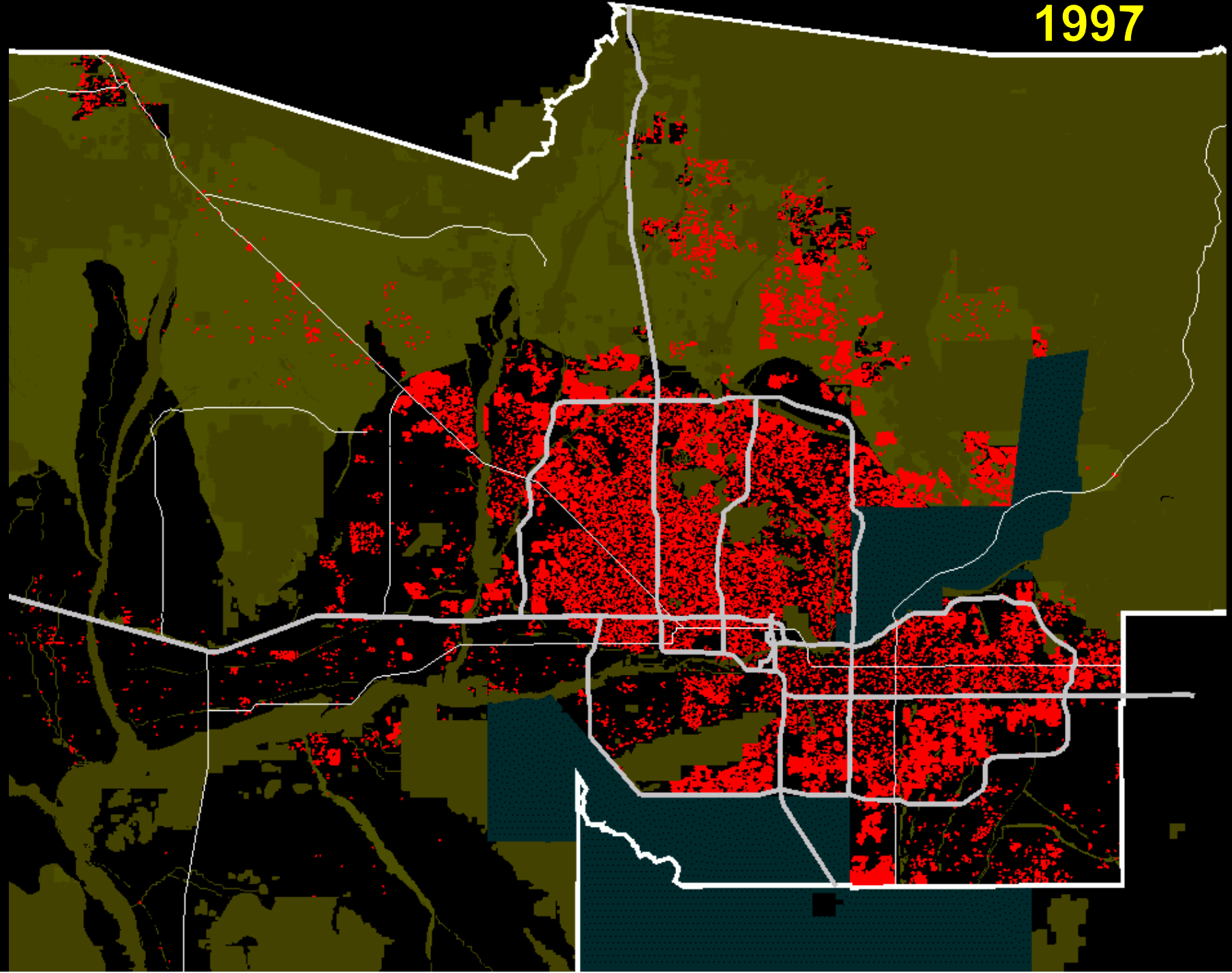
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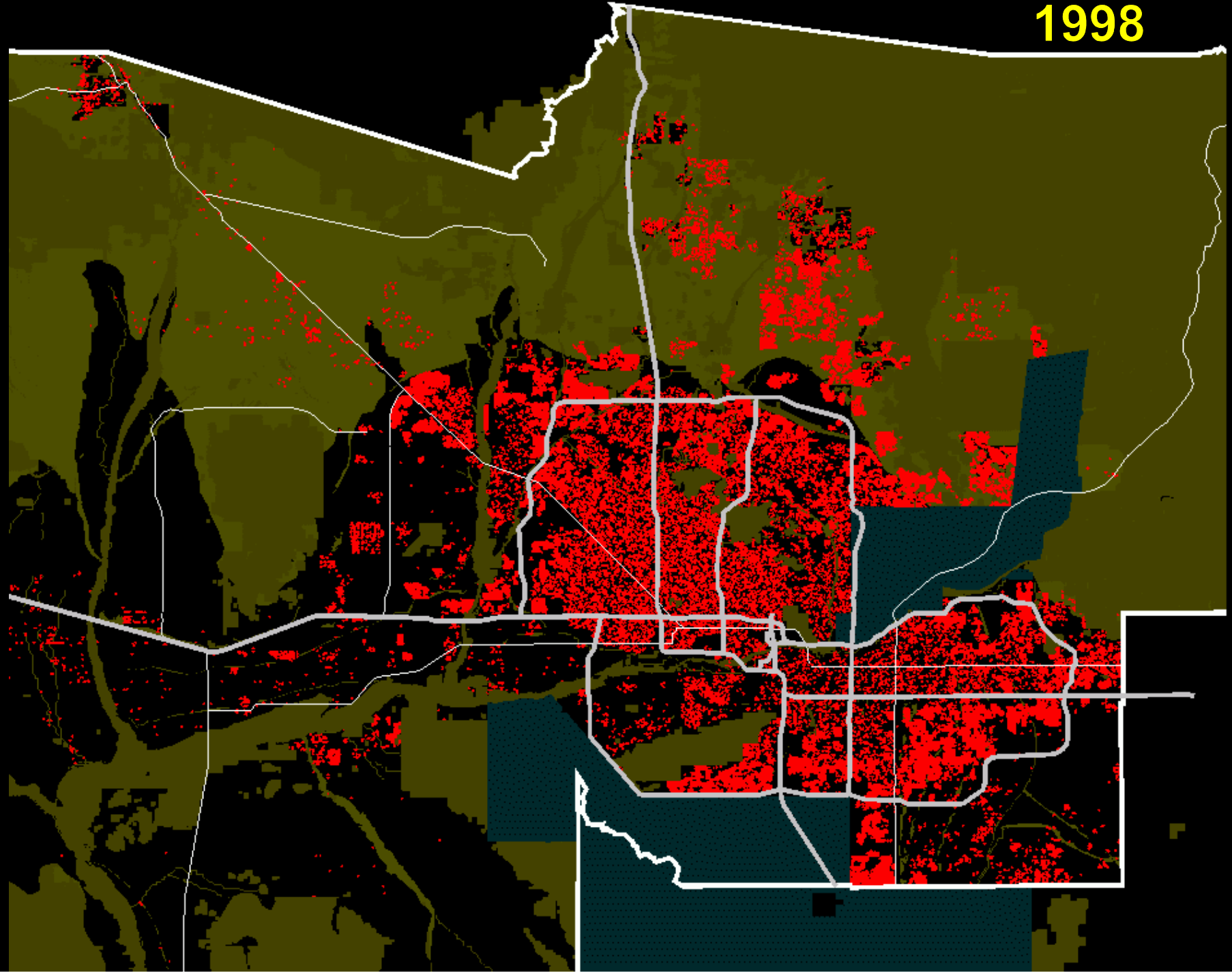
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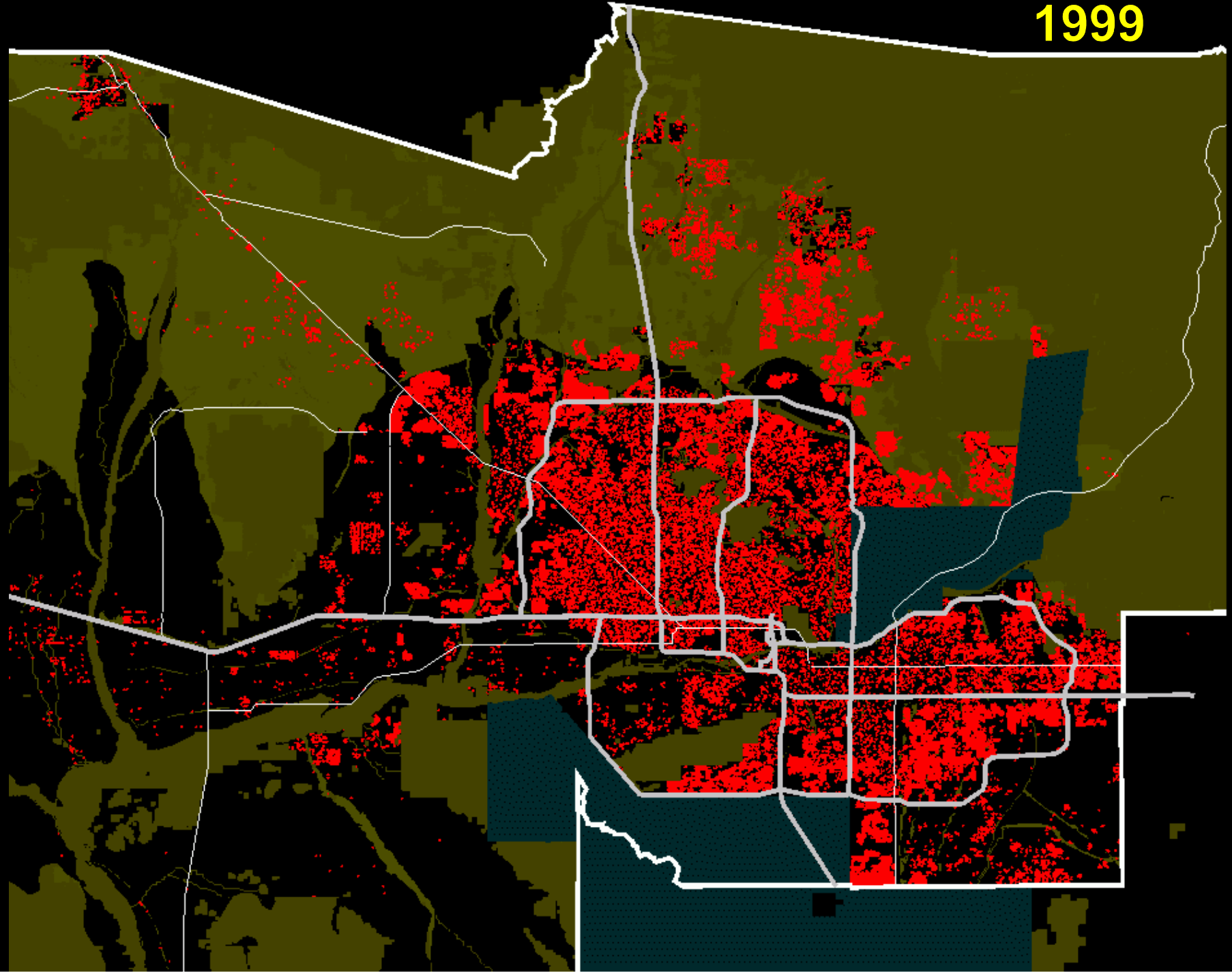
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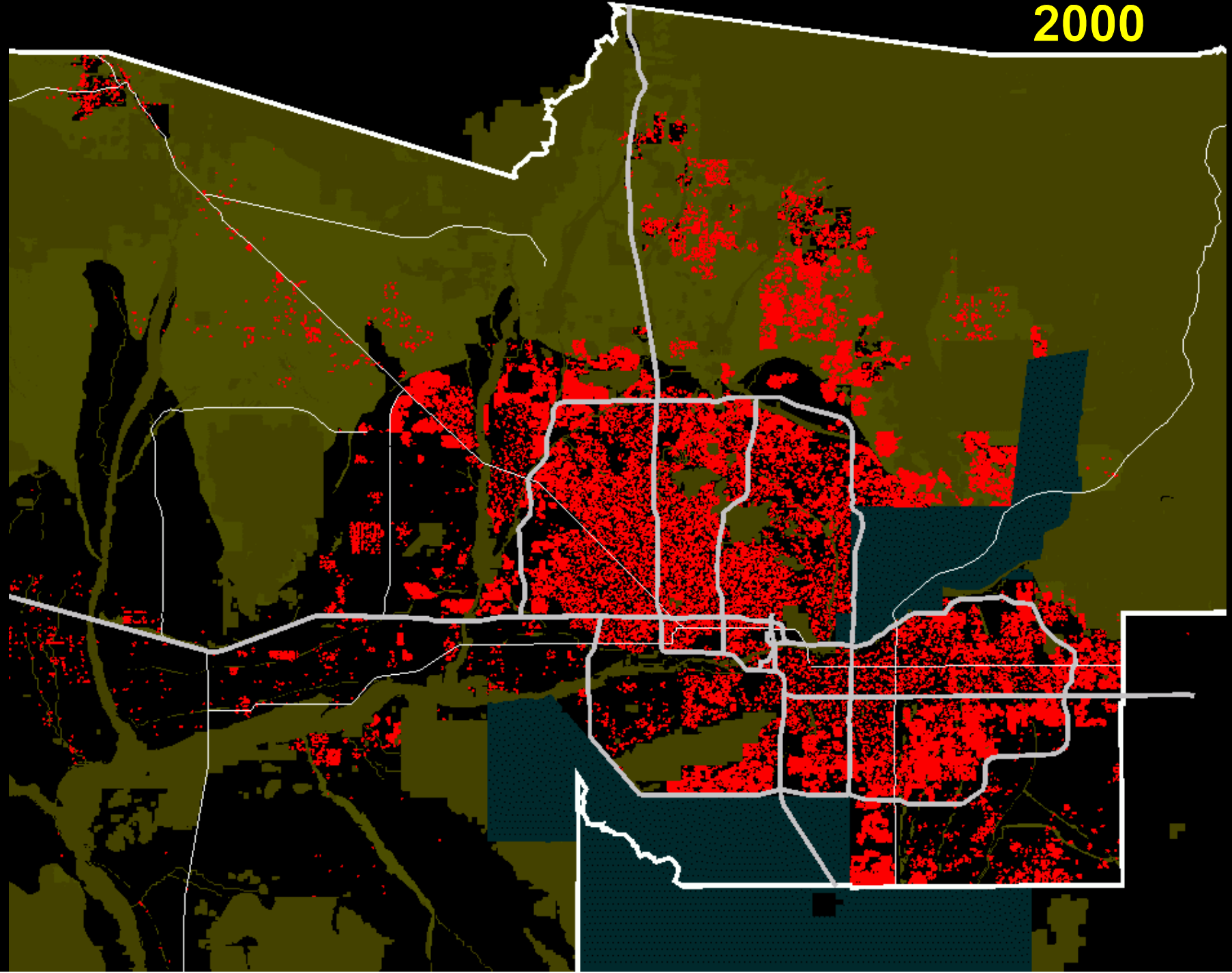
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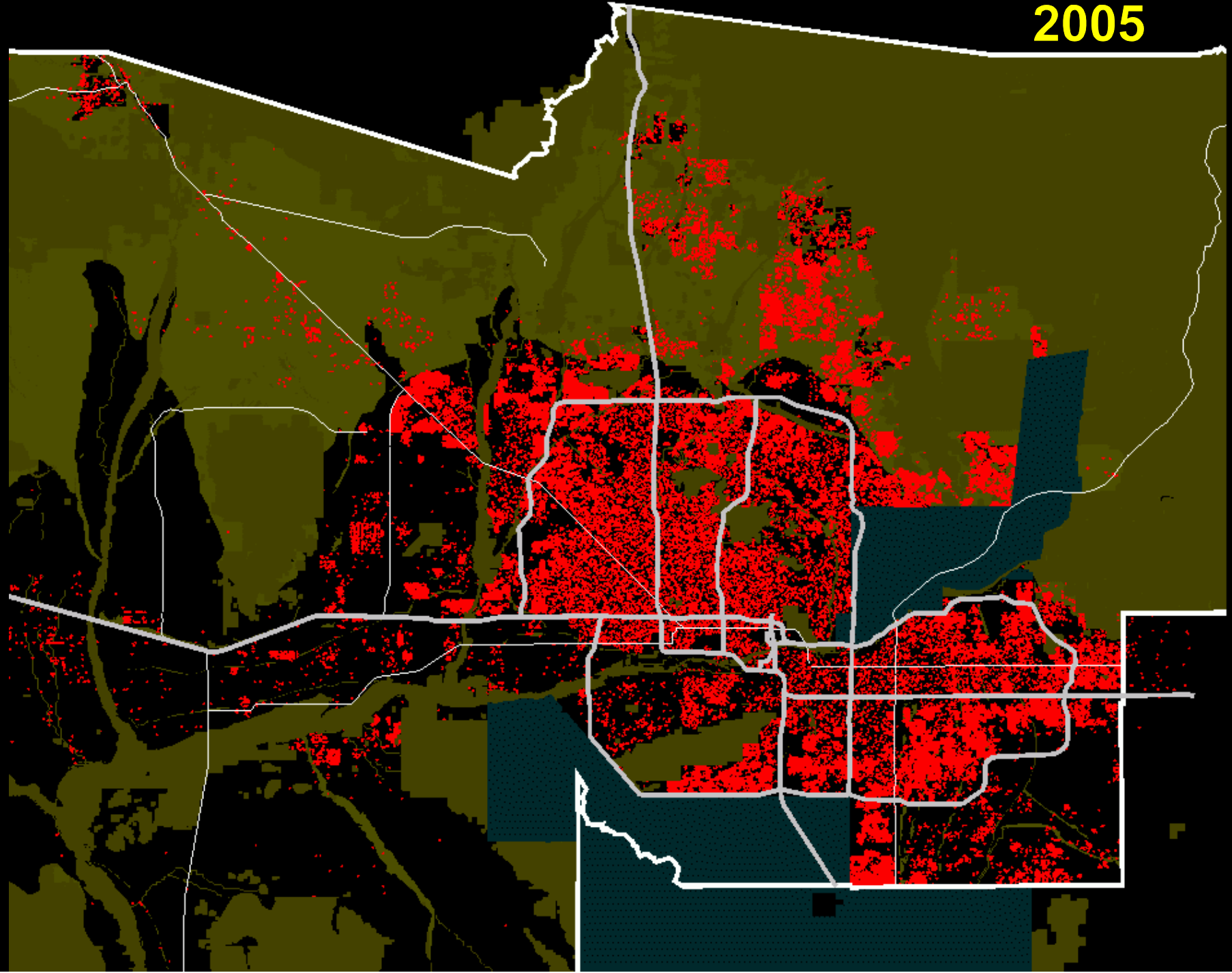
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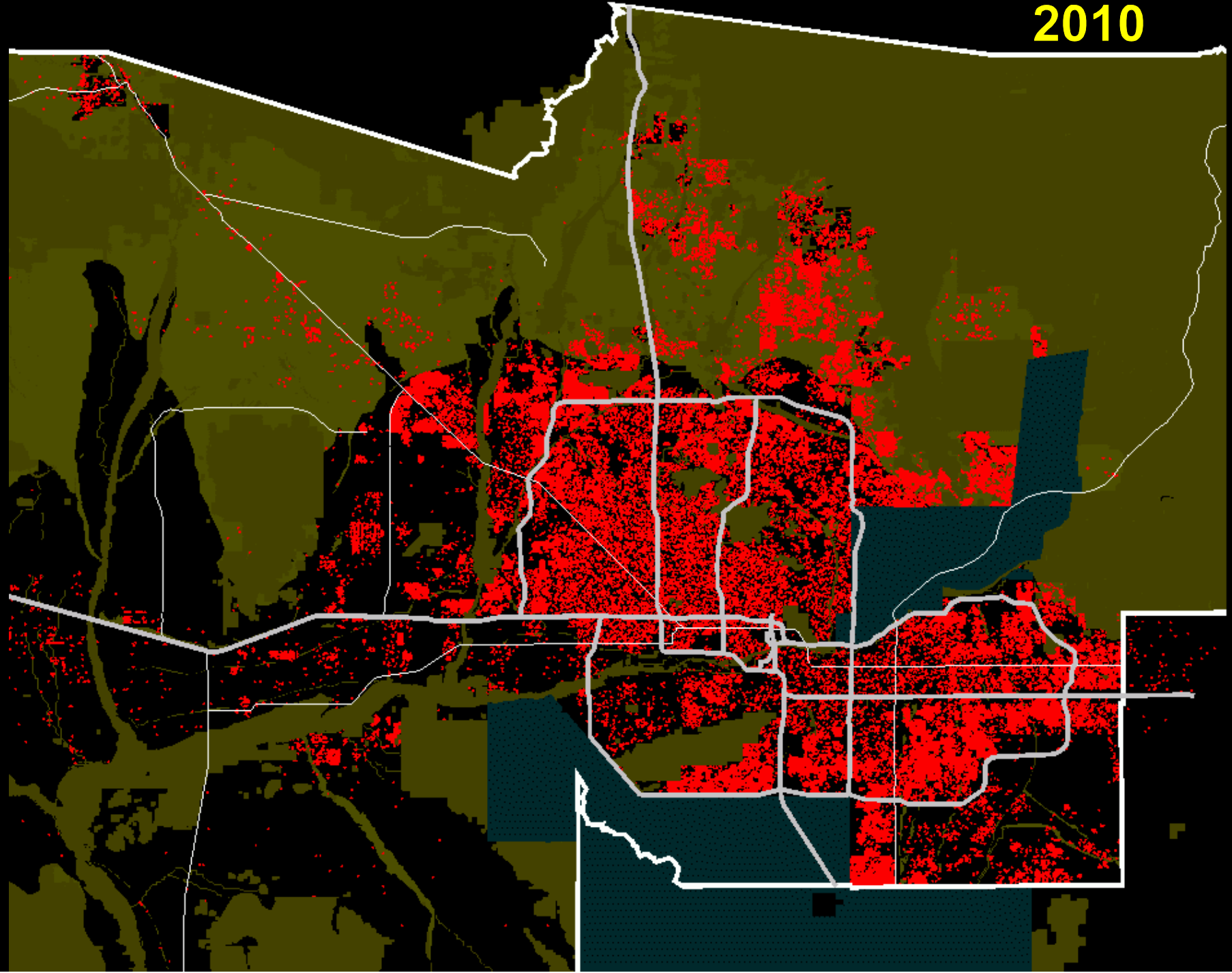
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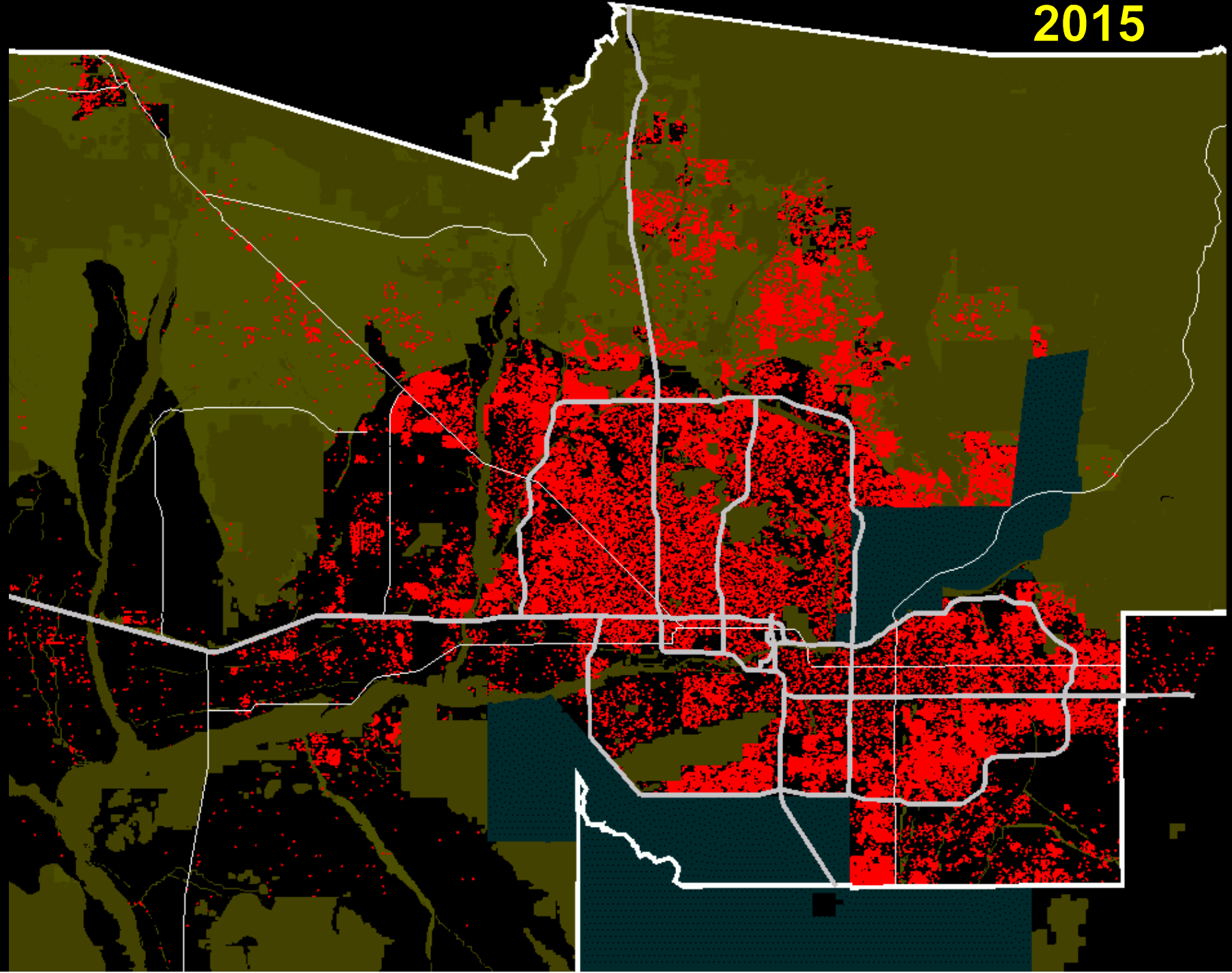
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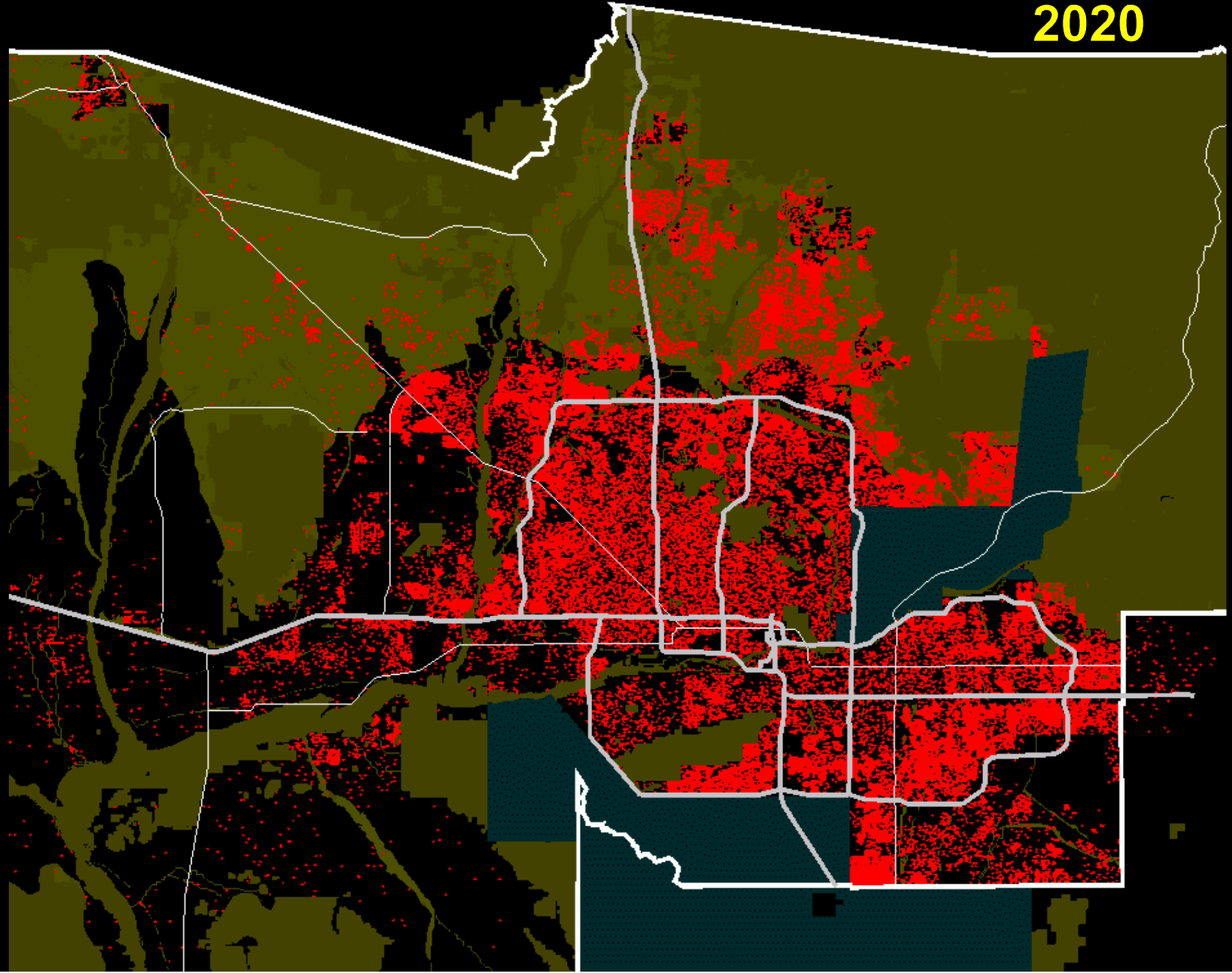
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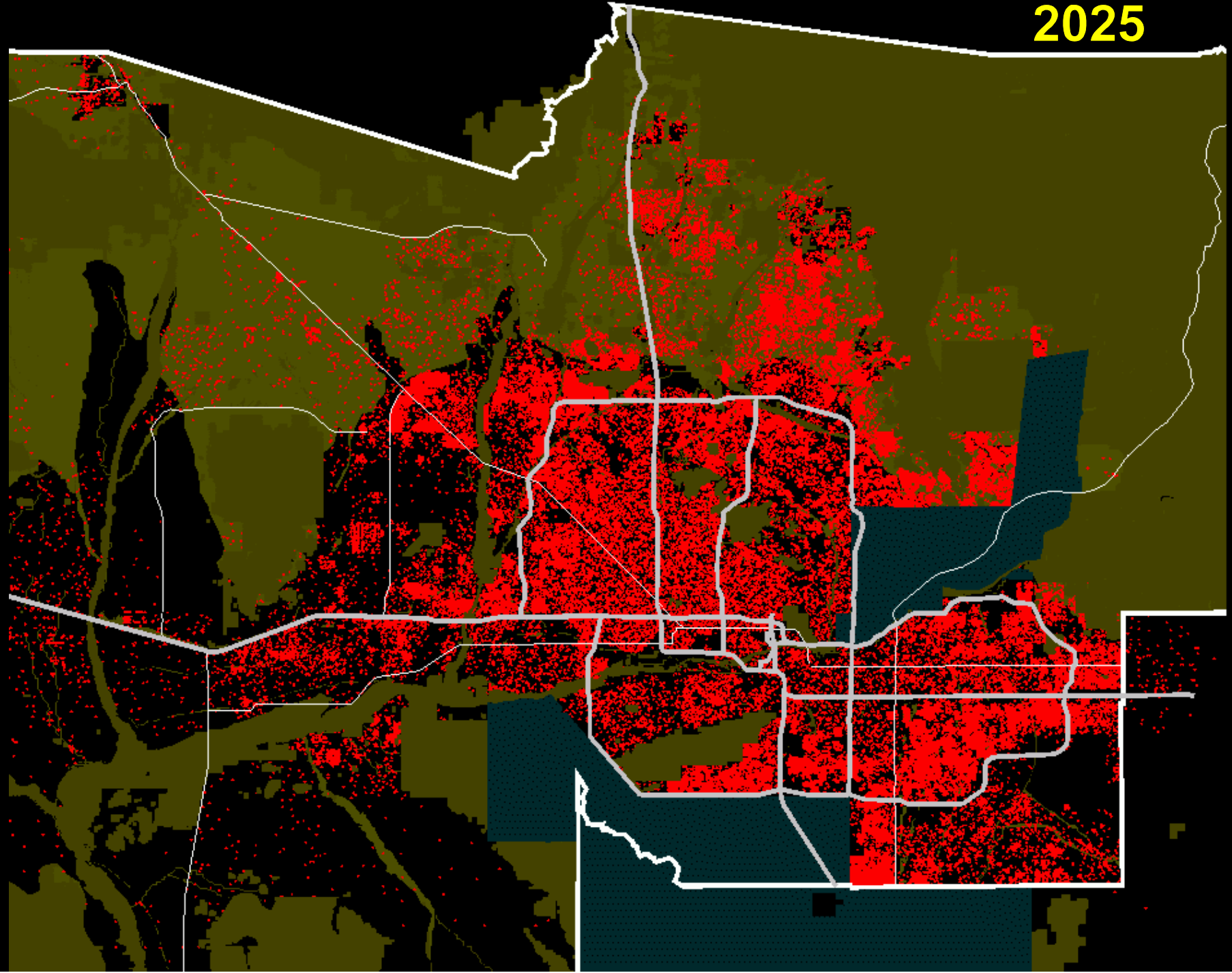
2015



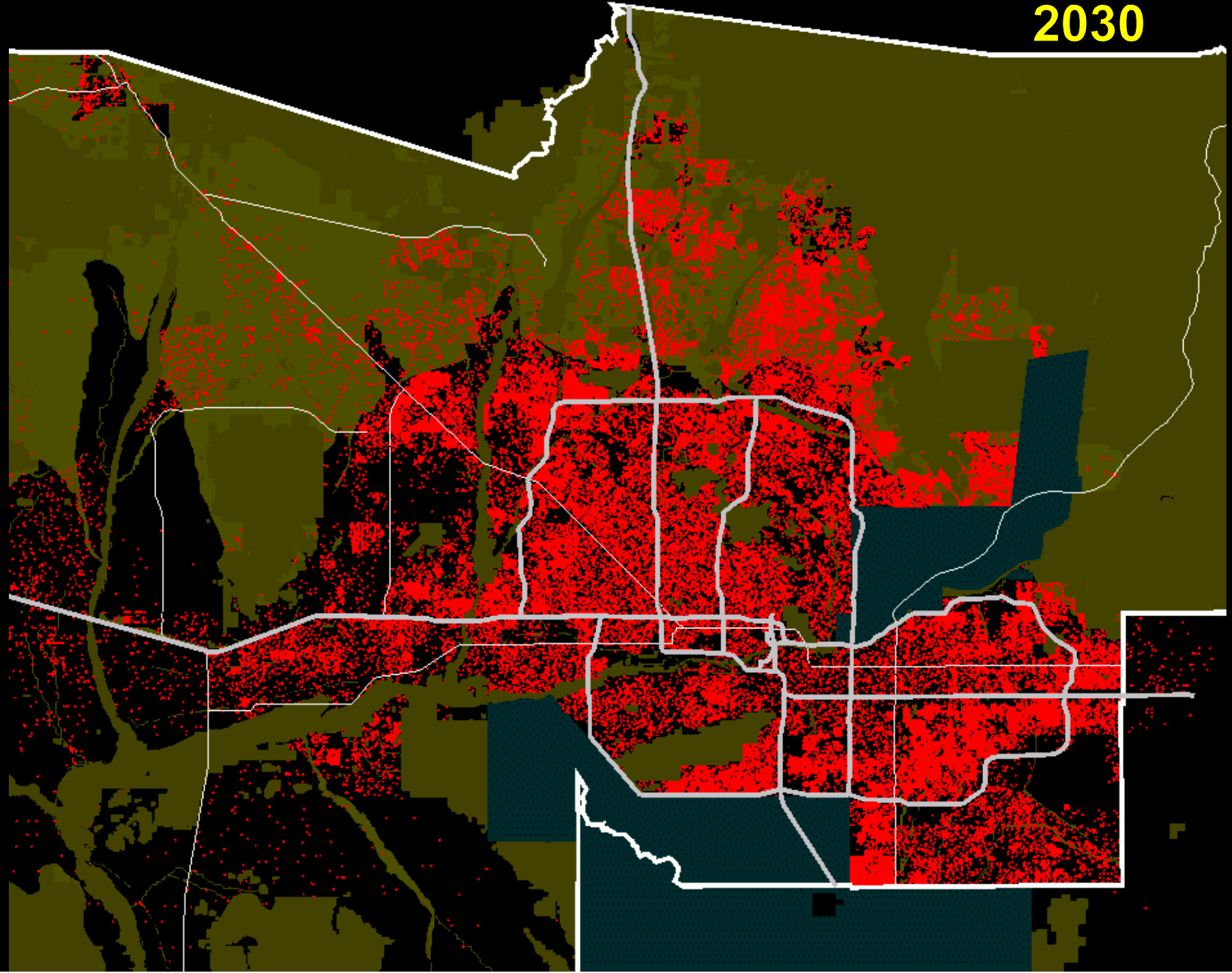
2020



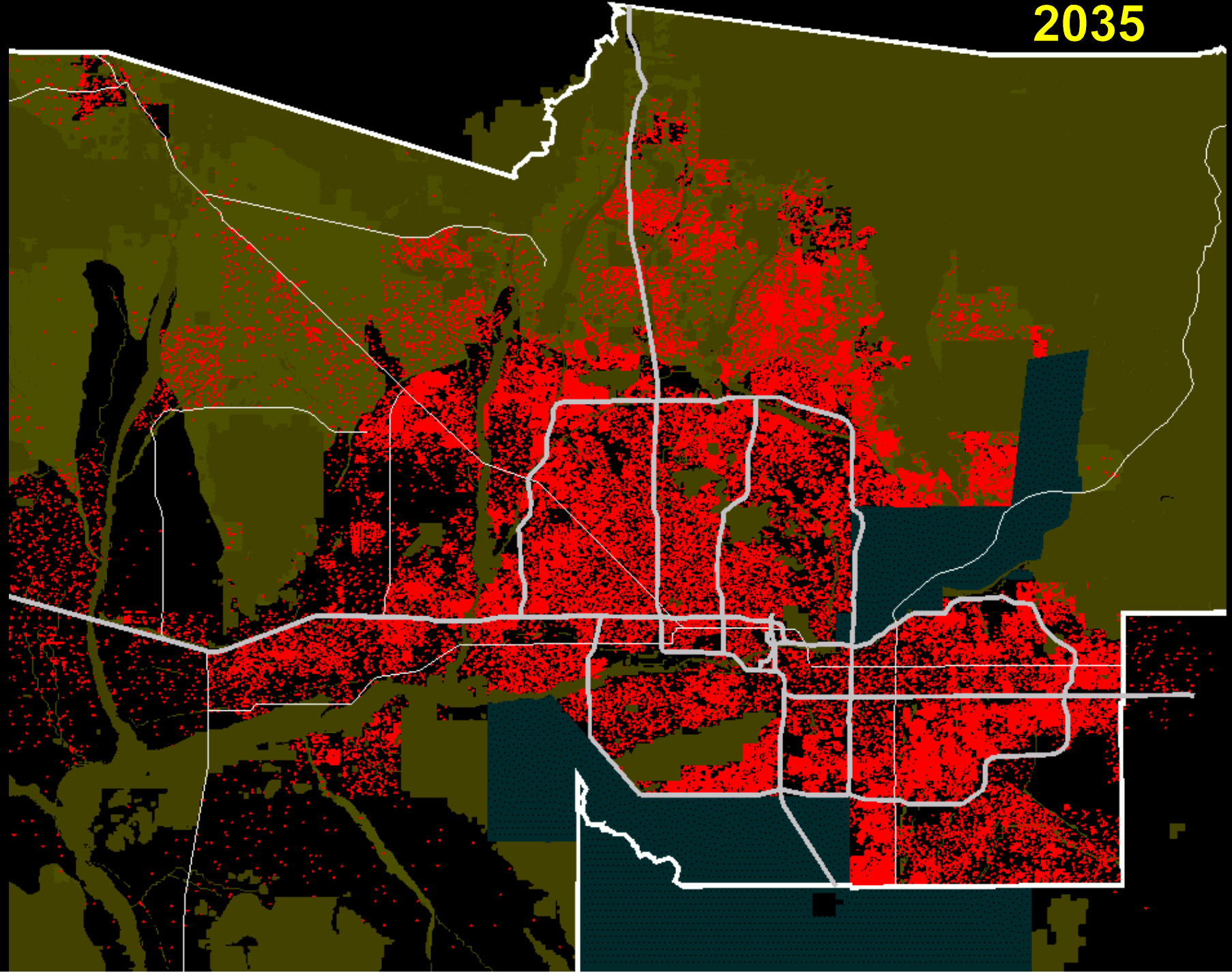
2025



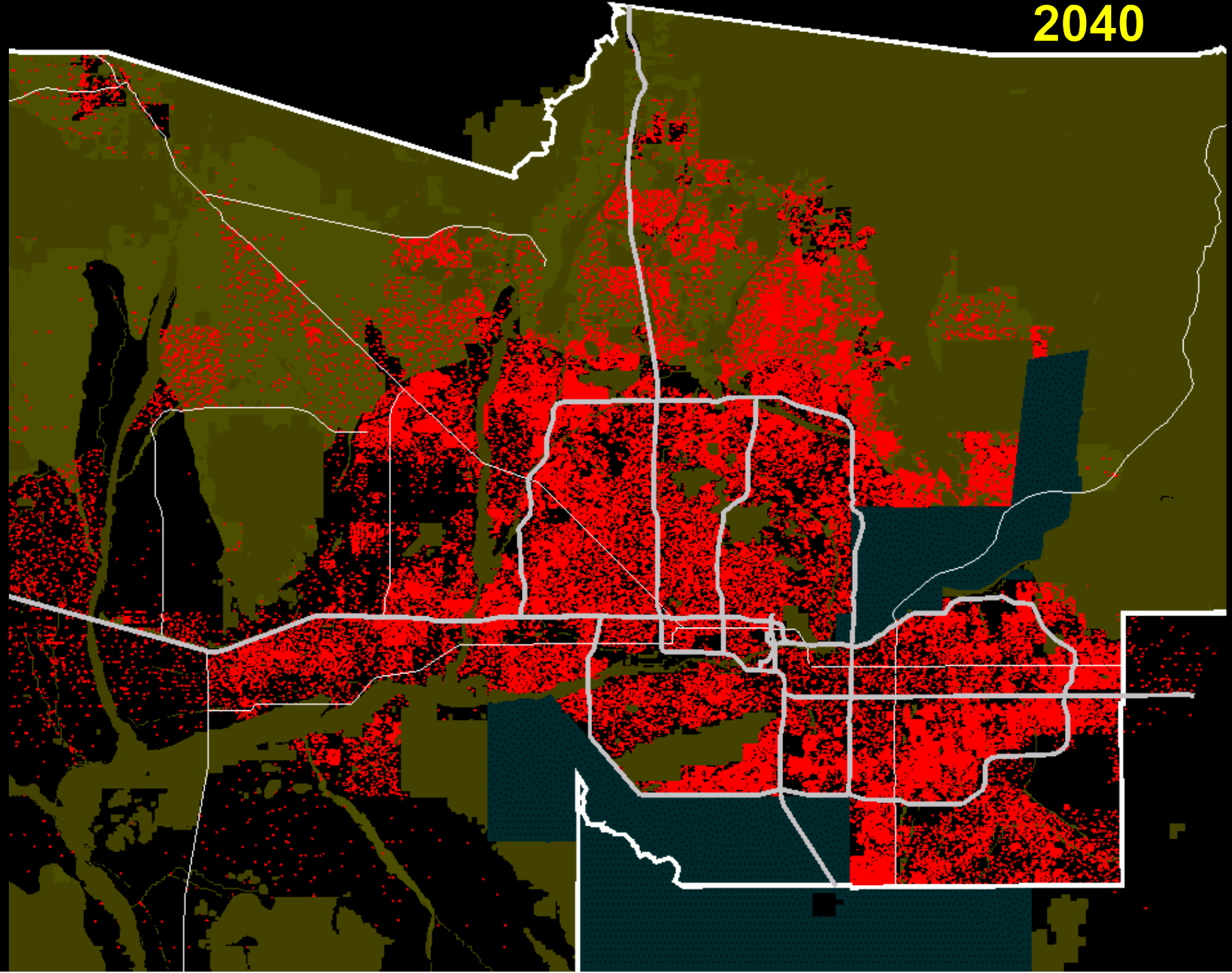
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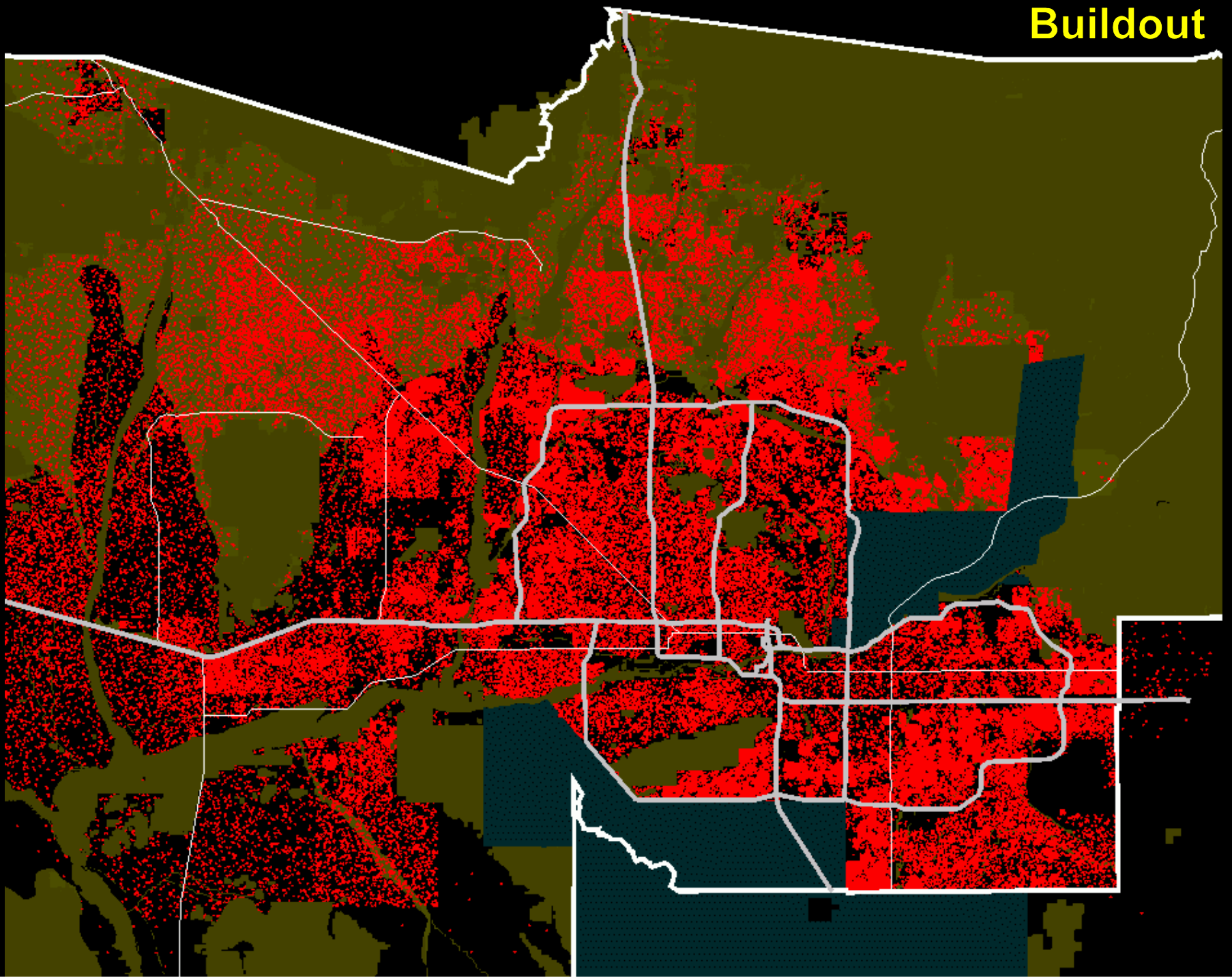
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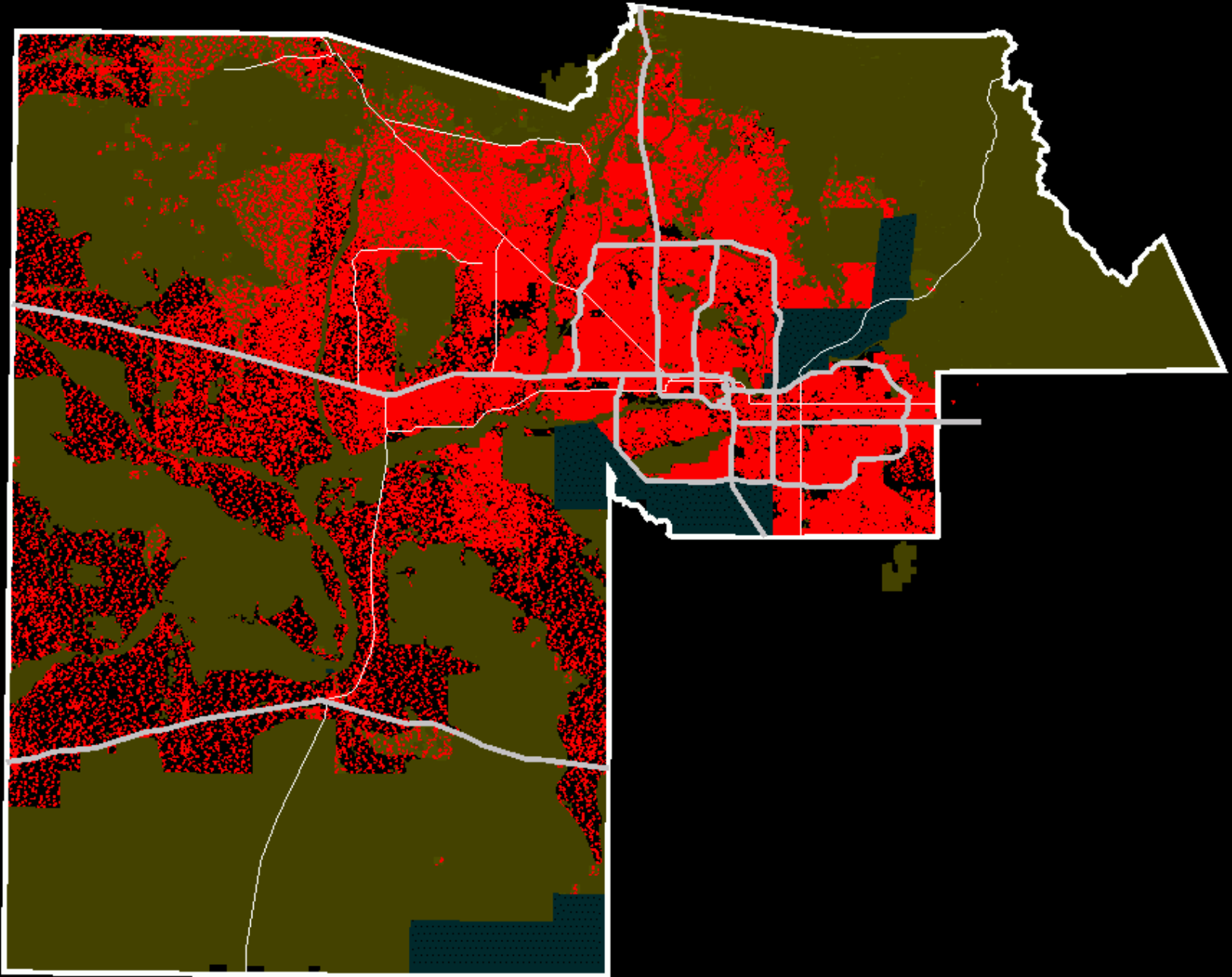
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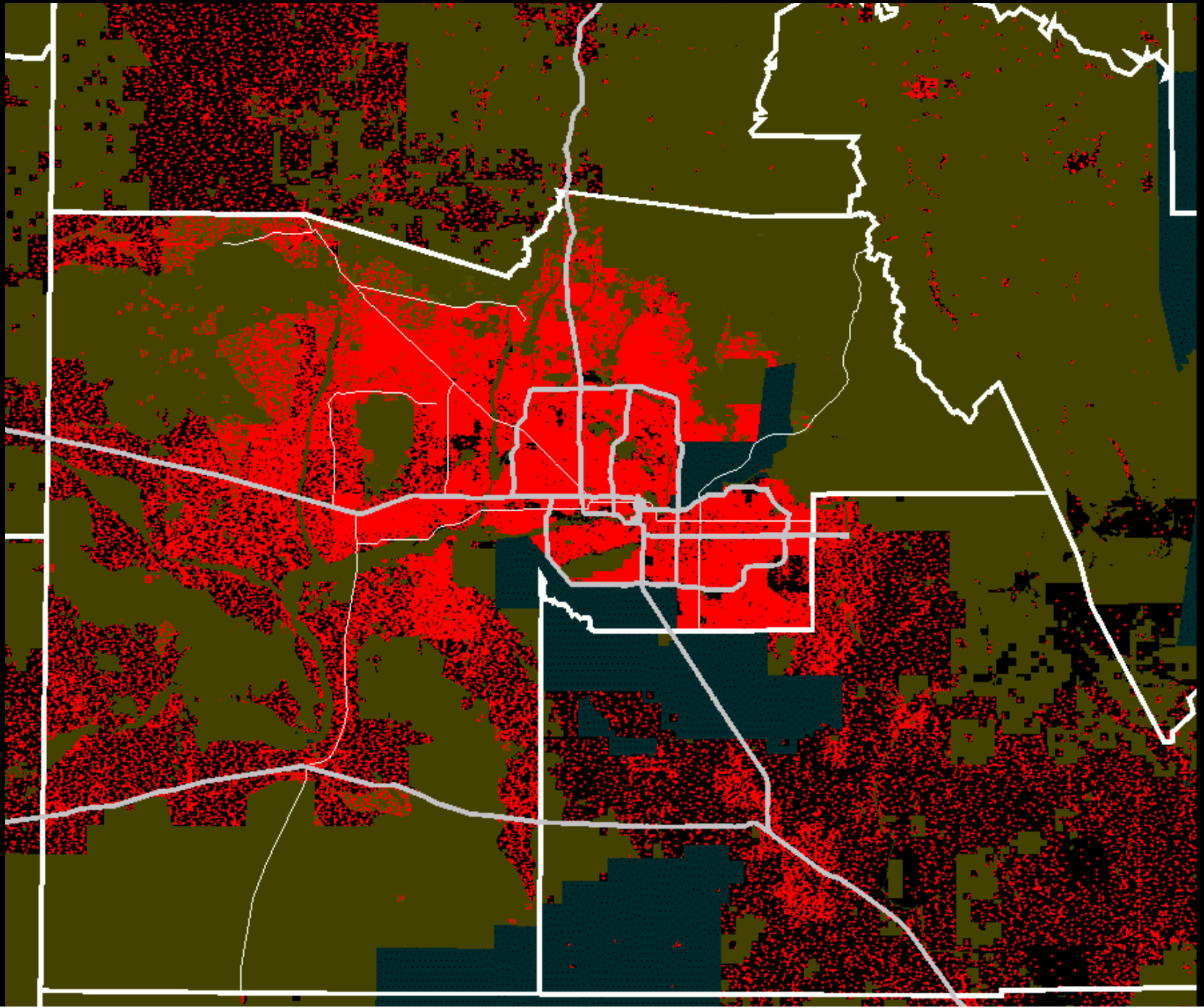
Buildout



Buildout



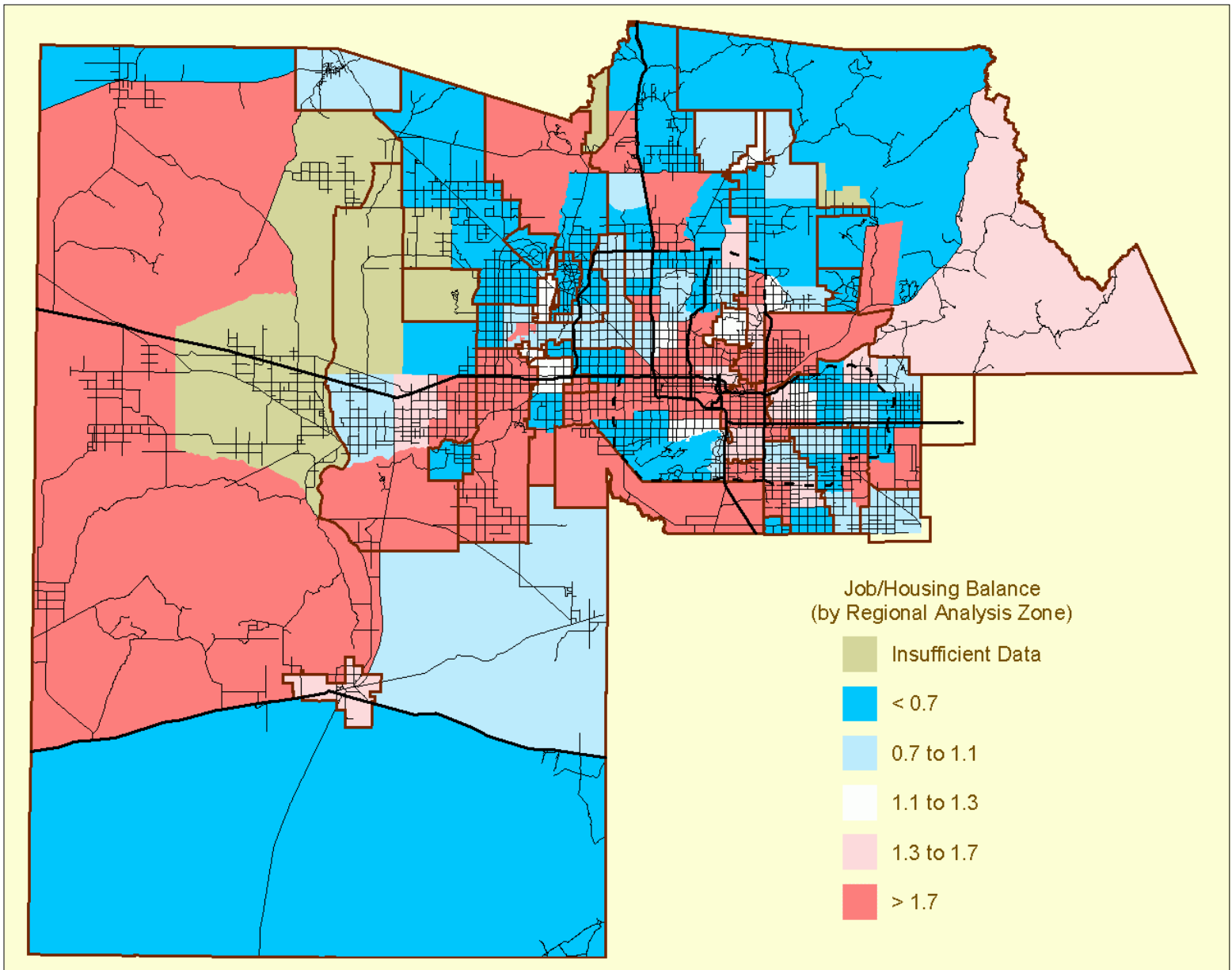
Buildout



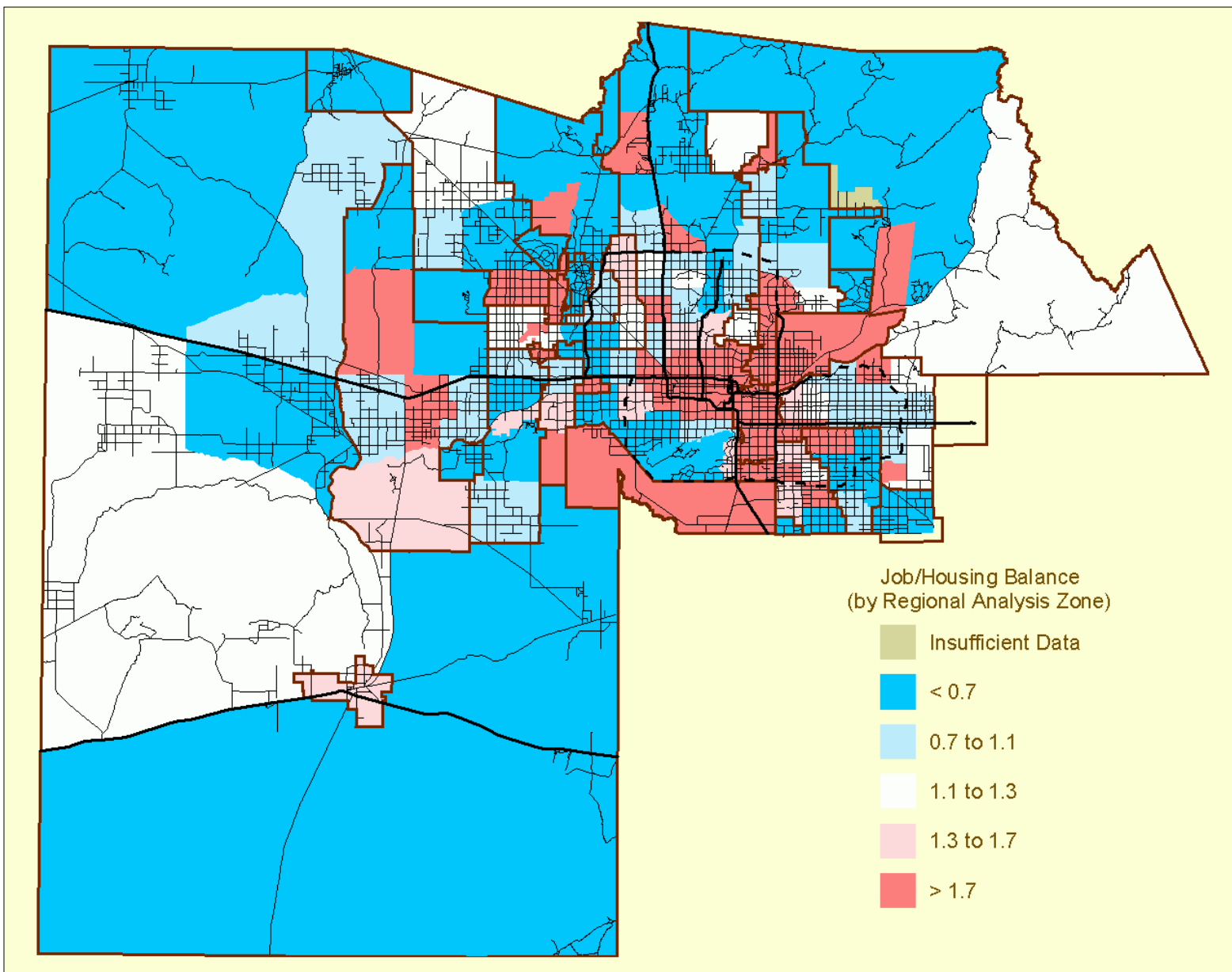
Impacts of Fringe Development

- **Fiscal balance of fringe cities**
- **Jobs/housing imbalance**
 - More concentrated employment cores
 - Surrounding fringe residential
- **Impact on regional transportation system**
- **Impact on pass-through cities**

Job/Housing Balance - 2000



Job/Housing Balance - 2040



Regional Infrastructure Costs, 2000-2040

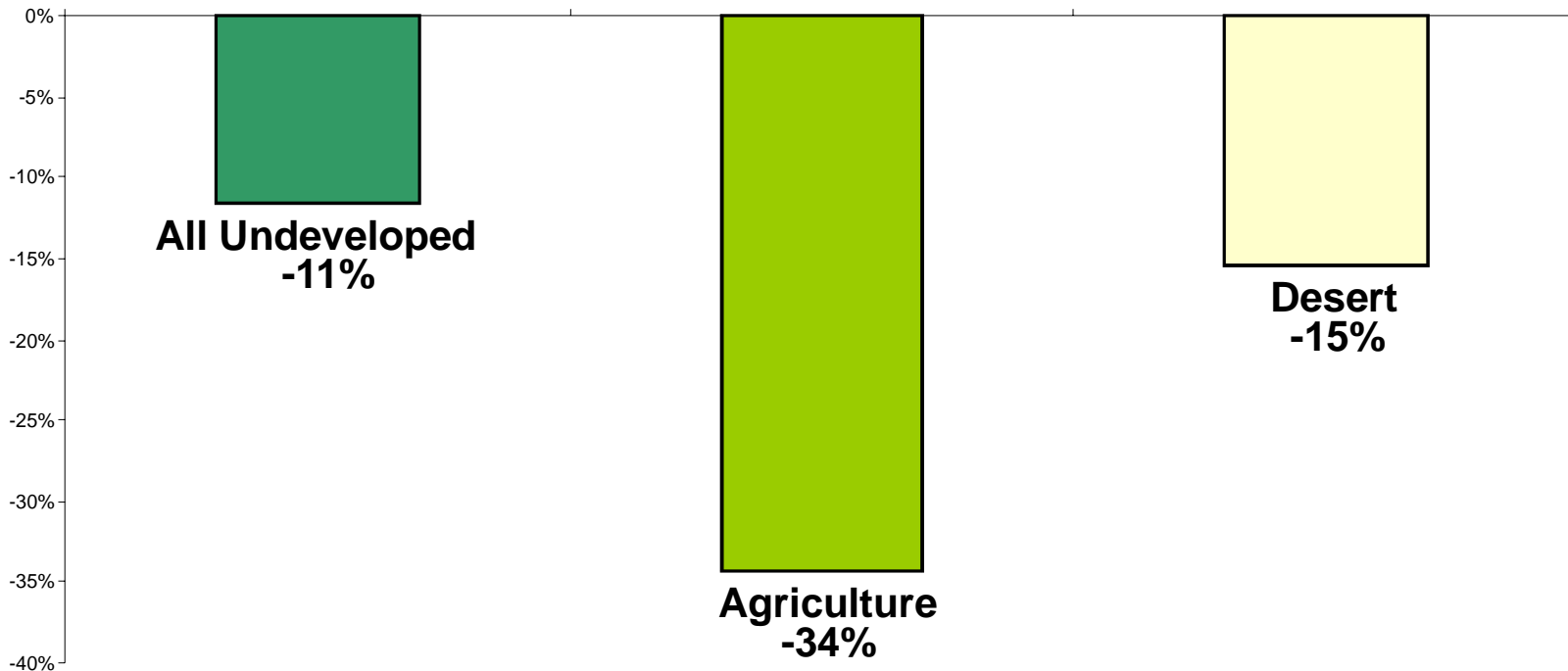
- **Transportation: \$45 to \$50 billion**
- **Water treatment: \$1 to \$1.5 billion**
- **Wastewater treatment: \$3 to \$5 billion**
- **Schools: \$9 to \$12 billion**
- **Open space: \$5 to \$13 billion**
- **TOTAL: \$64 to \$81.5 billion**

Open Space - Survey of Registered Voters

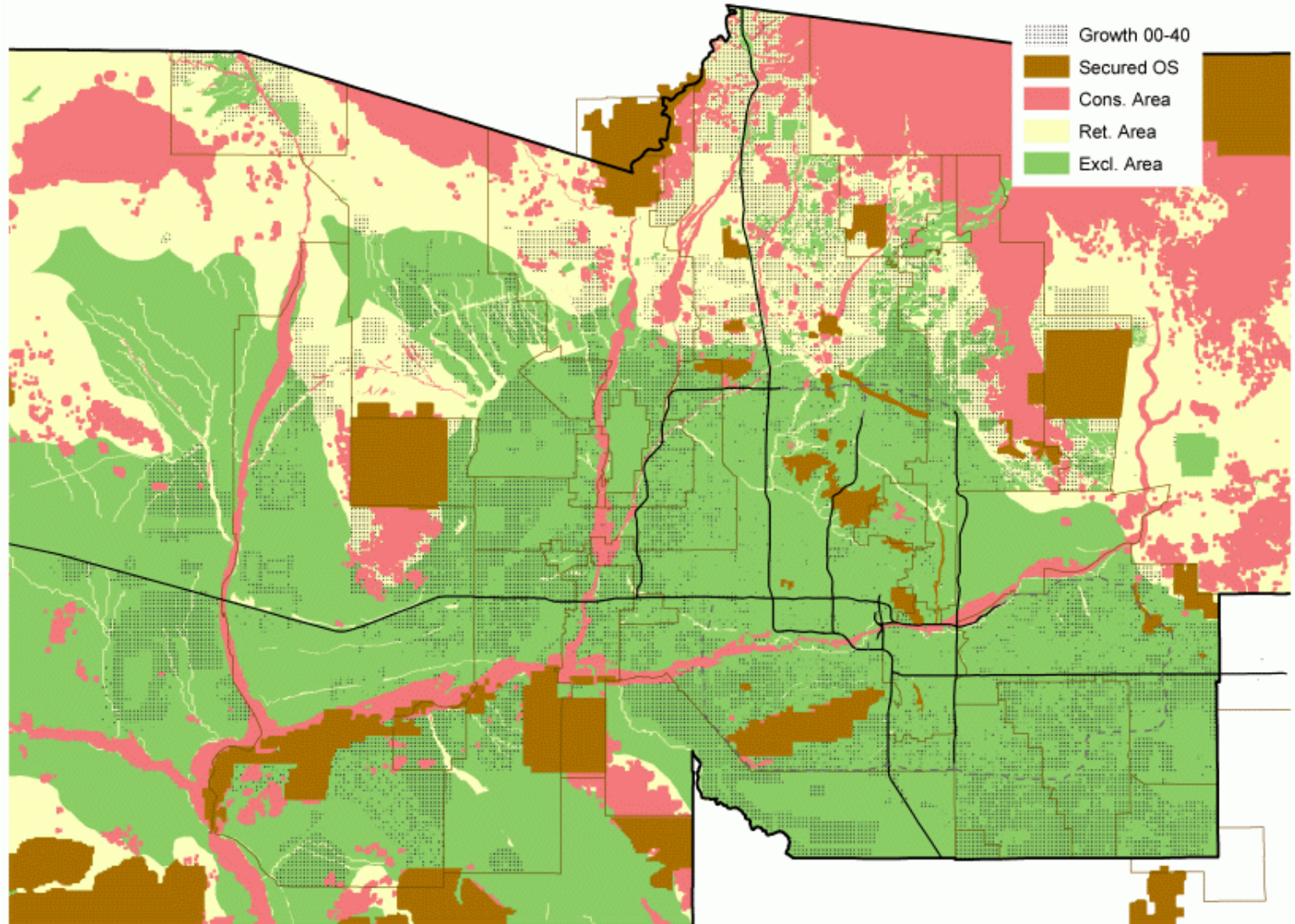
- Not enough permanently protected - 59%
- Buying only way to preserve - 55%
- Buy large amounts - 71%

Urban Land Area Doubles at Cost of Open Space

Unprotected Open Space Lost, 1995-2000
Maricopa County



Regional Open Space Loss



Quality of Life Impacts

45% – Move Immediately if Could

- **Too many people - 46%**
- **Climate/too hot - 18%**
- **Crime - 12%**
- **Traffic - 10%**
- **Pollution/air quality - 10%**
- **Don't like big city - 7%**

Development Challenges

- **Regional thinking in general plan process**
- **Continued geographic expansion of metro likely**
- **Negative consequences of fringe development**
- **Costly regional infrastructure**
- **Loss of open space**
- **Regional attributes make it less attractive to people**
- **Playing field more complex**
- **Regional problem-solving more difficult**

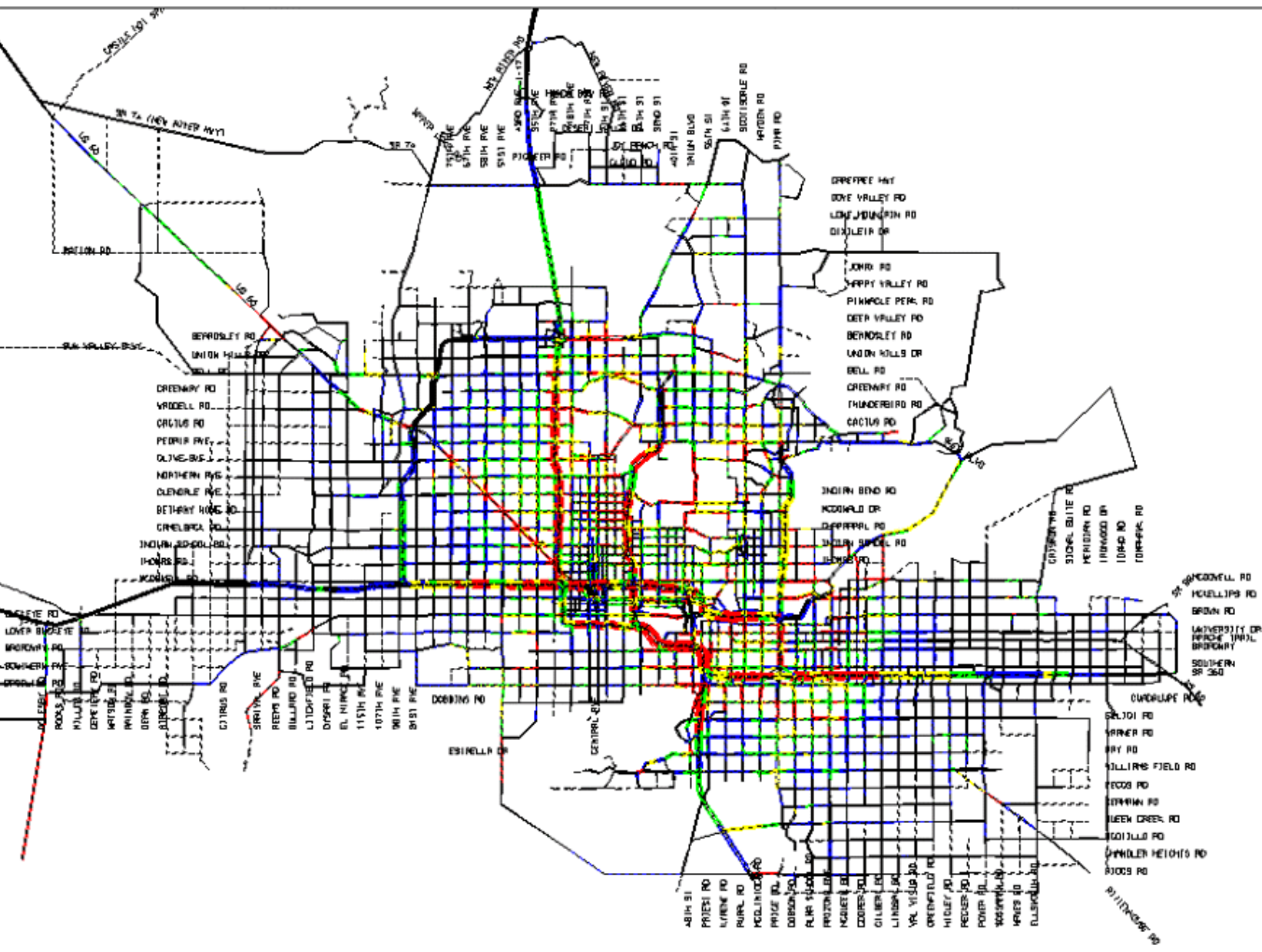
Transportation



YEAR 2000 DAILY LEVEL OF SERVICE

emme/2

LINRS:
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 &!vdf=10,50,10
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 THRESHOLD:
 LOWER: -*****
 UPPER: 999999

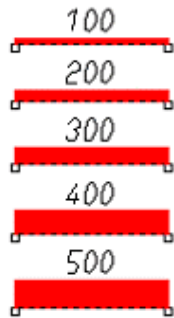


LEGEND

VOLUME/CAPACITY RATIO

LOS A:	0 - 50	Blue
LOS B-C:	51 - 80	Black
LOS D:	81 - 90	Green
LOS E:	91 - 100	Yellow
LOS F:	101 - UP	Red

SCALE: 32



WINDOW:
 268900/ 779758
 658535/1071984

EMME/2 PROJECT: "2000 w/1541 zones"
 SCENARIO 7: 24-HR Hwy Assignment (validation)
 ATTRIBUTE @vol: vol (in thousands)

00-12-14 10:17
 MODULE: 2.13
 MAC.....pj

YEAR 2040 DAILY LEVEL OF SERVICE

emme/2

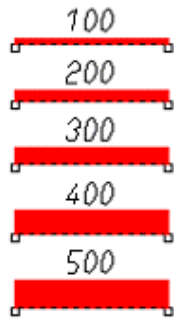
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LEGEND

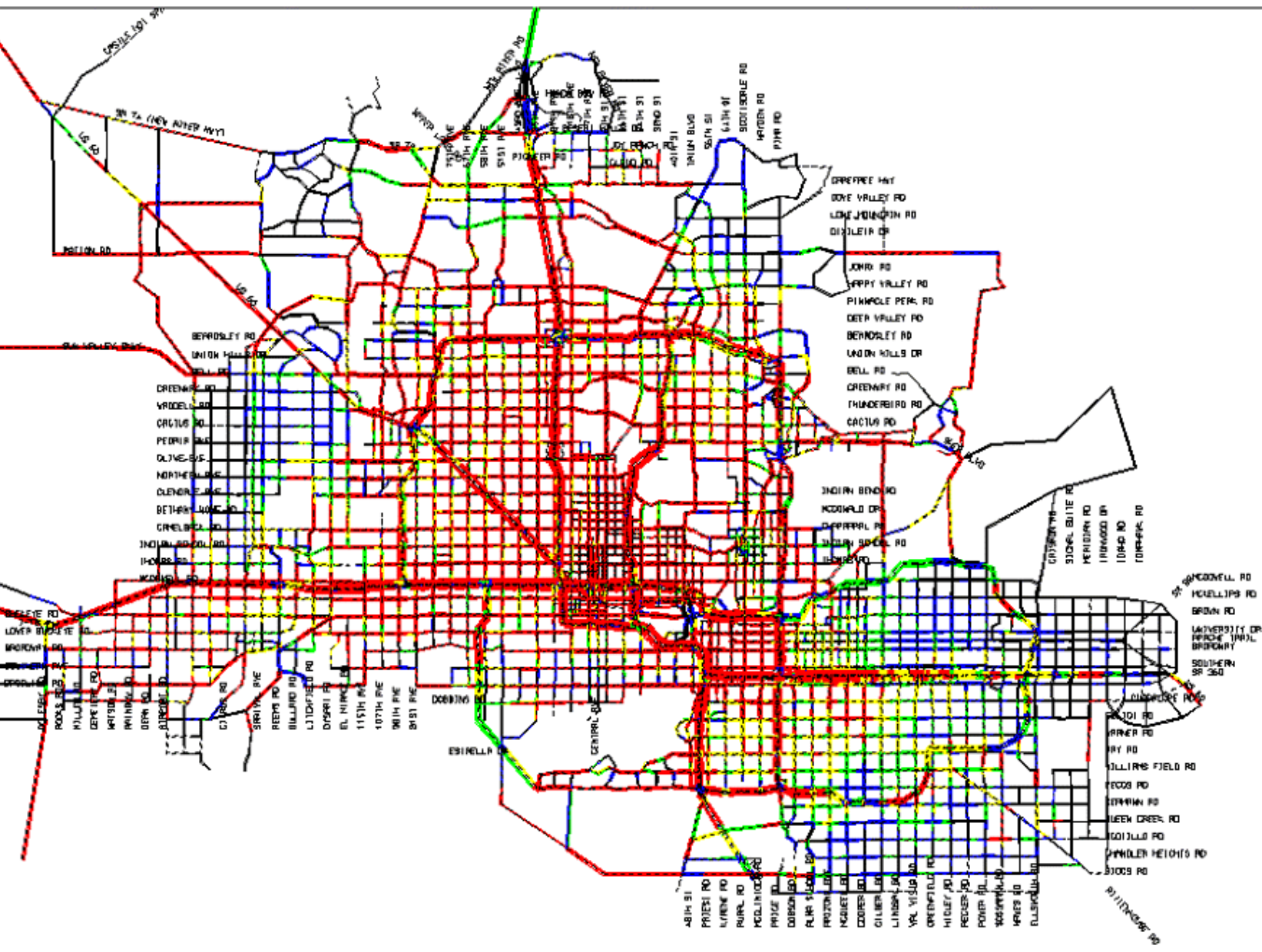
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 SCENARIO 7: 24-HRHwy Assignment (validation)
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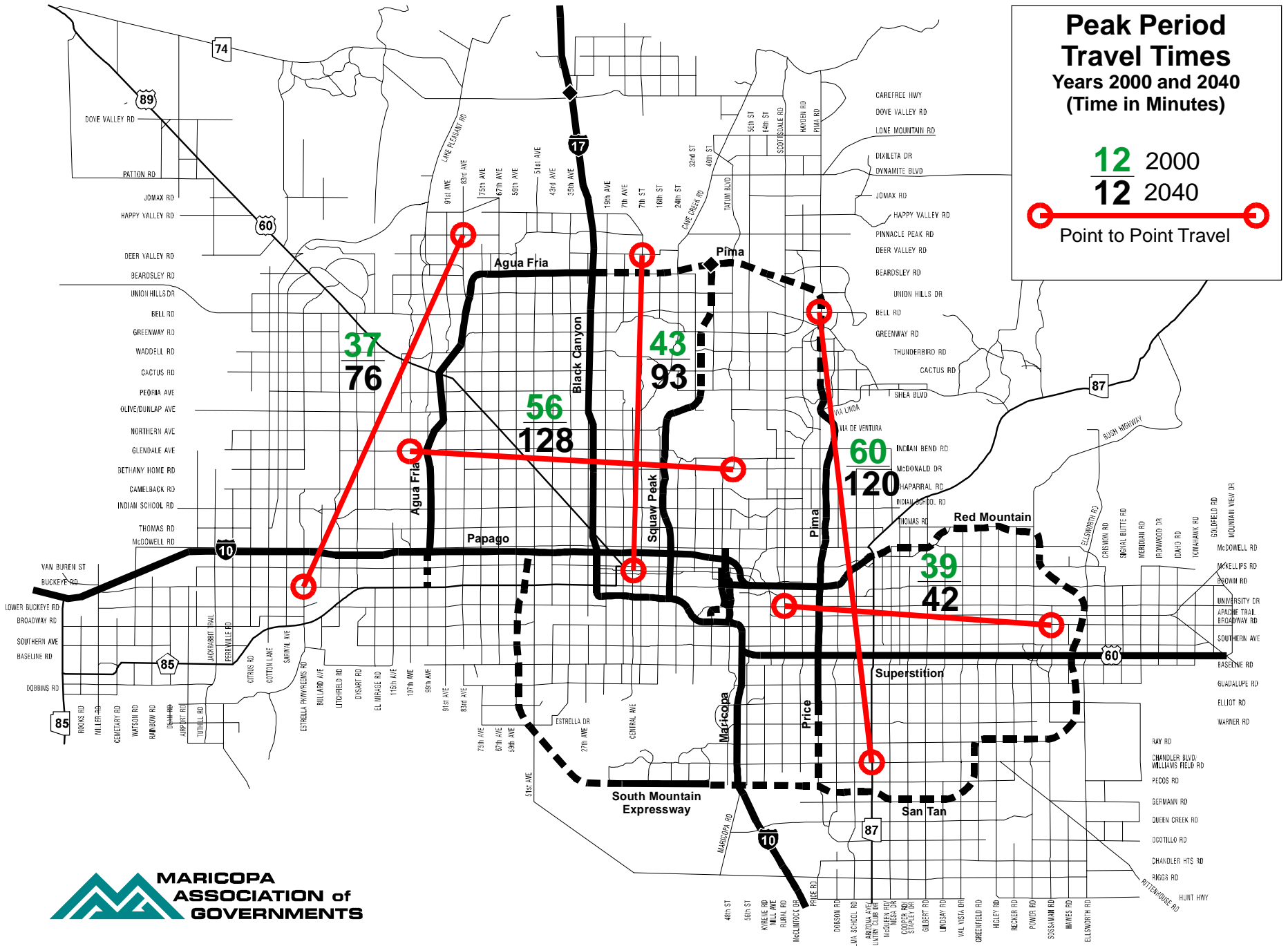
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 MAC.....pj

Peak Period Travel Times Years 2000 and 2040 (Time in Minutes)

12 2000

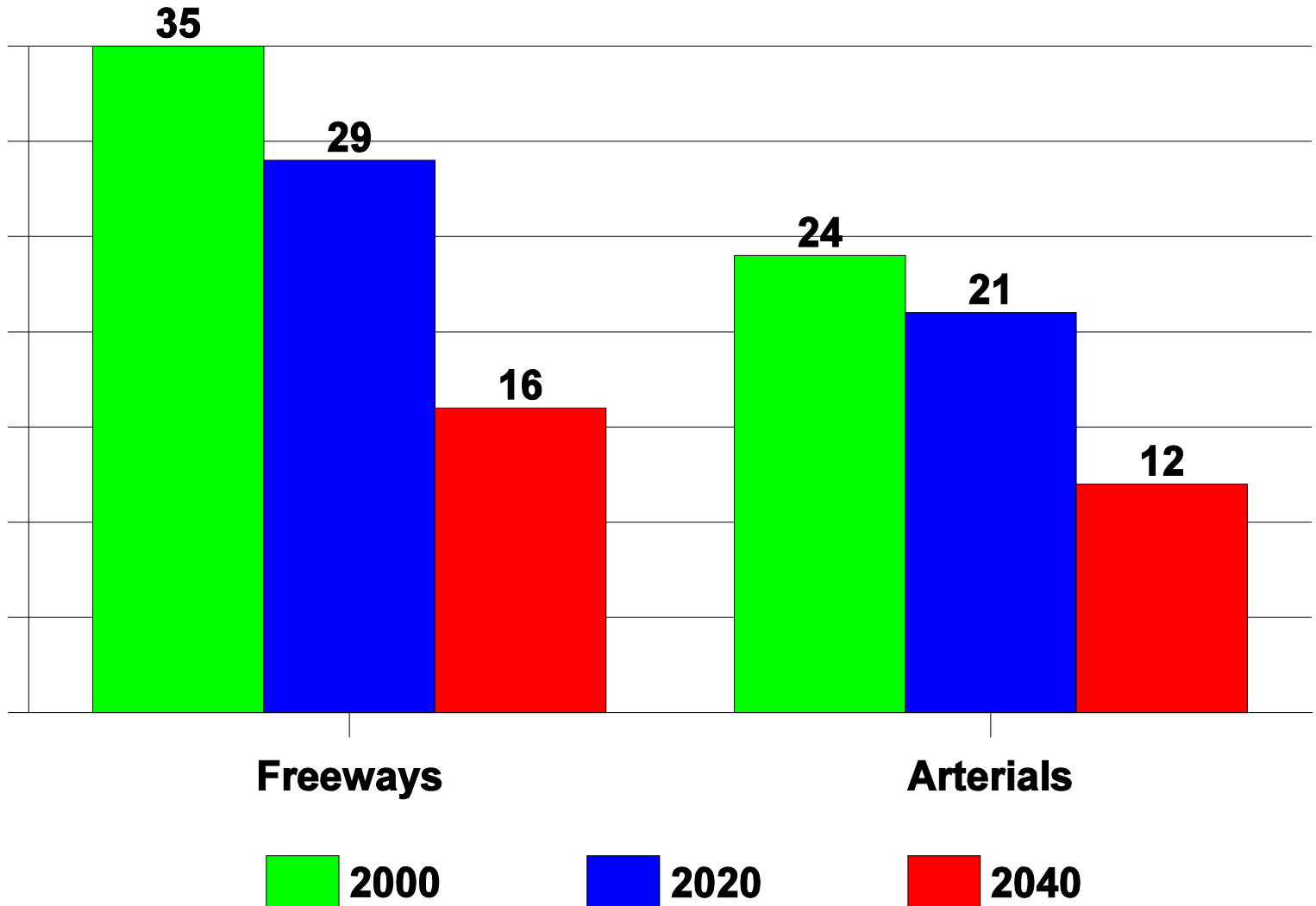
12 2040

Point to Point Travel

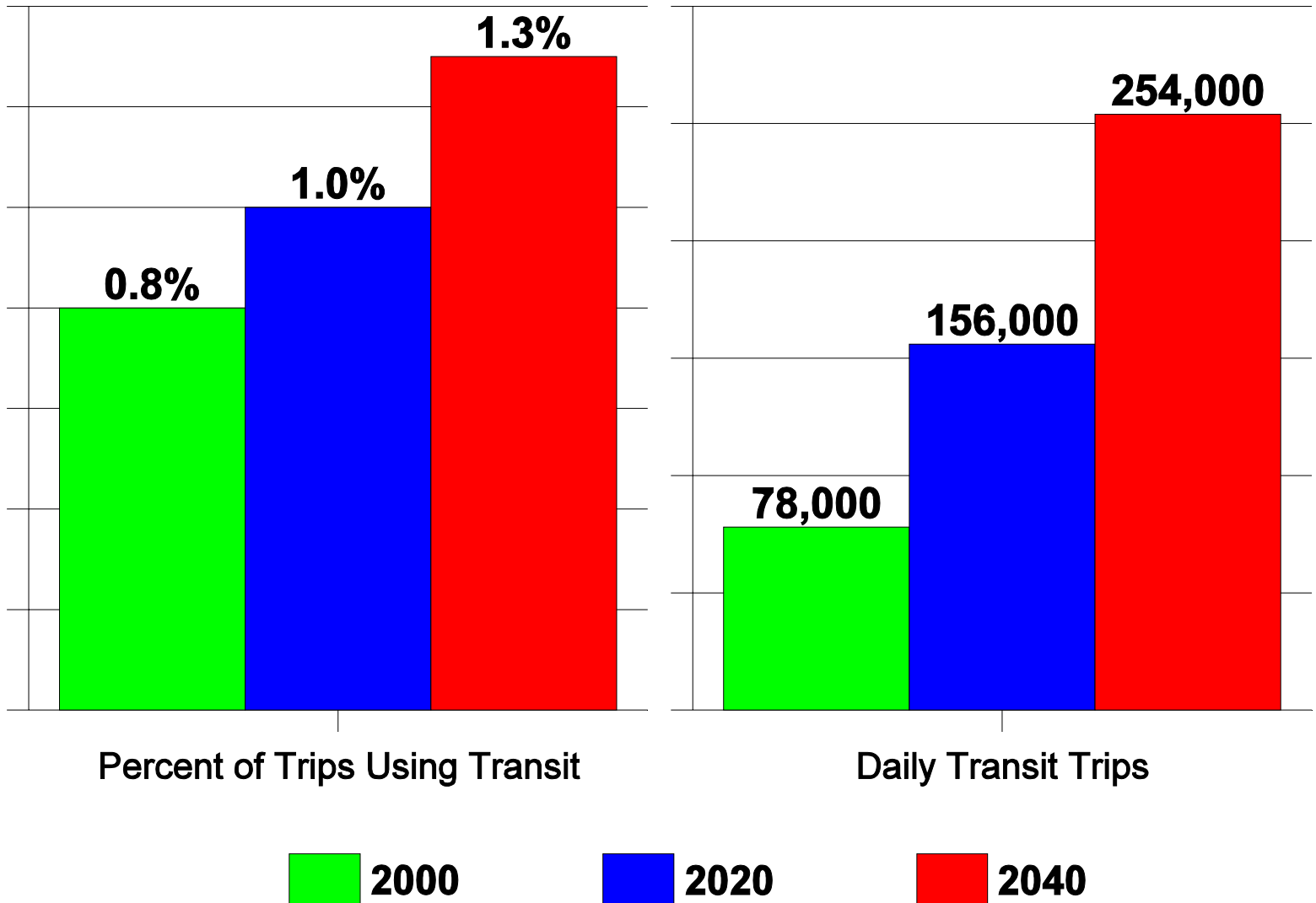


Facility Speeds

In MPH during the Peak Period

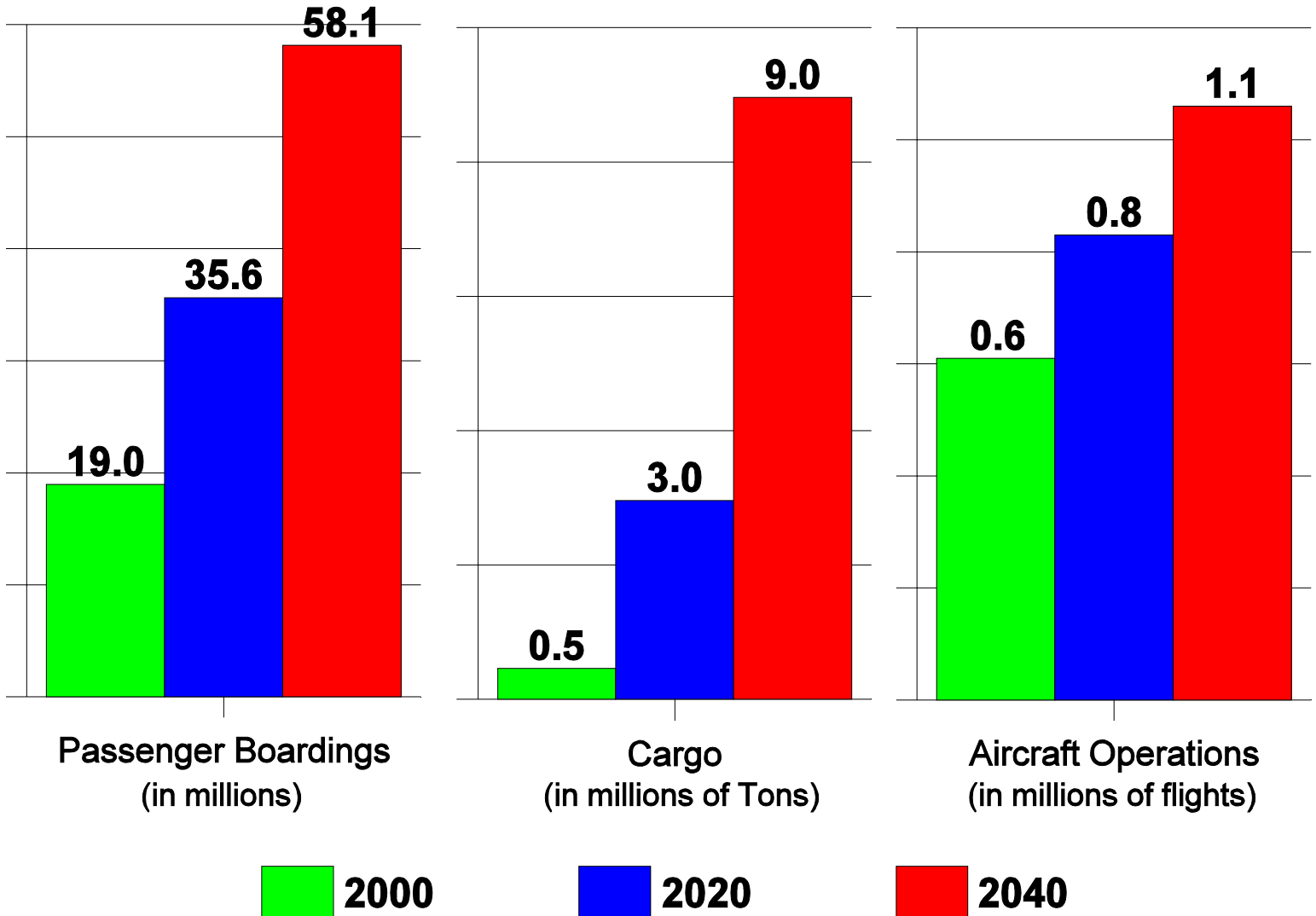


Transit Share of Travel

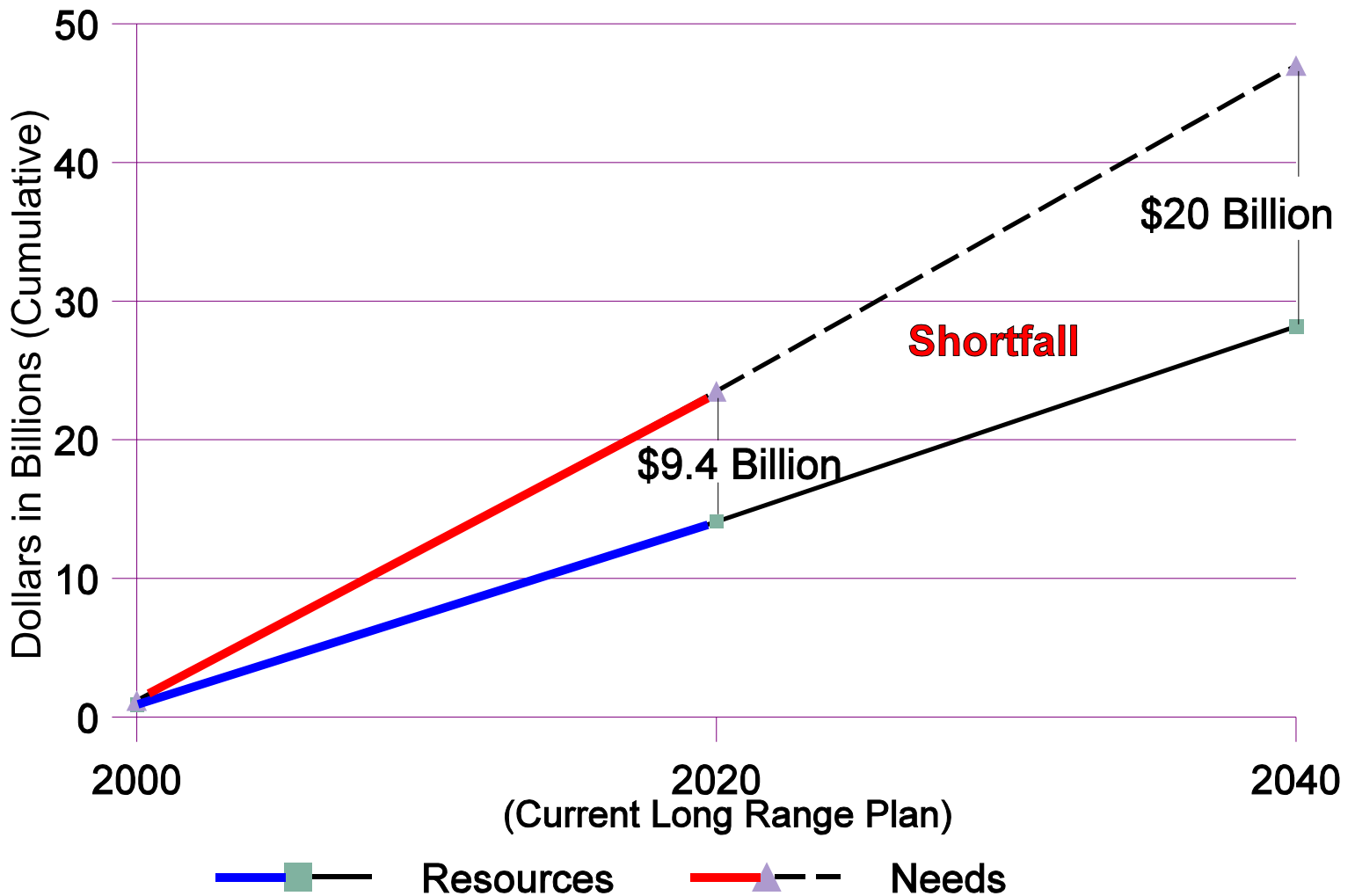


Aviation Activity

At Sky Harbor Airport

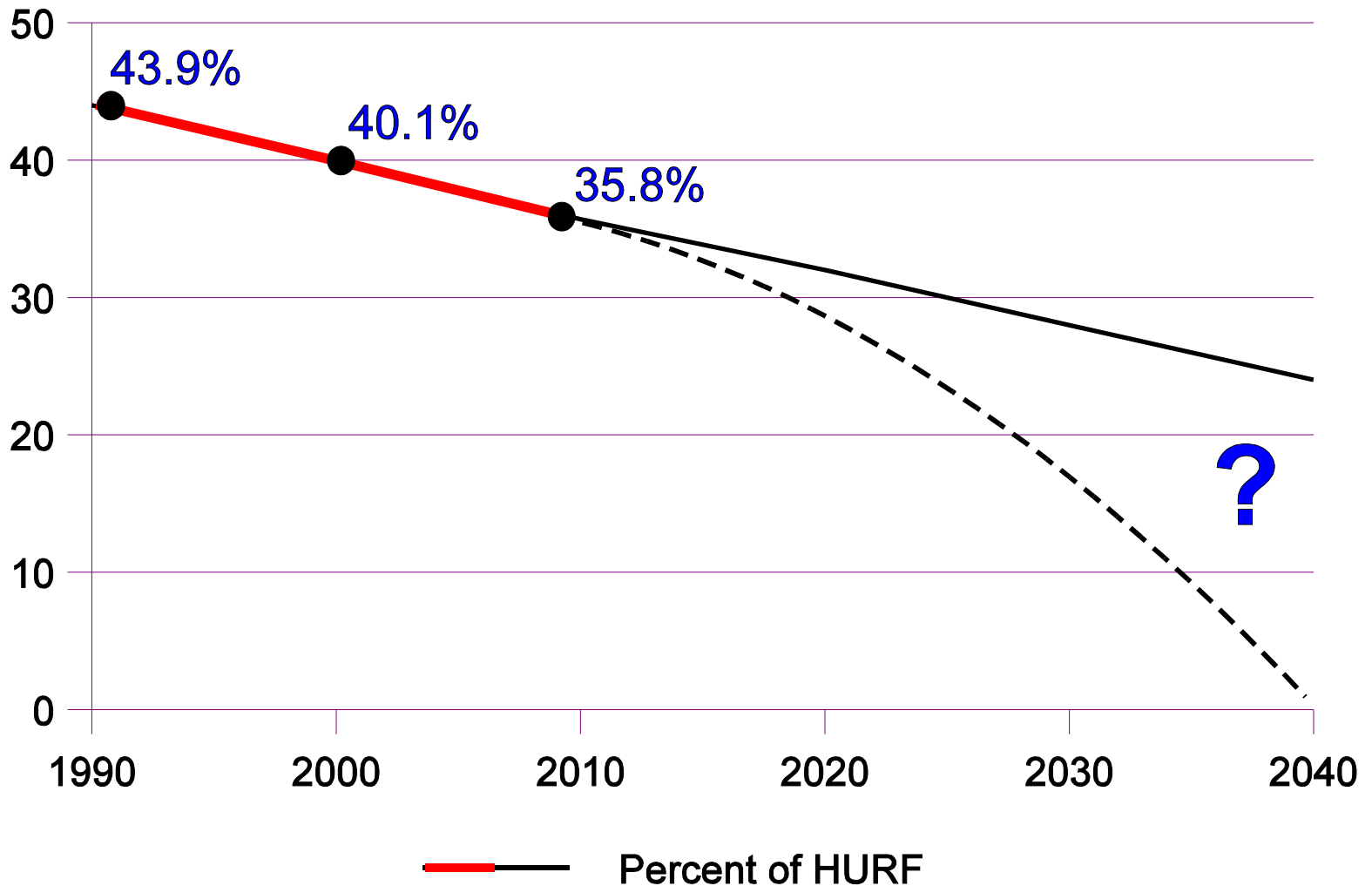


Funding Outlook for Long Range Plan



Contribution of Gas Tax

To Highway Revenues



Technology Outlook

- **Hydrogen/other non-petroleum powered vehicles**
- **Automated guideways & smart vehicles**
- **Privatized, fee-based freeways/ guideways**
- **Realtime, adaptive traffic signal systems**
- **On-demand urban transit**
- **High speed ground transportation**

YEAR 2040 DAILY LEVEL OF SERVICE

emme/2

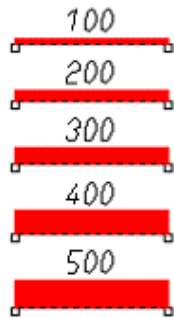
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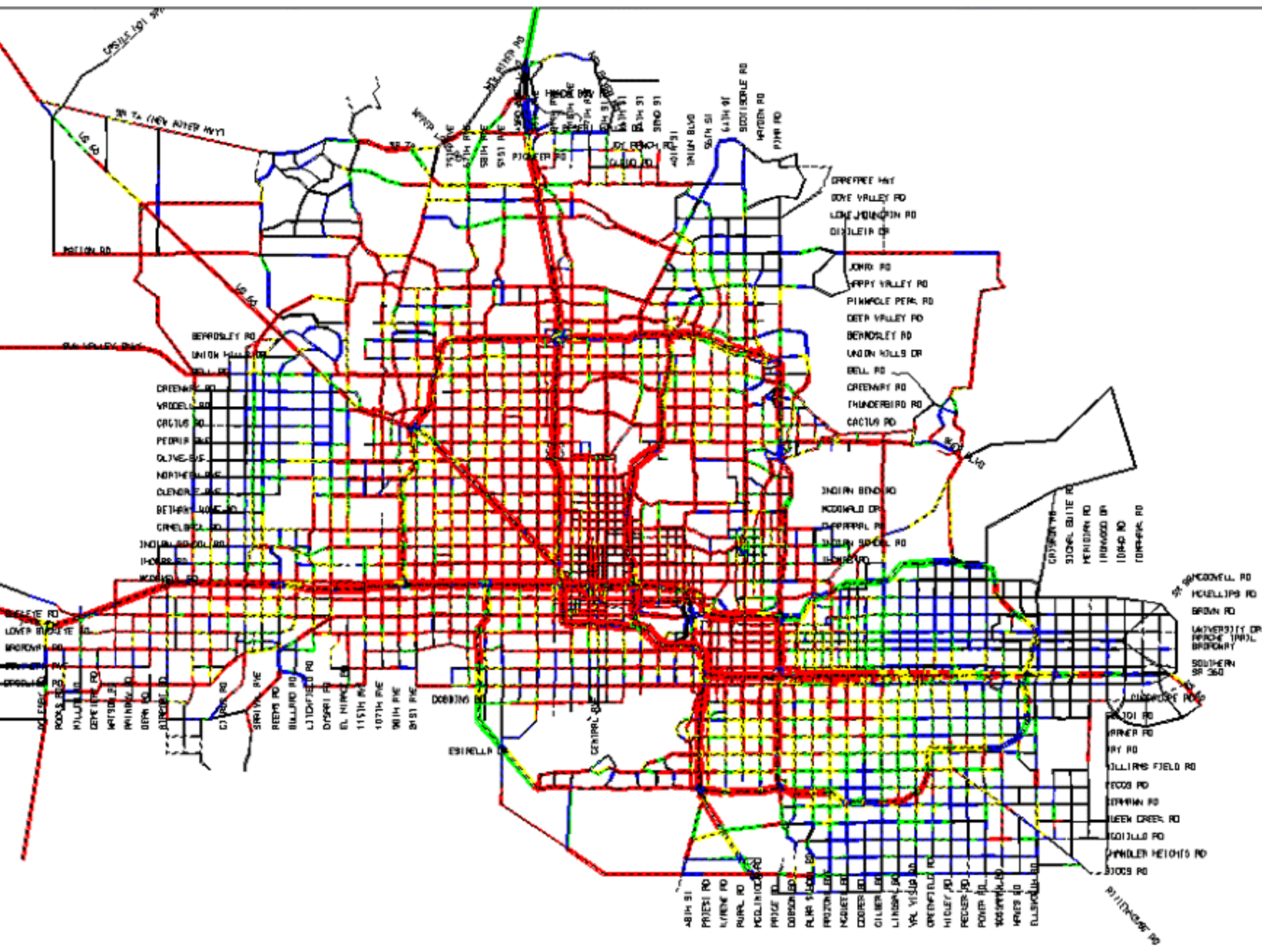
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 SCENARIO 7: 24-HR Hwy Assignment (validation)
 ATTRIBUTE @vol: vol (in thousands)

00-12-14 10:19
 MODULE: 2.13
 MAC.....pj

Transportation Challenge

Effectively & efficiently manage our transportation system investments in order to provide mobility options for the movement of people, goods, and information, addressing:

- **Travel Behavior**
- **Efficiency of the Existing System**
- **Need for Investments in New Facilities**

For more information

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