



Sustainable Madison Transportation Plan Oversight Committee

October 30, 2013

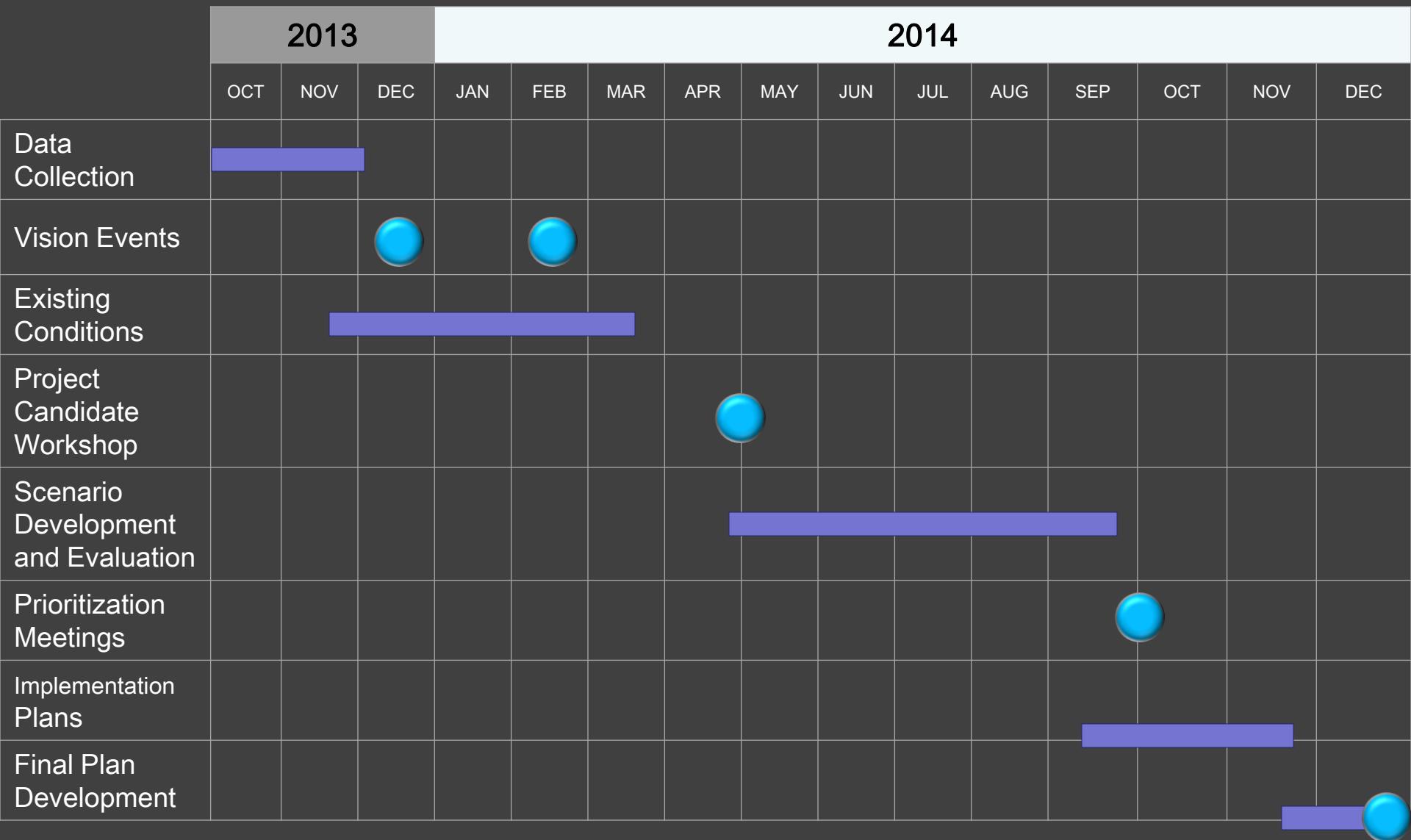
Project Process

- Confirm Community Vision
- Set Goals/Evaluation Metrics
- Identify Candidate Projects
- Evaluate and Prioritize Projects
- Document Plan

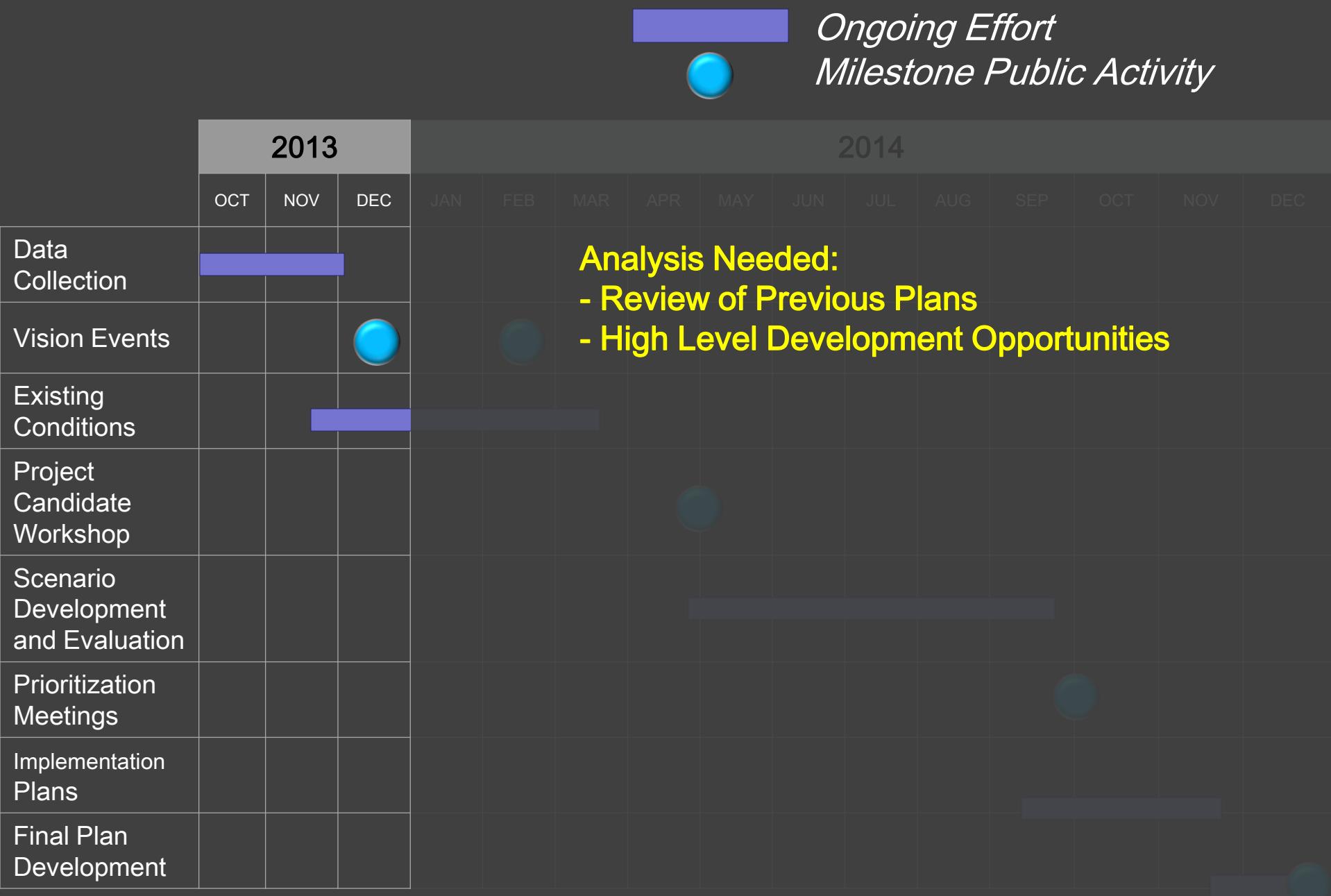
Schedule



Ongoing Effort
Milestone Public Activity



Schedule



Outcome - Plan Goals

provide Mobility Choices

protect Safety and Health

assure Equity for All System Users

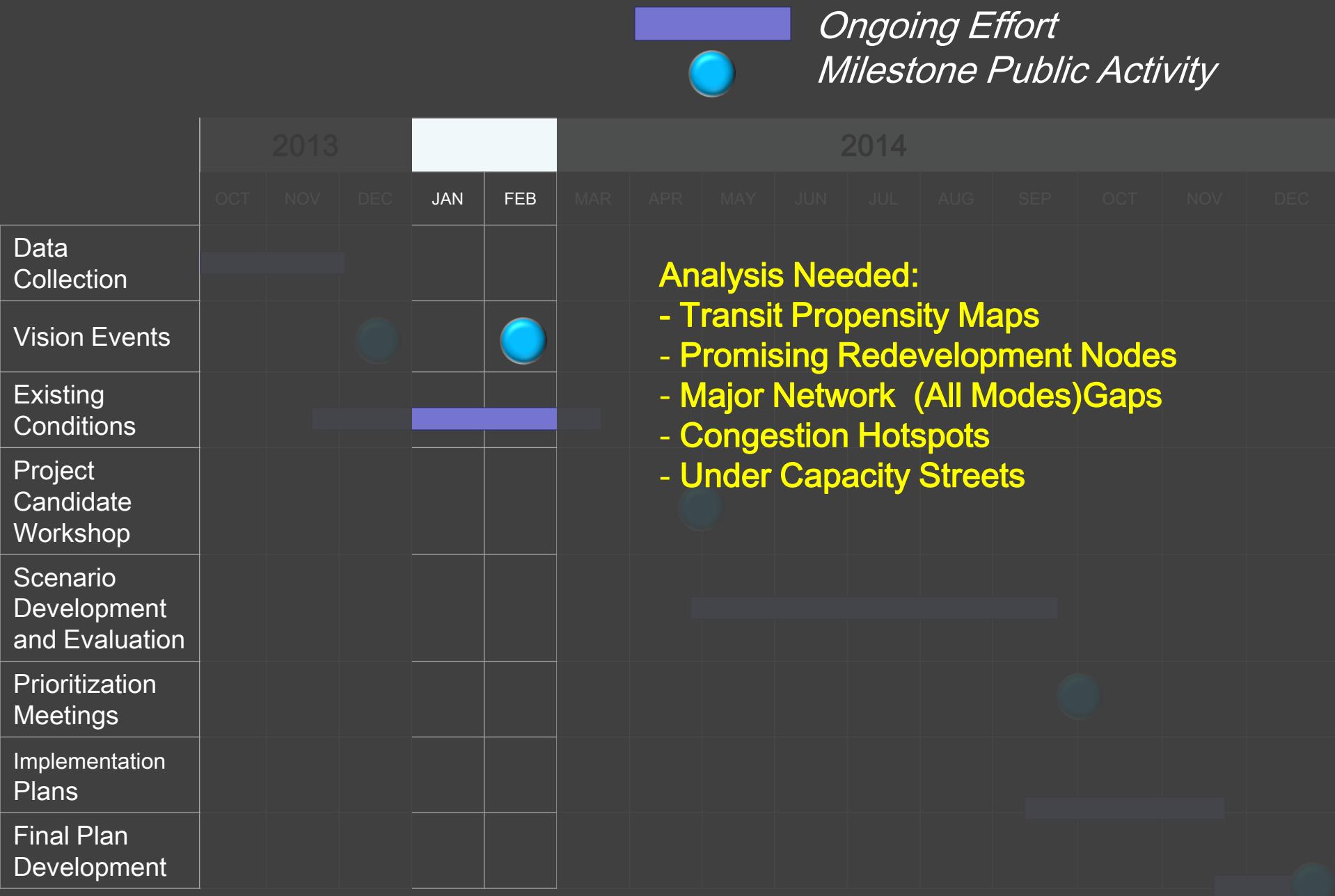
maintain Fiscal Responsibility

promote Beneficial Growth

assure Environmental Sustainability

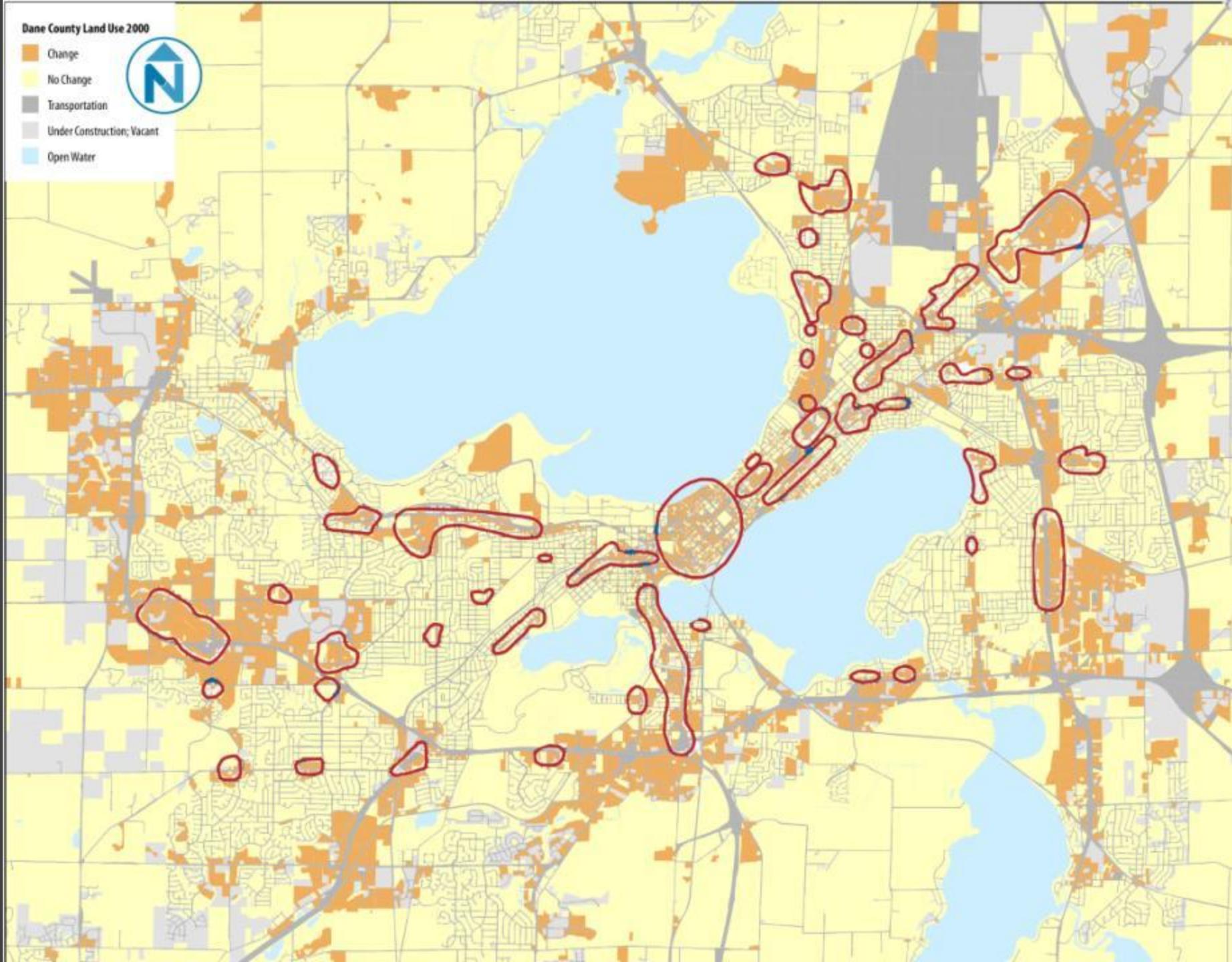
enhance Neighborhoods

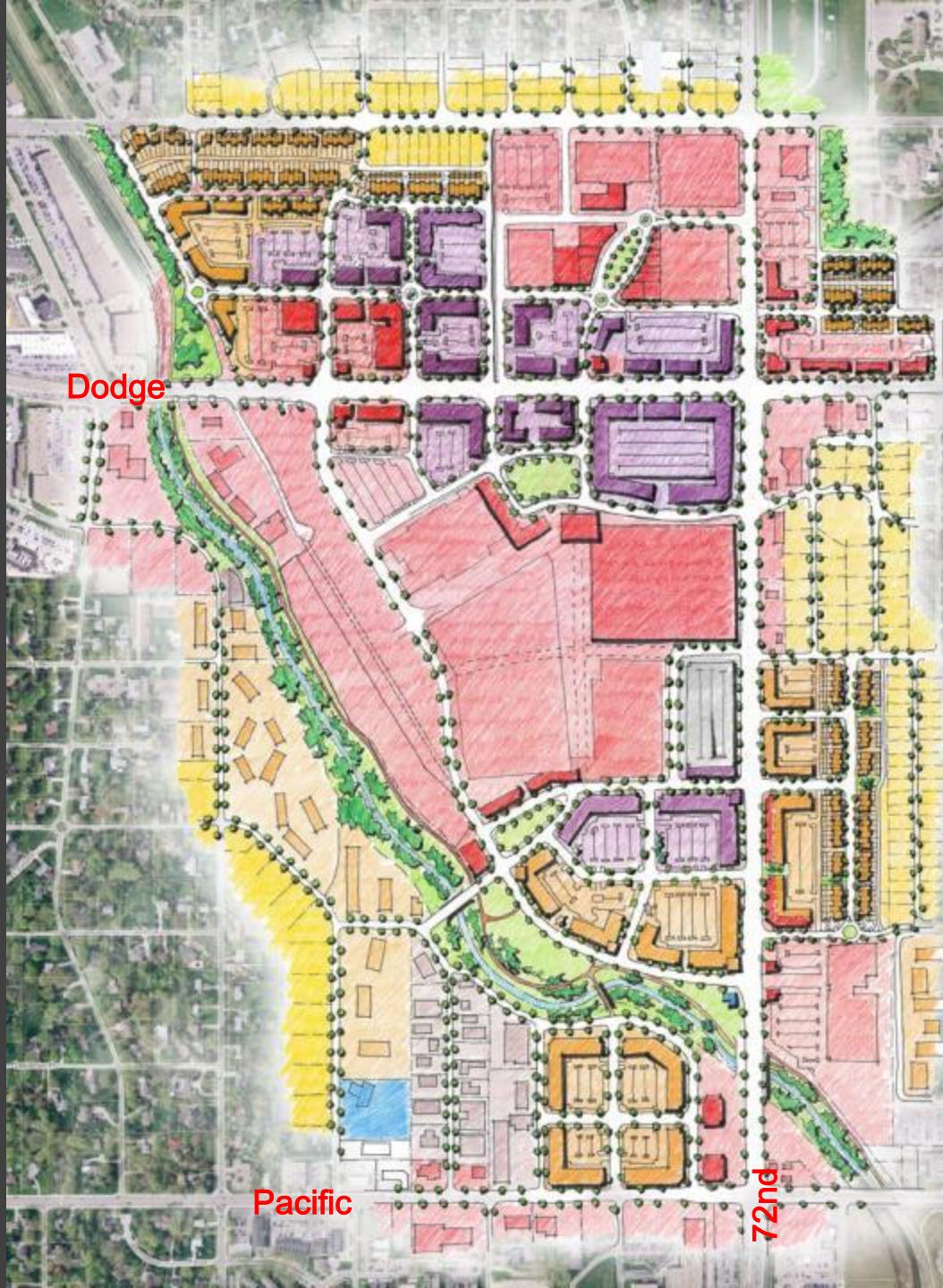
Schedule



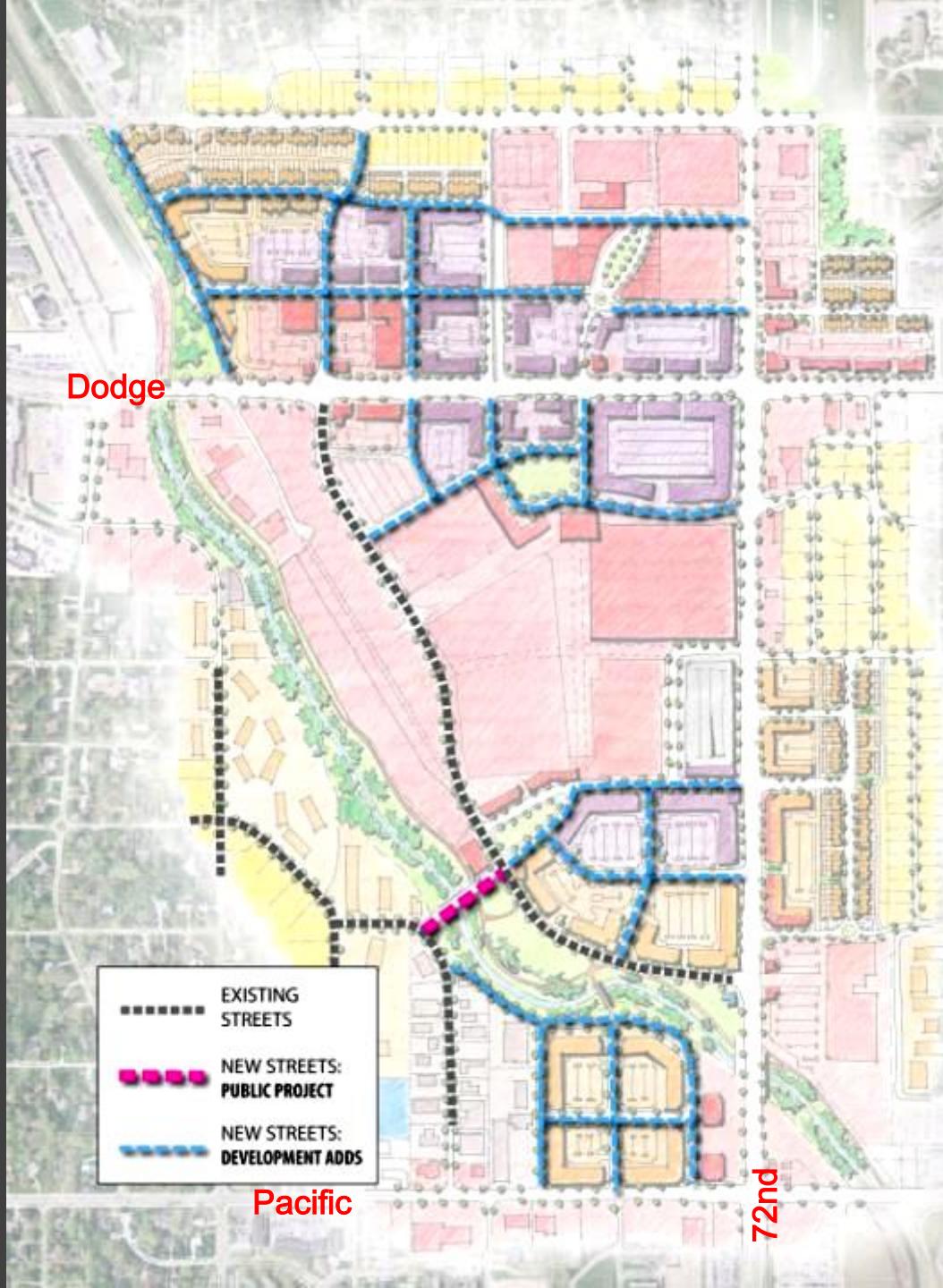
Dane County Land Use 2000

- Change
- No Change
- Transportation
- Under Construction; Vacant
- Open Water

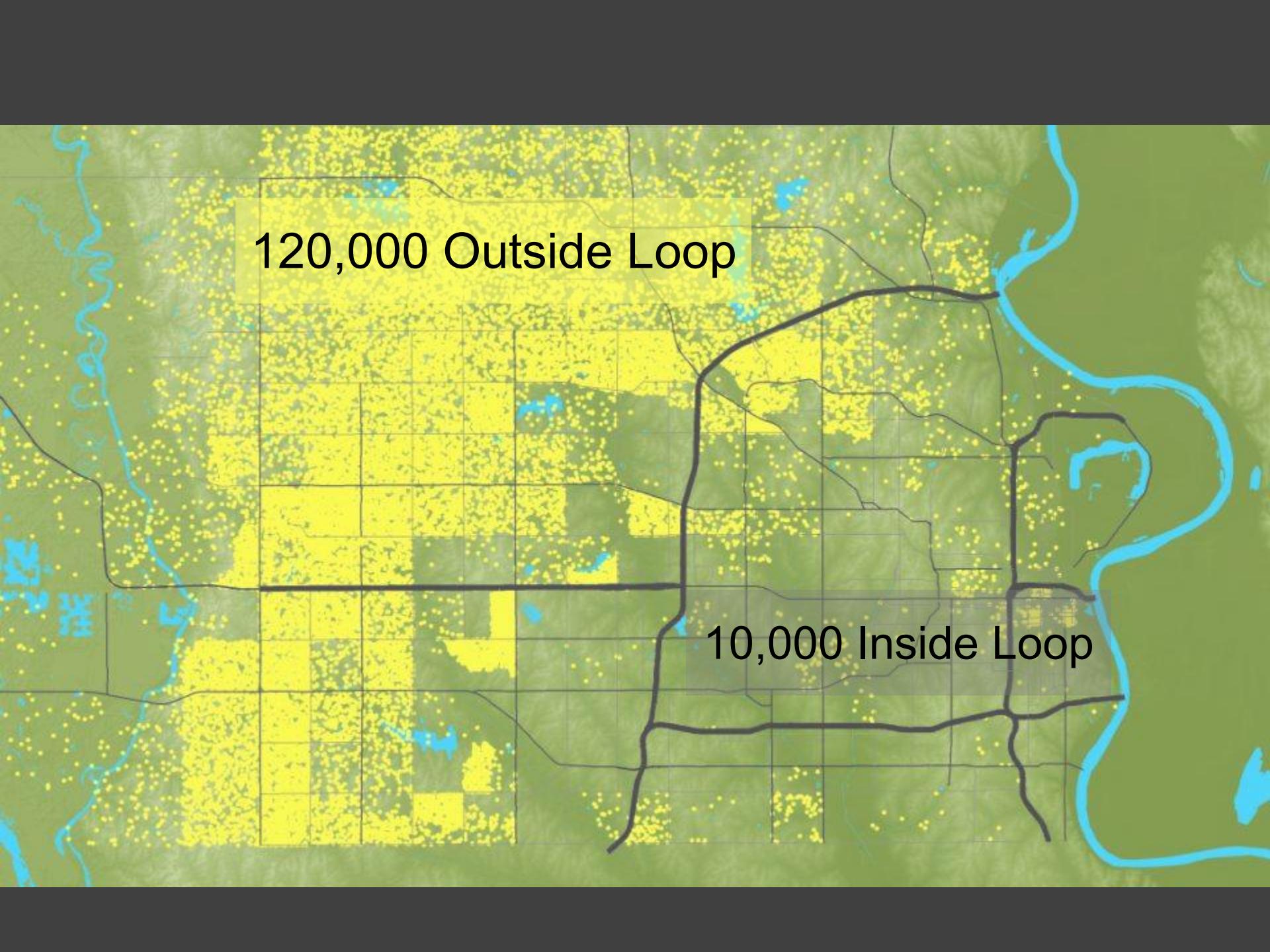




Redevelopment sites add network



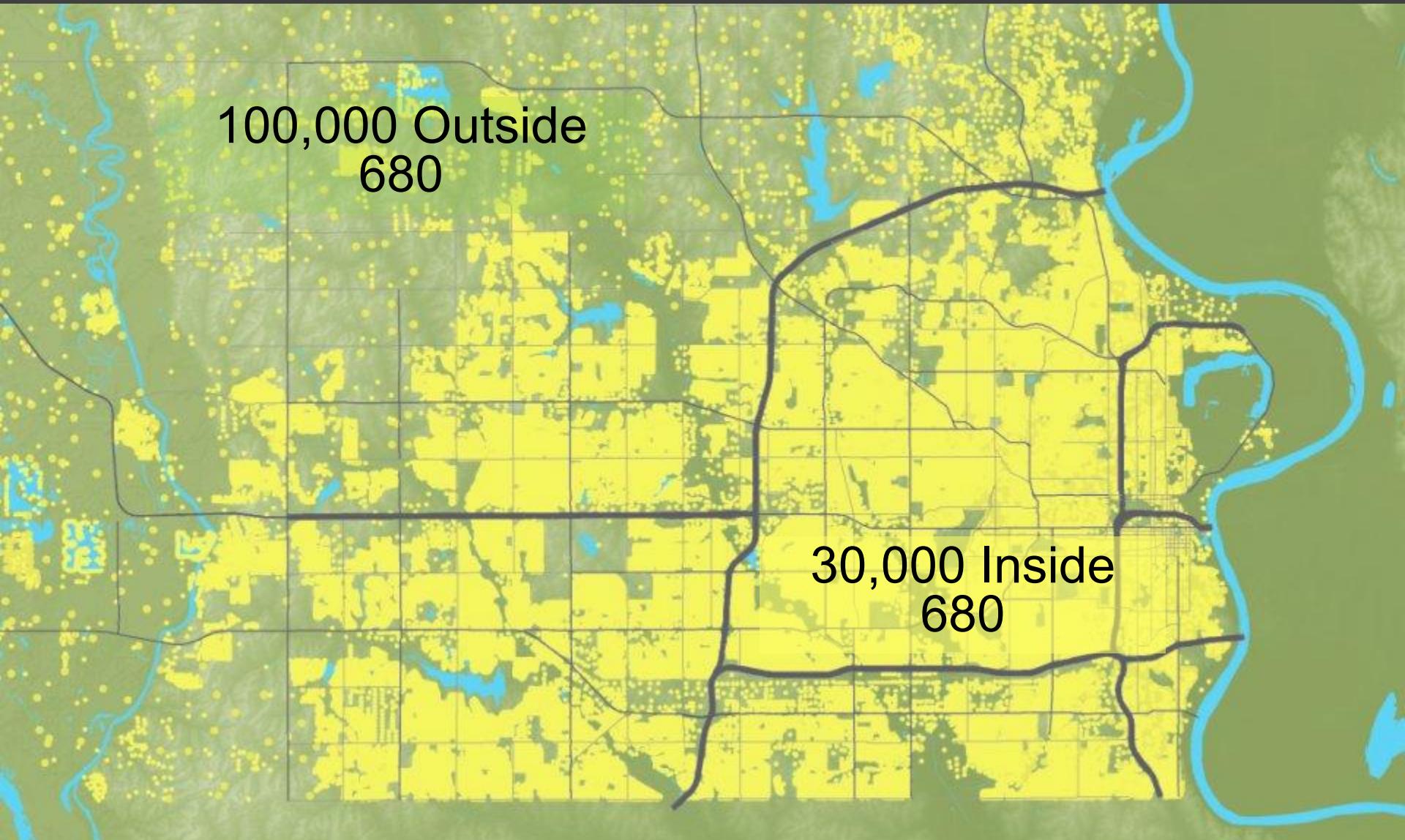
Redevelopment sites add network



120,000 Outside Loop

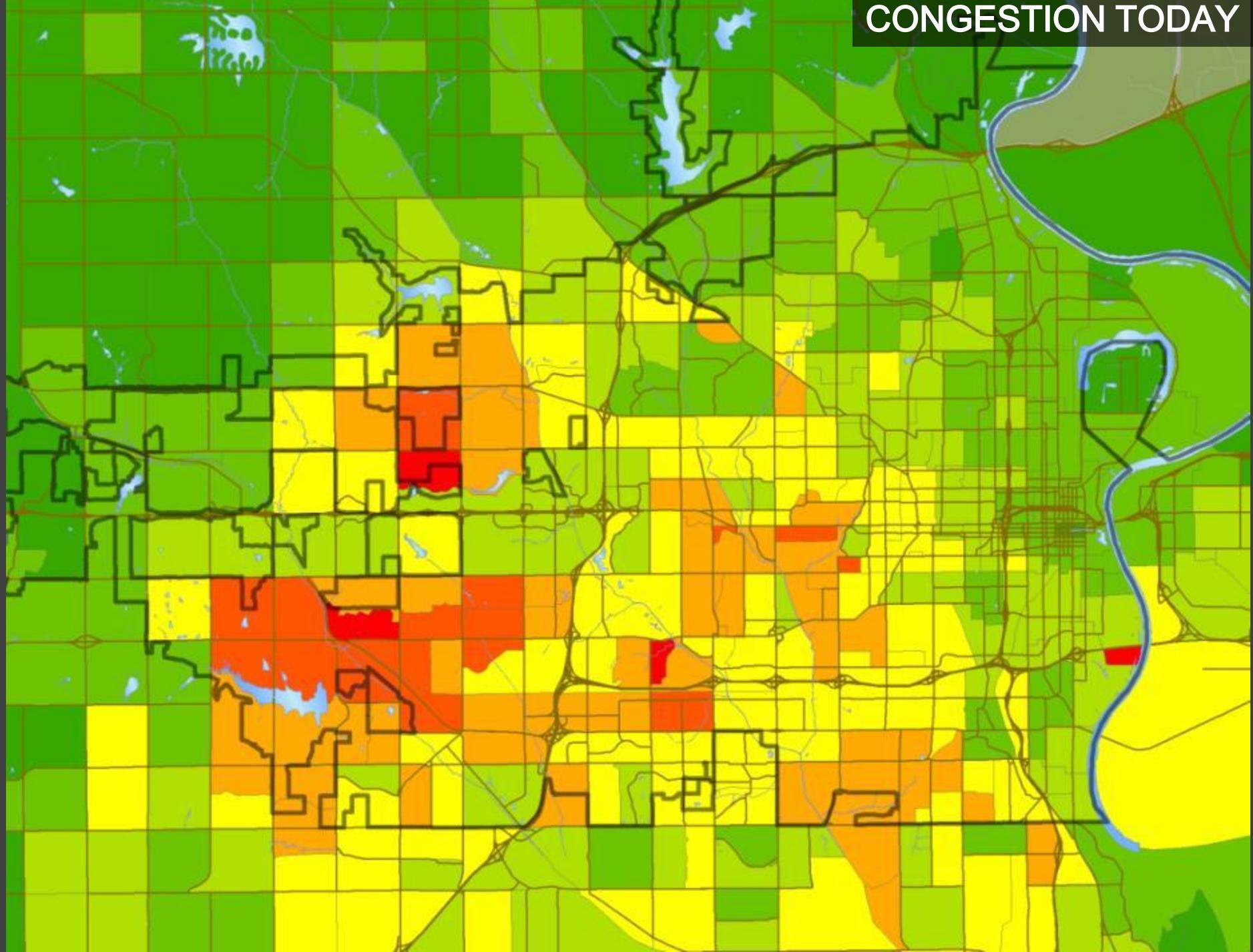
10,000 Inside Loop

2035 Greater Infill Focus

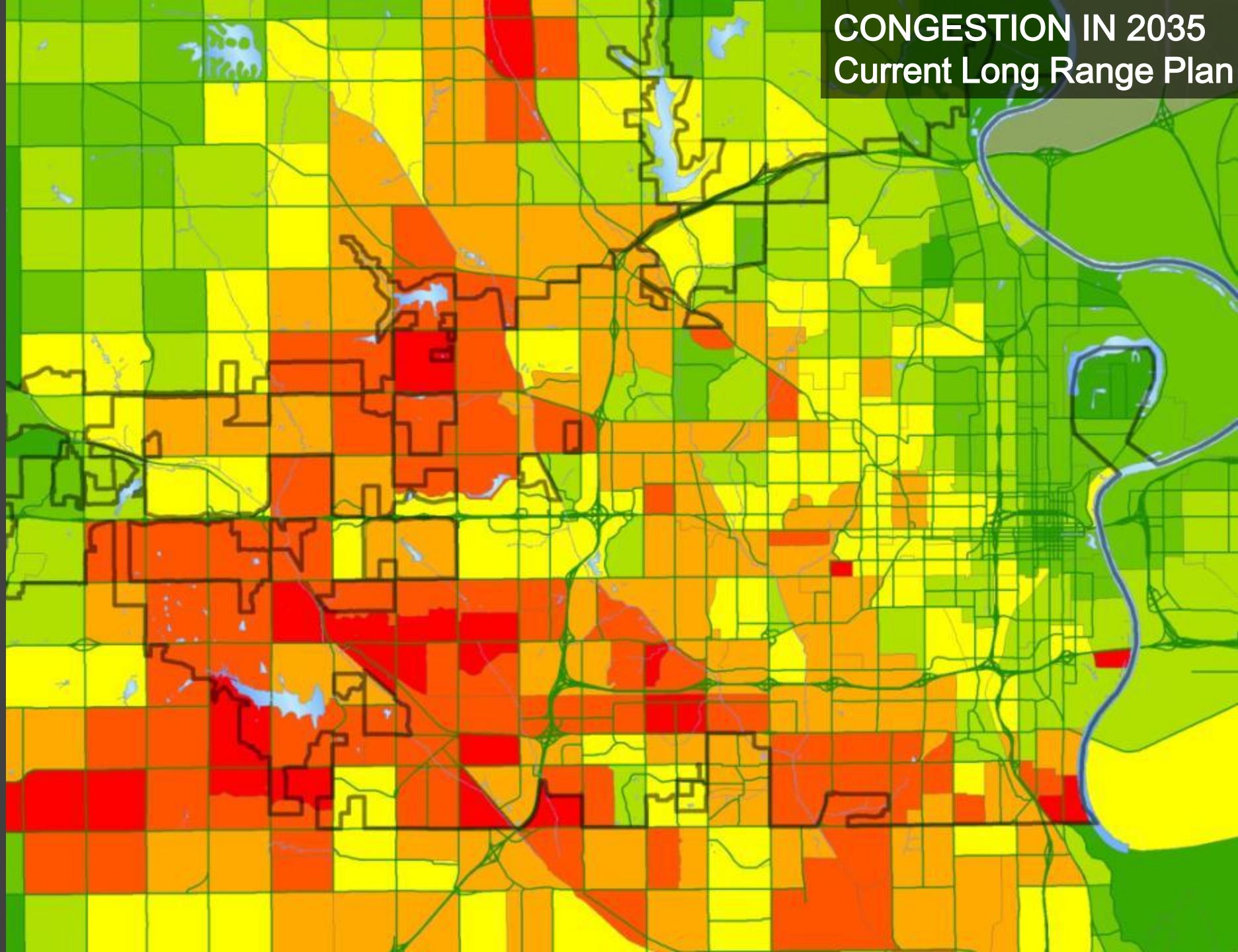


Additional 20,000 Stay Outside Loop, But Move Closer In

CONGESTION TODAY

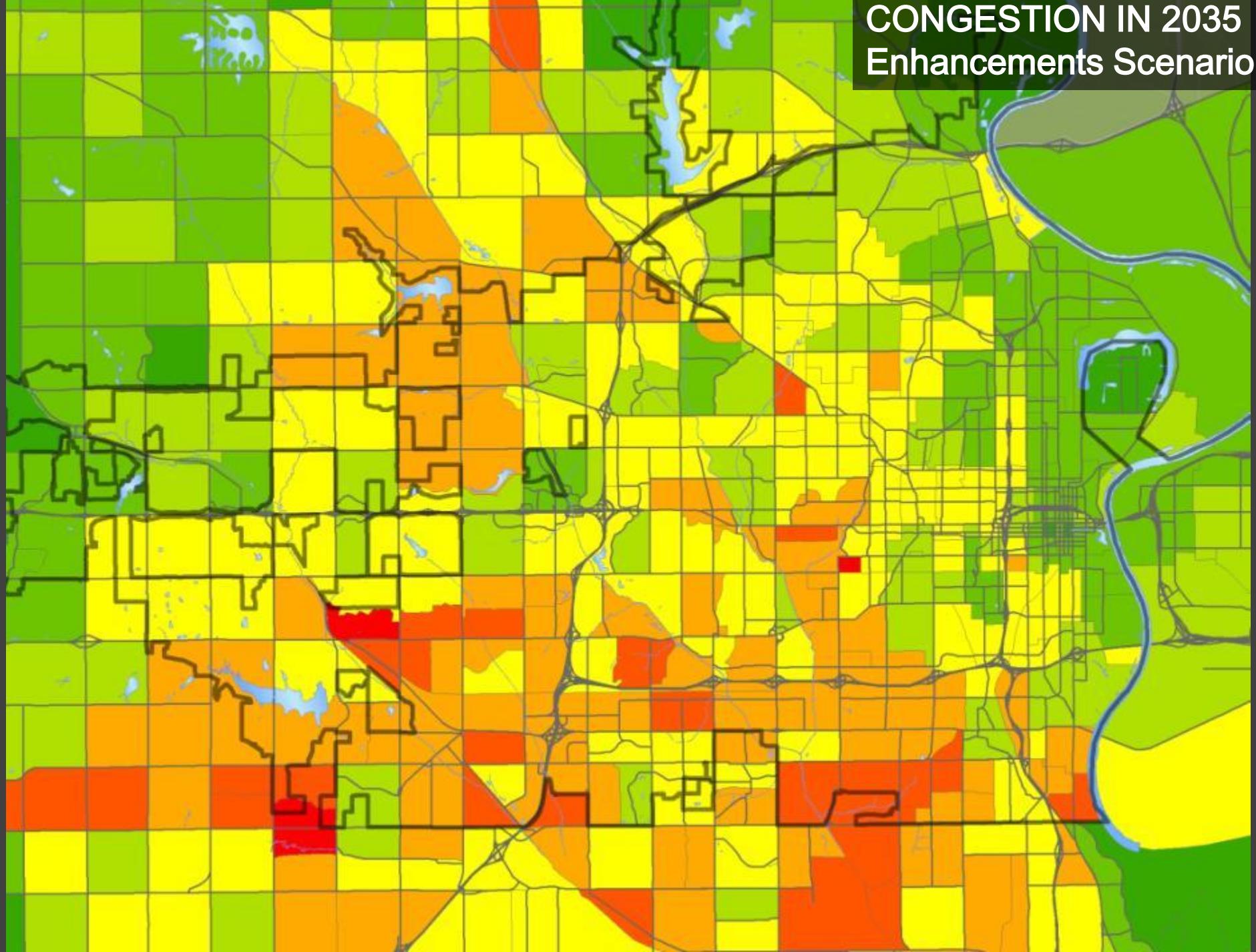


CONGESTION IN 2035
Current Long Range Plan



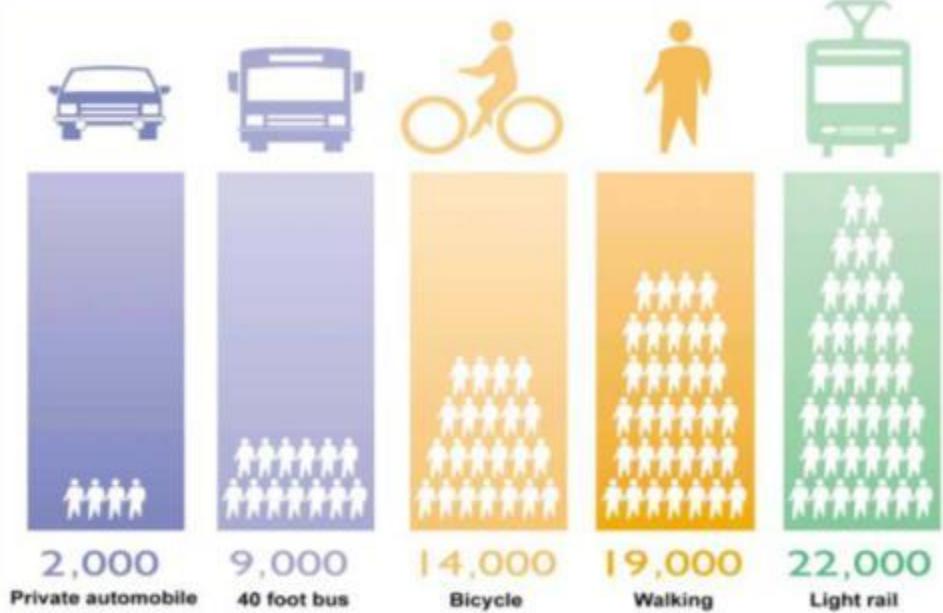
CONGESTION IN 2035

Enhancements Scenario



Schedule





Best Practices Freight Mobility

Smart Growth America

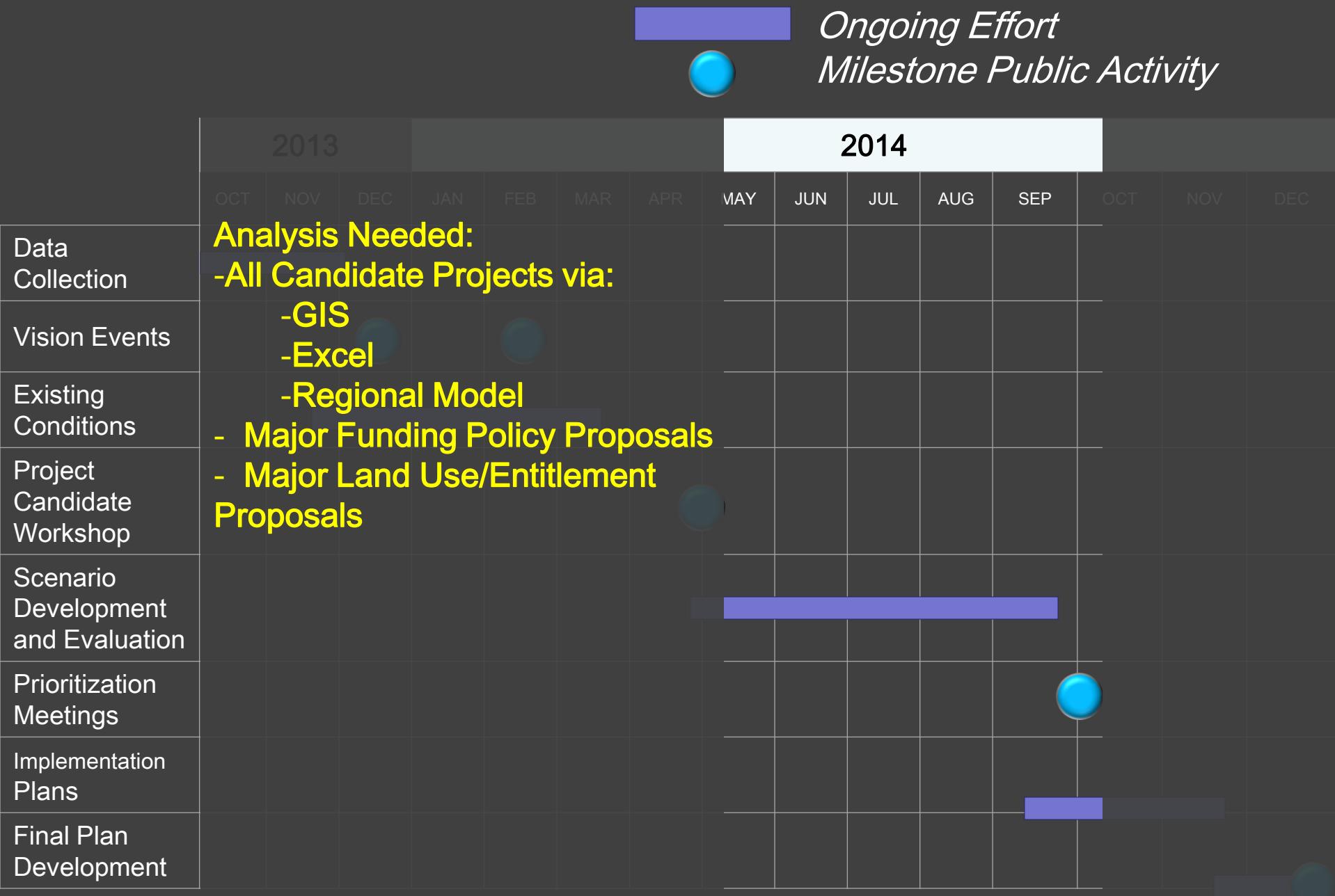
Best Practices Transit

Best Practices Urban Ecology and Climate Action



Transportation, especially travel in single-occupant cars, is the largest contributor of greenhouse gases that impact our climate.

Schedule



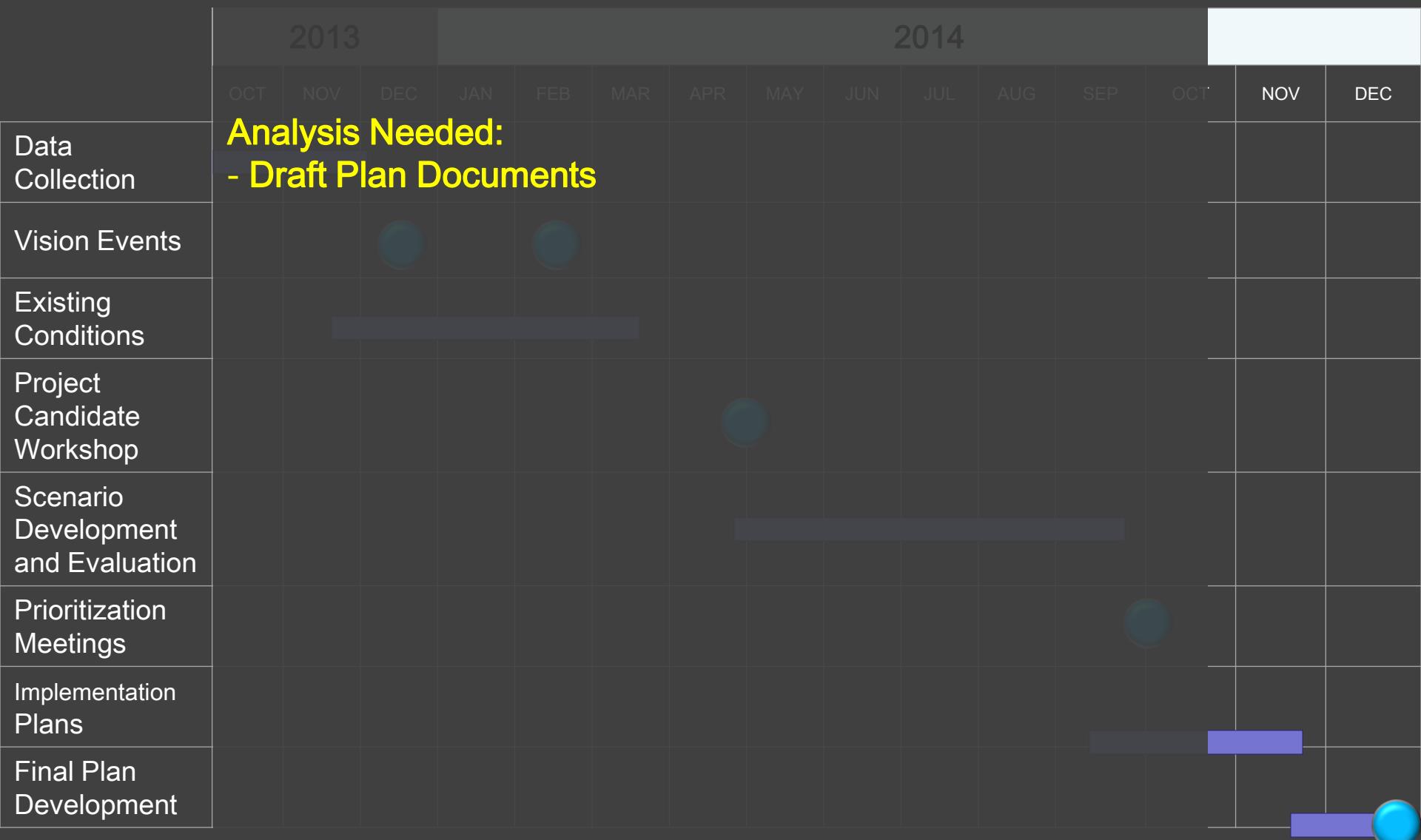
transportation Choices

Evaluation Criteria

Evaluation Criteria	Tools or Techniques
System Person Capacity – Rather than simply vehicle capacity. Analyze broad corridors rather than segments or intersections.	Travel Demand Model
Travel Time	Travel Demand Model
Route Options	GIS
Project Utility – Measure the people moving function of a policy or project	Travel Demand Model
Future Density vs. Transit Service	GIS Analysis
Viability of Transit Implementation	TSUB (FTA Measure)

Schedule

Ongoing Effort
Milestone Public Activity





Visioning Events

The Role of Transportation

What is the Purpose of Cities?

Cities are an invention to maximize exchange (goods, culture, friendship, knowledge) and to minimize travel.

The role of transport is to maximize exchange

...David Engwicht



What Is The Purpose of Cities?



Access



Mobility



Transportation and Economics

Transportation investments are powerful and far-reaching



The Good
Old Days

*Grand Ave. East from 5th St.
Milwaukee, Wiz.*



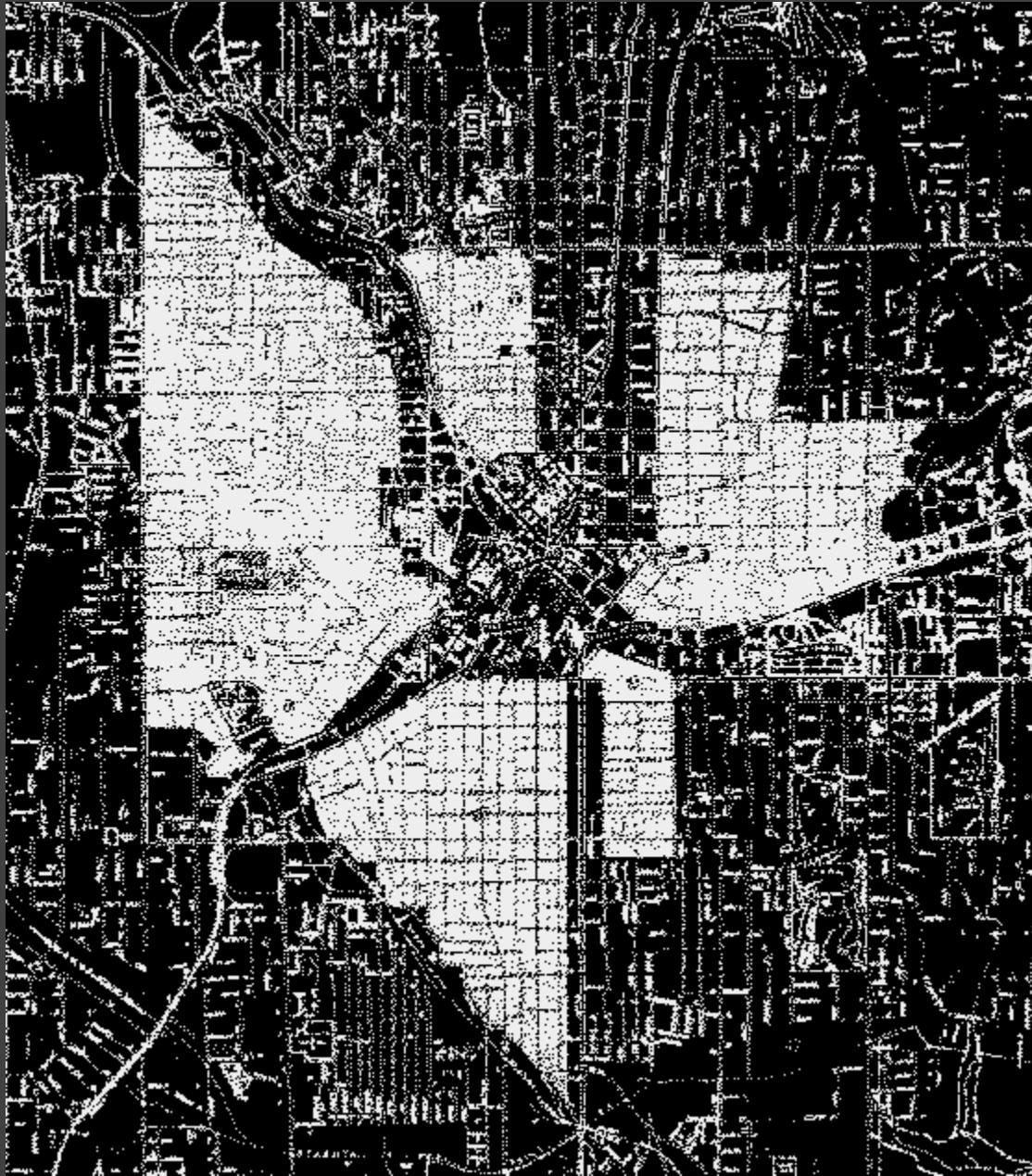
- Crowded
- Dangerous
- Dirty
- Unhealthy
- Lacking Greenspace

- Infectious diseases: TB
Cholera
Yellow Fever
Polio

Multi-Disciplinary Approach

1. Identify Problem
2. Formulate A Response
3. Copy The Solution

Step 1 - Identifying Last Century's Problems



Step 2 – Formulating A Response



Lake View Sanatorium, Dane County

THE
GENERAL MOTORS
EXHIBIT BUILDING

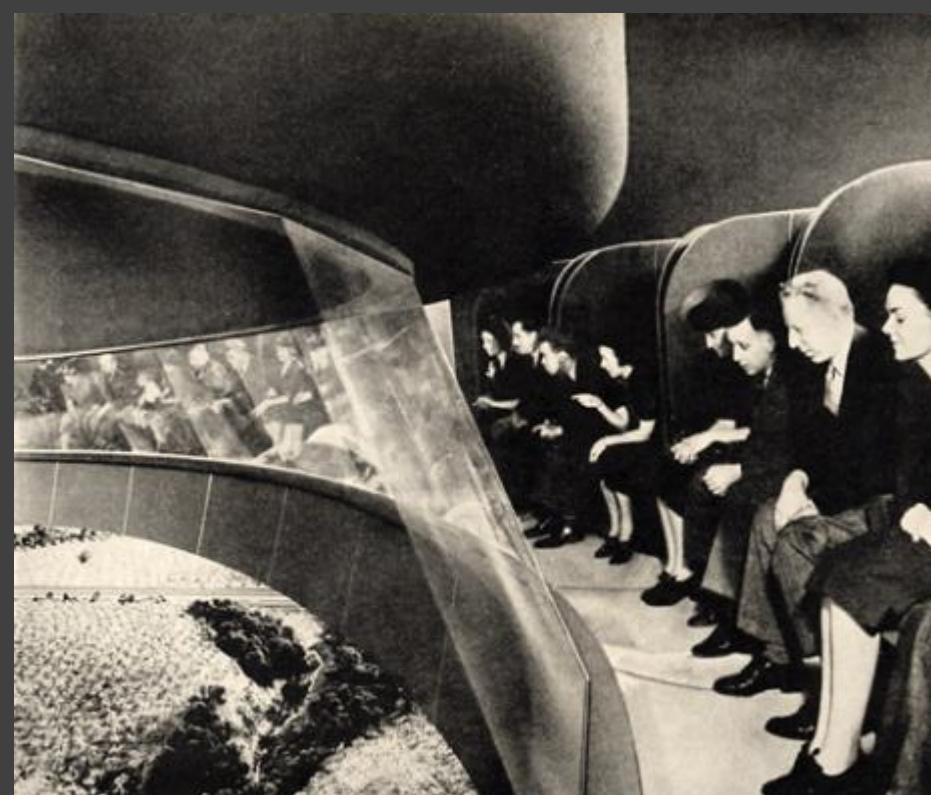


New York World's Fair
HIGHWAYS AND HORIZONS

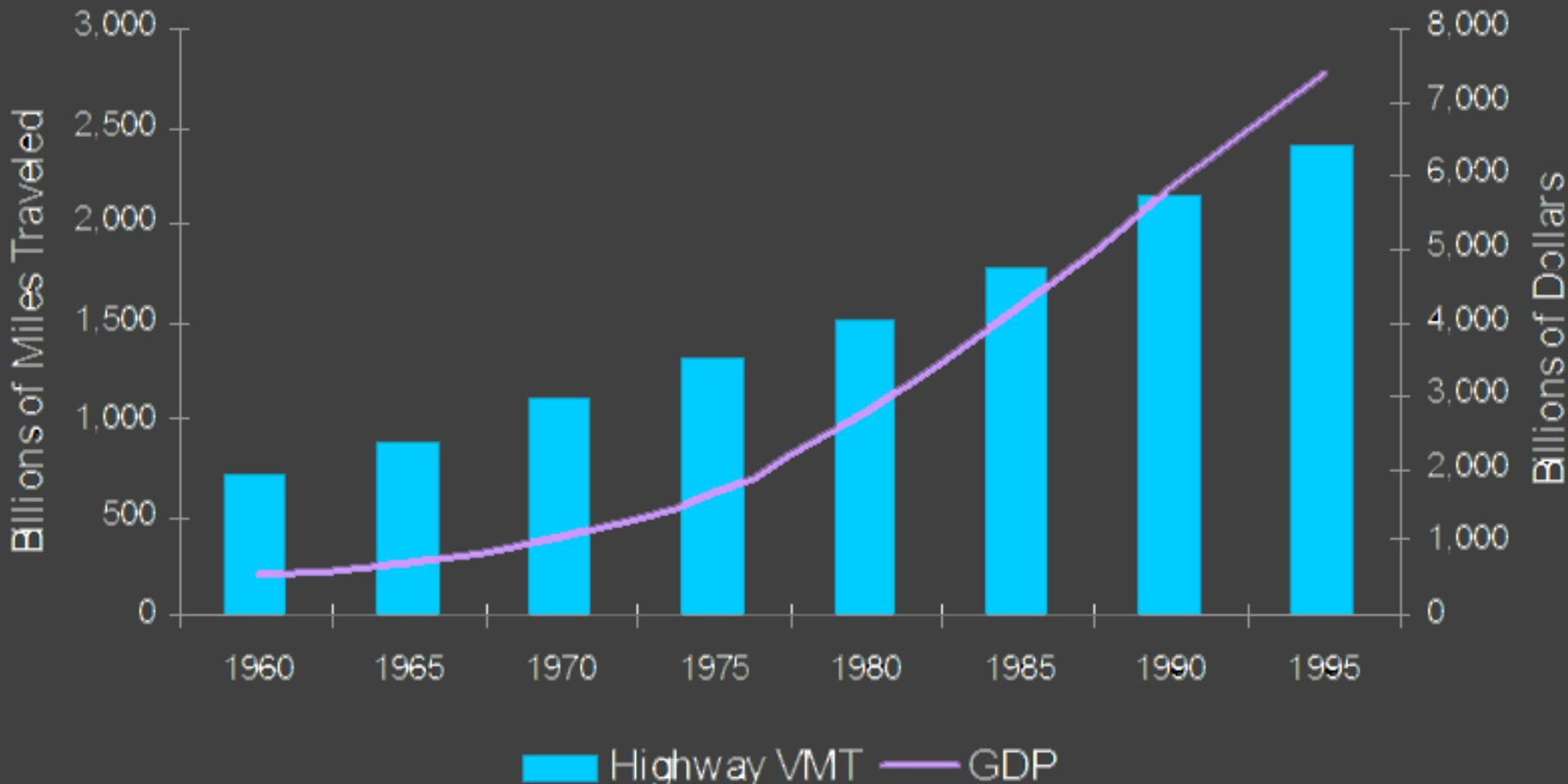


"abundant sunshine, fresh air, fine green parkways will blend together seamlessly with dazzling skyscrapers and seven-lane highways."

FUTURAMA



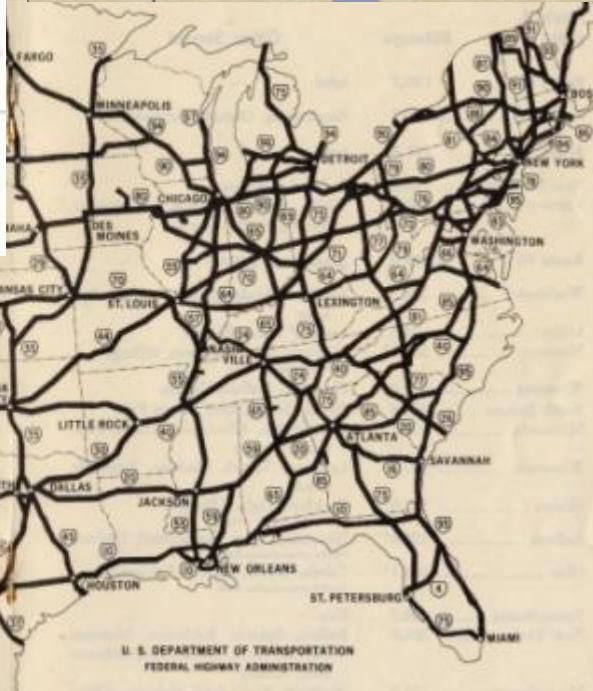
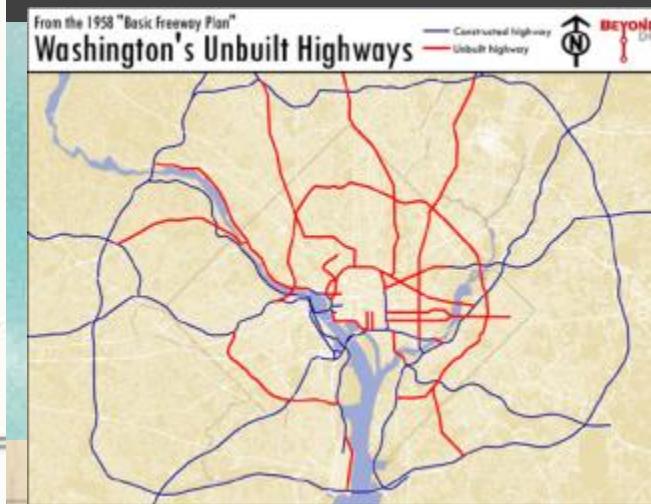
Transportation improvements allow economic growth.



Freeways Are Safe!

	RURAL AREAS	PRINCIPAL ARTERIAL	MINOR ARTERIAL	COLLECTOR	INTERSTATE	ALL HIGHWAYS
Vehicle Miles of Travel (Millions)	4,031.36	1,789.58	957.67	4,573.99	11,352.60	
Miles of Highway	1,980.28	1,685.51	1,604.63	467.33	5,737.75	
Total Collisions	3,776	2,128	1,291	2,367	9,562	
Collision Rate (1)	0.94	1.19	1.35	0.52	0.84	

Step 3 – Spread The Success



Federal Transportation Policy 1956-1982

Federal Aid Highway Act of 1956



Unintended Consequences

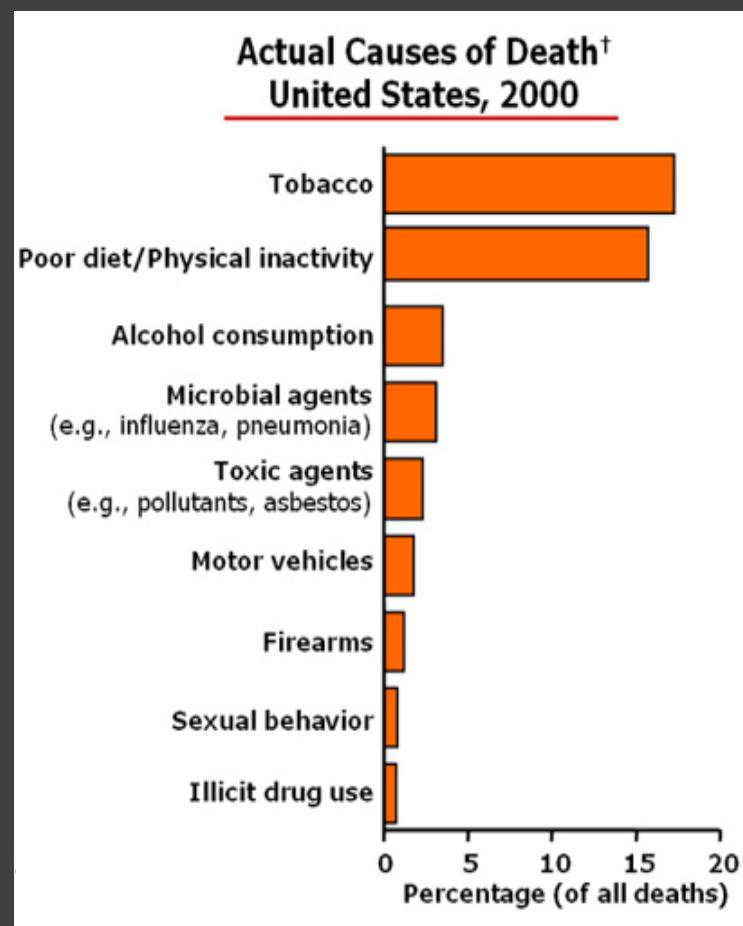


Diseases of this Century

- Cardiovascular: Heart Attack
Stroke
- Respiratory: Asthma
Emphysema
- Weight Related: Diabetes II
Heart Disease
- Environmental: Cancer & other
“chronic” diseases



Health Issue	Transportation Cause
Physical Safety	
Car Collisions	Speed
Physical Health	
Obesity	Inactivity
Asthma	Vehicle Emissions
Mental Health	Stress
Clean Water	Vehicle Waste



Environmental factors influence 85 out of the 102 categories of diseases and injuries listed in The World Health Report.

Copying Success, Ignoring Context



To facilitate travel over longer distances!

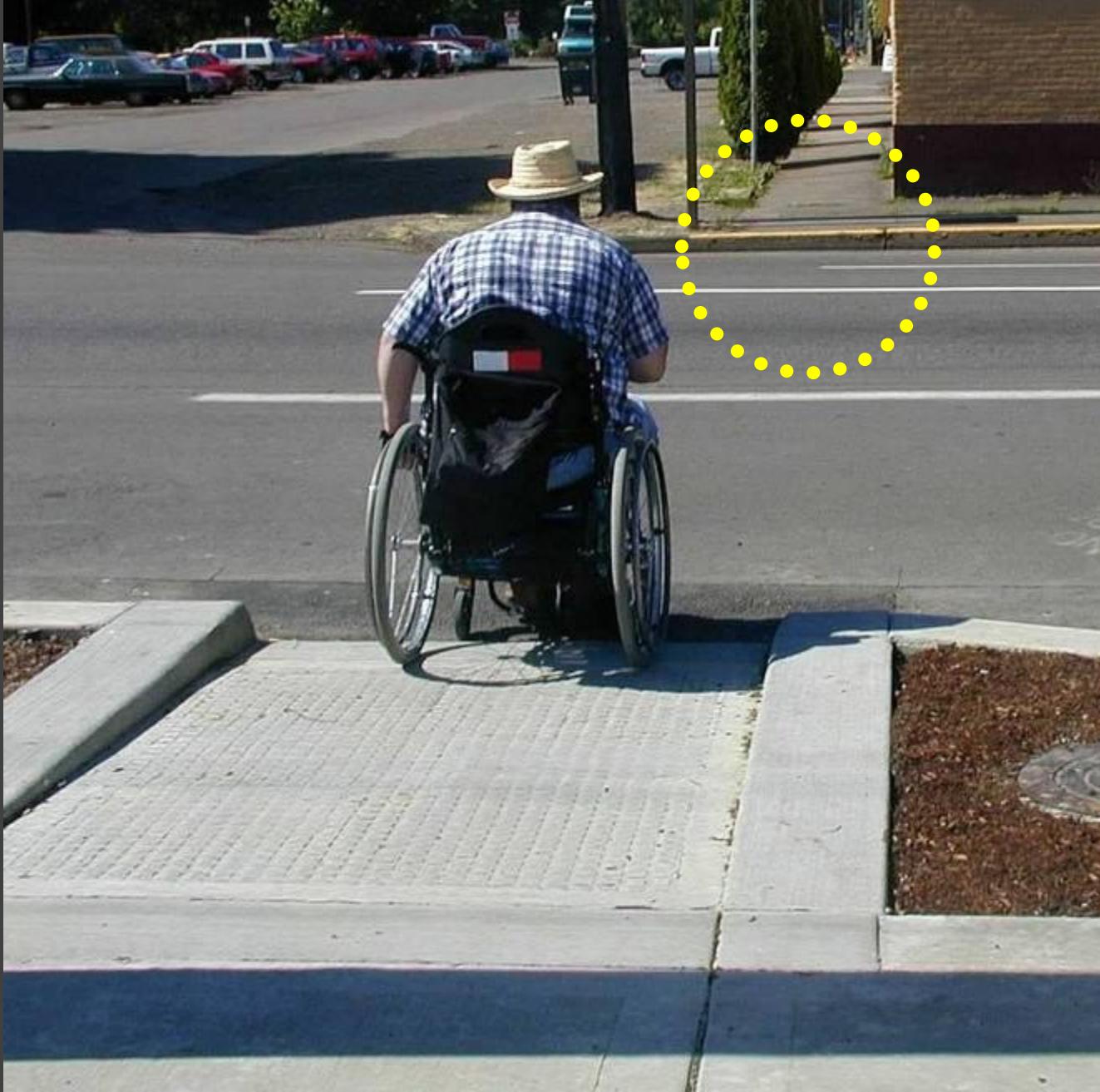


CAUTION
DEAF
AND
BLIND
CHILDREN



GRANGER
CROSSING



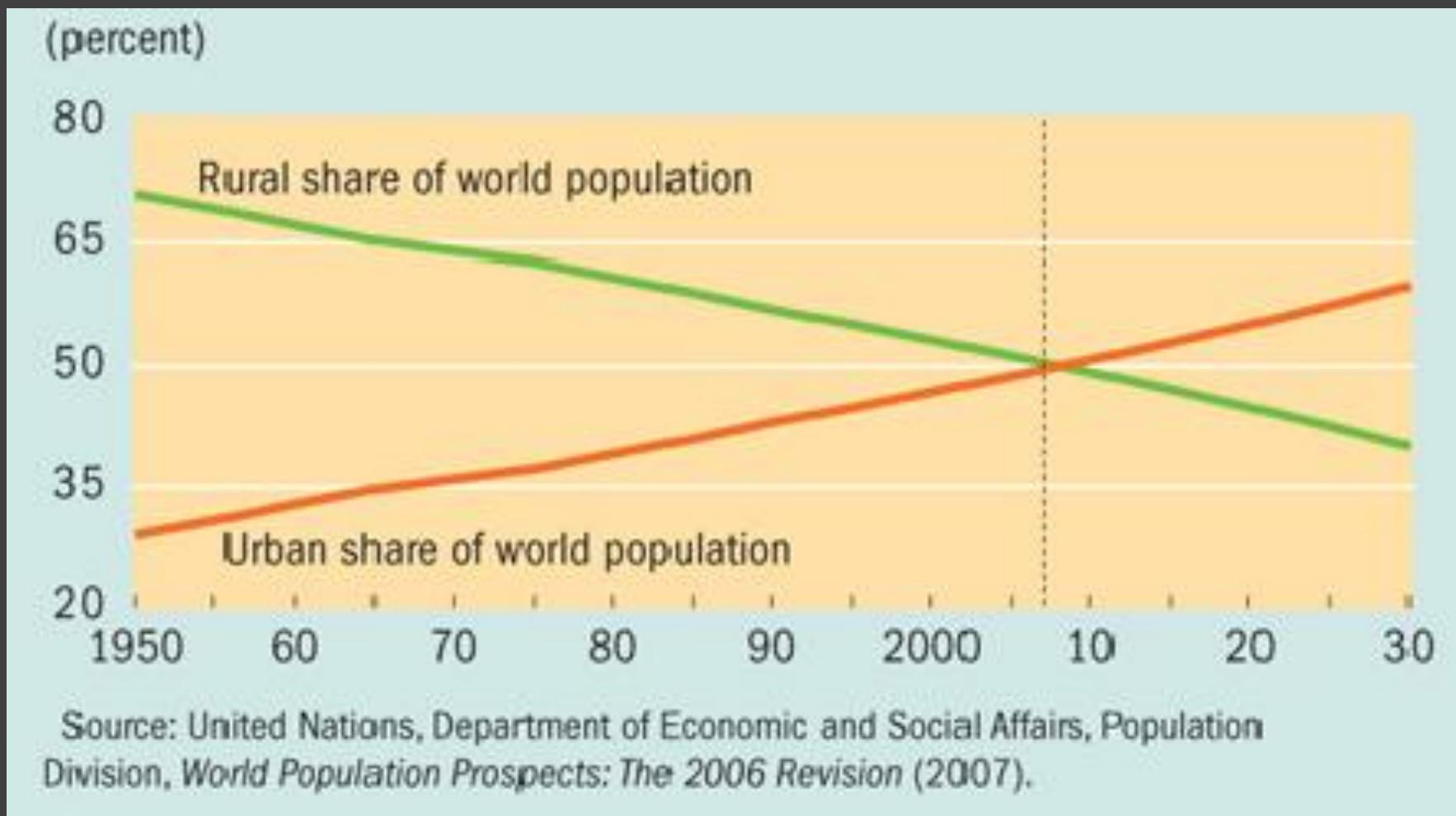




Results Over the Last 50-Years

- 1) Vehicle Miles of Travel (VMT) Growing Faster Than Population Growth
- 2) Longer Commute Times
- 3) Decreased Transit Ridership

Today's Issues – Urban Choice

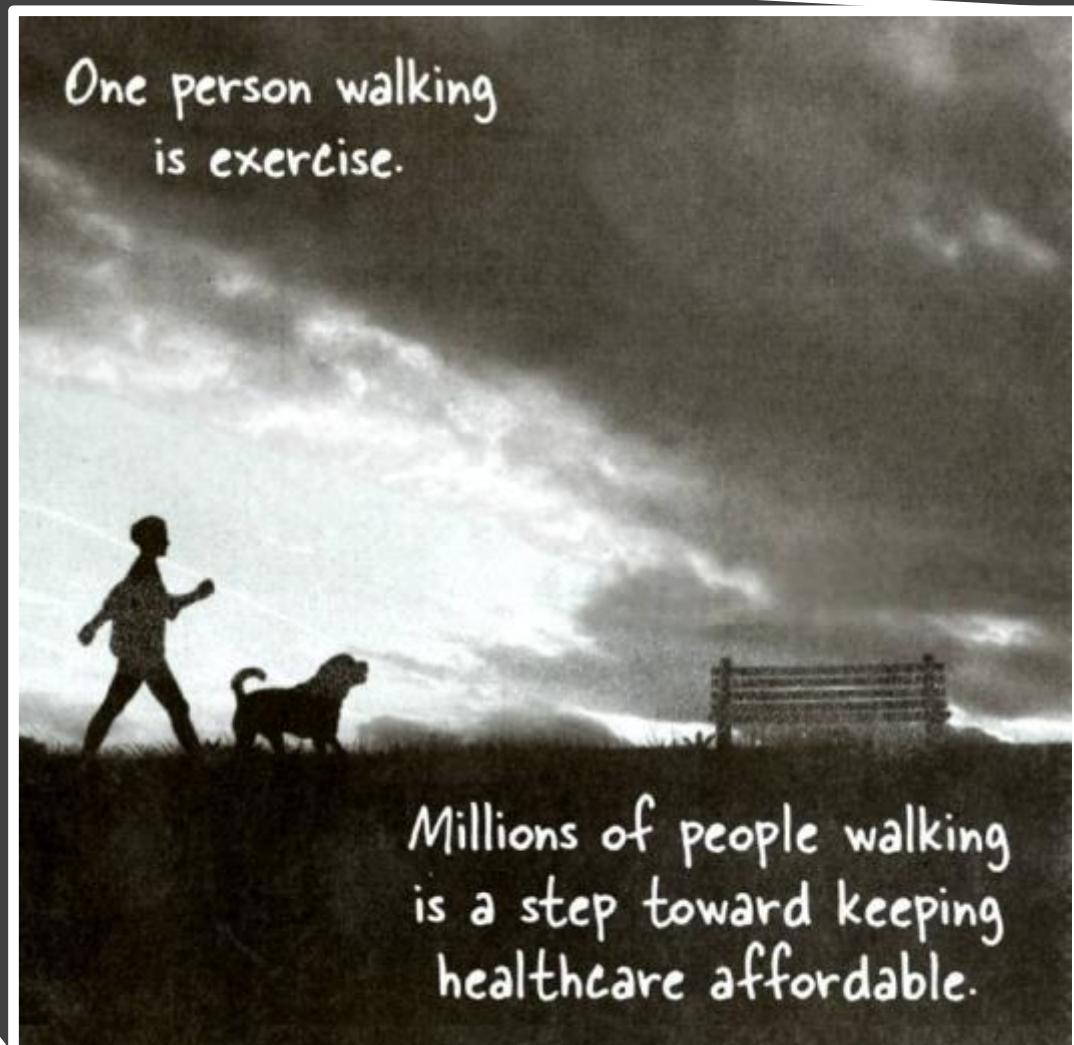


Today's Issues - Health



The illness and chronic disease resulting from inactivity cost as much as \$77 billion a year to treat. That's why Blue Cross and Blue Shield Plans across the nation are launching **WorkingWorks™**, an unprecedented effort to work with employers to help Americans add physical activity to their daily routines. It's one of the many ways we're doing our part to controlling healthcare costs. For more information, visit our web site at www.bcbs.com.

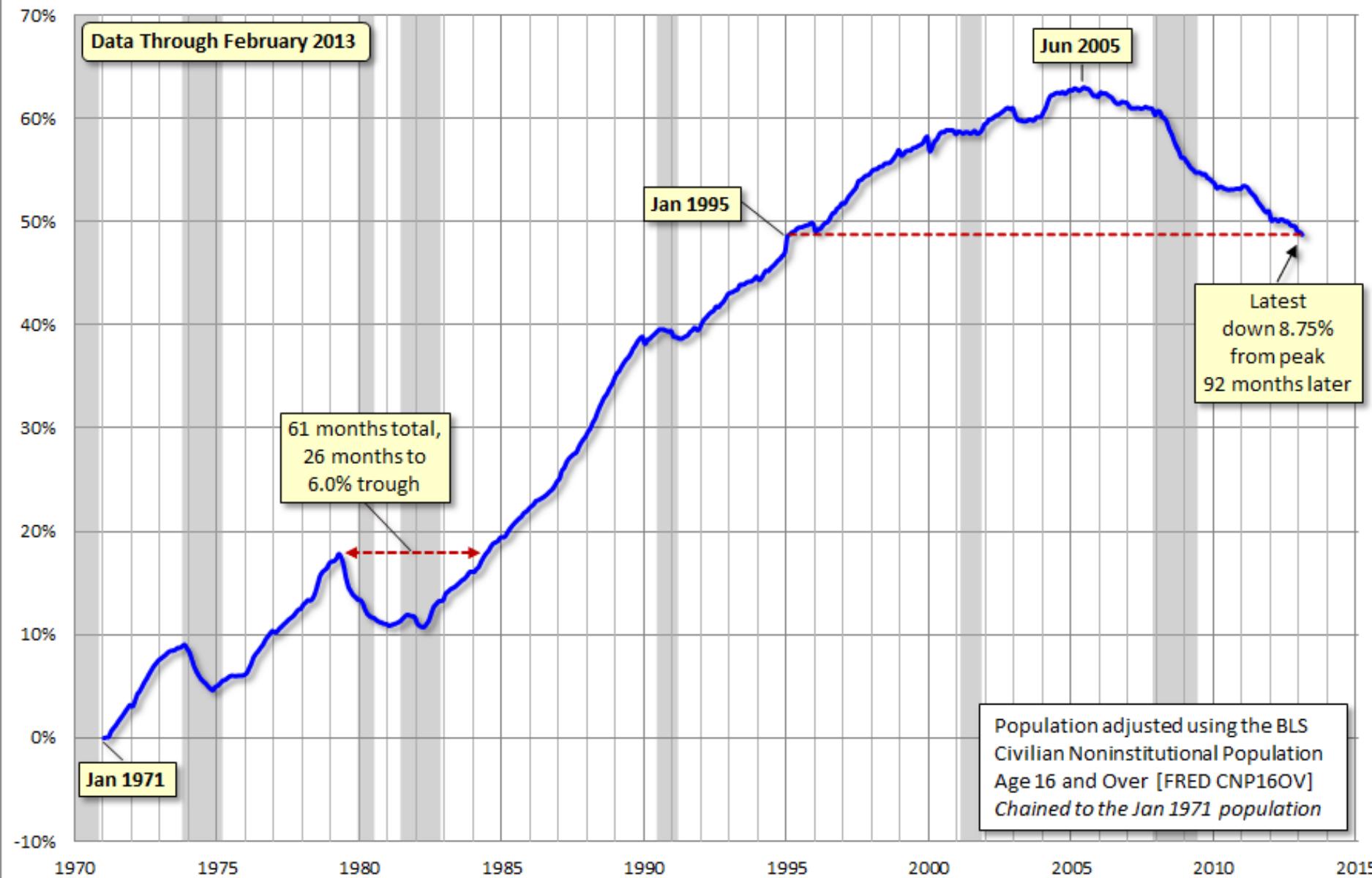
Healthcare. Affordable. Now.



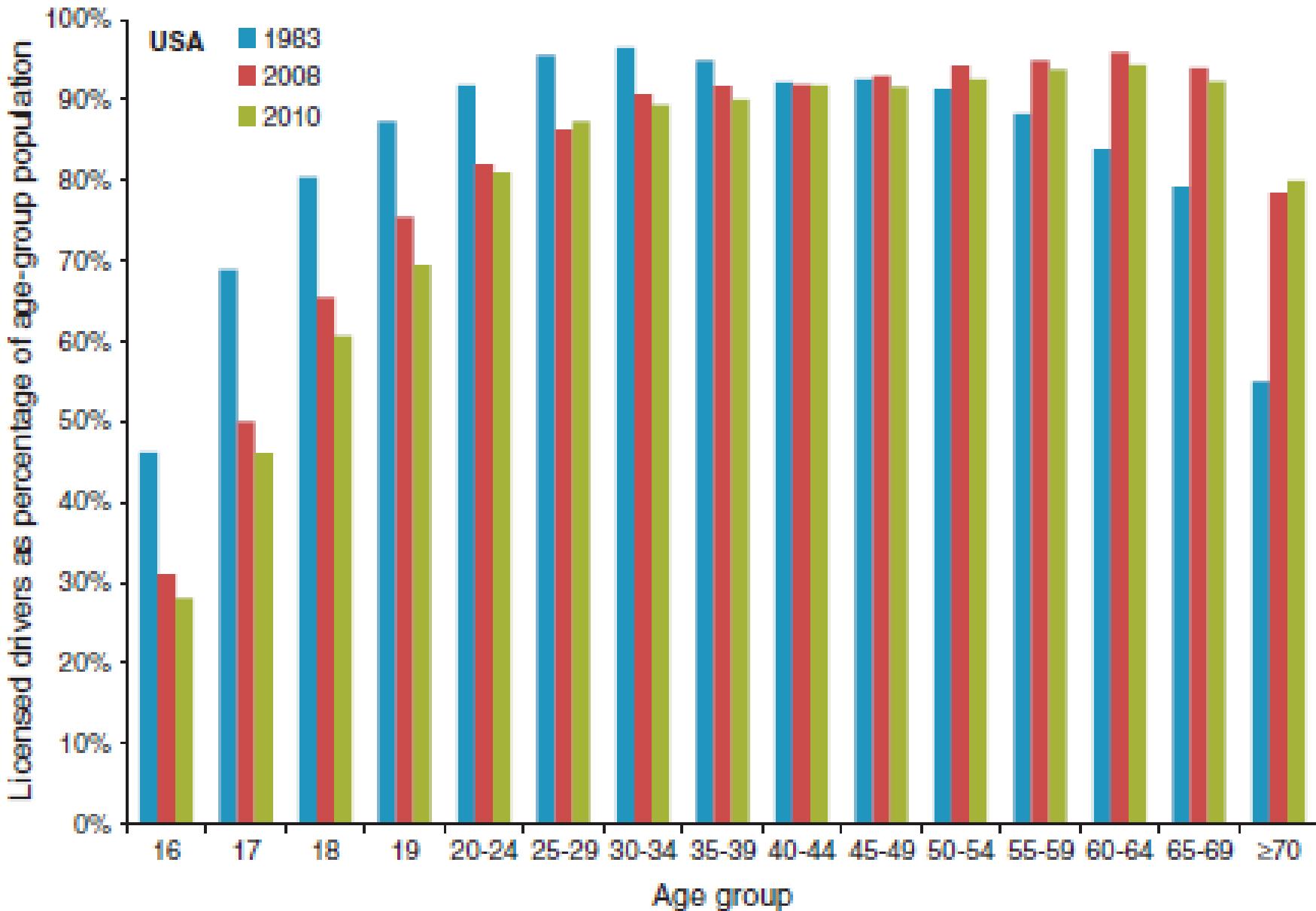
Estimated Vehicle Miles Driven on All Roads

dshort.com
April 2013

Recessions Population-Adjusted Cumulative Growth Current Level



US Licensed Drivers By Age Group



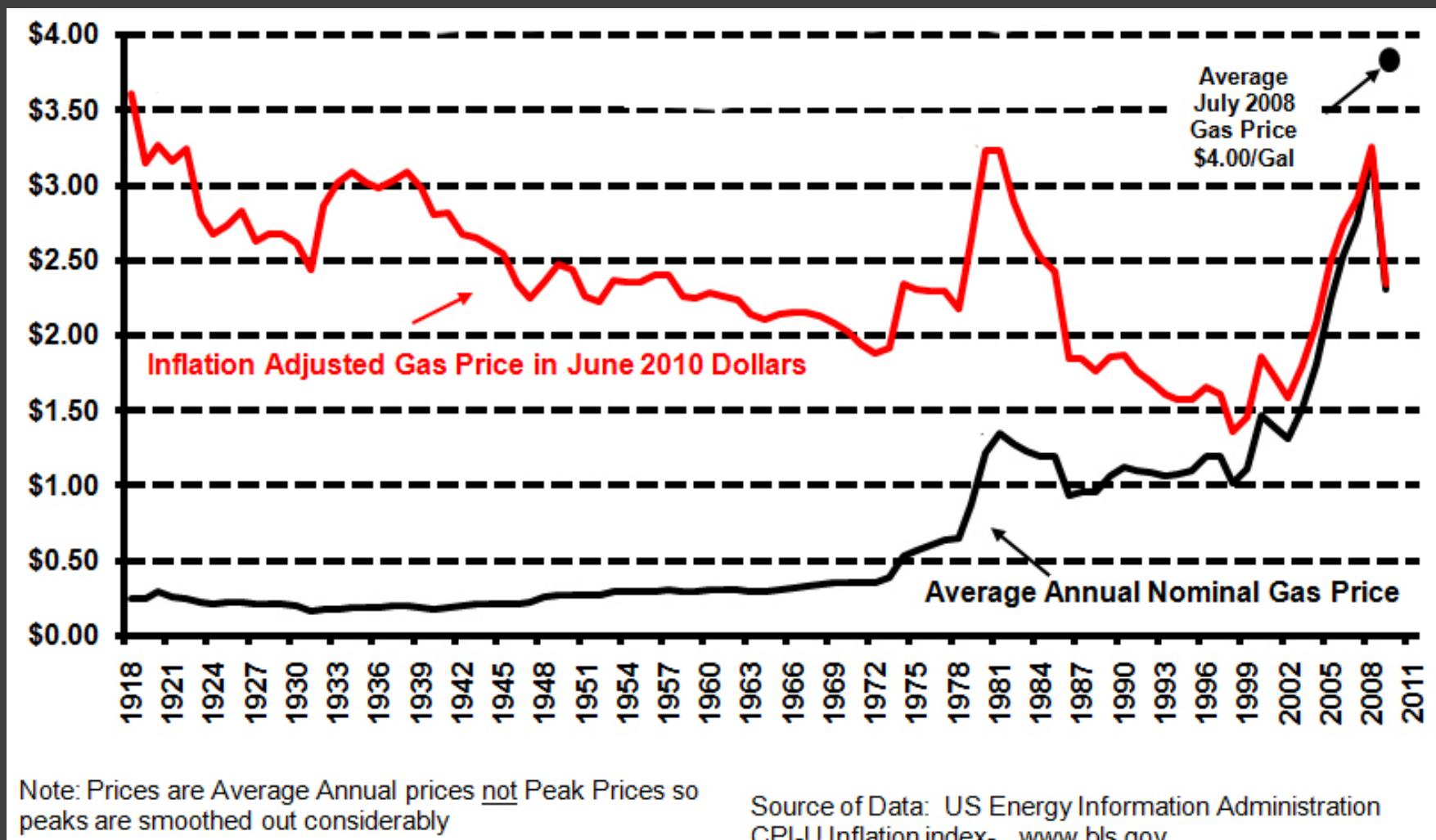
Housing Stock

<u>Household Type</u>	<u>1960</u>	<u>2000</u>	<u>2040</u>
HH w/Children	50%	32%	27%
HH w/o Children	50%	68%	73%

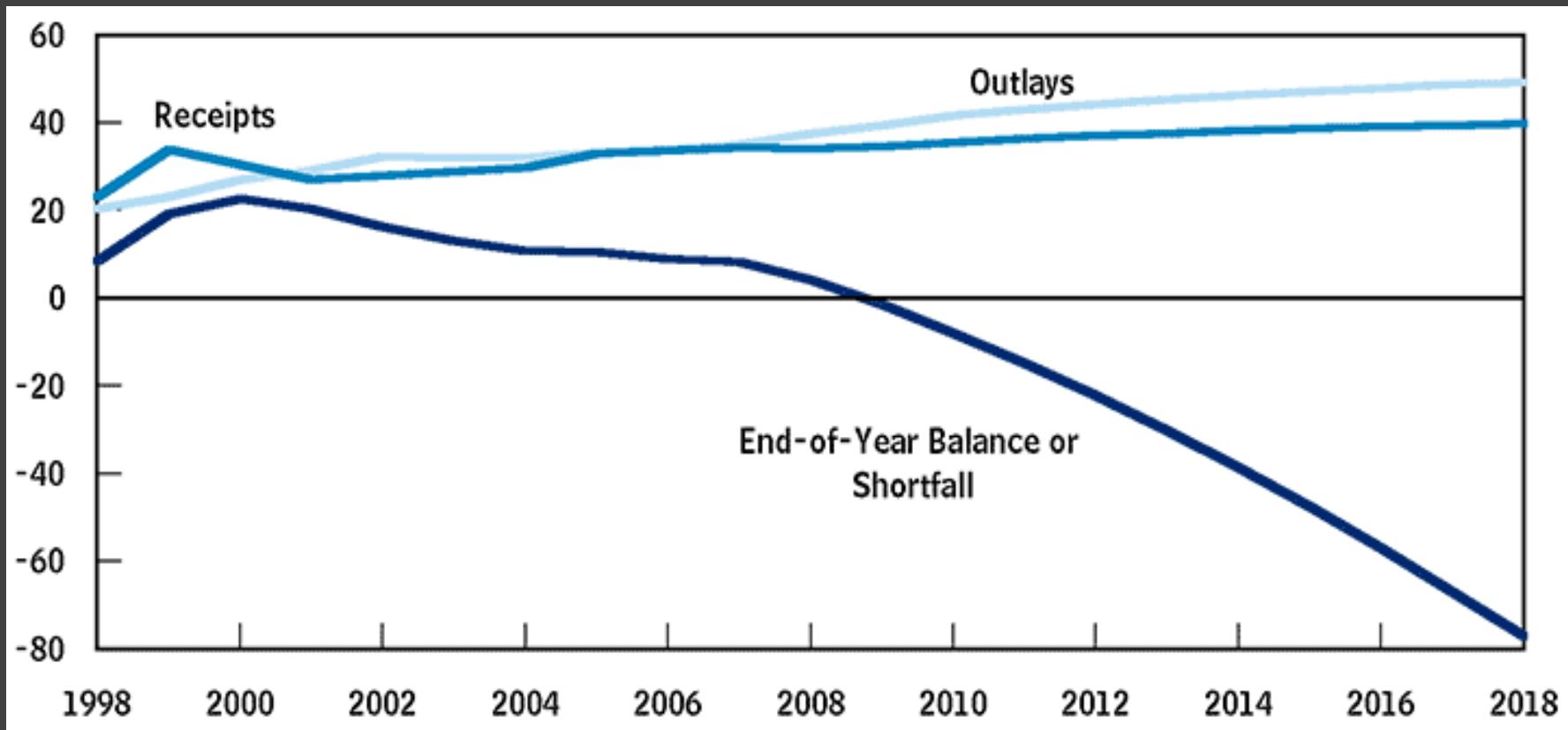
Dane County = 71% Households Without Children

Source: Dr. Arthur C. Nelson, University of Utah

Today's Issues - Energy



Today's Issues - Finance

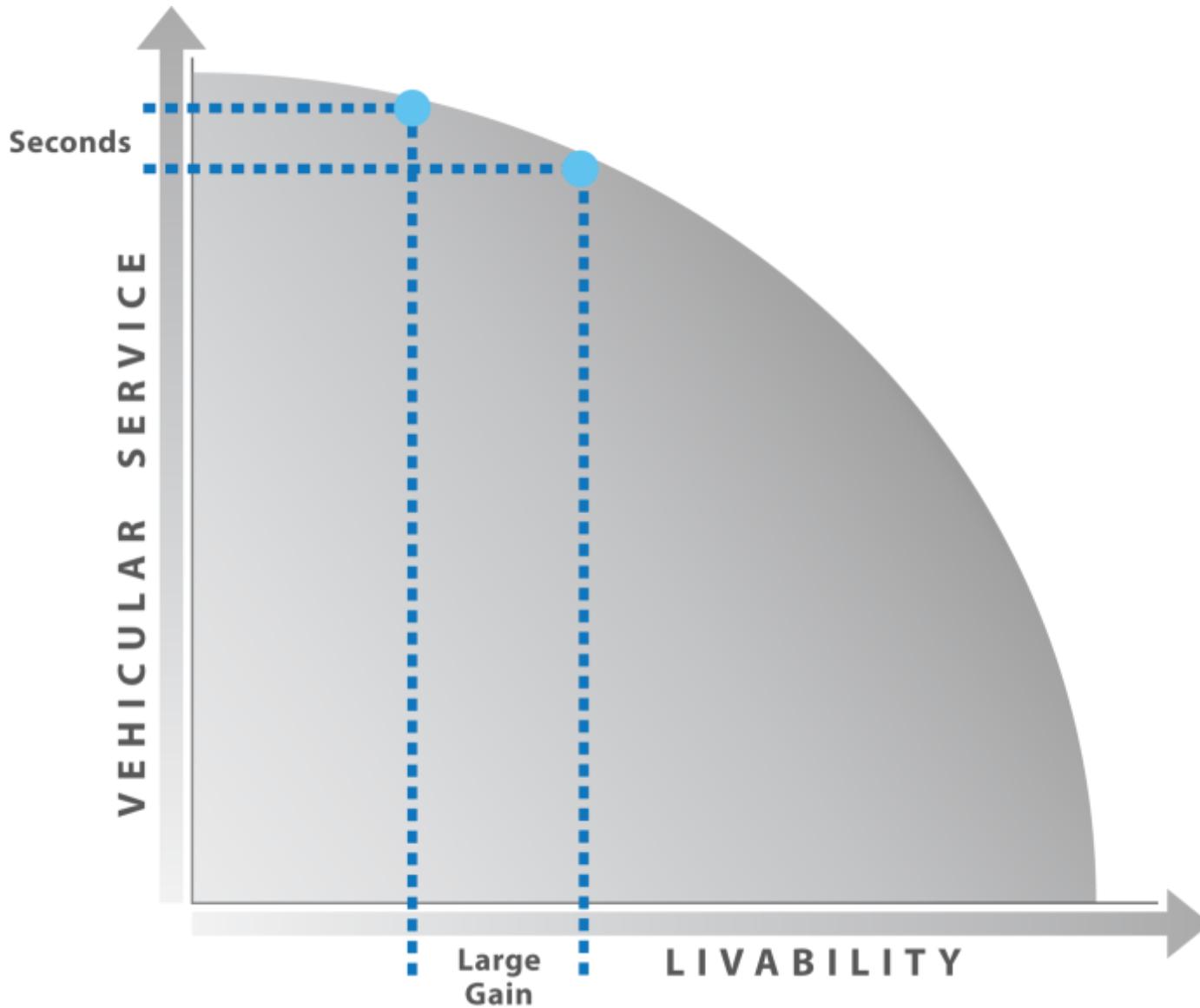


A Strategic Plan

“A good hockey player plays where the puck is.
A great hockey player plays where the puck is
going to be.”

Wayne Gretzky

Striking A Balance



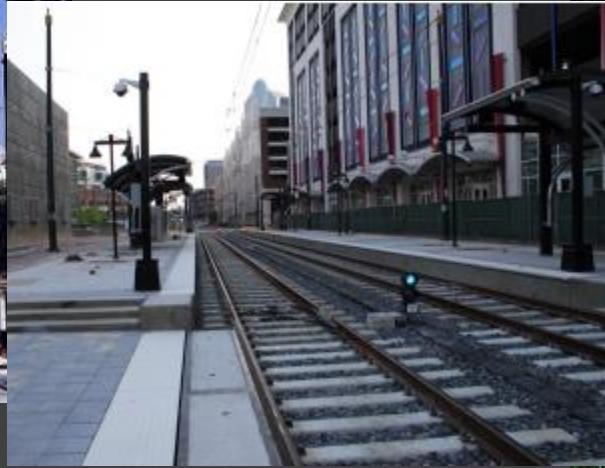
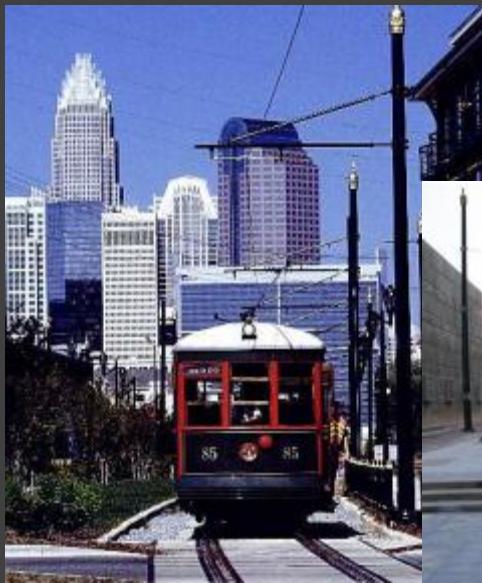
Move
Differently

Travel Modes

	Drive Alone	Carpool	Transit	Walk/ Bike
Madison Region	73.9%	9.0%	4.1%	12.9%
City of Madison	62.1%	9.6%	8.6%	19.7%
Downtown and University workers (commuting in)				

Source: US Census, American Community Survey

Transit Commitment - Charlotte



- \$8.9 Billion Investment In Transit
- Over \$1 Billion in Private Investment Before Opening

Transit Commitment – Salt Lake



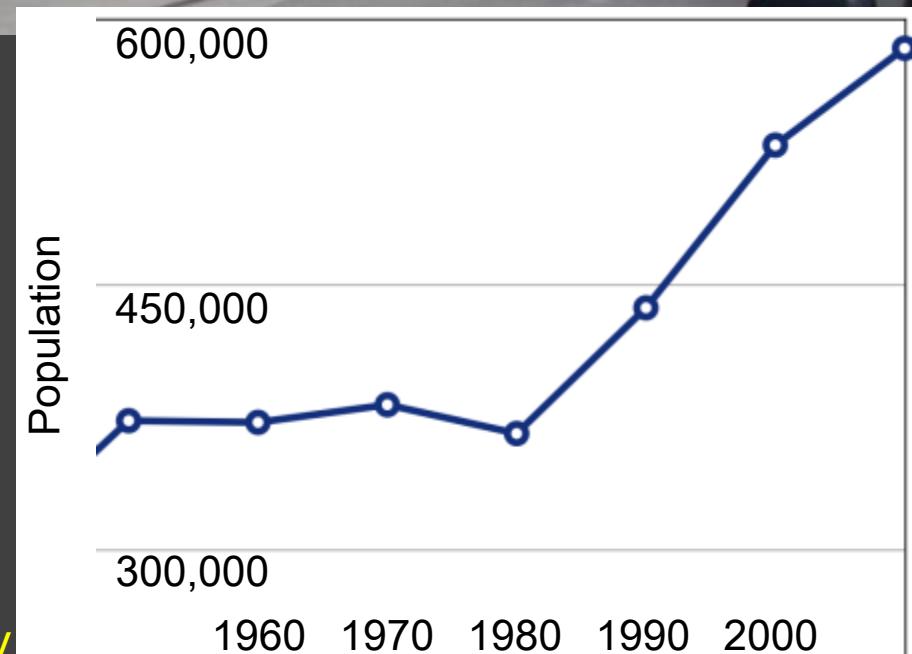
SLC tops the US in transit
connecting people and jobs

Transit Commitment - Denver



\$6.1 Billion Investment In 122 Miles of Transit

Transit Commitment - Portland



\$2.6 Billion Added to Local Economy By
Getting Citizens to Driver 4 Less Miles Per Day

MBTA Key Bus Routes

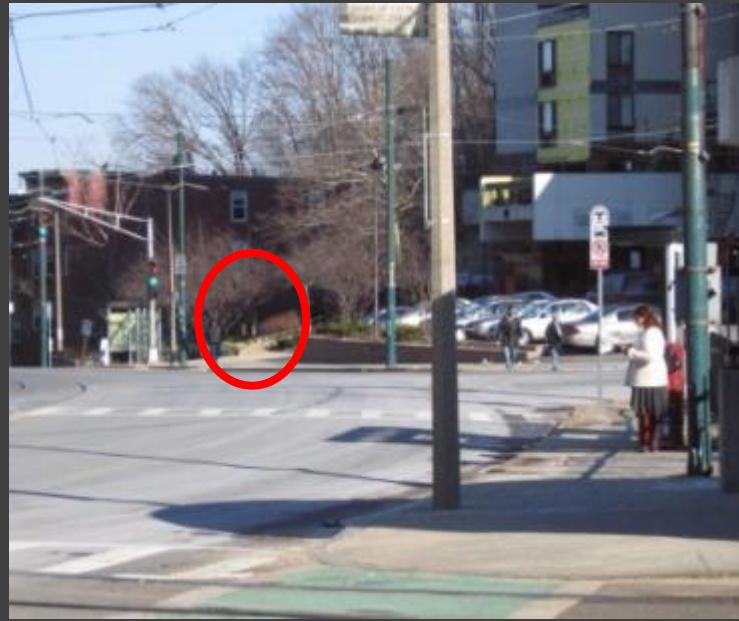


- \$10 million ARRA funds
- MBTA's 15 highest ridership bus routes
- Capital Improvements

Existing Condition s



Poorly located
boarding area



Bus stops too close



Signage issues

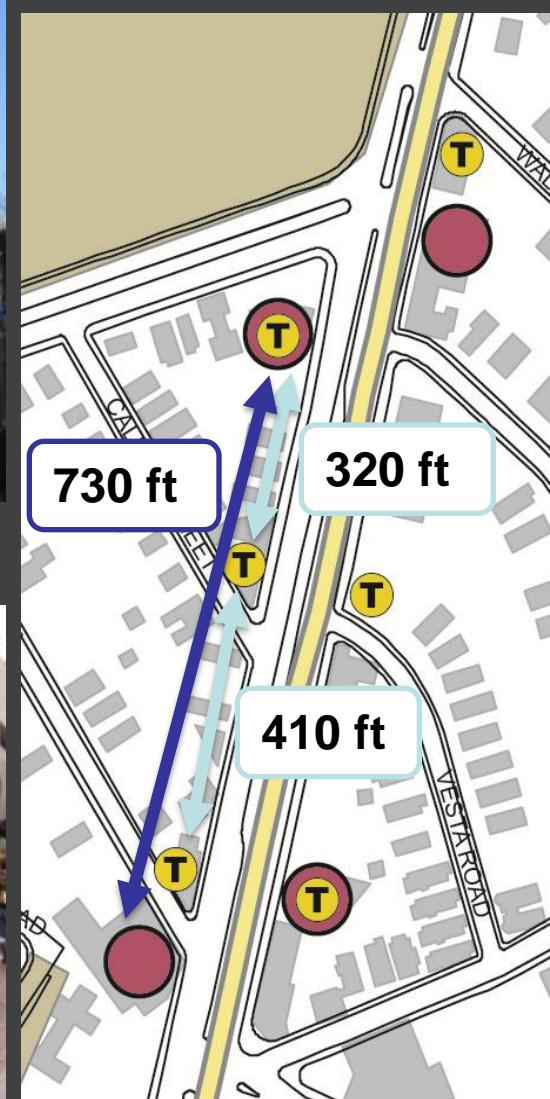
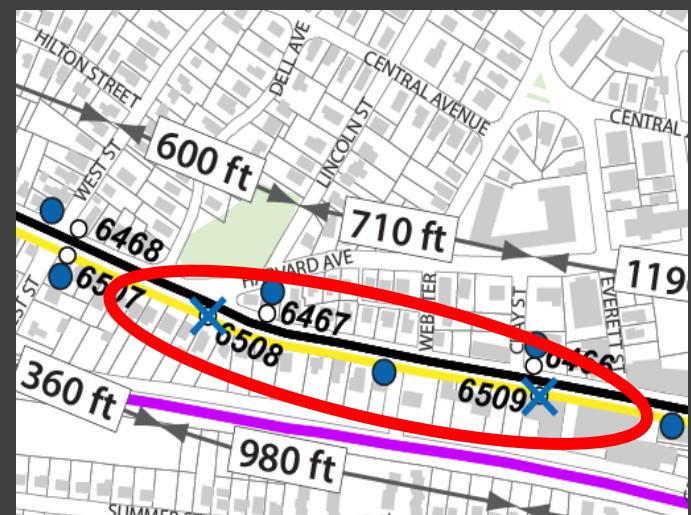


Bus stop too short



Lack of accessibility

Typical Improvements



Stop Consolidation

Signal Improvements



Curb Extensions

Improved Amenities

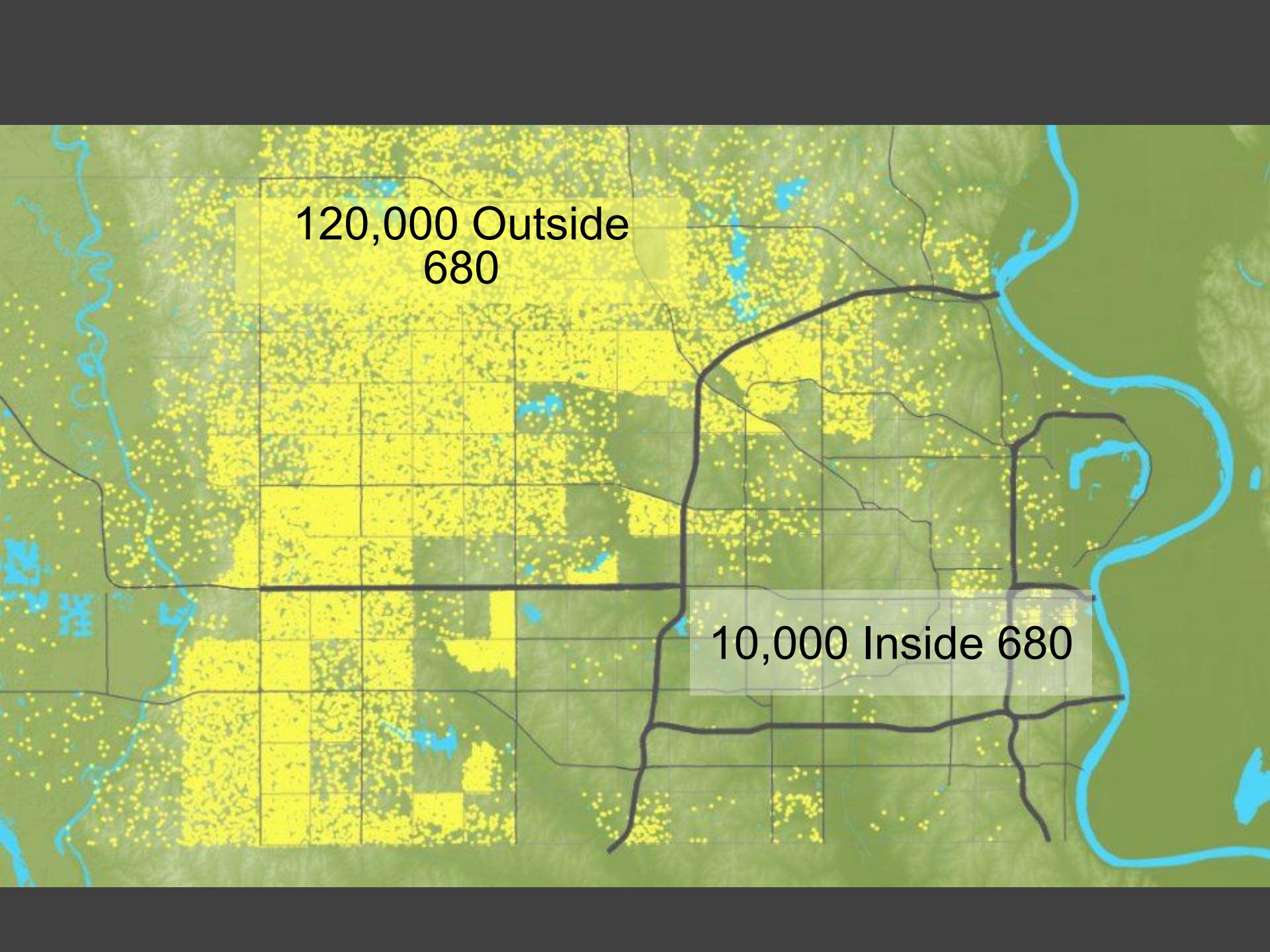
Spacing



WAIT-HERE



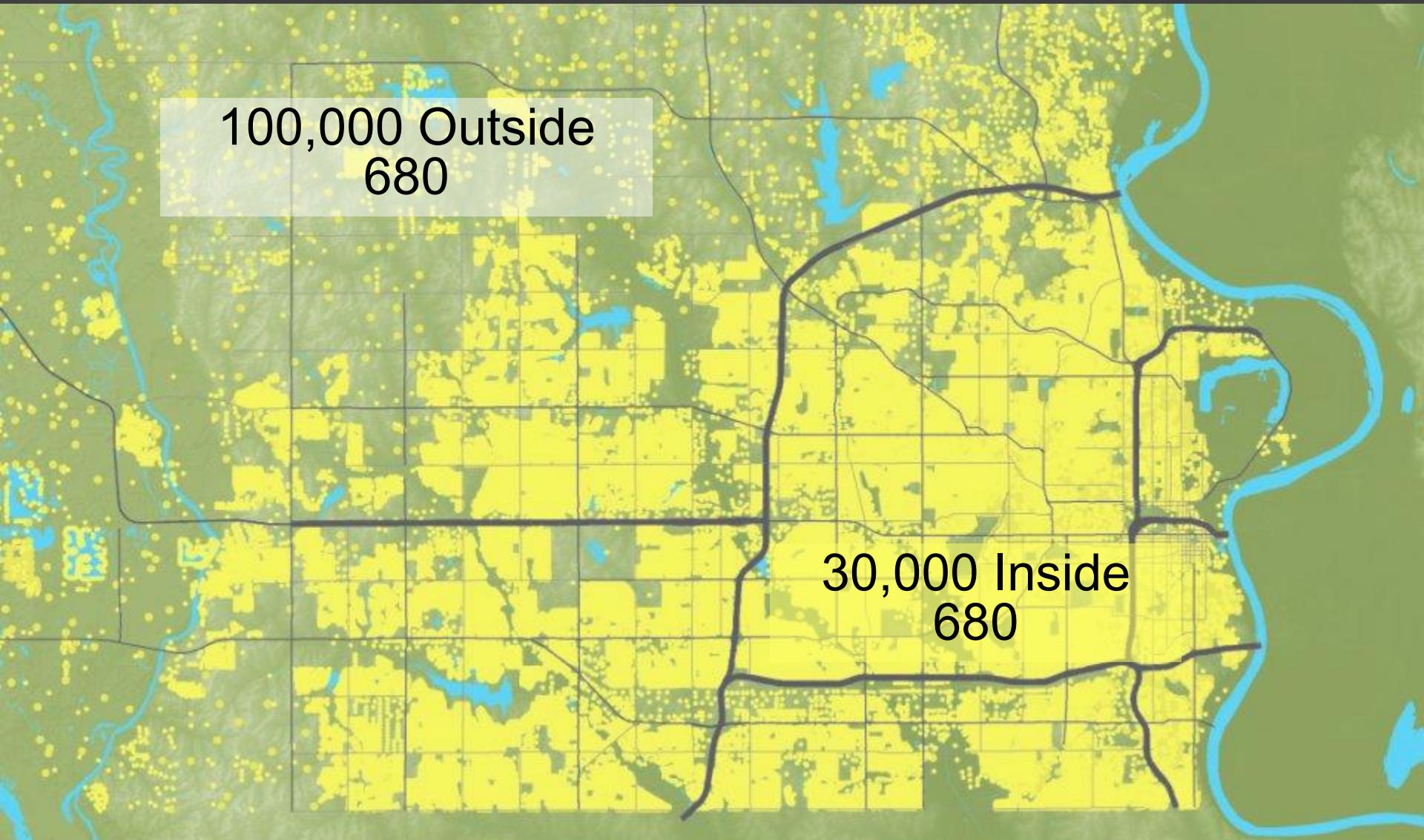
Grow
Differently



120,000 Outside
680

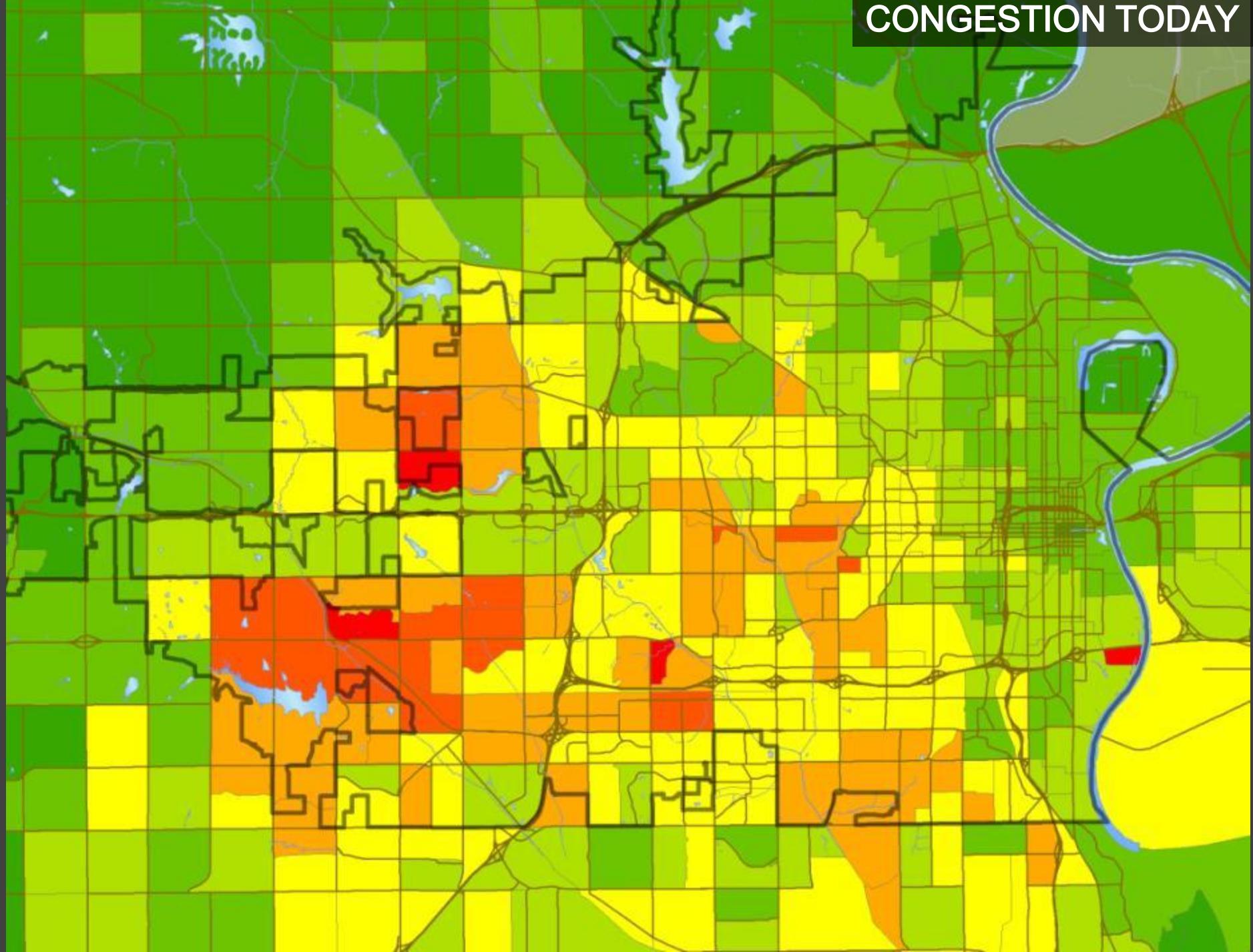
10,000 Inside 680

2035 Greater Infill Focus

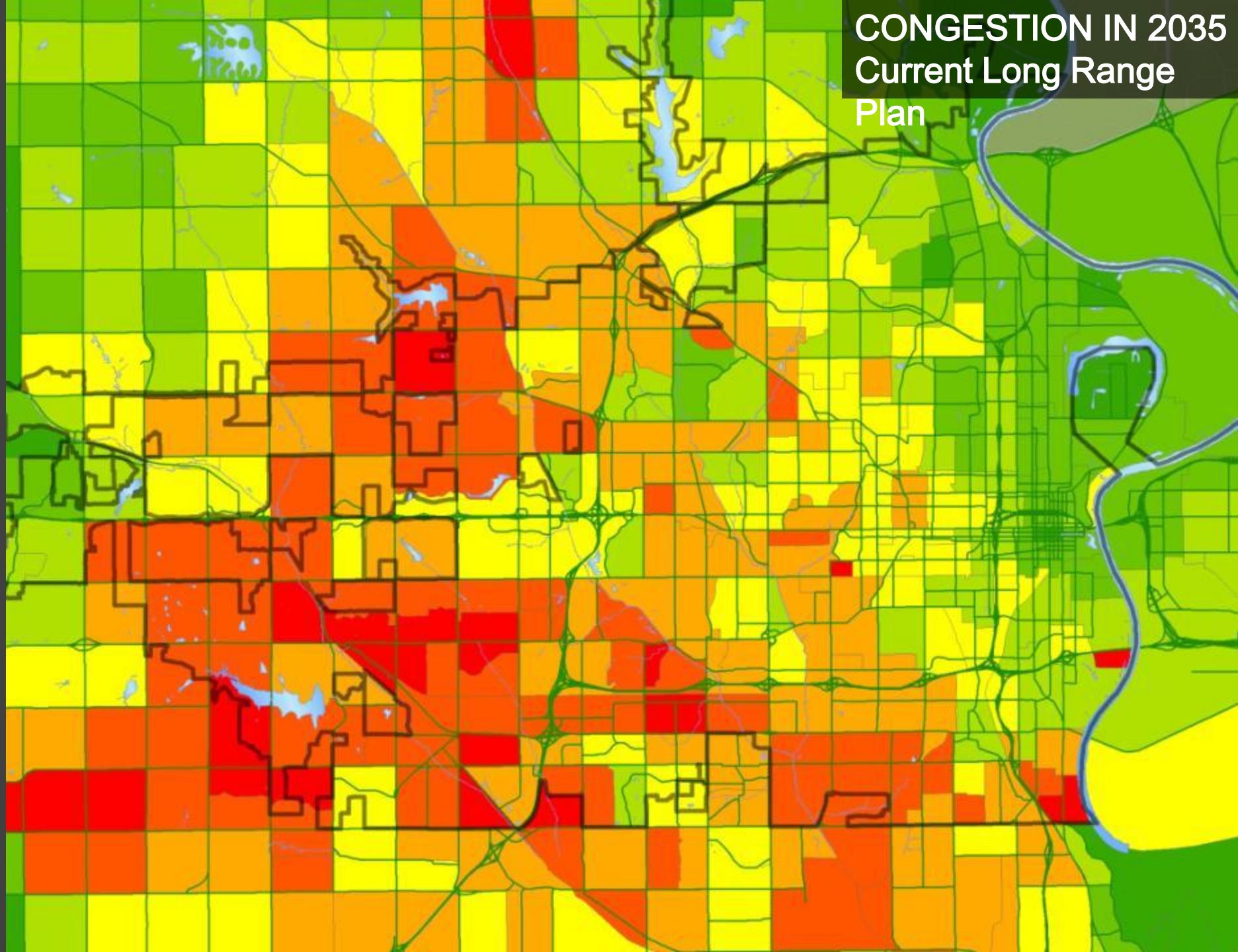


Additional 20,000 Stay Outside 680, But Move Closer In

CONGESTION TODAY

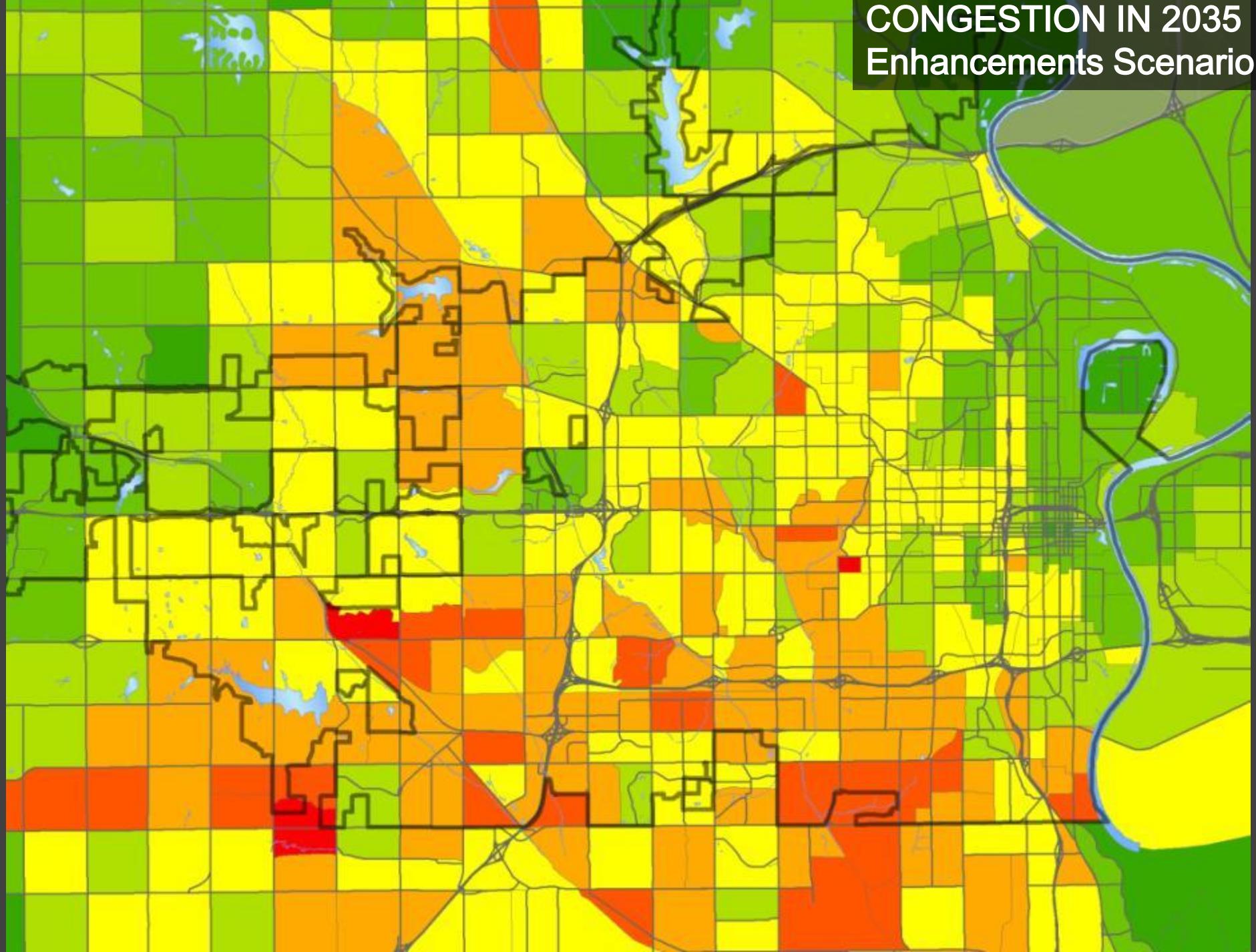


CONGESTION IN 2035
Current Long Range
Plan



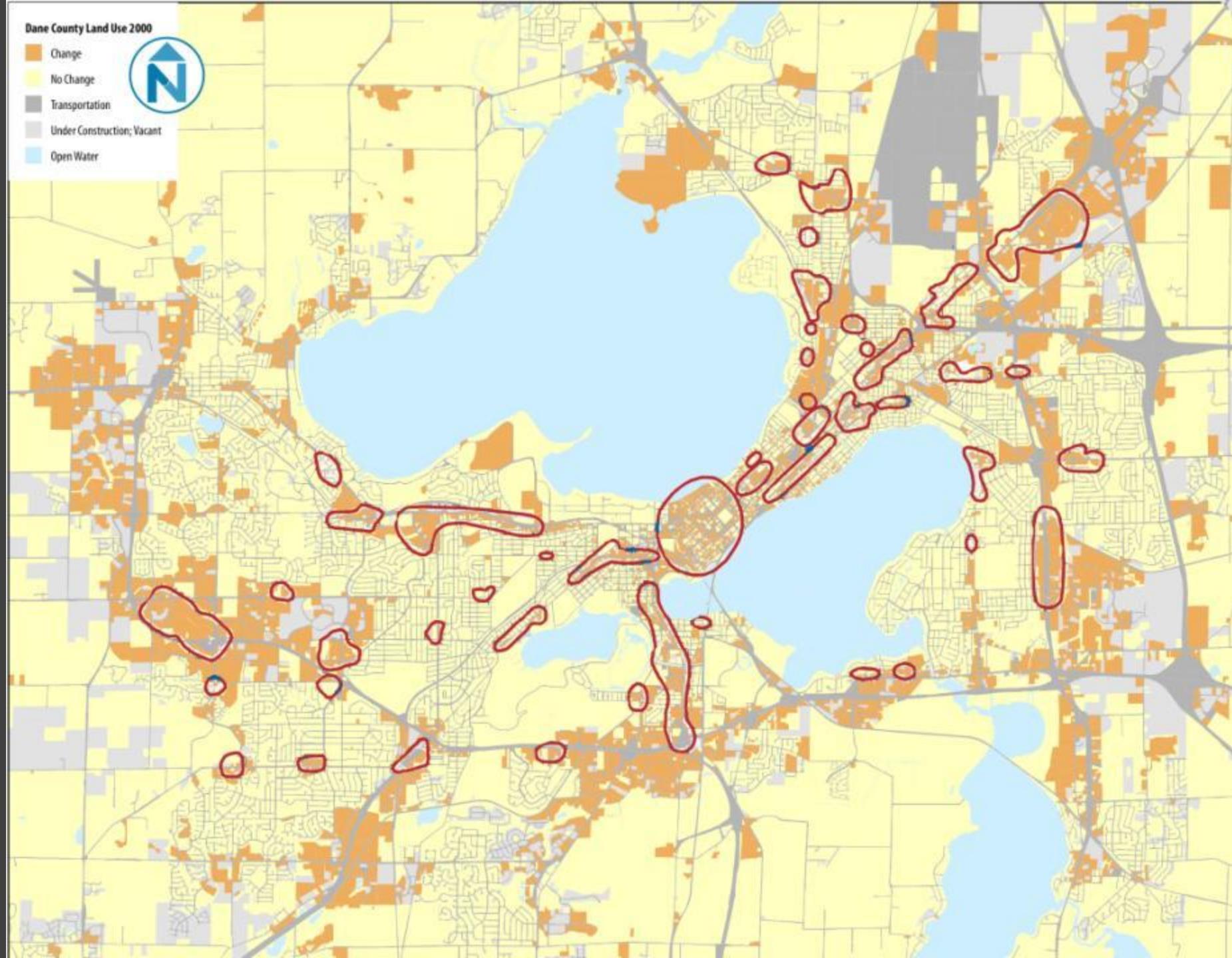
CONGESTION IN 2035

Enhancements Scenario



Dane County Land Use 2000

- Change
- No Change
- Transportation
- Under Construction; Vacant
- Open Water



University Avenue





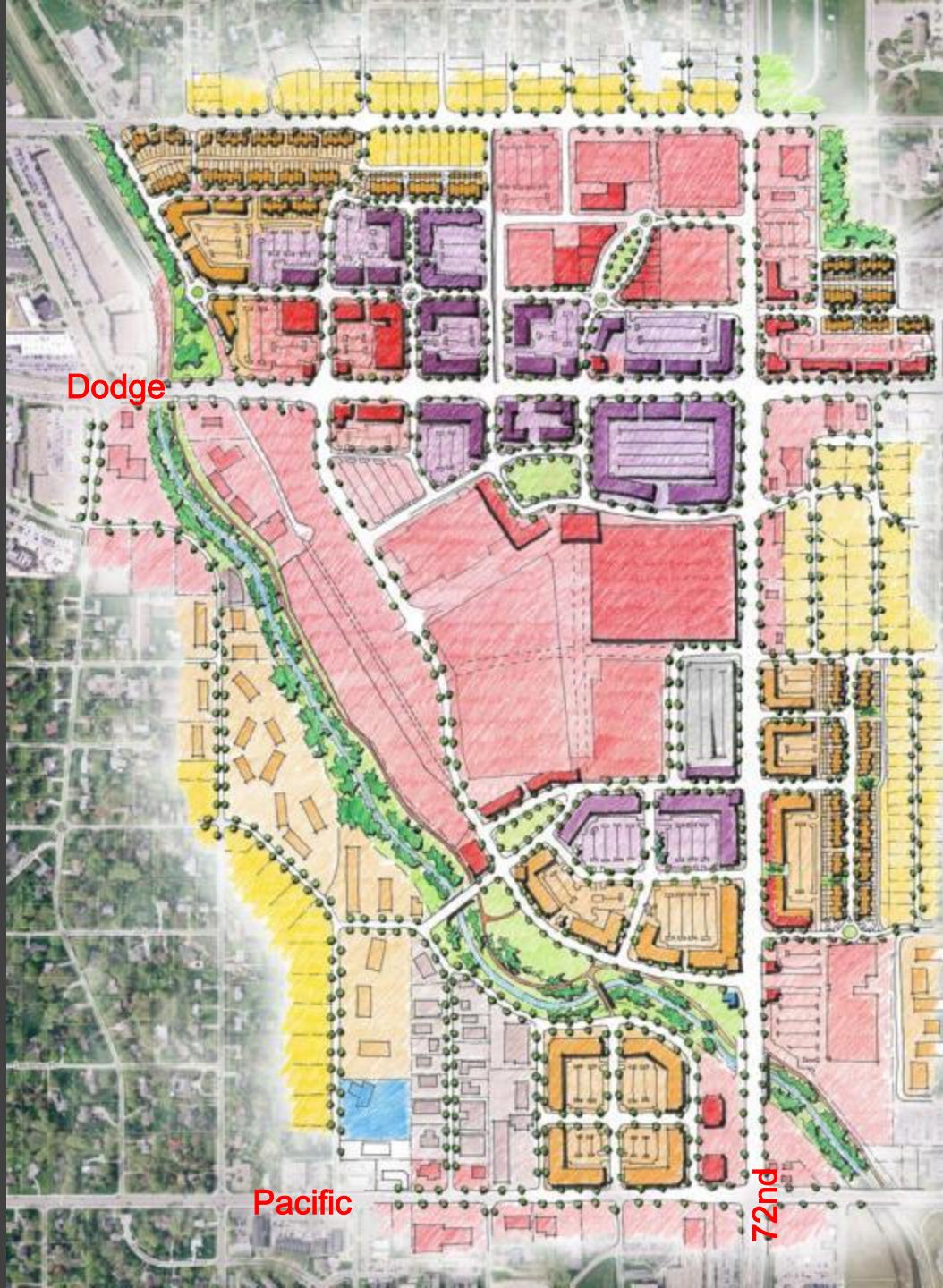




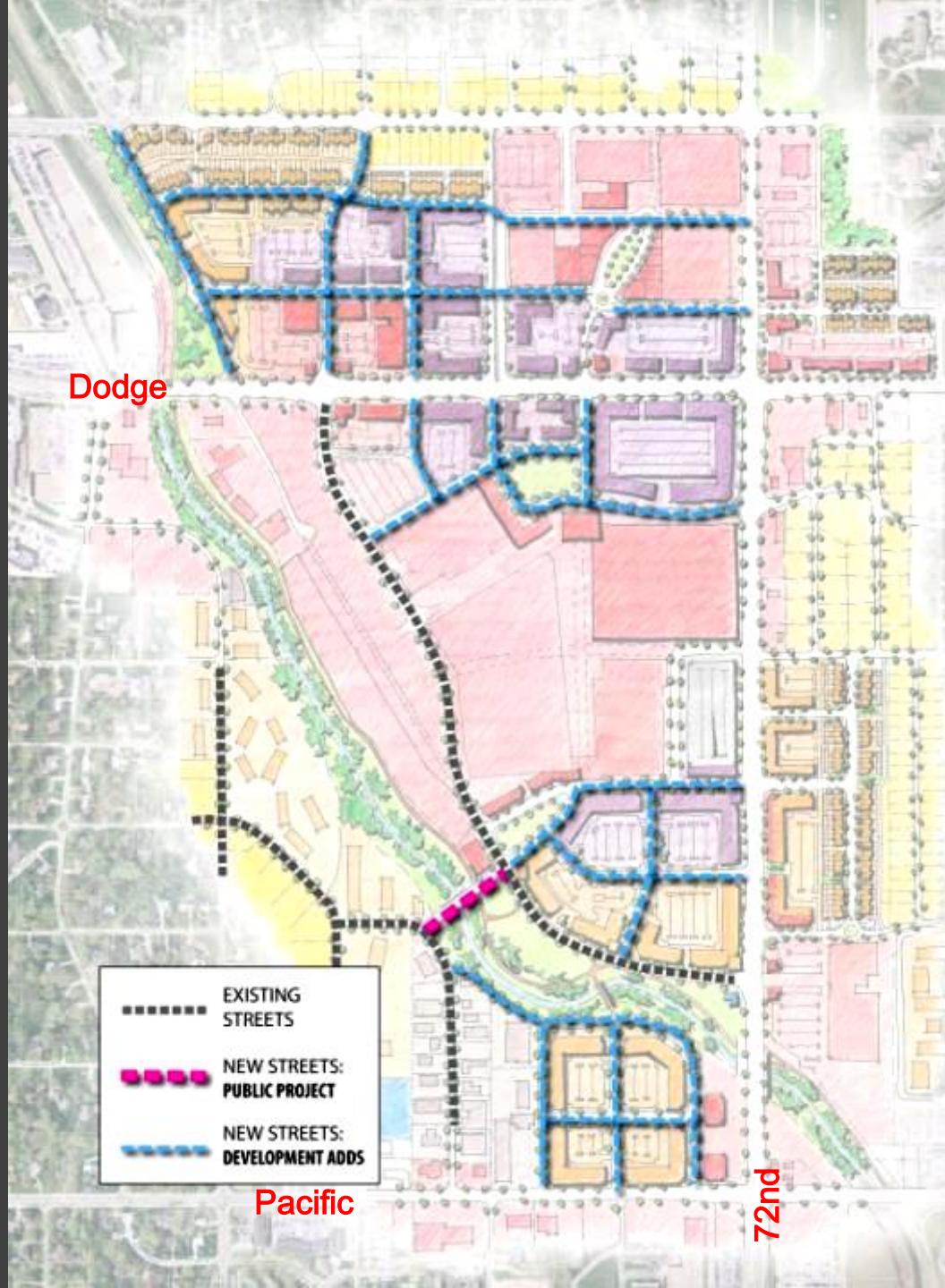








Redevelopment sites add network

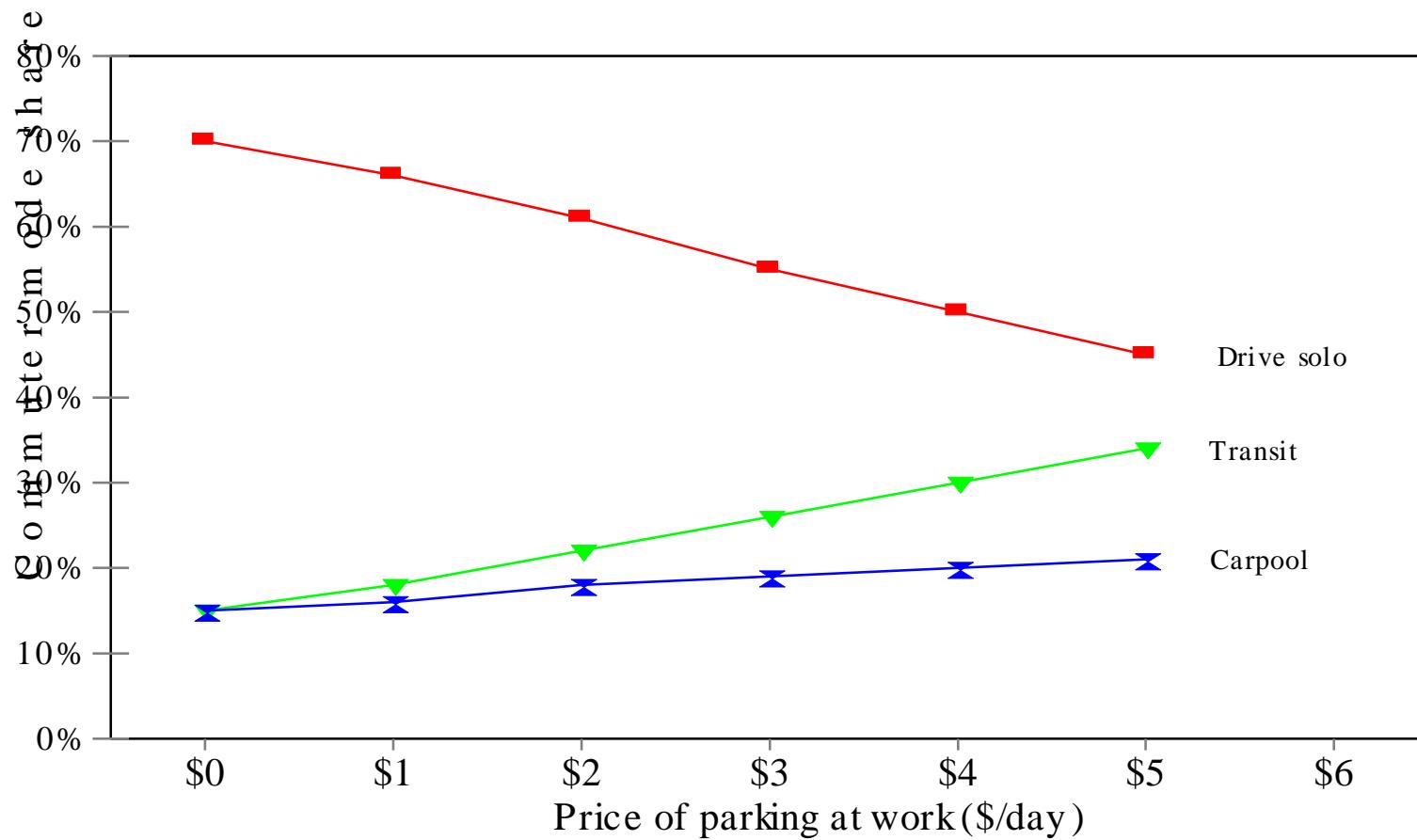


Redevelopment sites add network

Spend
Effectively

Parking Prices Affect Mode Choices

For Commuters to Downtown Los Angeles



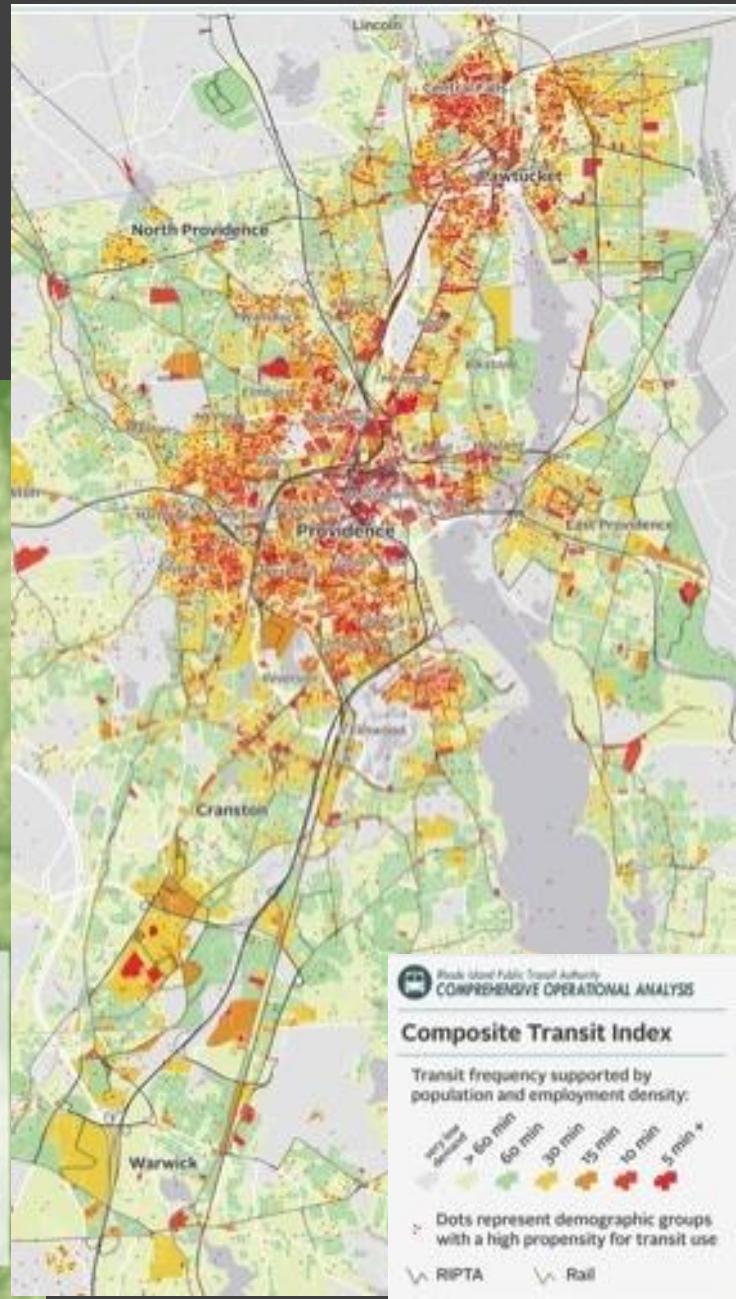
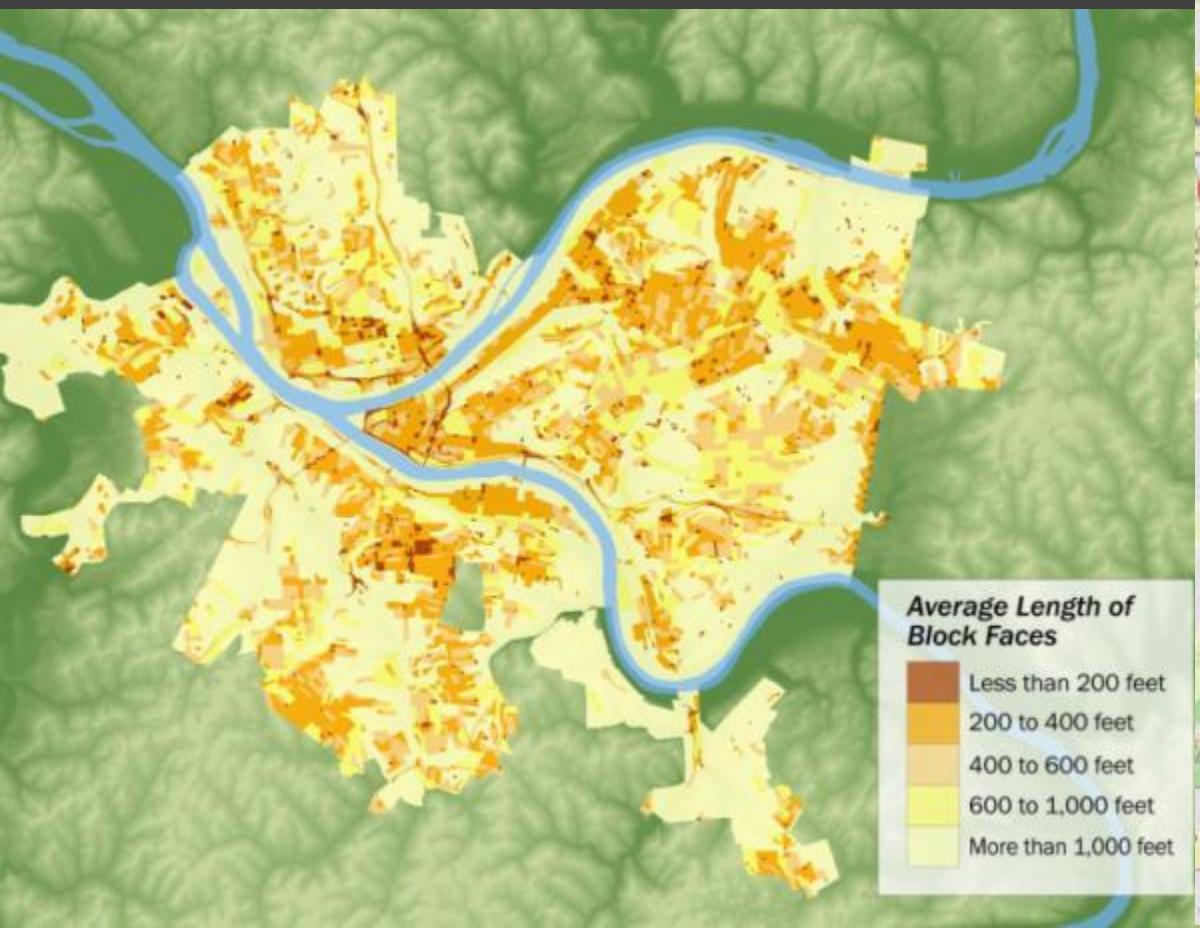
Source: Estimated from Willson (1991)

- Vehicle Miles Traveled (VMT) Tax
- Environmental (Carbon) Taxes
- Distance or Damage/Weight Tax
- Value Pricing (Tolls/Congestion)
- Development Impact Fees
- Parking Taxes

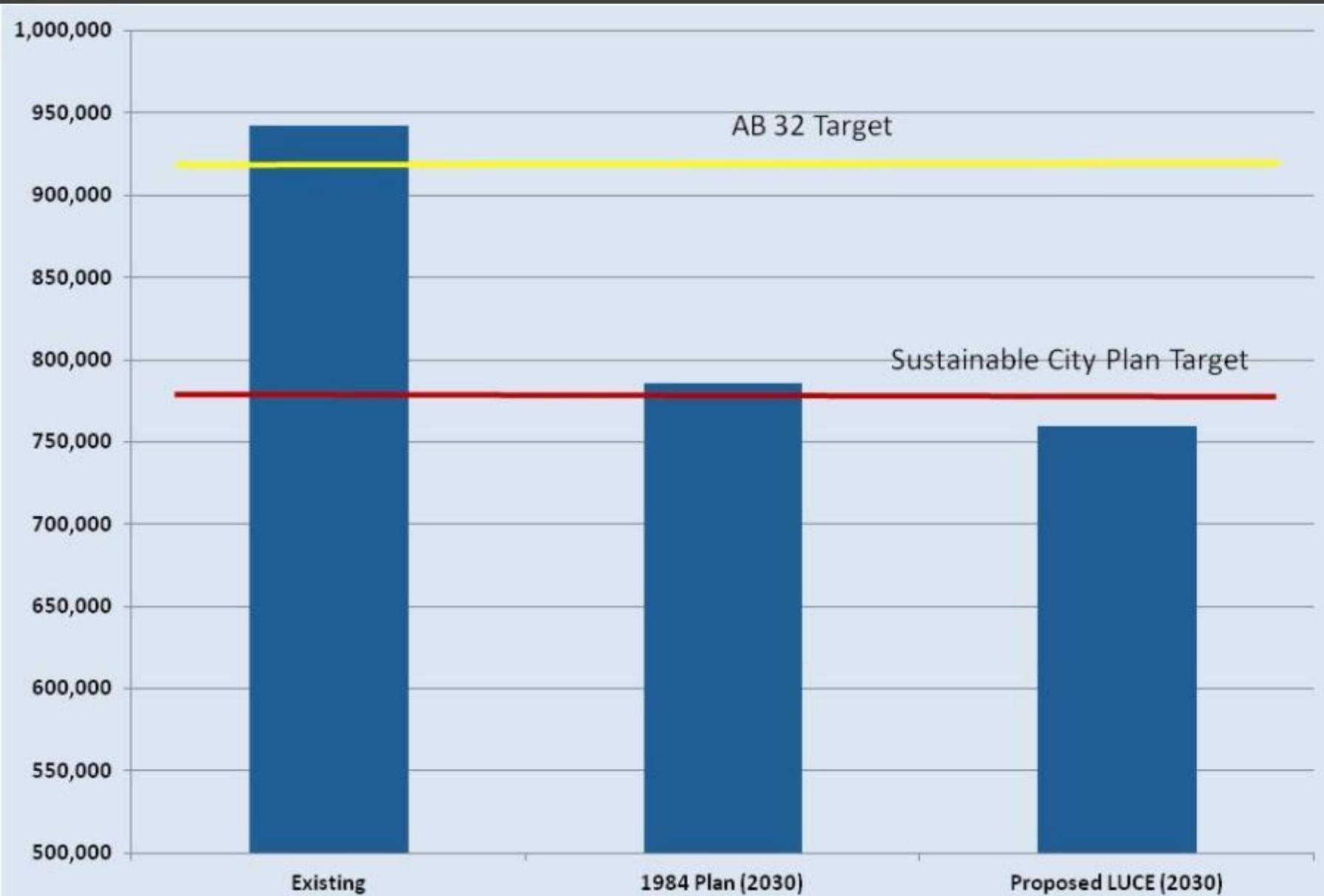


Measure
Progress

Performance Standards



Greenhouse Gas Emissions



We can do nothing and just take our chances...

...or we can choose now to plan for change.



Image source: The New Yorker

Discussion – Project Goals

- provide **Mobility Choices**
- protect **Safety and Health**
- assure **Equity for All System Users**
- maintain **Fiscal Responsibility**
- promote **Beneficial Growth**
- assure **Environmental Sustainability**
- enhance **Neighborhoods**

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