

Utah Transit Authority's Role in Building Sustainable Communities



Long Arch

Arches National
Park



Subway

Zions National Park



Rainbow Bridge

Lake Powell, UT



Heber Creeper

Heber, Utah

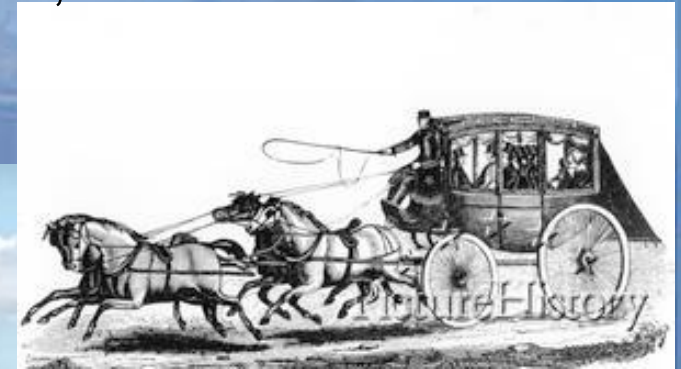




It was the age of the horse--ever marking the ability to pull as “horsepower”.

Pre 1800s

For thousands of years humans traveled using horses, or other livestock for mobility of goods, services and other people.



***Horse-powered
Transportation***

Pre 1800s

1800 - 1850

The first 93 miles of the Erie Canal opened in 1819, revolutionizing inland movement of goods.



View of Erie Canal by John William Hill, 1829



***Canal
Transportation***

Pre 1800s

1800 - 1850

1850 - 1900

The next mover of goods and people came with the first common railroad in the United States on the Baltimore and Ohio Line in 1830.

Starting in 1850, the United States government began making grants to assist the spreading of railroads further westward and southward.



***Locomotive
Transportation***

Pre 1800s

1800 - 1850

1850 - 1900

1900 - 1950

Roadbuilding came next with motorized equipment allowing easier and cheaper construction. By the early 1920s, improved motor vehicles and an expanding road network brought the end to railway dominance.

The first United States automobile highway system originated in the 1910s with a series of named highways, the major routes being named for American presidents.



Old Plank Road, California, US 80, 1915

Automobile Transportation

Pre 1800s

1800 - 1850

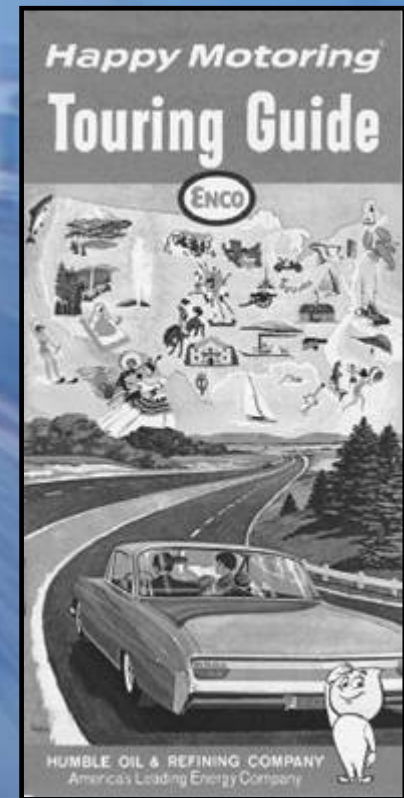
1850 - 1900

1900 - 1950

1950 - 2000

The age of “superhighways” had arrived with the Dwight D. Eisenhower System of Interstate and National Defense Highways. Construction began in 1956 and was paid for primarily through the gas tax.

Although construction on the Interstate Highway system is ongoing, it was regarded as complete in 1990.



**Modern
Transportation**

Pre 1800s

It is now the century of transit.

1800 - 1850

Transportation improvements call for funding—SAFETEA, TEA-21 and TEA-LU.

1850 - 1900

Roads alone can't take us all where we need to go.

1900 - 1950

1950 - 2000

2000 and beyond



***Public
Transportation***

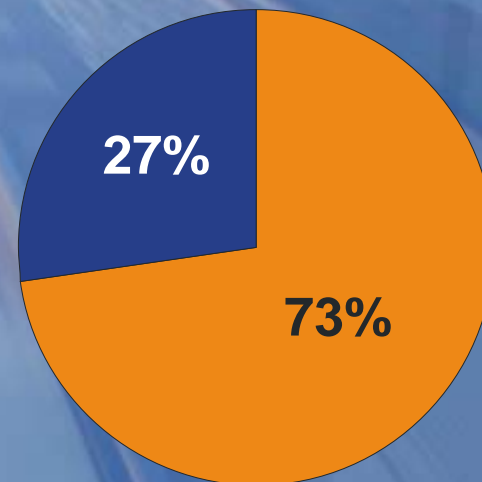
The Future

- Renaissance
- We're finally at the big table!
- Need to reinvent transit
- Retirement's starting to look pretty good.....

Utah's Need For Sustainable Communities

Growth in Population

- Another one million people along the Wasatch Front by 2030
 - 88,000 new residents in 2005, a 4% growth rate
- One of the fastest-growing states in the nation
 - U.S: 13.2%
 - Utah: 29.6%
 - (1990 – 2000)*
- Most of our growth is coming from within

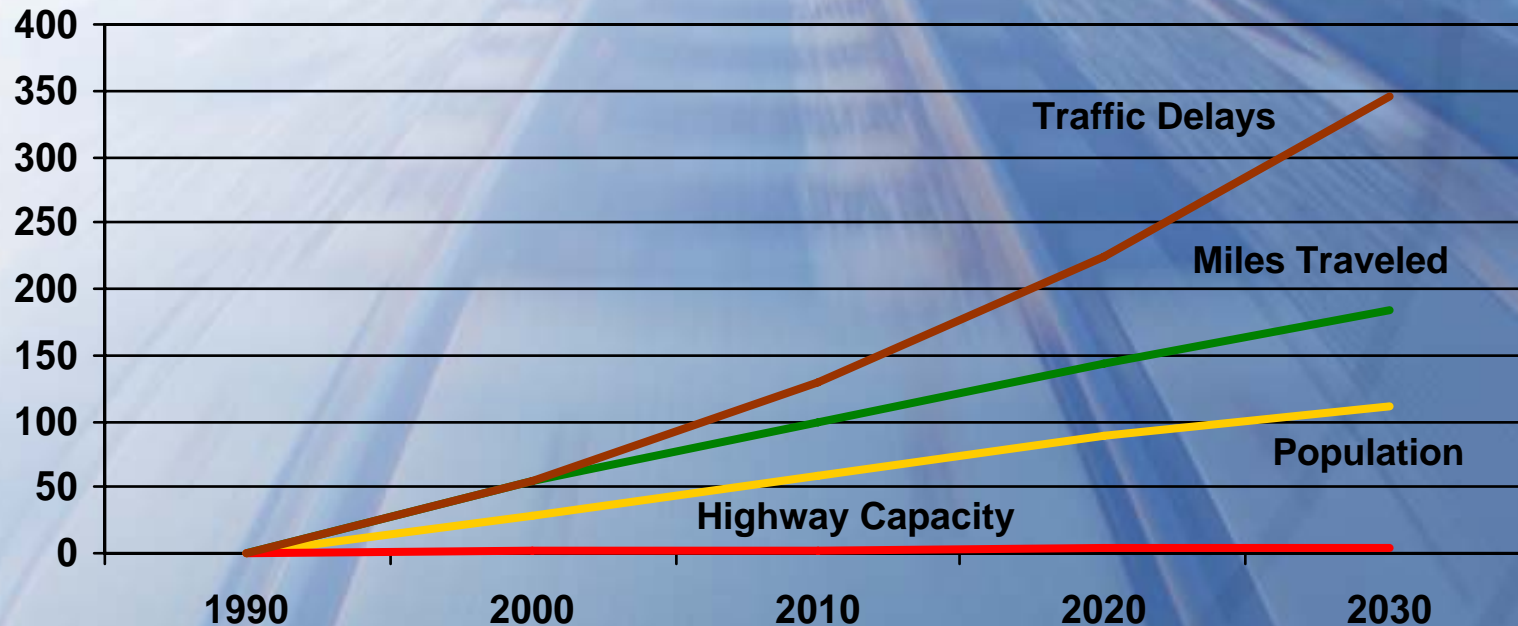


Internal Migration

Utah's Need For Sustainable Communities

Growth in Travel & Congestion

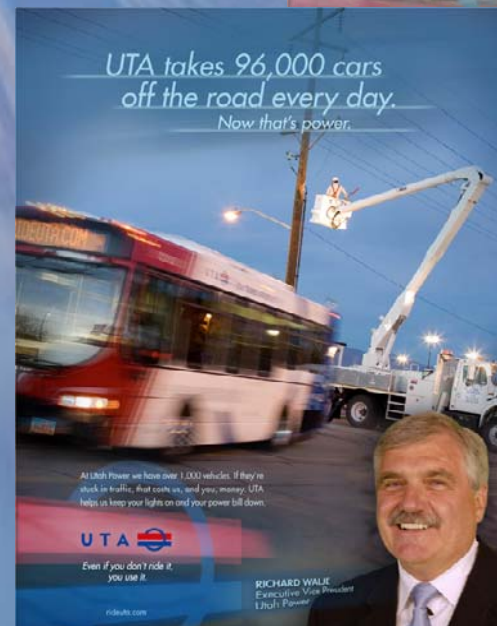
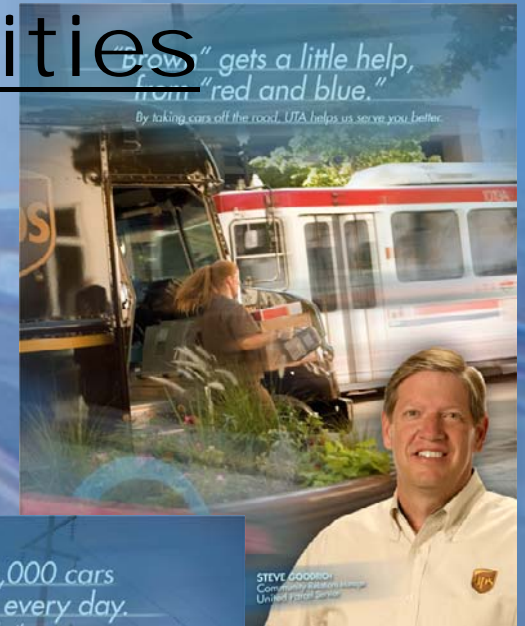
- Vehicle miles traveled is increasing at twice the rate of population. Growth in highway capacity is far behind
- Under current funding, the average time we spend delayed in traffic will triple by 2030



Utah's Need For Sustainable Communities

Economic Vitality

- Transportation is the backbone of our economy
- Movement of goods in Utah is a \$100 billion a year industry
- Congestion impacts our economic growth:
 - Increases cost of business
 - Reduces business productivity
 - Makes us a less desirable place for business to locate
 - Makes us less competitive with other regions



Greater Wasatch Area

**Over 500 City Council
Members**

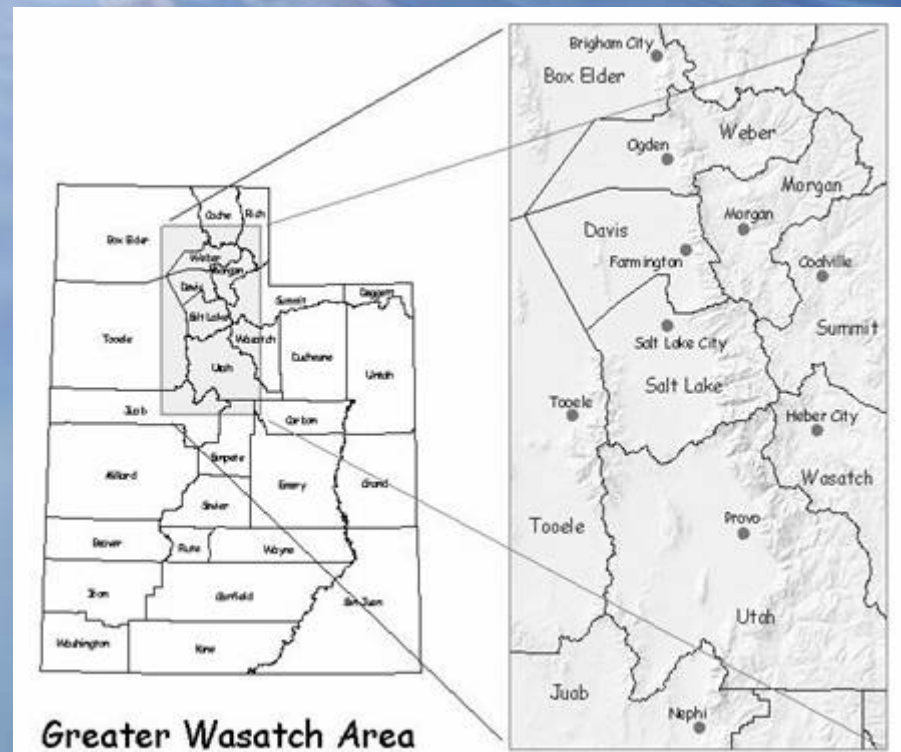
**Over 500 Planning
Commissioners**

**30 County
Commissioners**

90 Mayors

**100's of developers,
realtors and other key
stakeholders**

- **10 Counties**
- **90 Cities and Towns**
- **157 Special Service Districts**



UTA

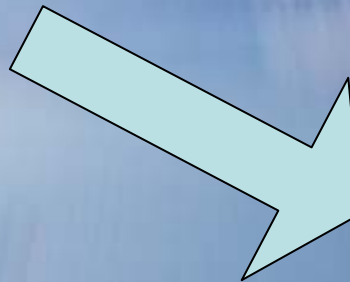
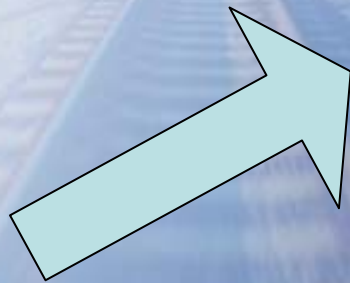
FRONT RUNNER

UTAH AUTHORITY

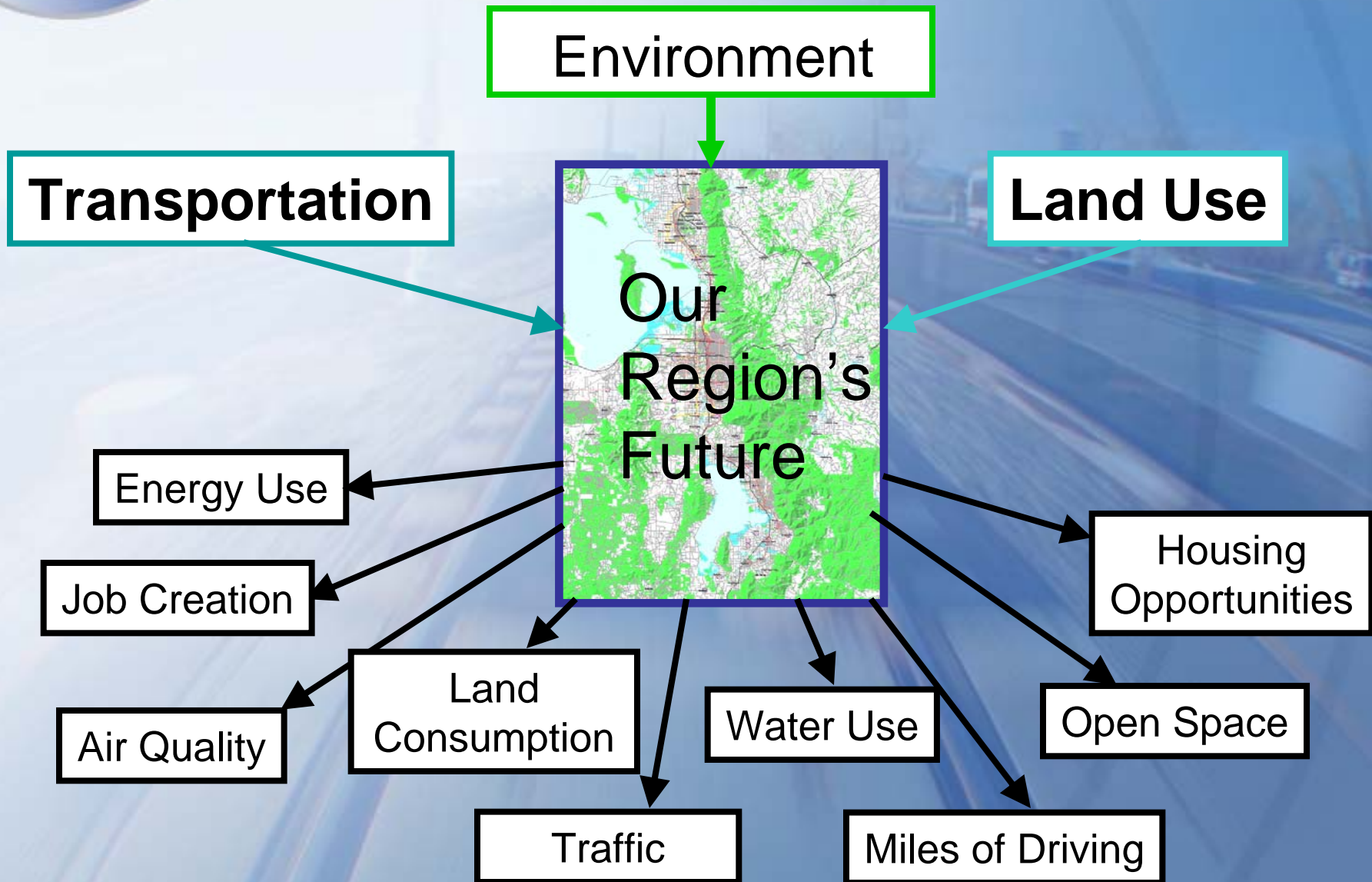


Scenario Approach:

Contrasts today's choices by showing long-term consequences



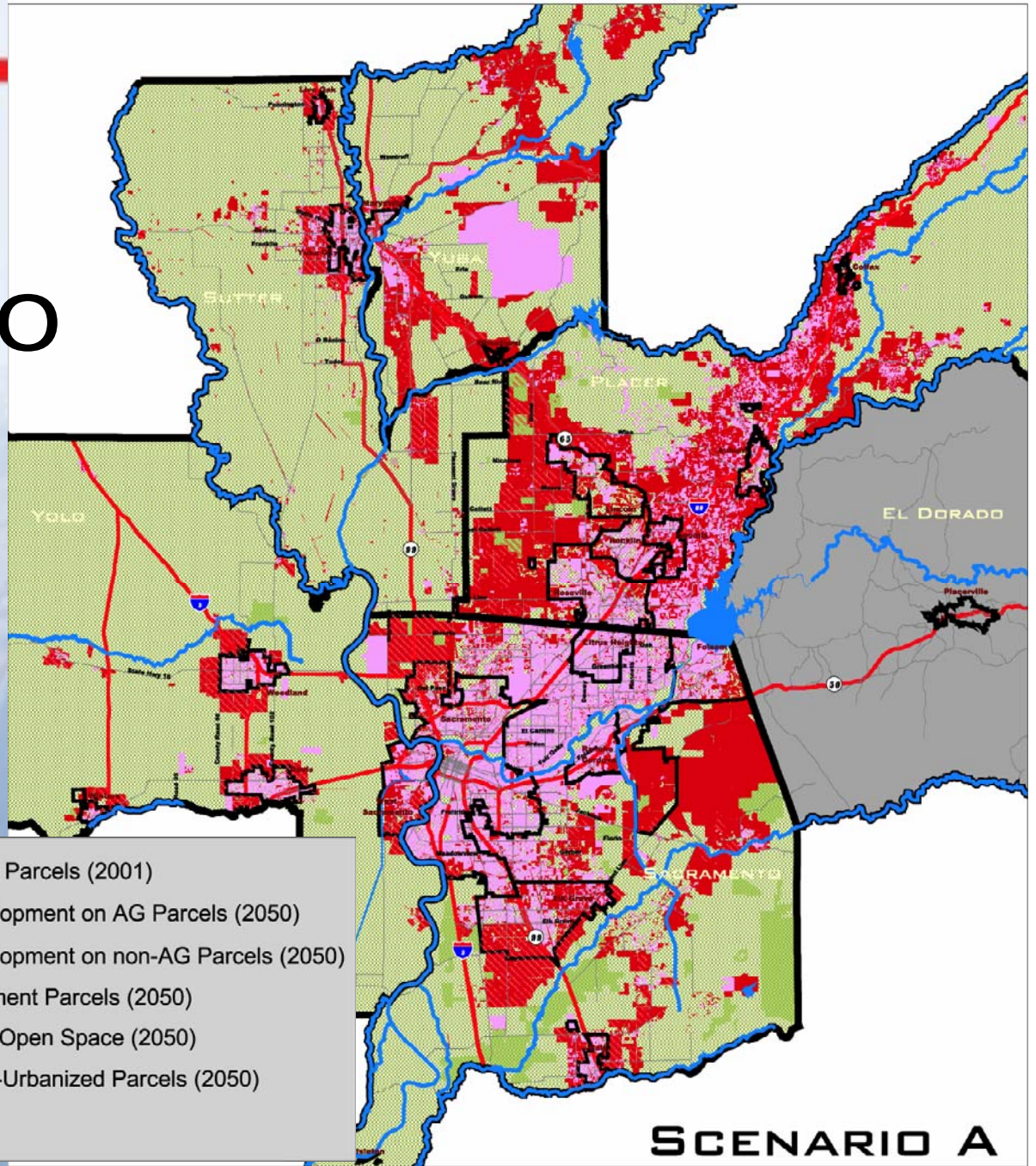
Regional Choices and Outcomes



Sacramento

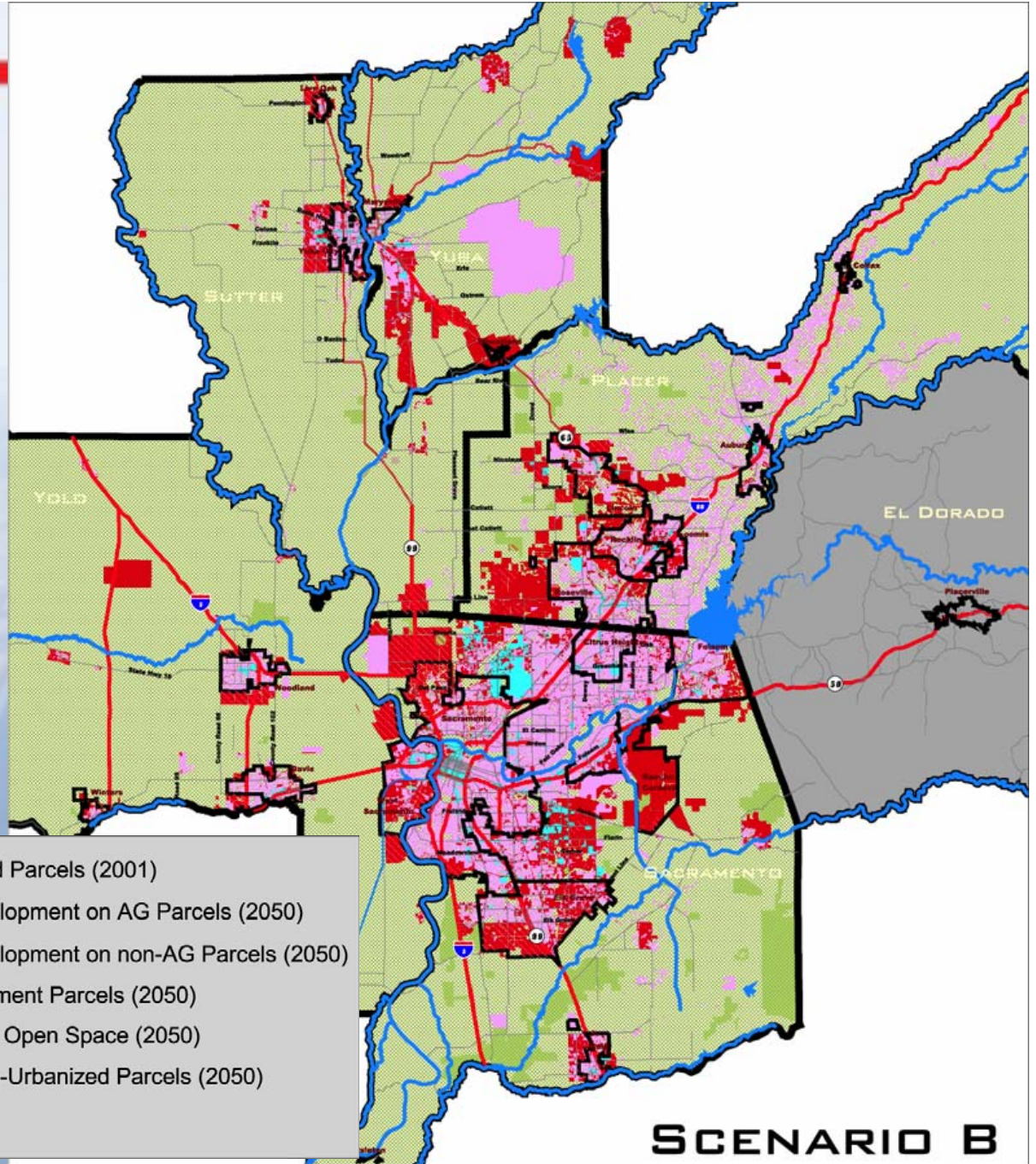
A

Urban Footprint
— 2050



B

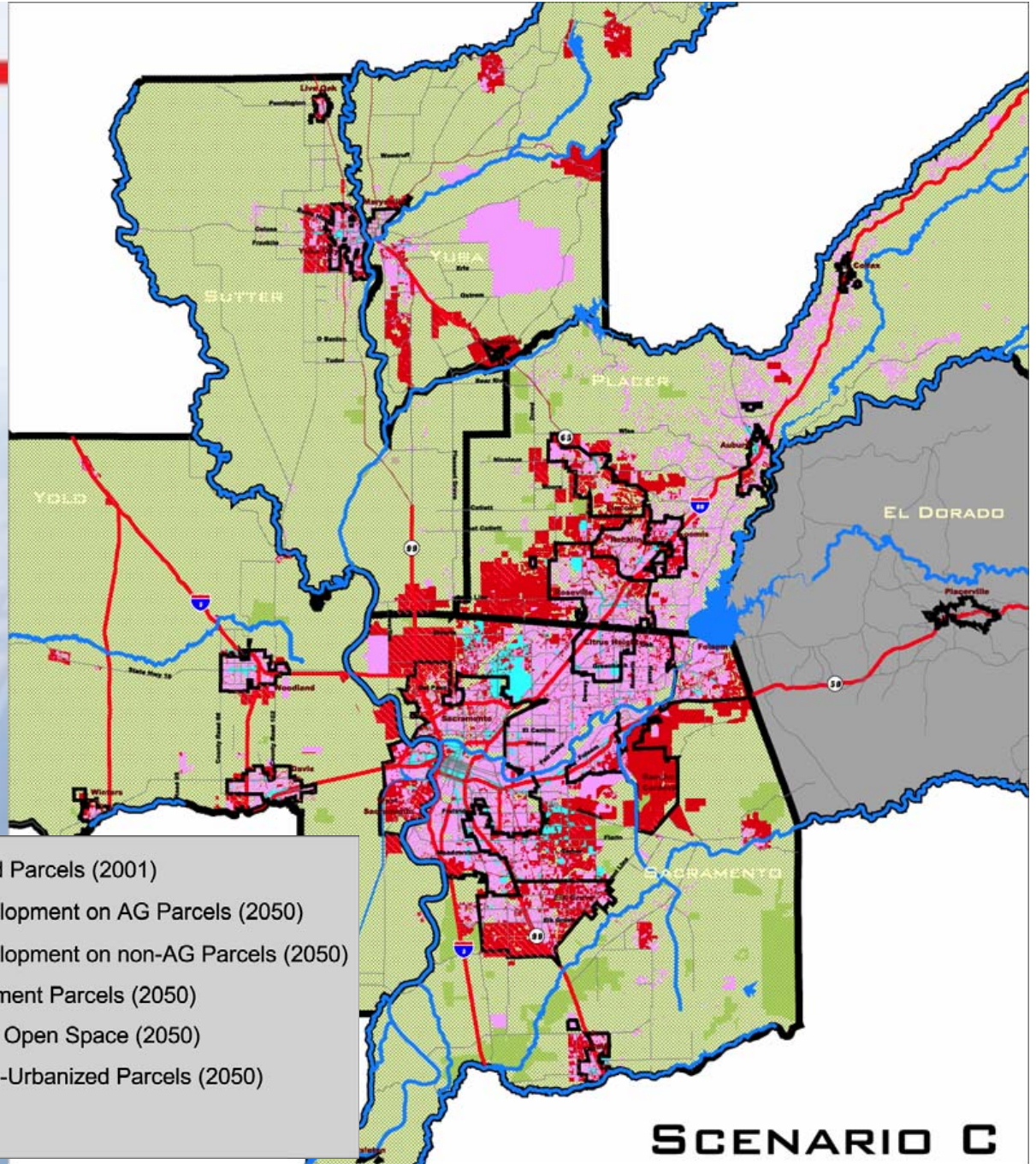
Urban Footprint — 2050



SCENARIO B

C

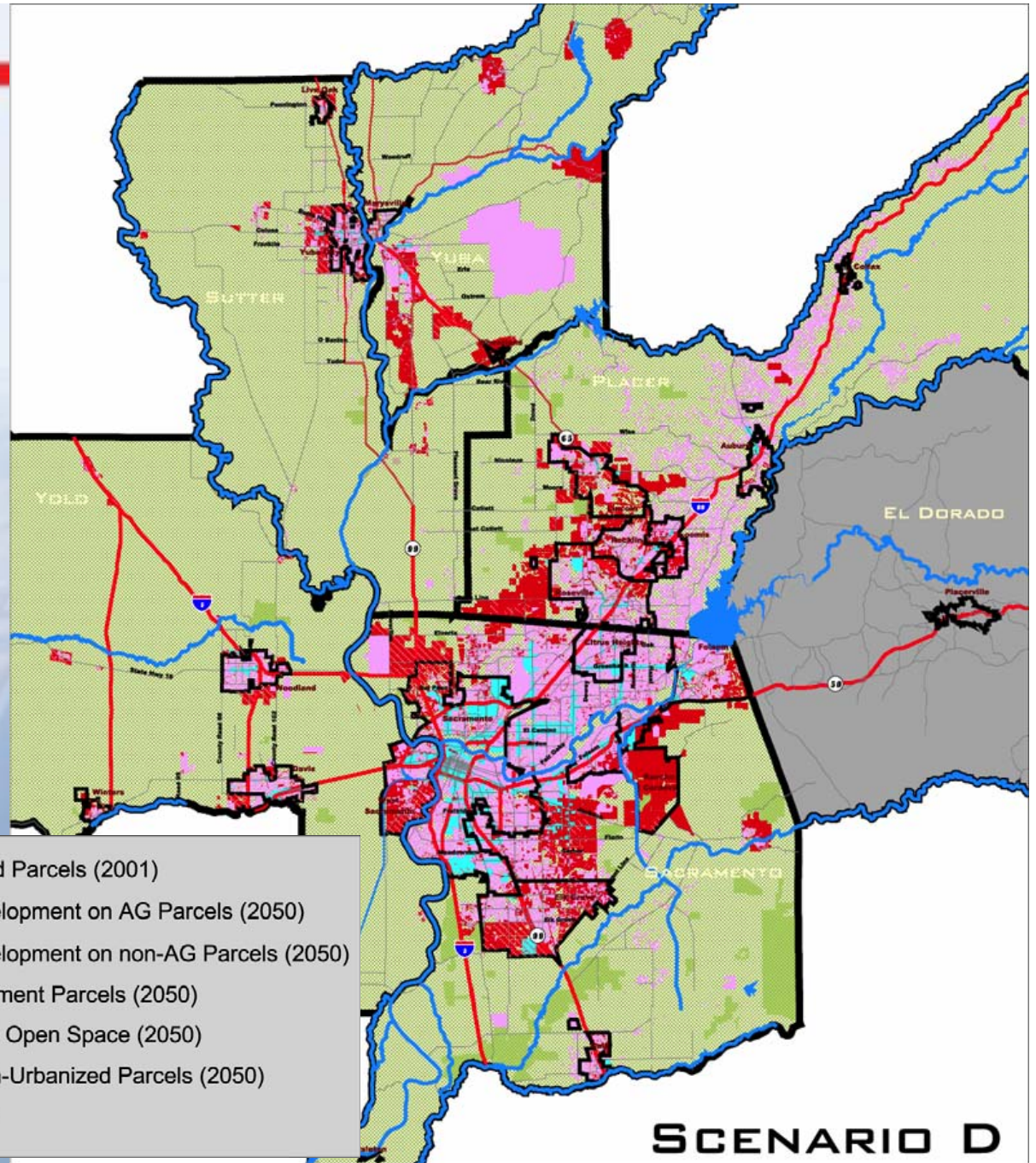
Urban Footprint — 2050



SCENARIO C

D

Urban Footprint — 2050

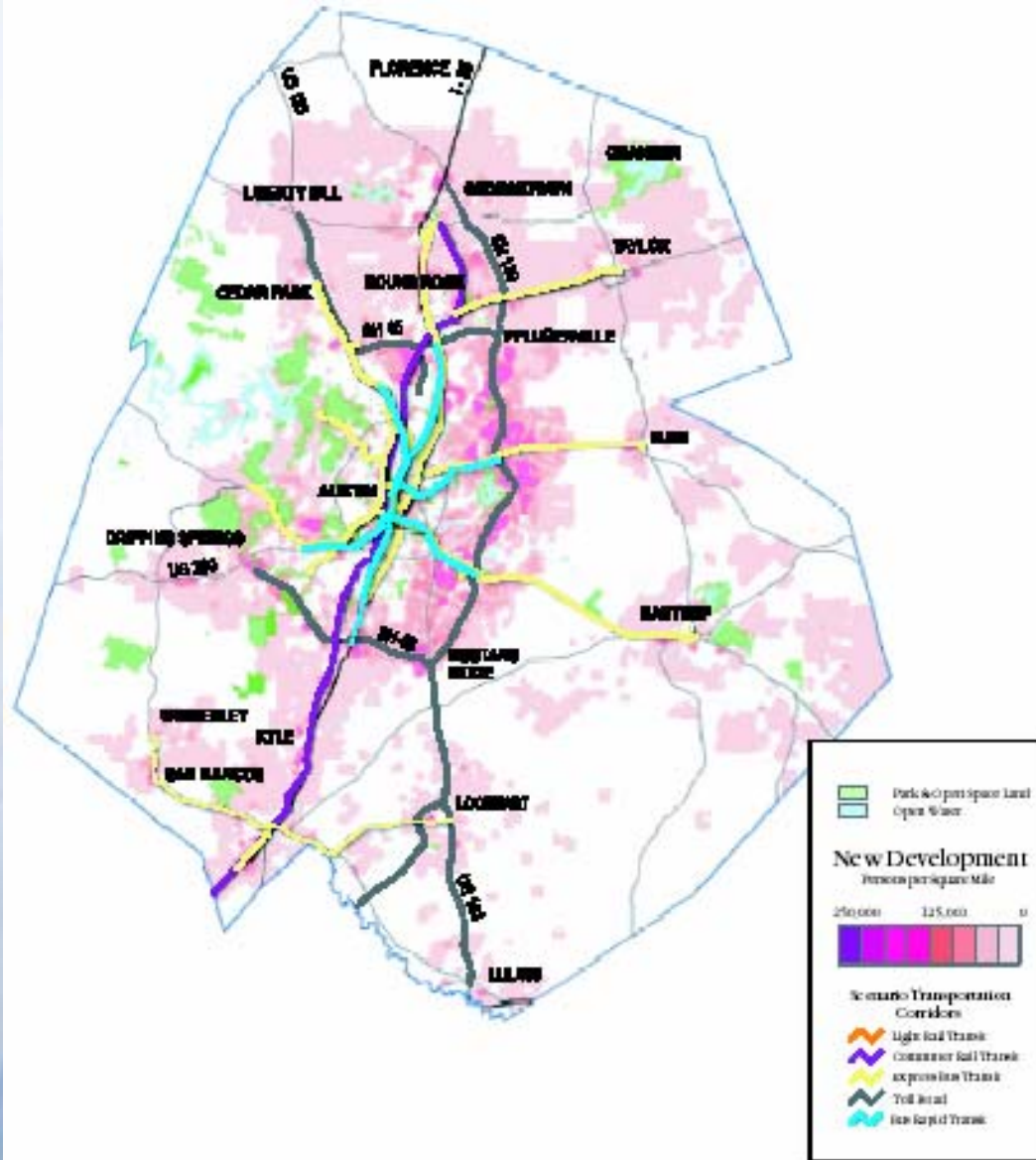


SCENARIO D

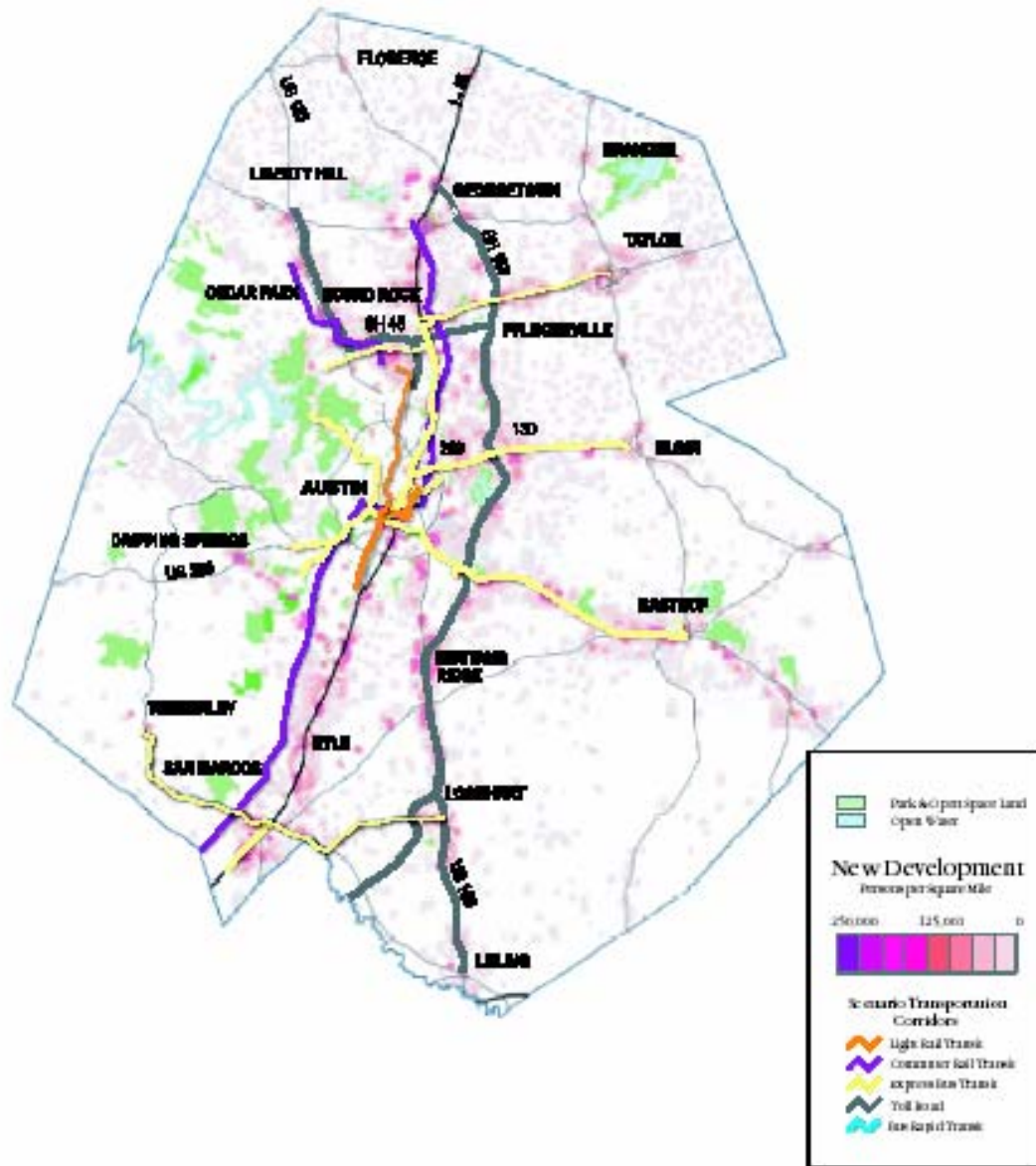


Austin, Texas

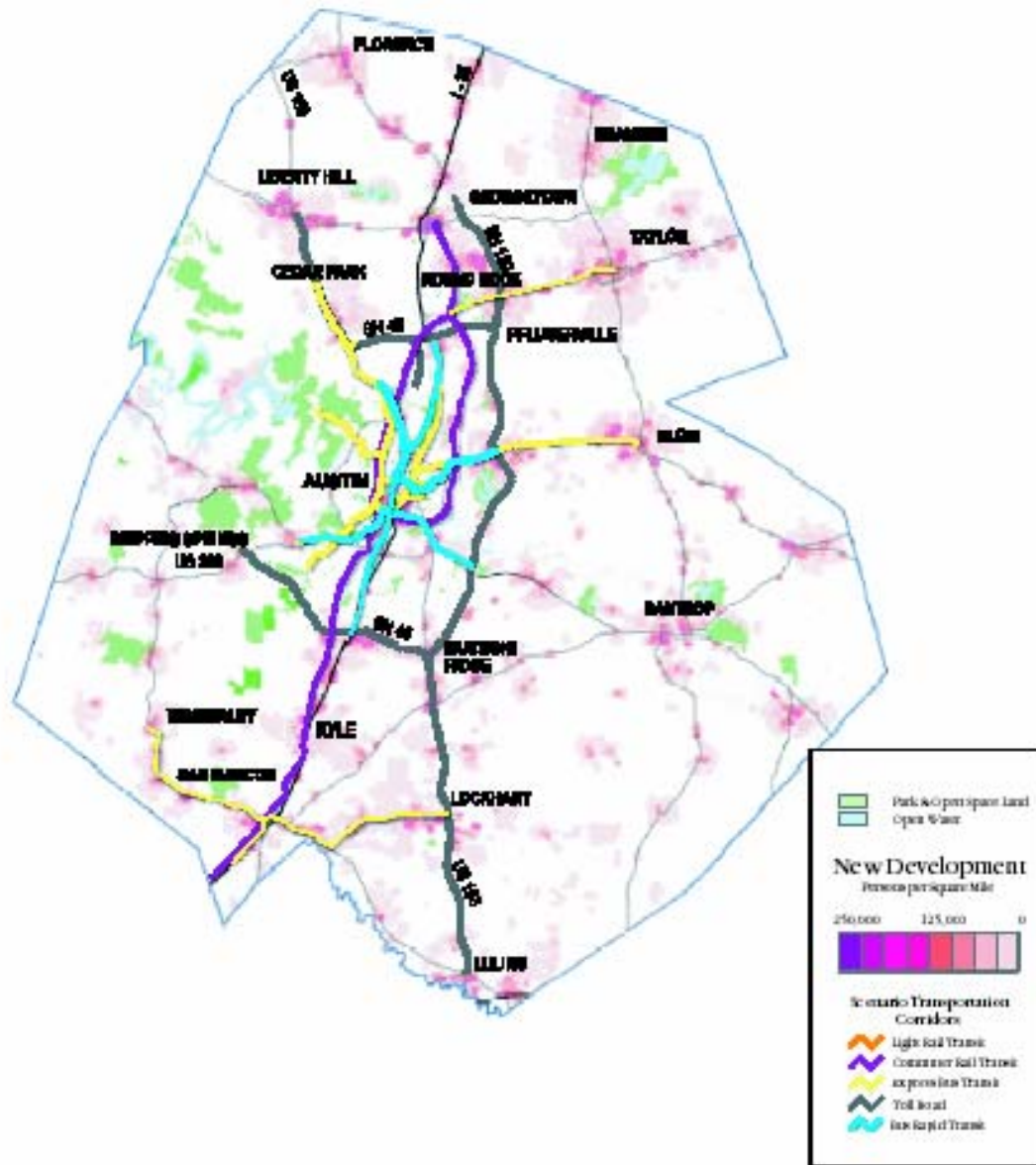
Scenario A



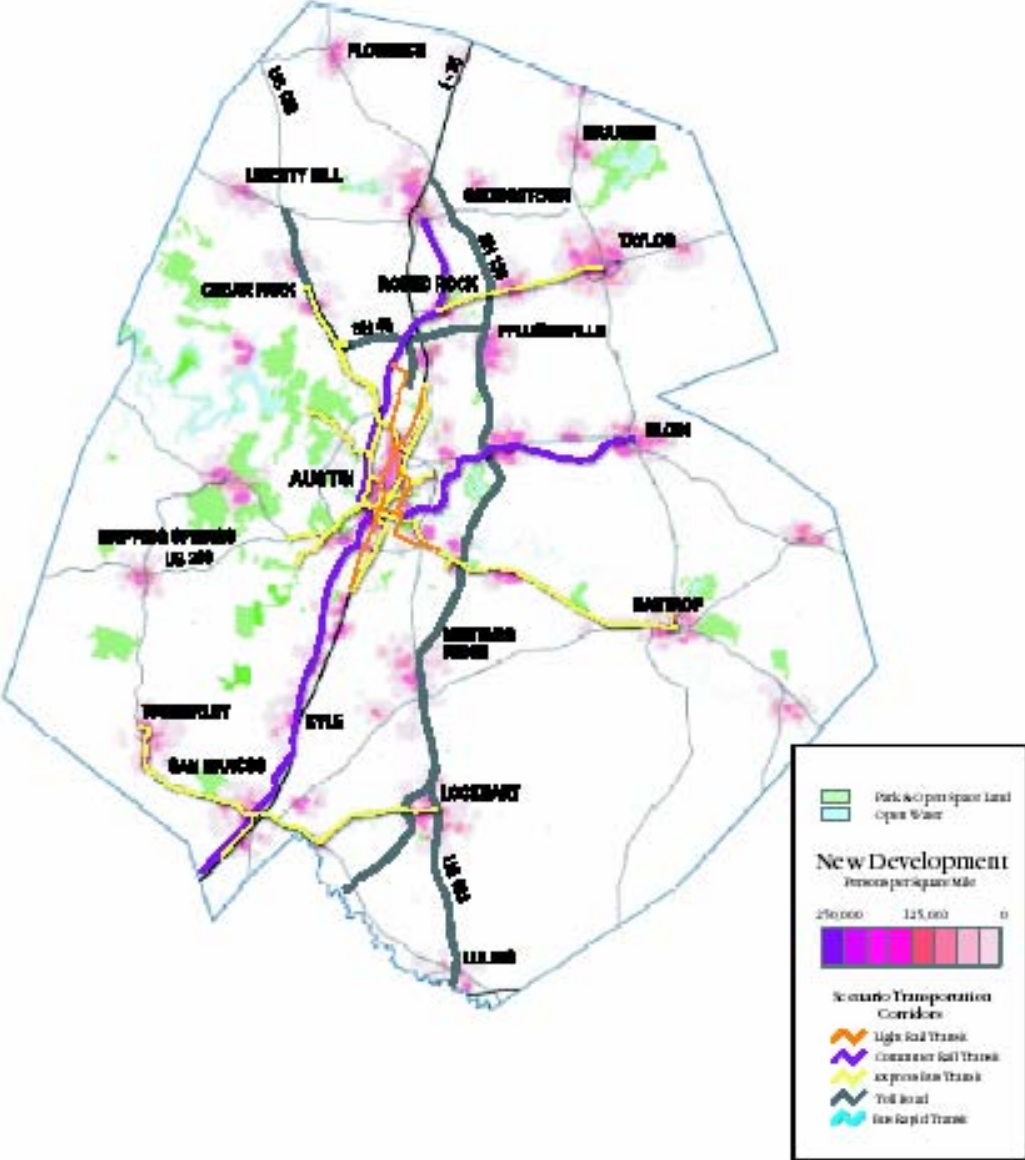
Scenario B



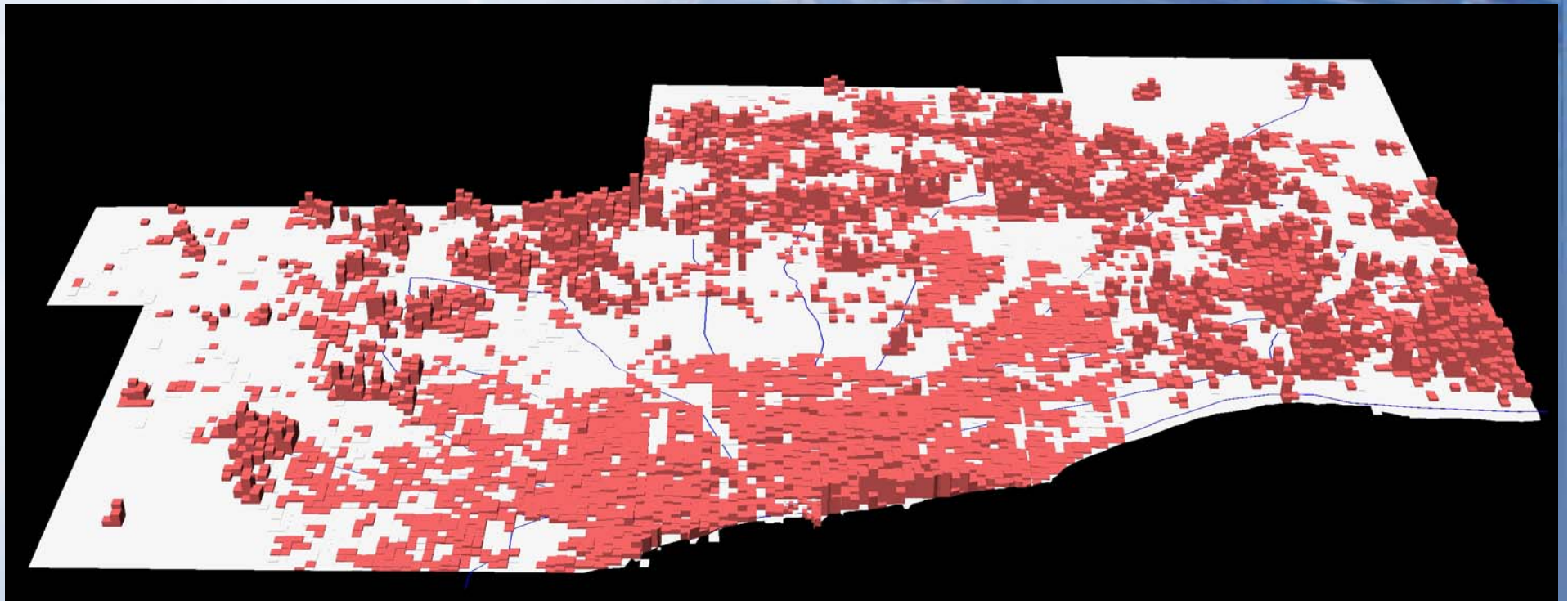
Scenario C



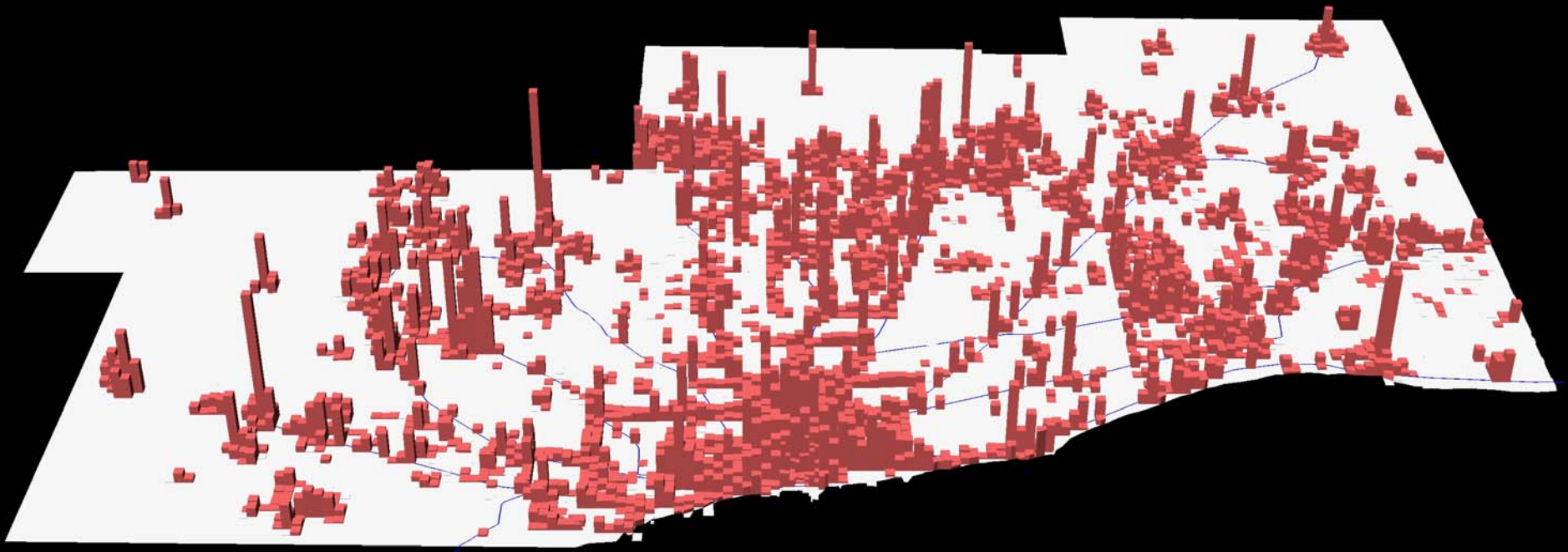
Scenario D



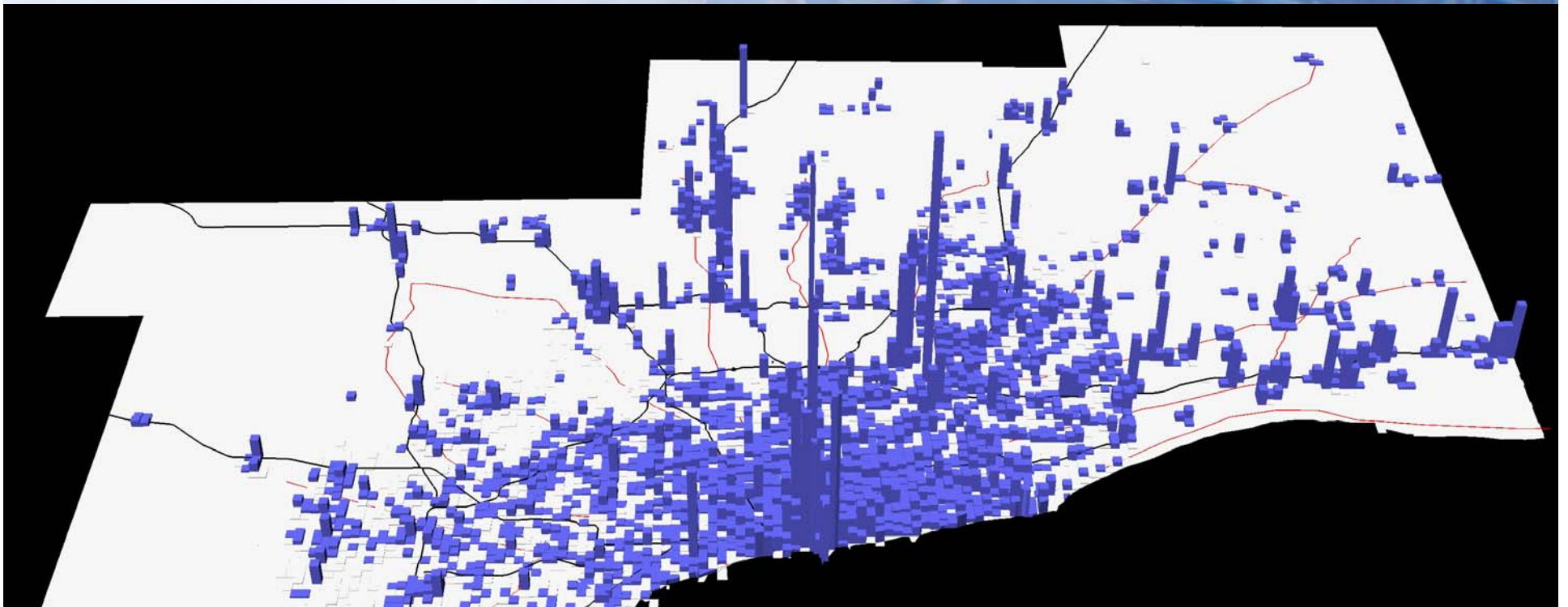
Household Distribution Business as Usual



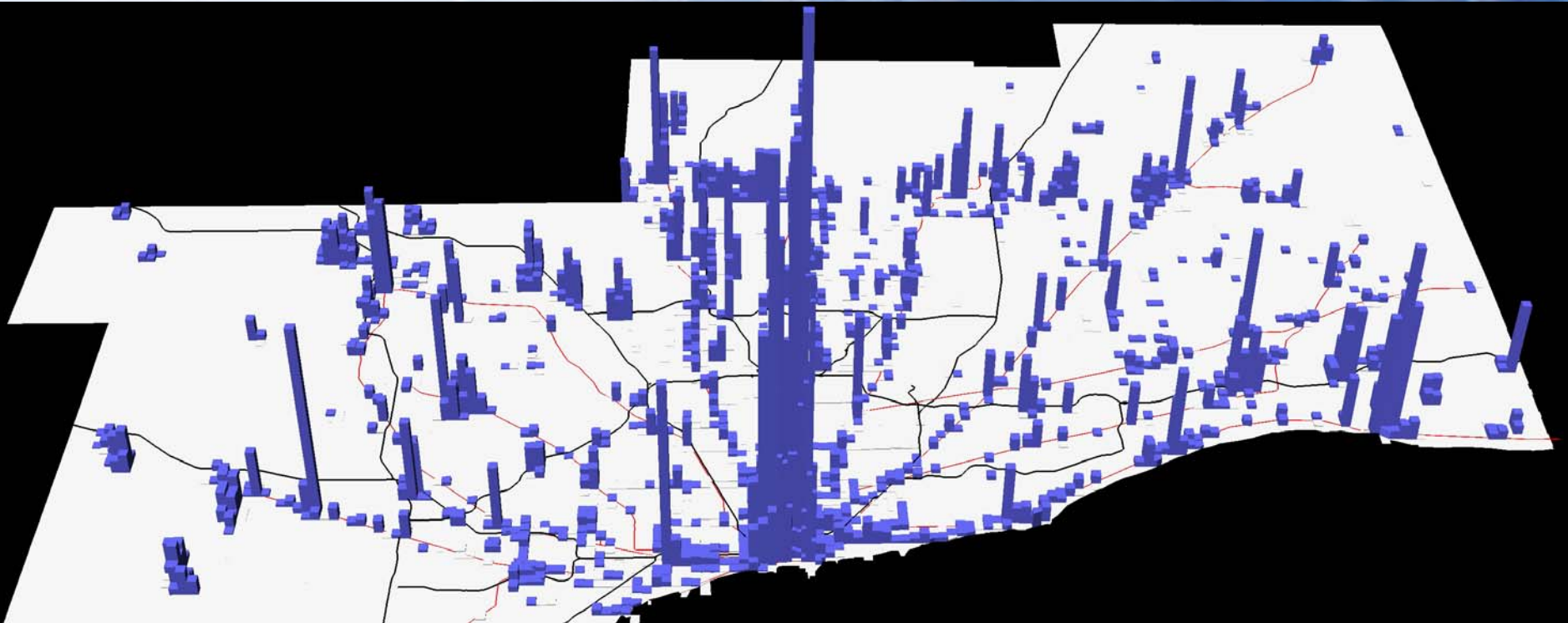
Household Distribution Metropolis Alternative



Employment Distribution Business as Usual



Employment Distribution Metropolis Alternative



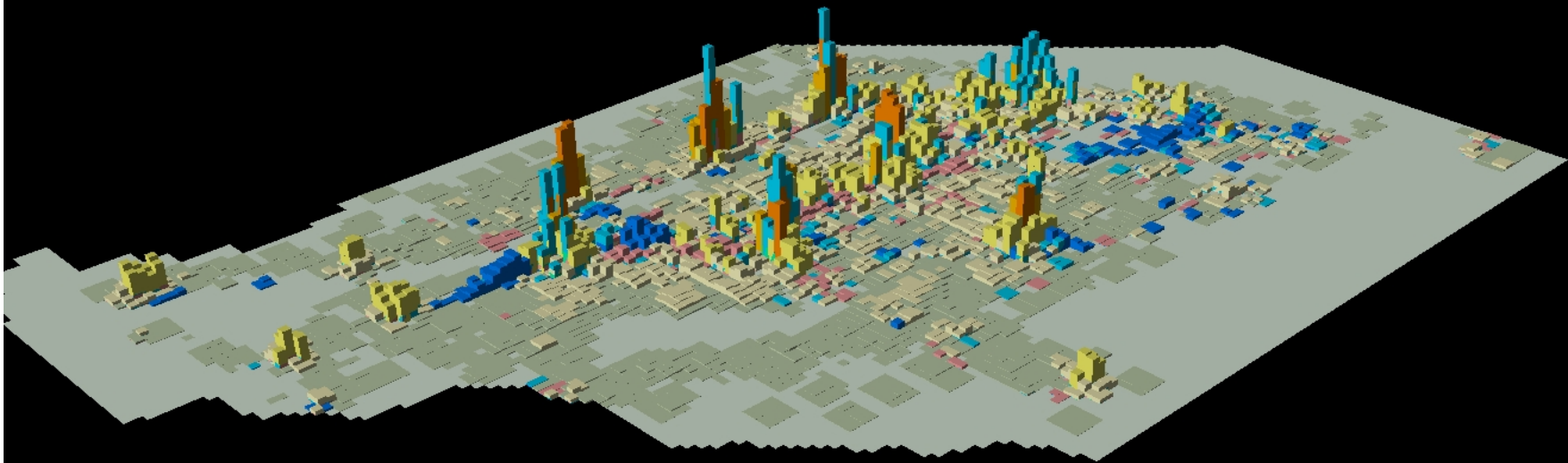
2030 Metropolis Plan Concept

Six County Metropolitan Chicago Area

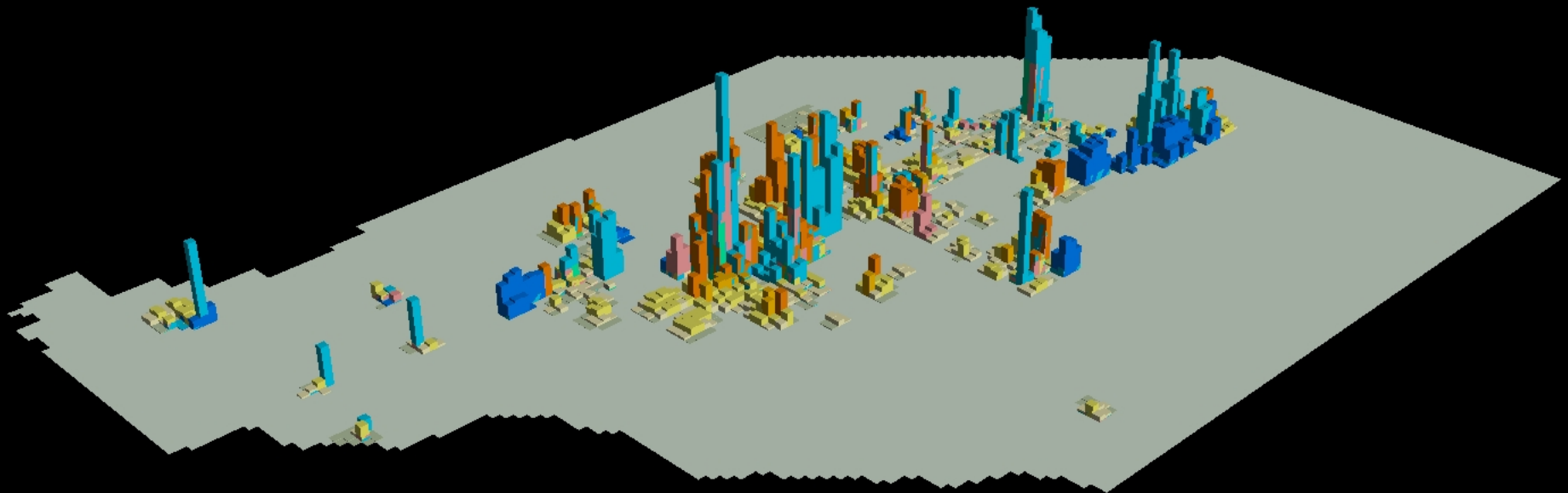


Source: Chicago Metropolis 2020 Technical Report

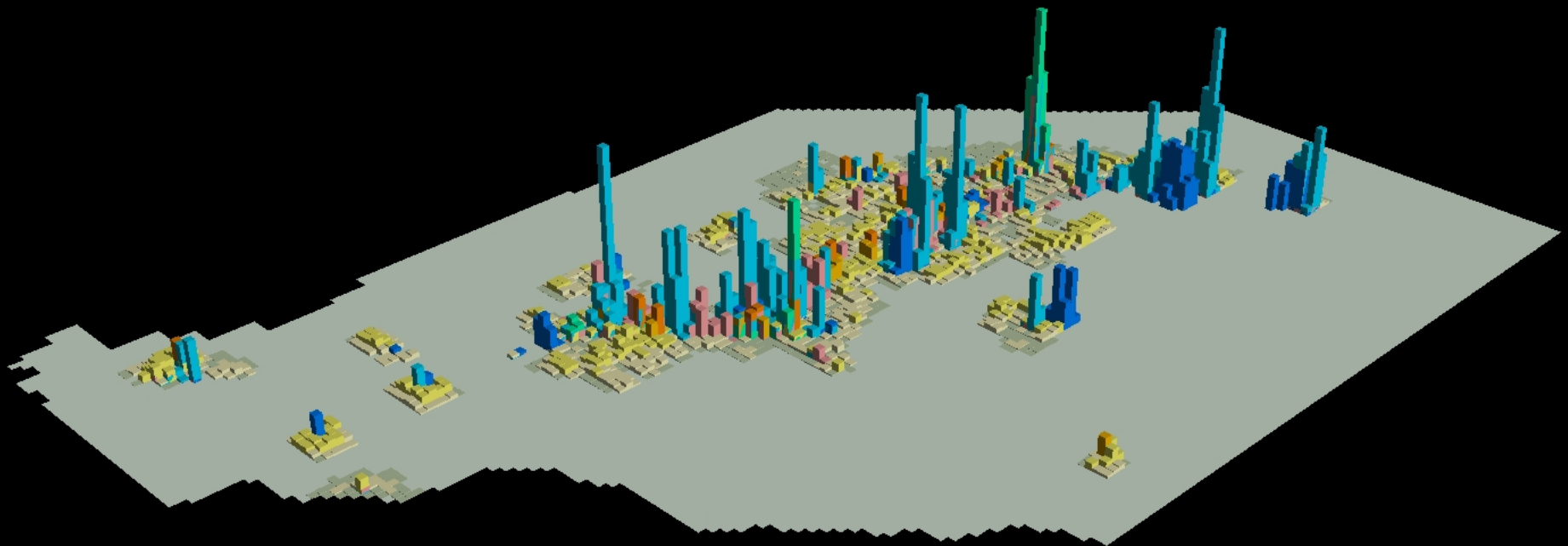
Boise, Idaho Workshop Average



Compact Urban

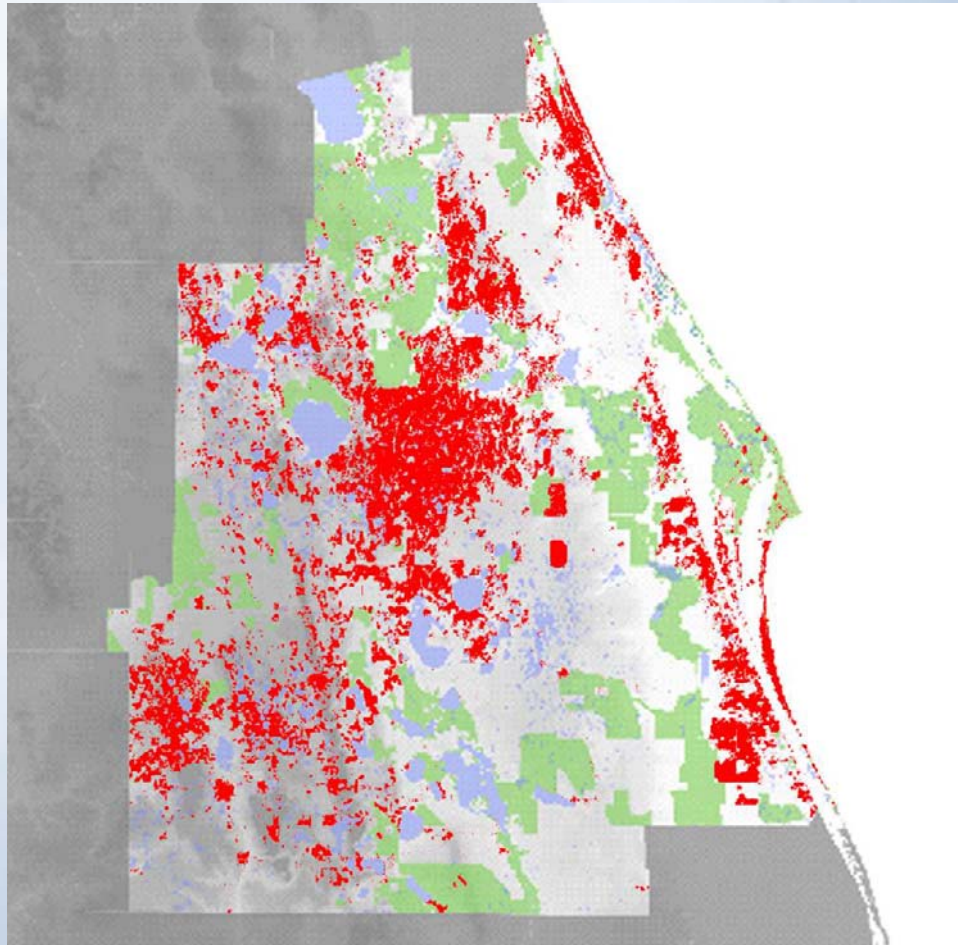


Satellite Cities



Orlando, Florida Developed Land

2000



■ protected lands 2000 ■ developed areas 2000
■ water bodies

Total acres: 5,312,627

16% Developed Land

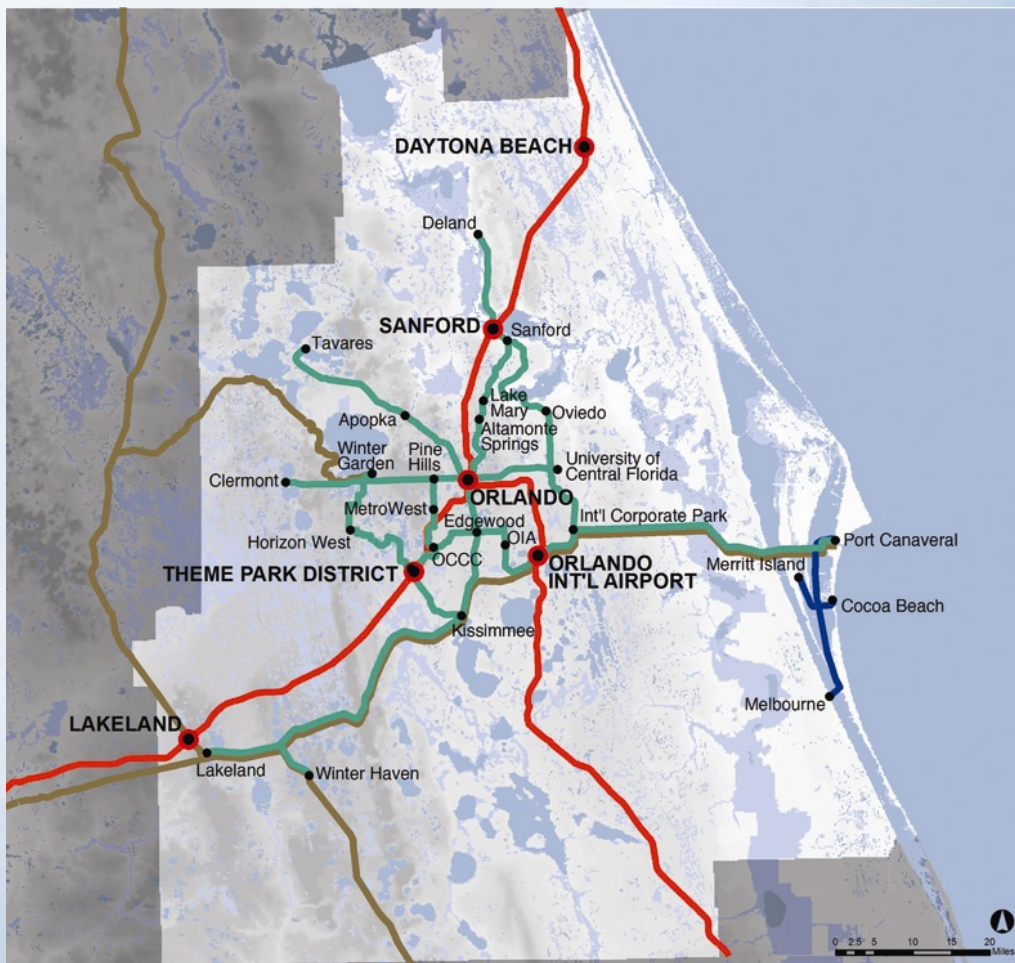
19% Preserved Land

10% Water

55% Undeveloped Land

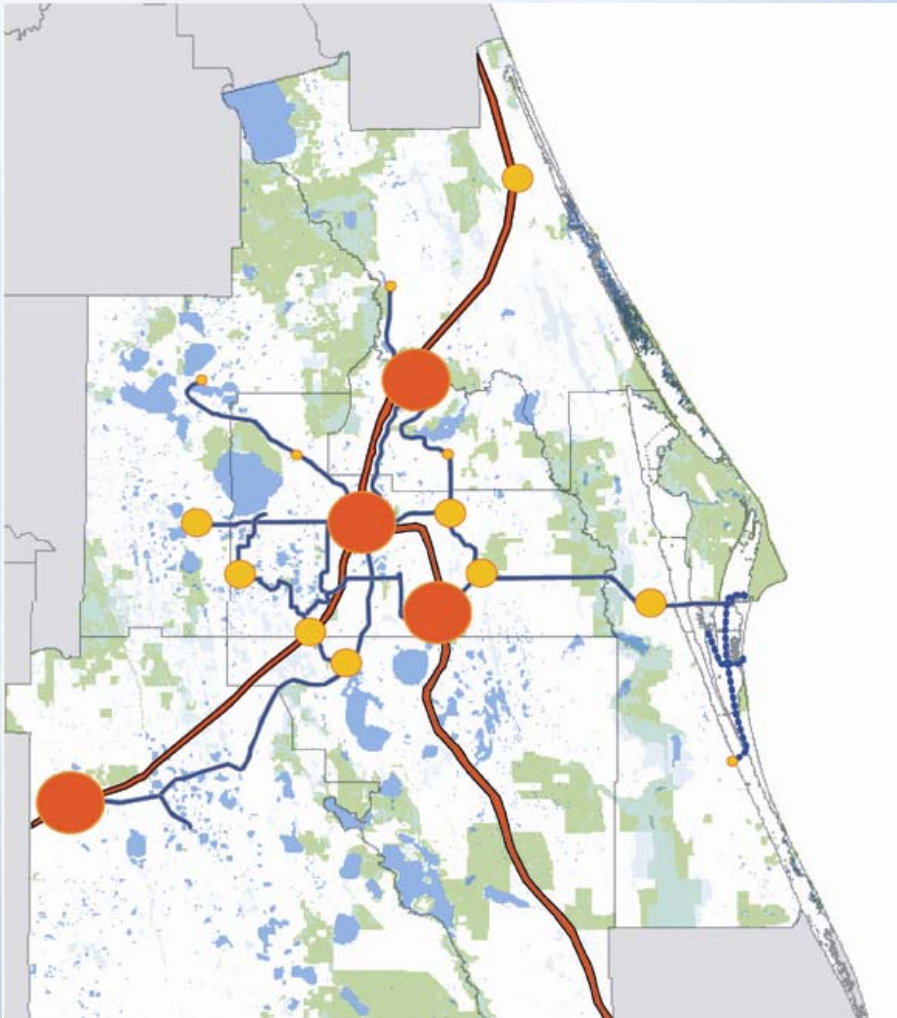
Regional Mass Transit

2050









-  High Speed Rail
-  Light Rail
-  Ferry
-  Freight Rail
-  Operational
-  Under Construction
-  Major Node
-  High Speed Stop

Identify Areas for Increased Densities

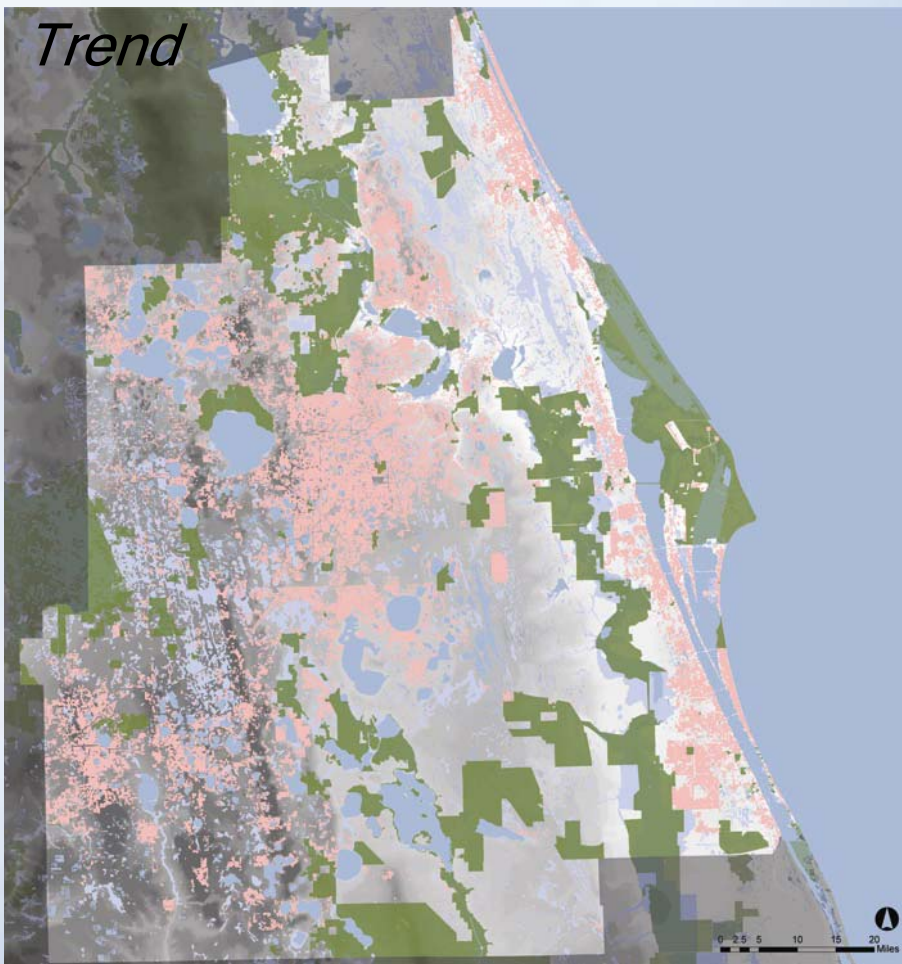


Create higher density zones in selected areas

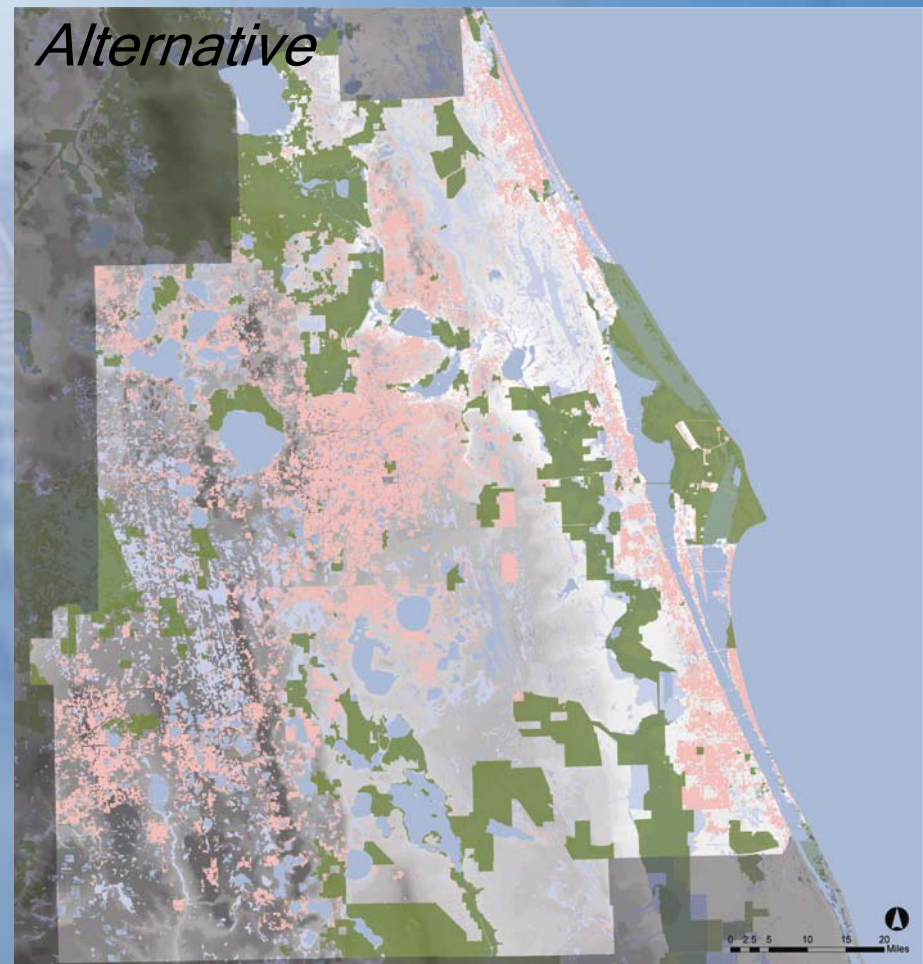
-  Super Nodes
-  Nodes
-  Micro Nodes
-  Light Rail
-  High Speed Rail
-  Ferry

Phase I: 2000

Trend

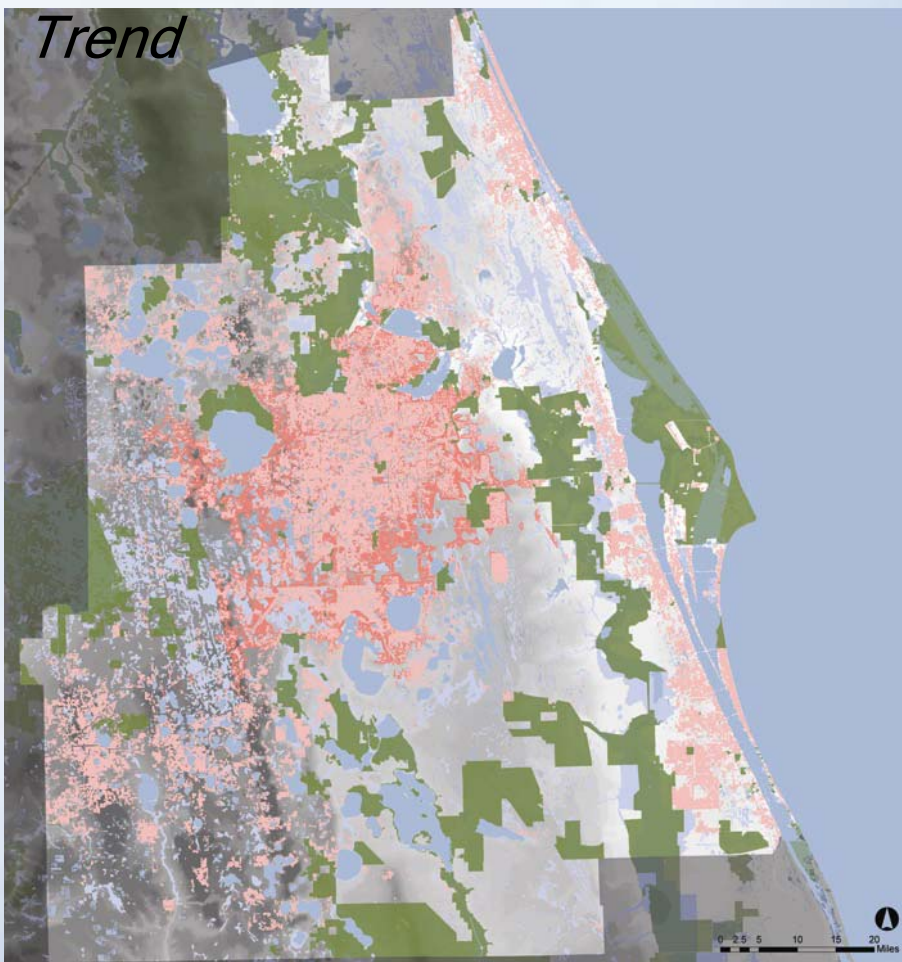


Alternative

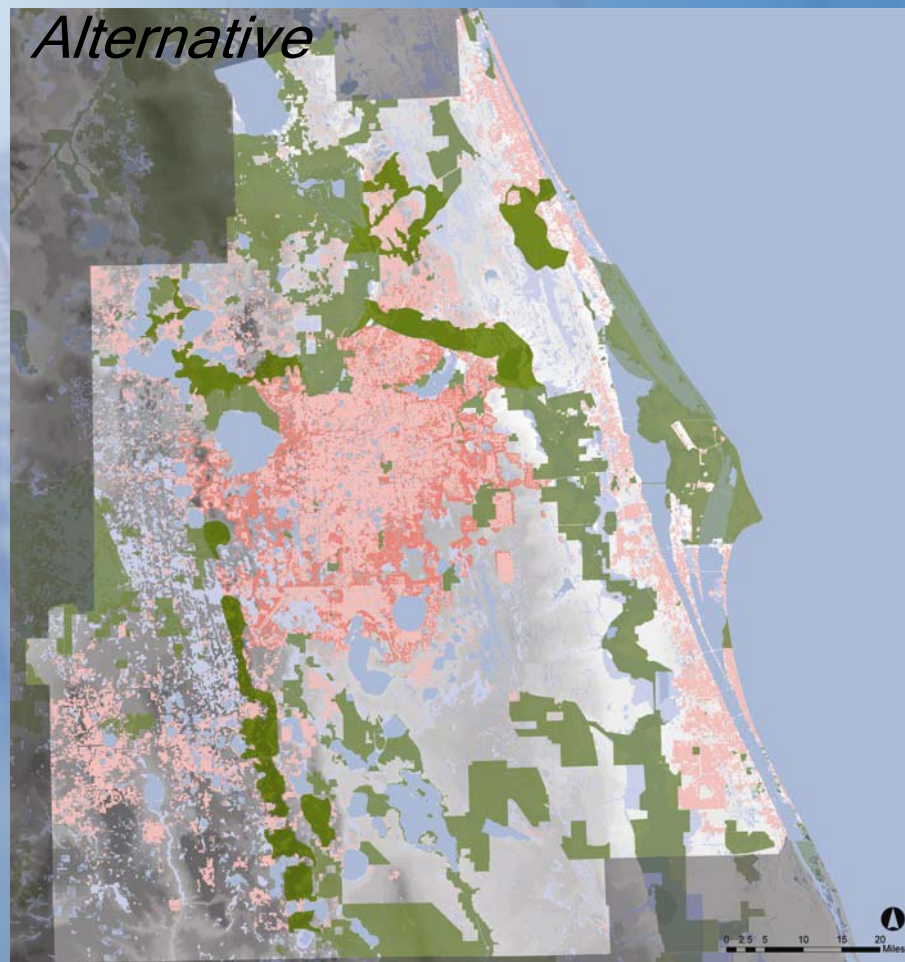


Phase I: 2010

Trend

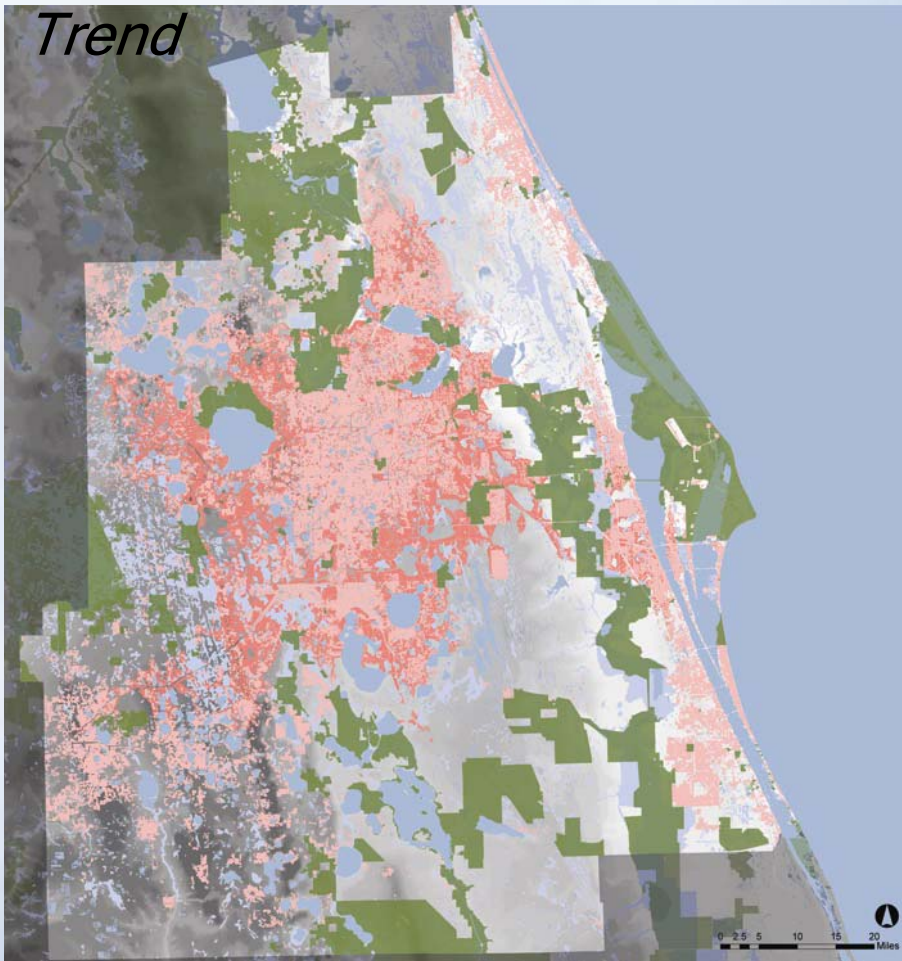


Alternative

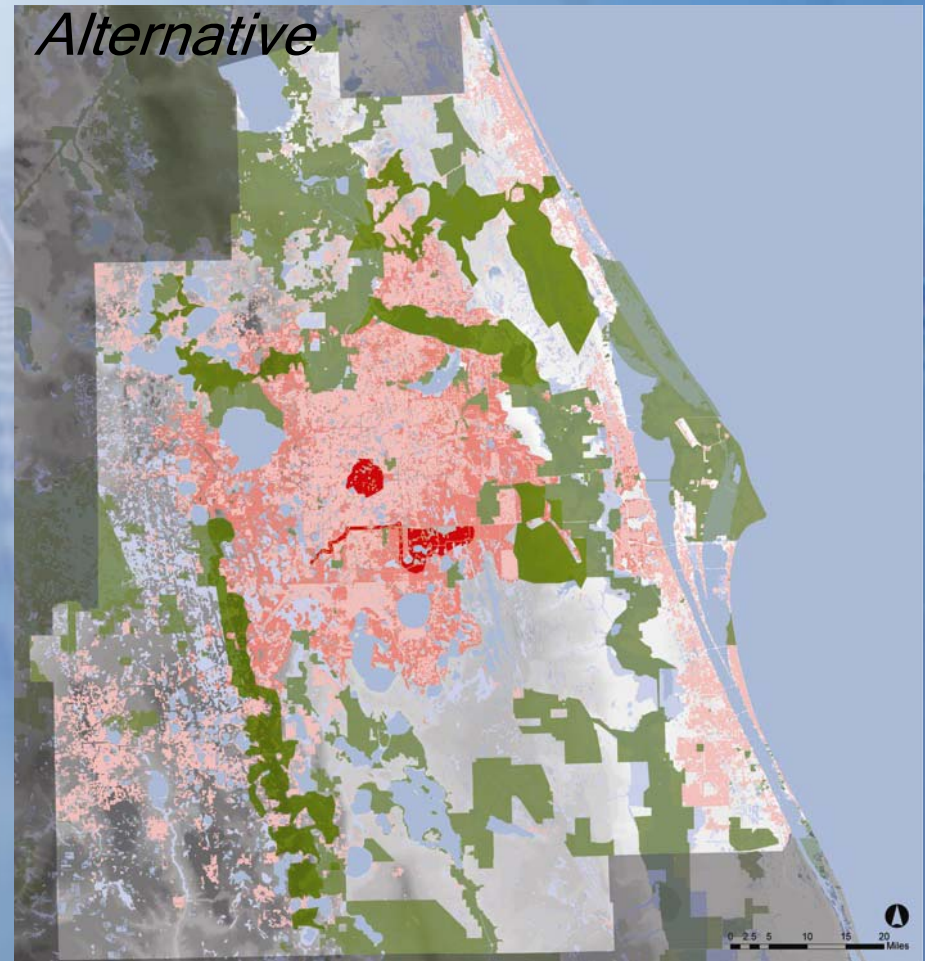


Phase II: 2020

Trend

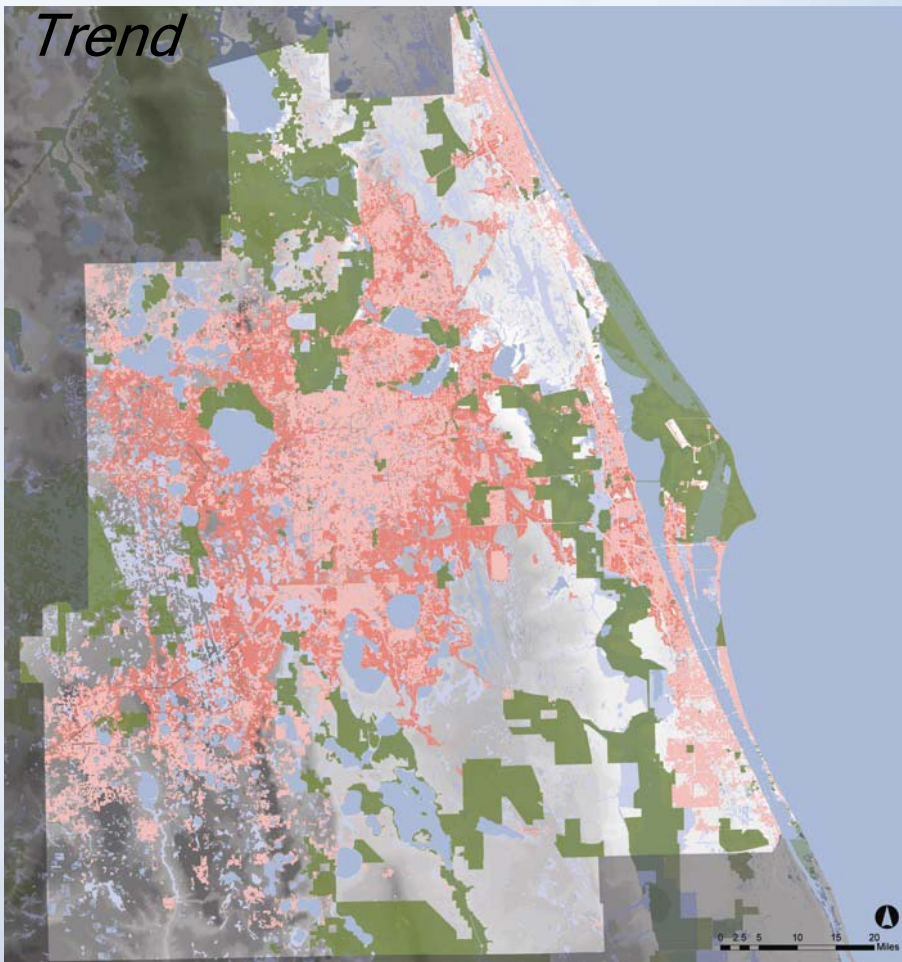


Alternative

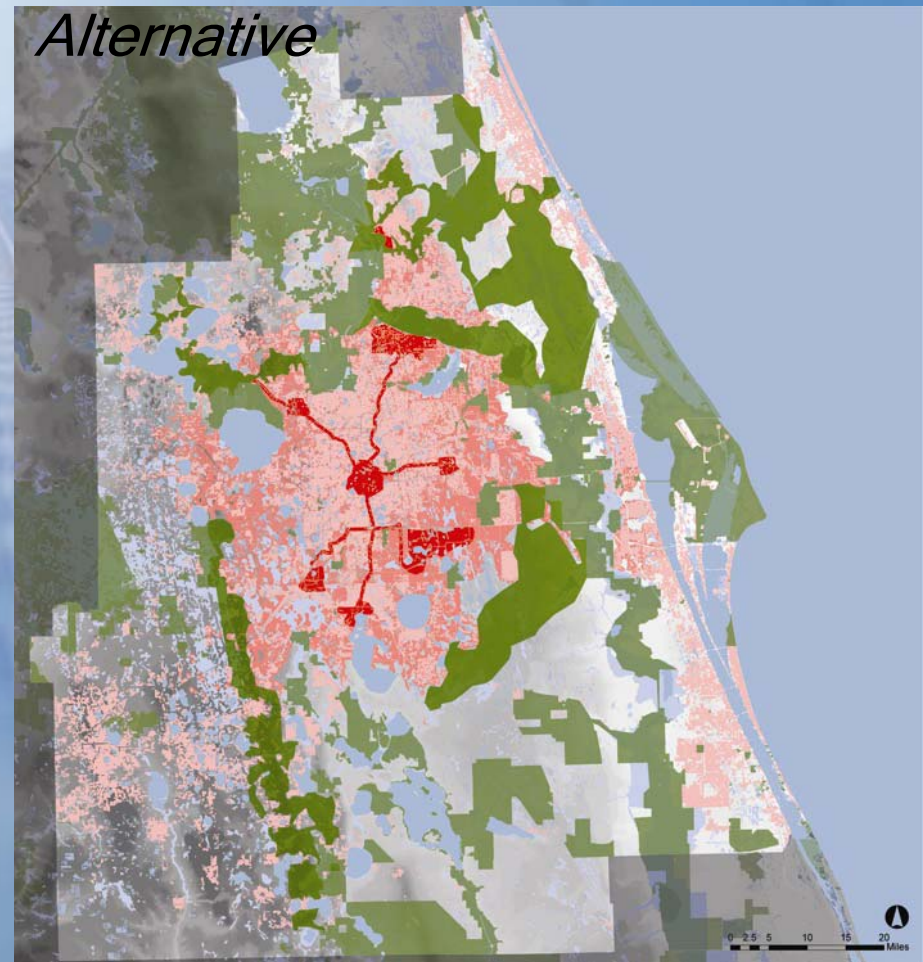


Phase III: 2030

Trend

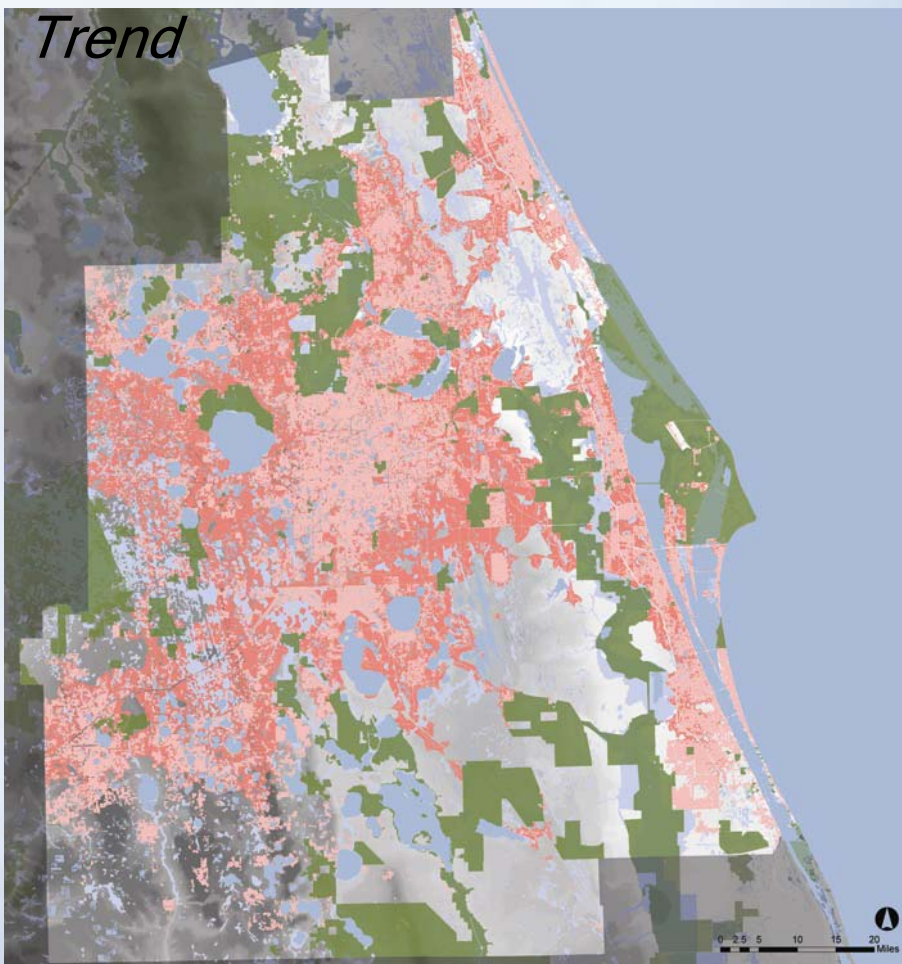


Alternative

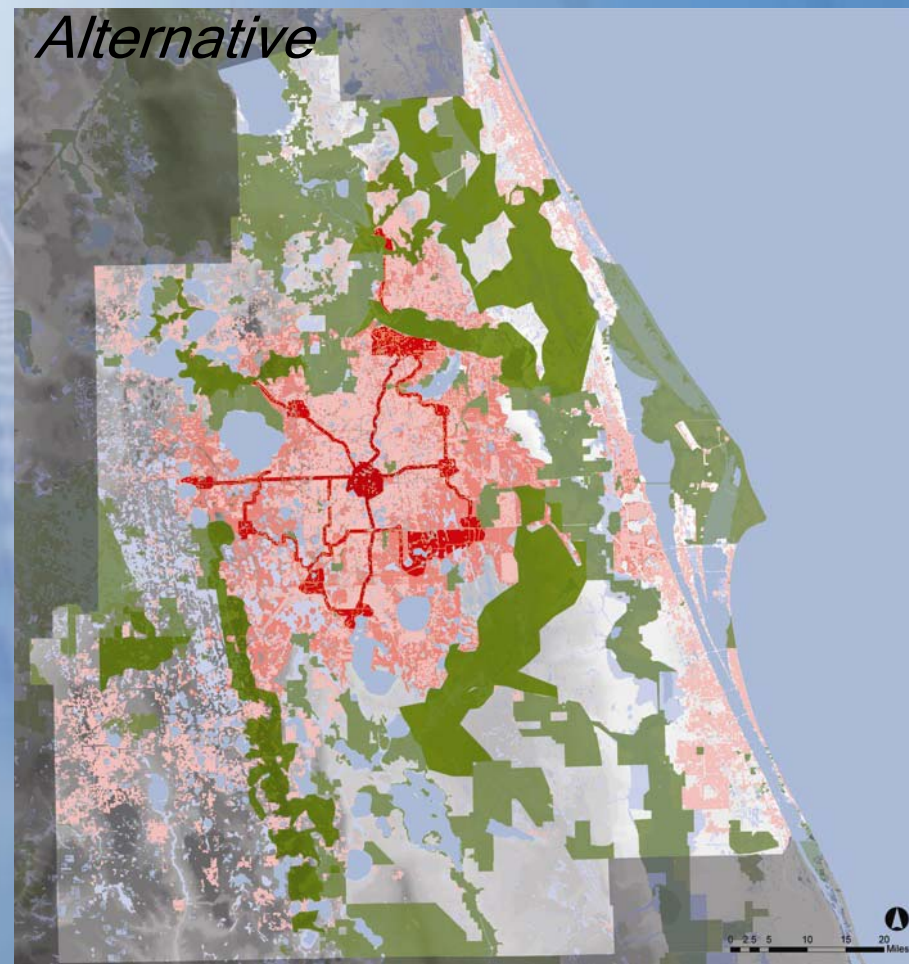


Phase IV: 2040

Trend

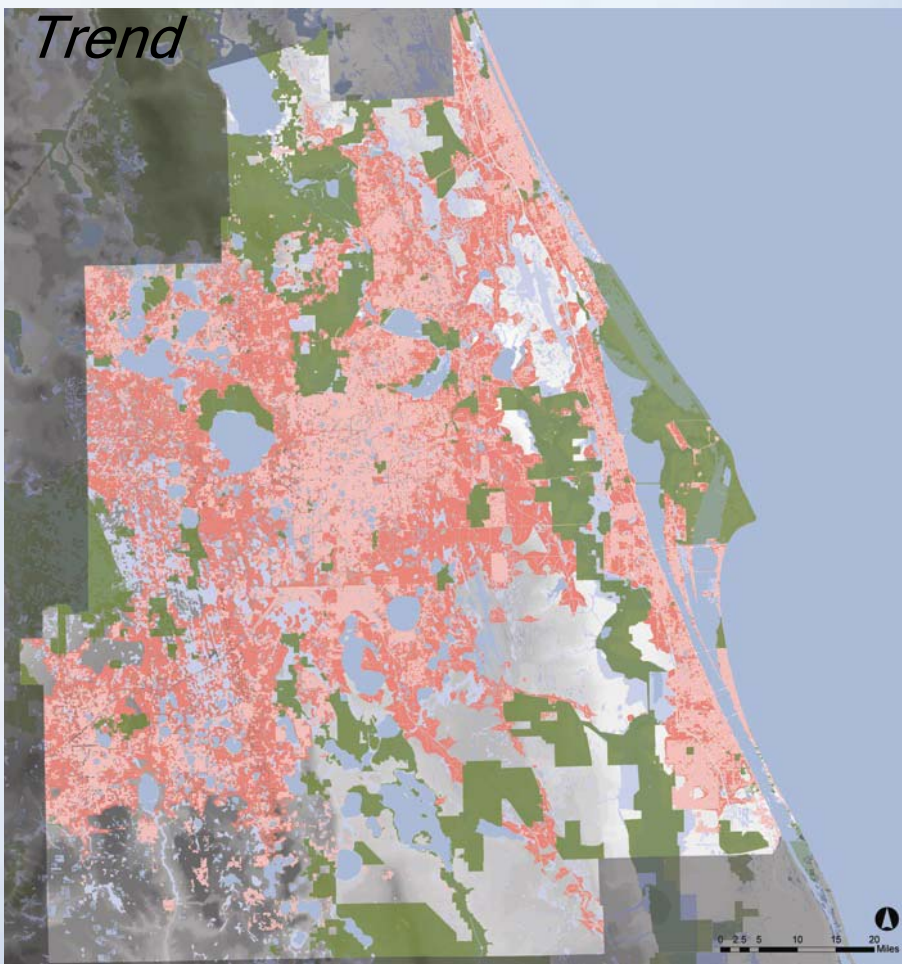


Alternative

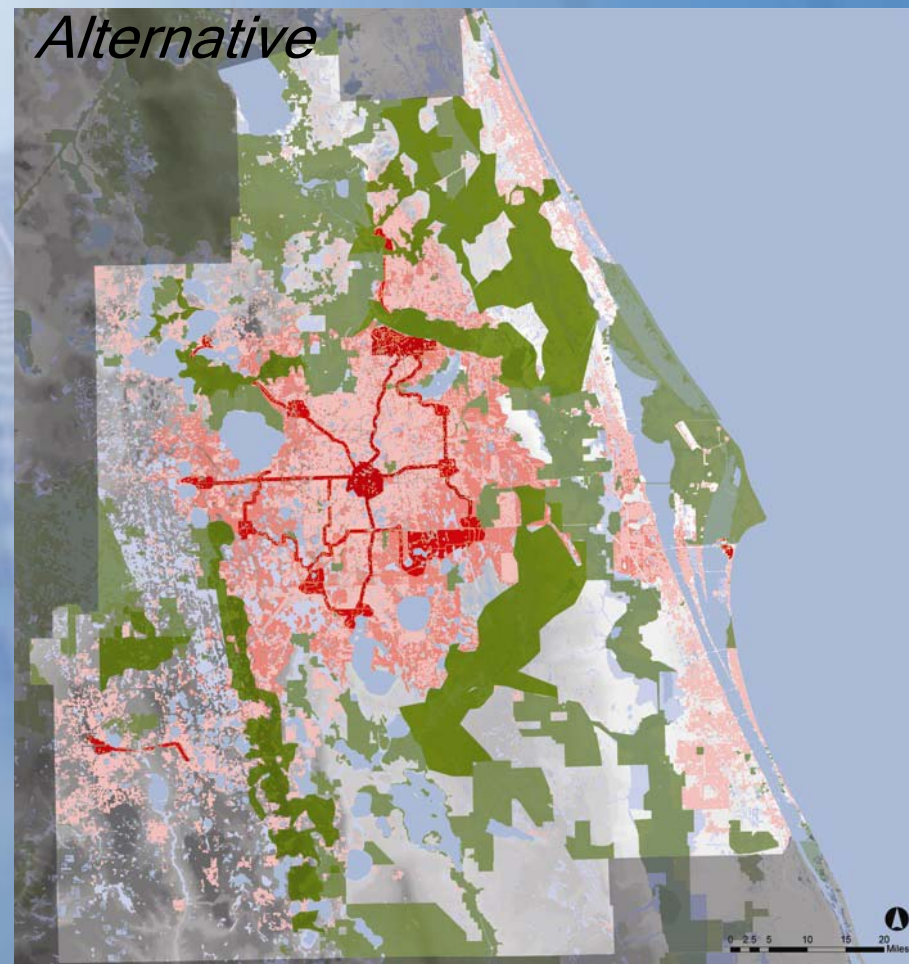


Phase V: 2050

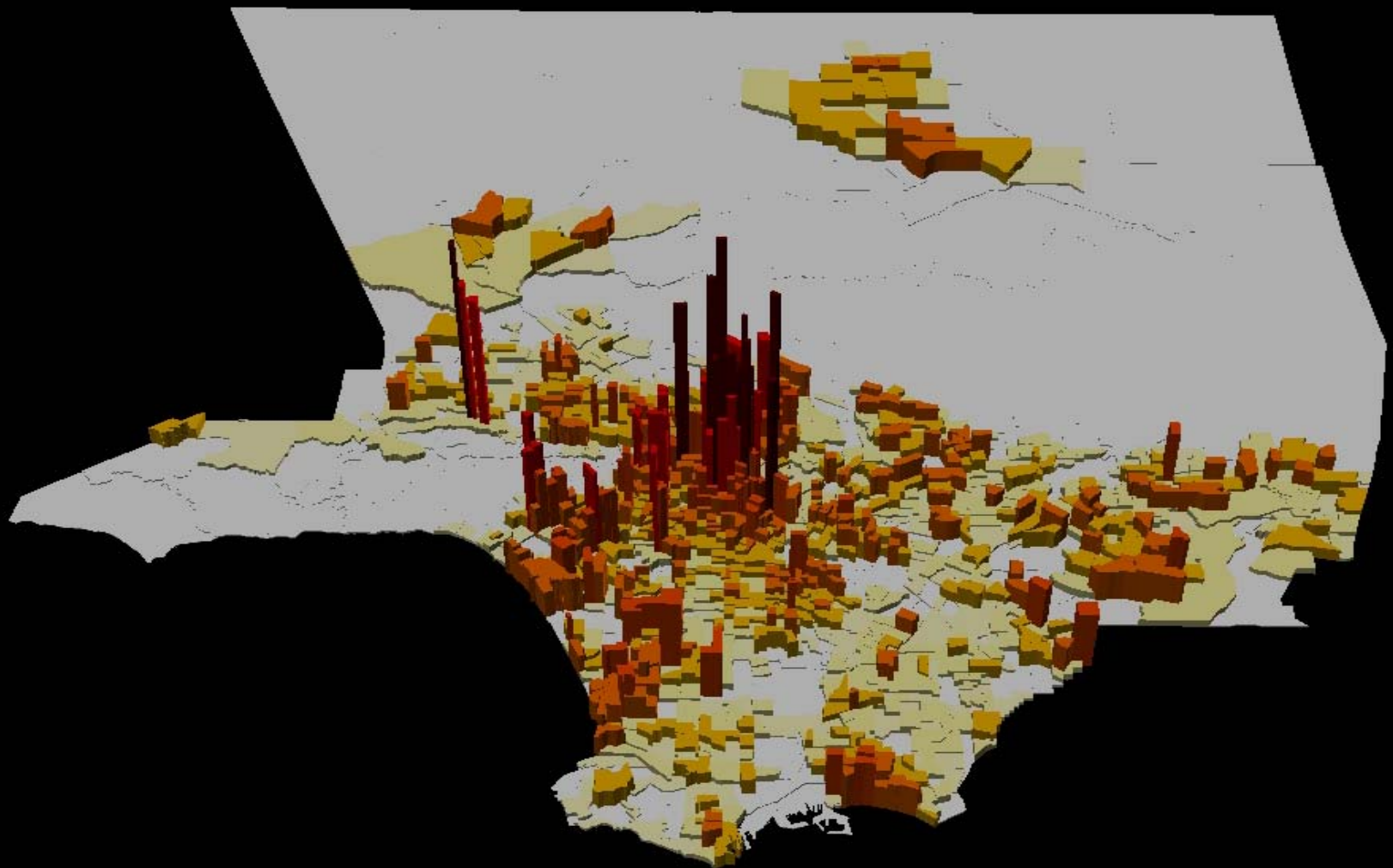
Trend



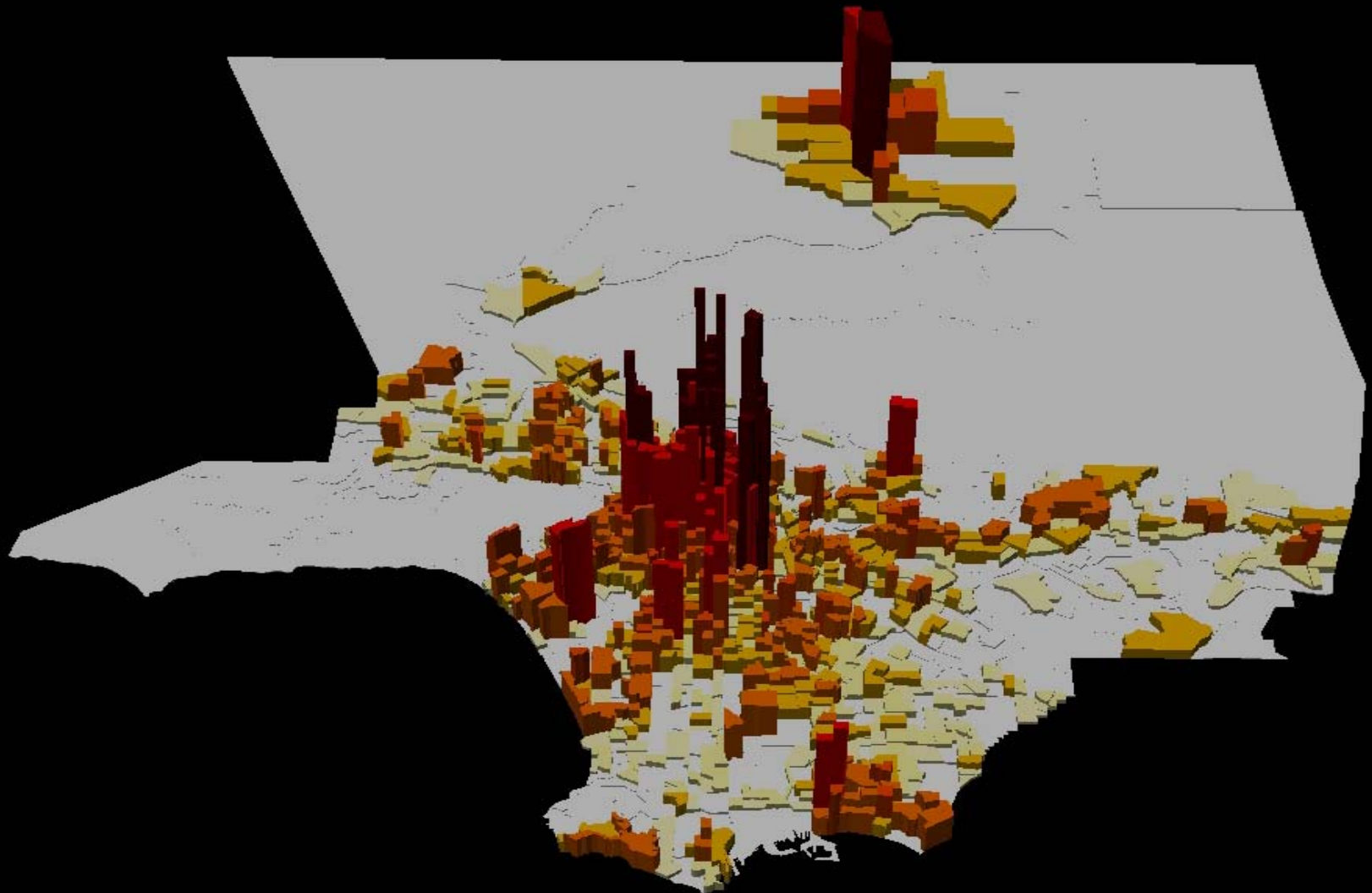
Alternative



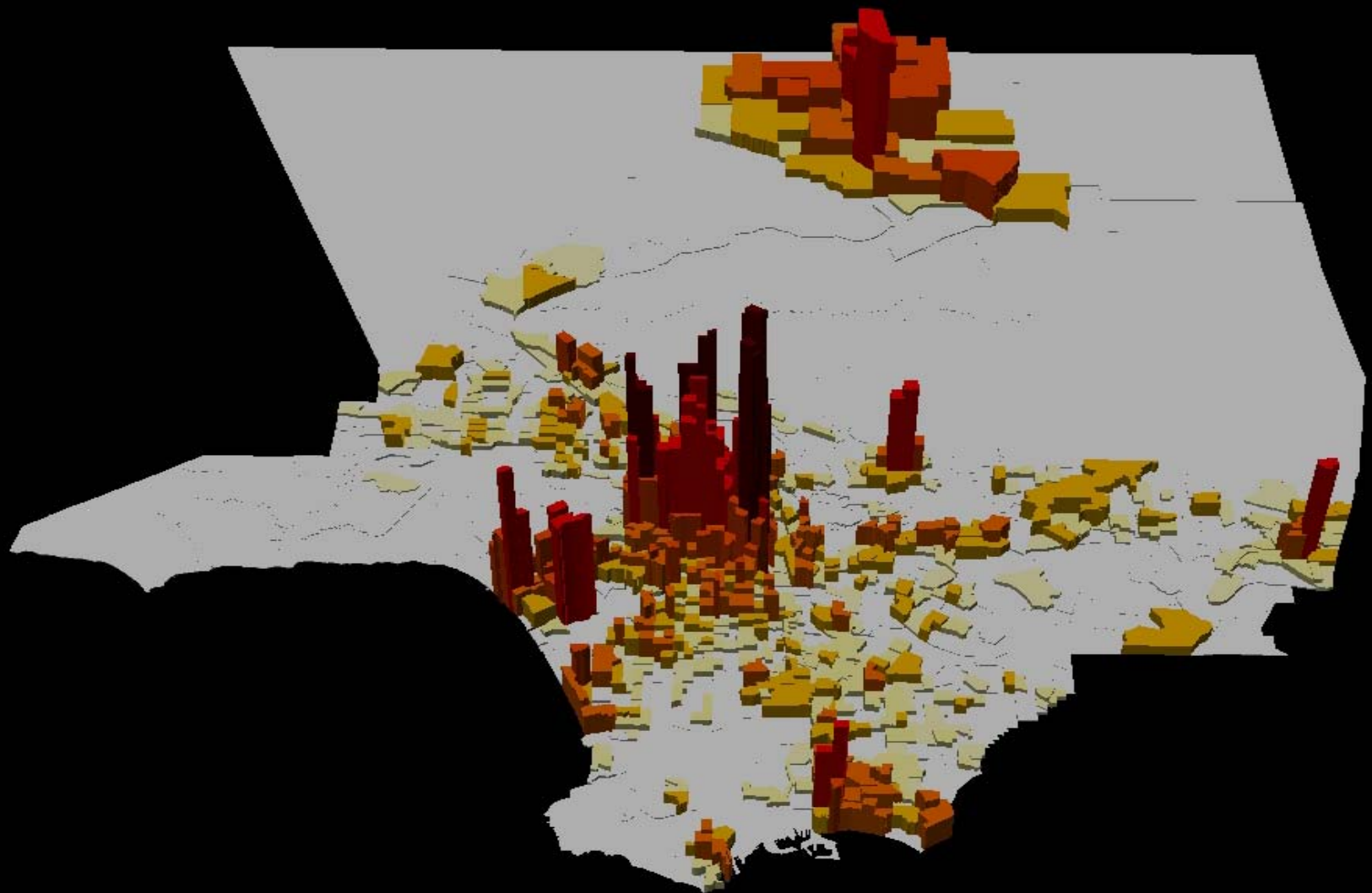
Los Angeles -- Trend Scenario



Infill Scenario



5th Ring Scenario

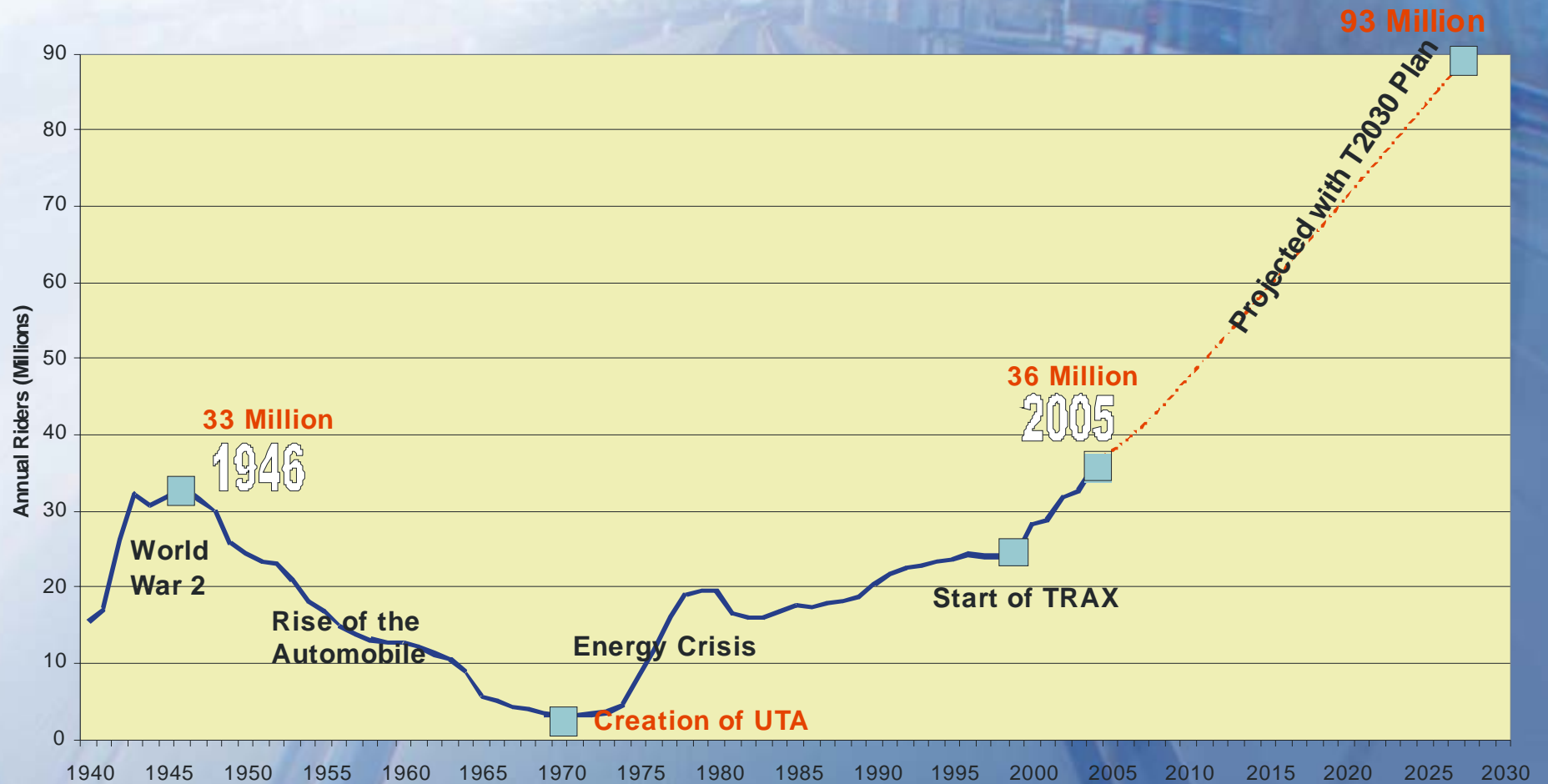


Our Challenges

- Adding a million residents by 2030
- Urbanizing 87% more land by 2020
- Needing new water sources by 2010
- Risking increases in air pollution
- Worsening crowding and congestion
- Increasing costs for businesses and families
- Rising infrastructure needs

Transit Success

- UTA ridership at record levels and growing



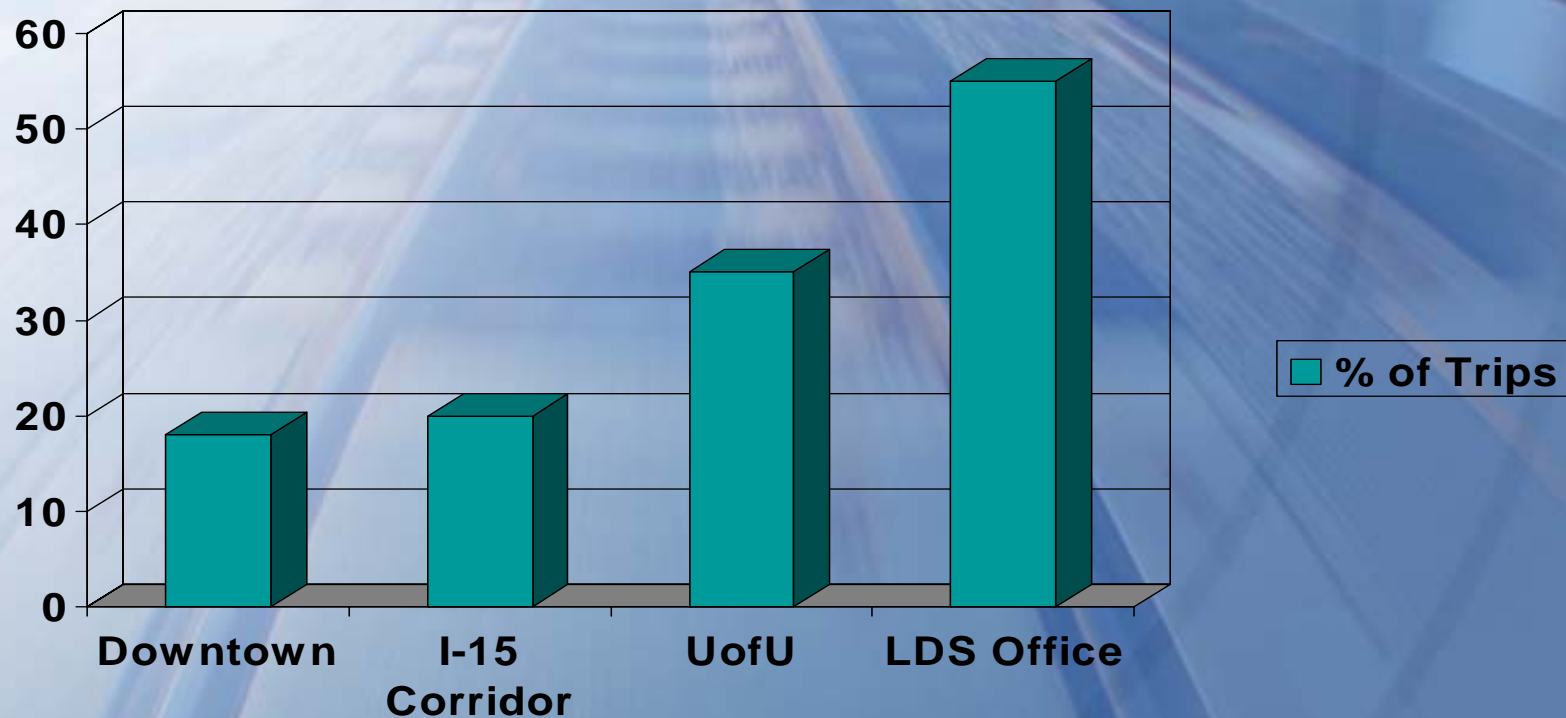
Transit Success

- **TRAX is a great success**
 - Three lines built in five years
 - Completed ahead of schedule, under budget
- **Ridership is more than double projections**
 - Projected ridership of 21,000 trips a day
 - Carried more than 58,300 trips a day in March 2006



Transit Success

- **Transit is making a difference**
 - The equivalent of one lane on I-15 during peak hours
 - 35% of students going to the University of Utah
 - 50% of employees at the LDS Church Office Building



Economic Development Around TRAX Stations

900 South TRAX



Development
near 1300 South



Development
near 900 South



What UTA Has Accomplished

Brownfield Site Clean-Up

Before



Ballpark Station



Rail Services Center

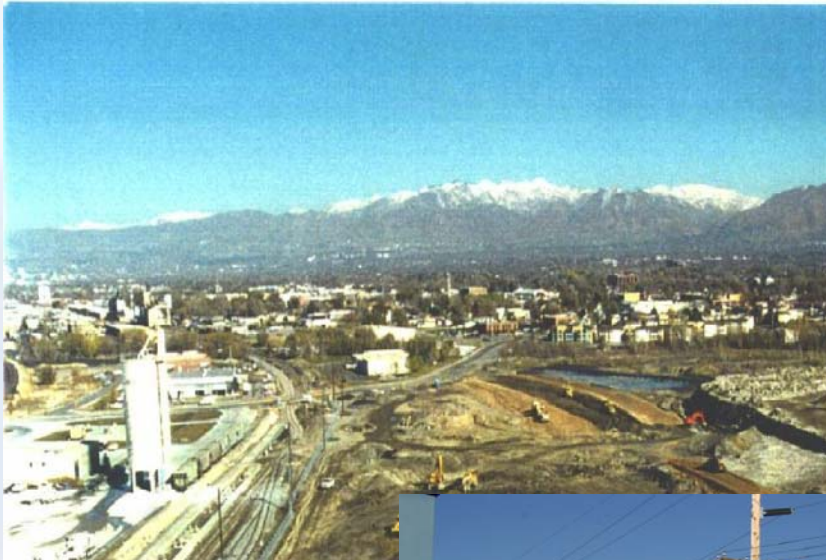


Pallas Yard

After



Superfund Site Land Use



5300 South TRAX
Station and future
hospital site



Rail Trails



ISO Certification

- Only transit authority in the United States with both ISO 9001 certification for quality management and ISO 14001 certification for environmental management



Regional Visioning Starts with Regional Values

- **Values are stable and enduring; life's "tides" as opposed to the "waves."**
- **Values are widely shared and create consensus among diverse groups.**
- **Satisfying ones' values is the foundation of personal decision making.**

Public Workshops

**Hundreds of
meetings with
thousands
of participants**



Major Public Workshop Findings

- **Infill** -- Participants preferred greater population numbers in infill areas than new expansion
- **Wasatch Back** -- Nearly all participants indicated that only minimal development should occur in the Wasatch Back
- **Rail Transit** -- Rail was seen as an essential component of the region's growth
- **Walkable** -- Participants expressed a general preference for walkable development
- **Critical Lands** -- Near general consensus that critical lands should be conserved

Life in Utah

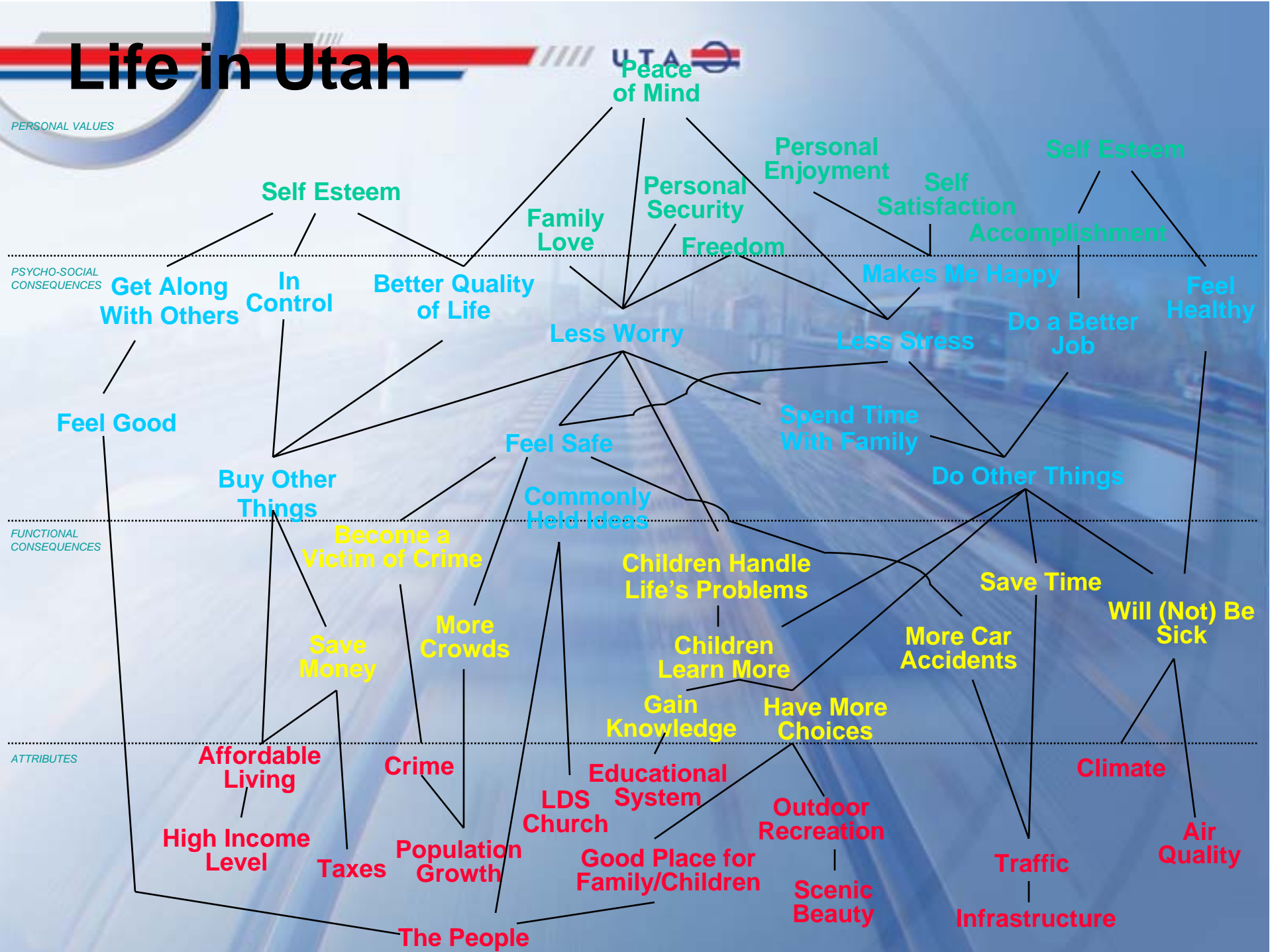


PERSONAL VALUES

PSYCHO-SOCIAL CONSEQUENCES

FUNCTIONAL CONSEQUENCES

ATTRIBUTES



Safe and Secure Environment Gateway Value

Peace of Mind

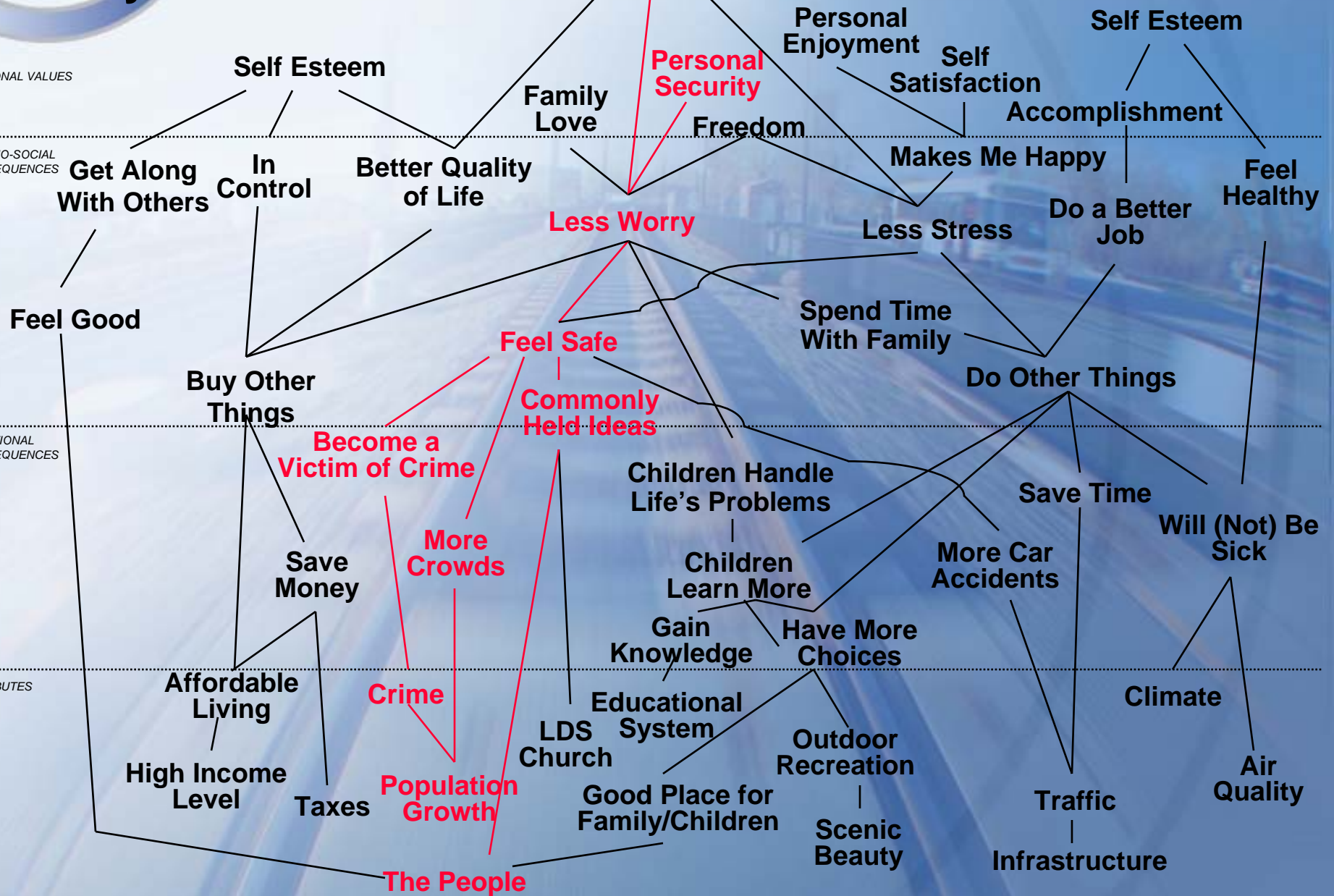
(34%)

PERSONAL VALUES

PSYCHO-SOCIAL CONSEQUENCES

FUNCTIONAL CONSEQUENCES

ATTRIBUTES



Personal and Community Enrichment



(31%)

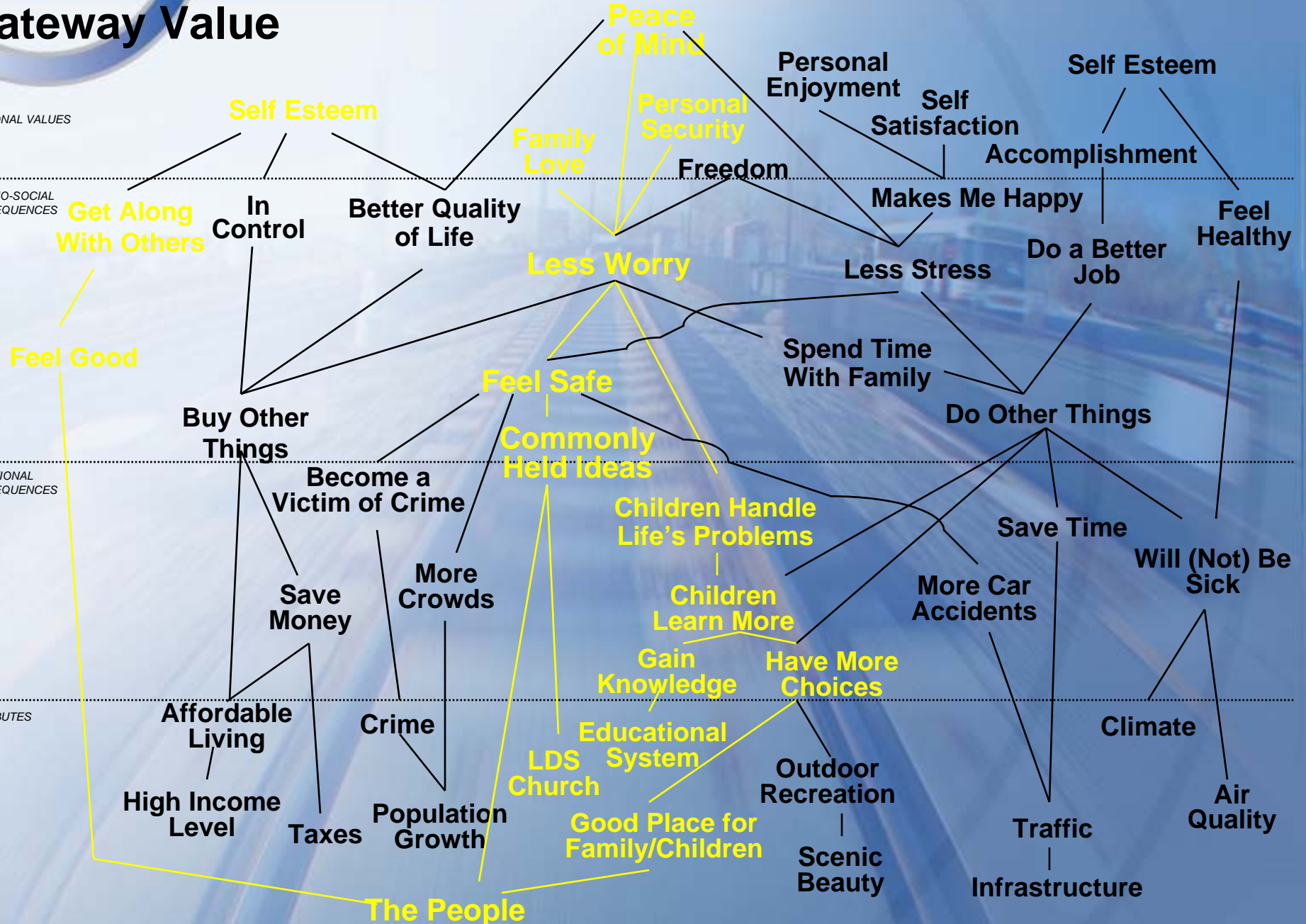
Gateway Value

PERSONAL VALUES

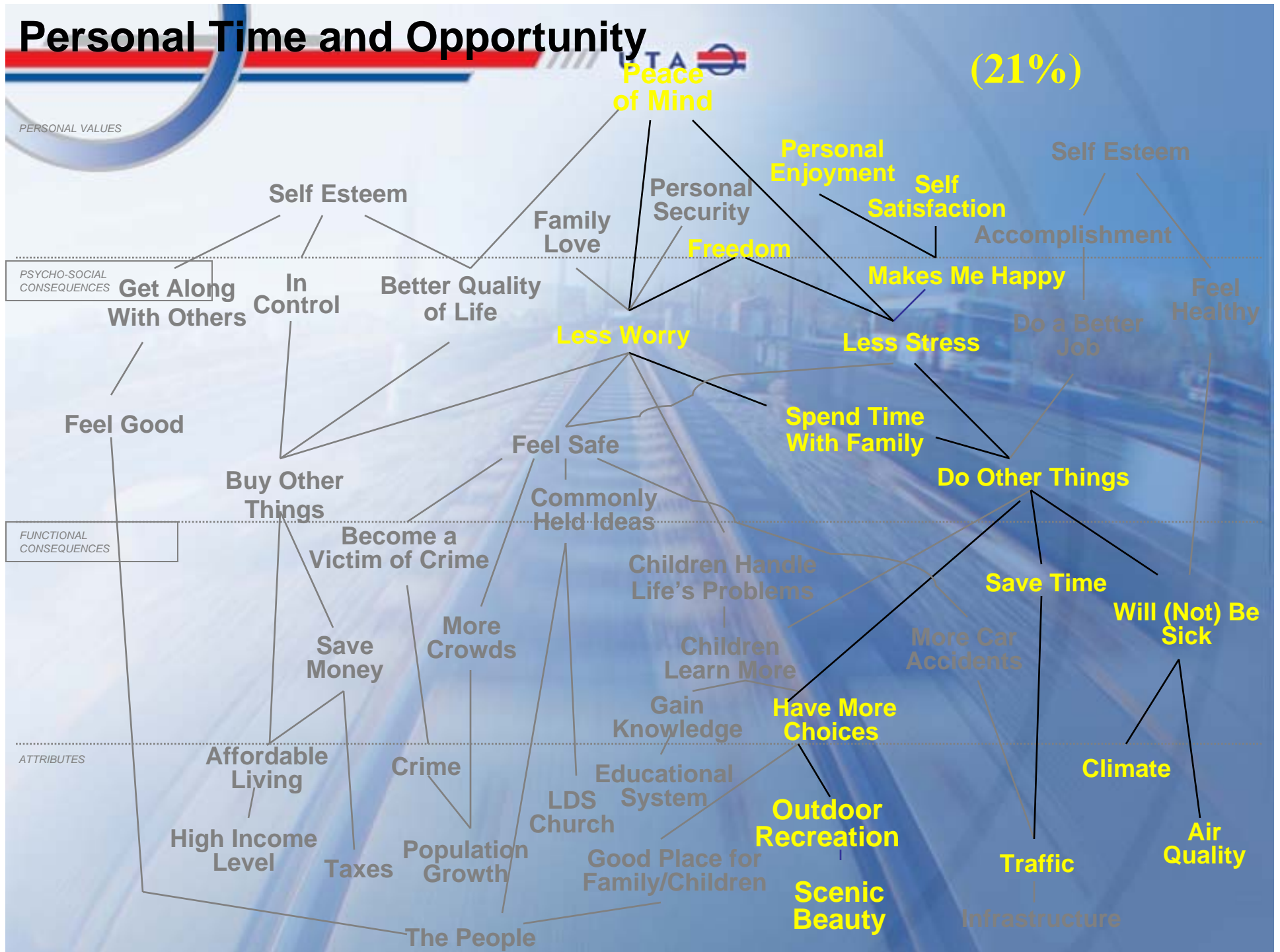
PSYCHO-SOCIAL CONSEQUENCES

FUNCTIONAL CONSEQUENCES

ATTRIBUTES



Personal Time and Opportunity



Financial Security



(14%)

PERSONAL VALUES

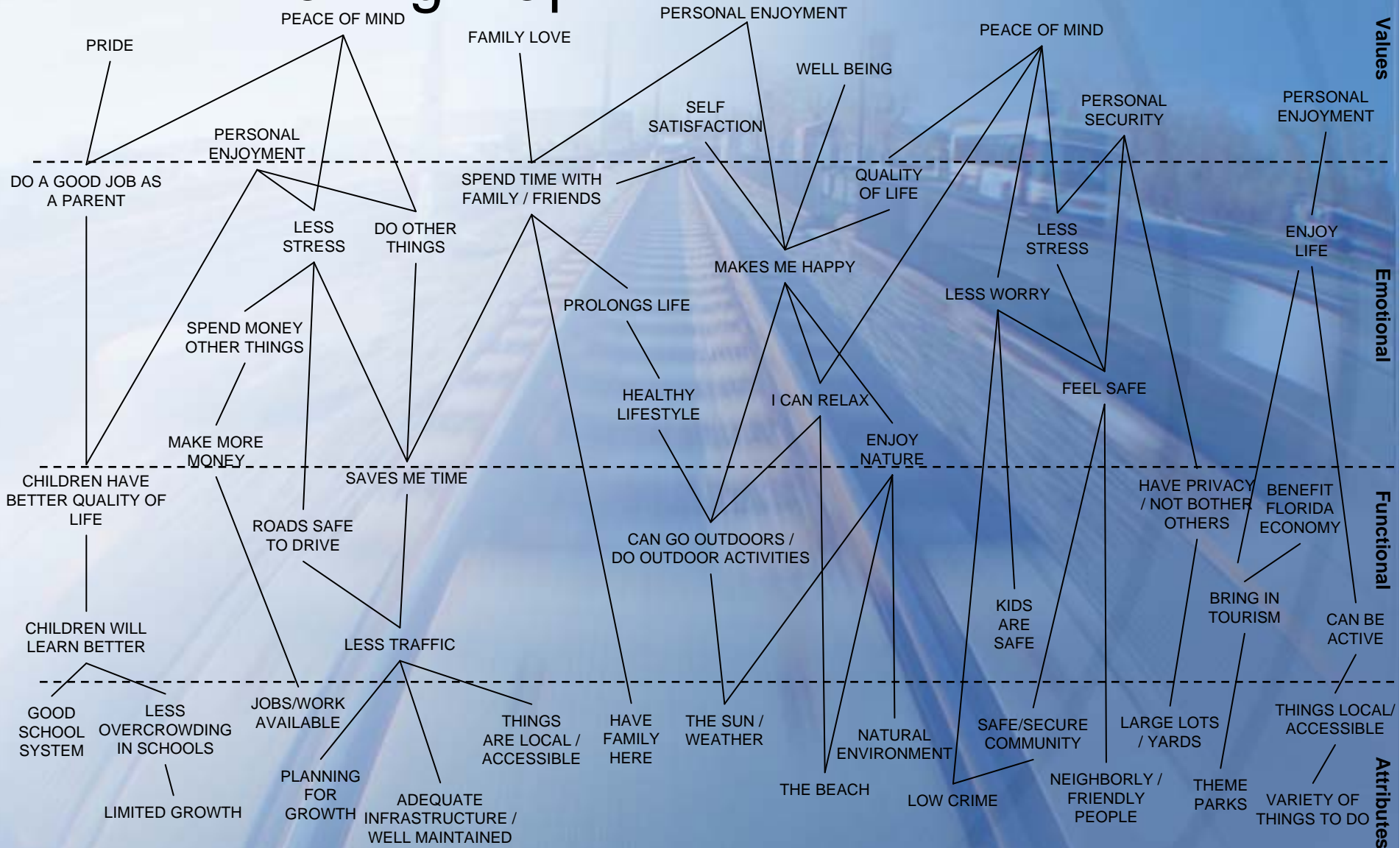
PSYCHO-SOCIAL CONSEQUENCES

FUNCTIONAL CONSEQUENCES

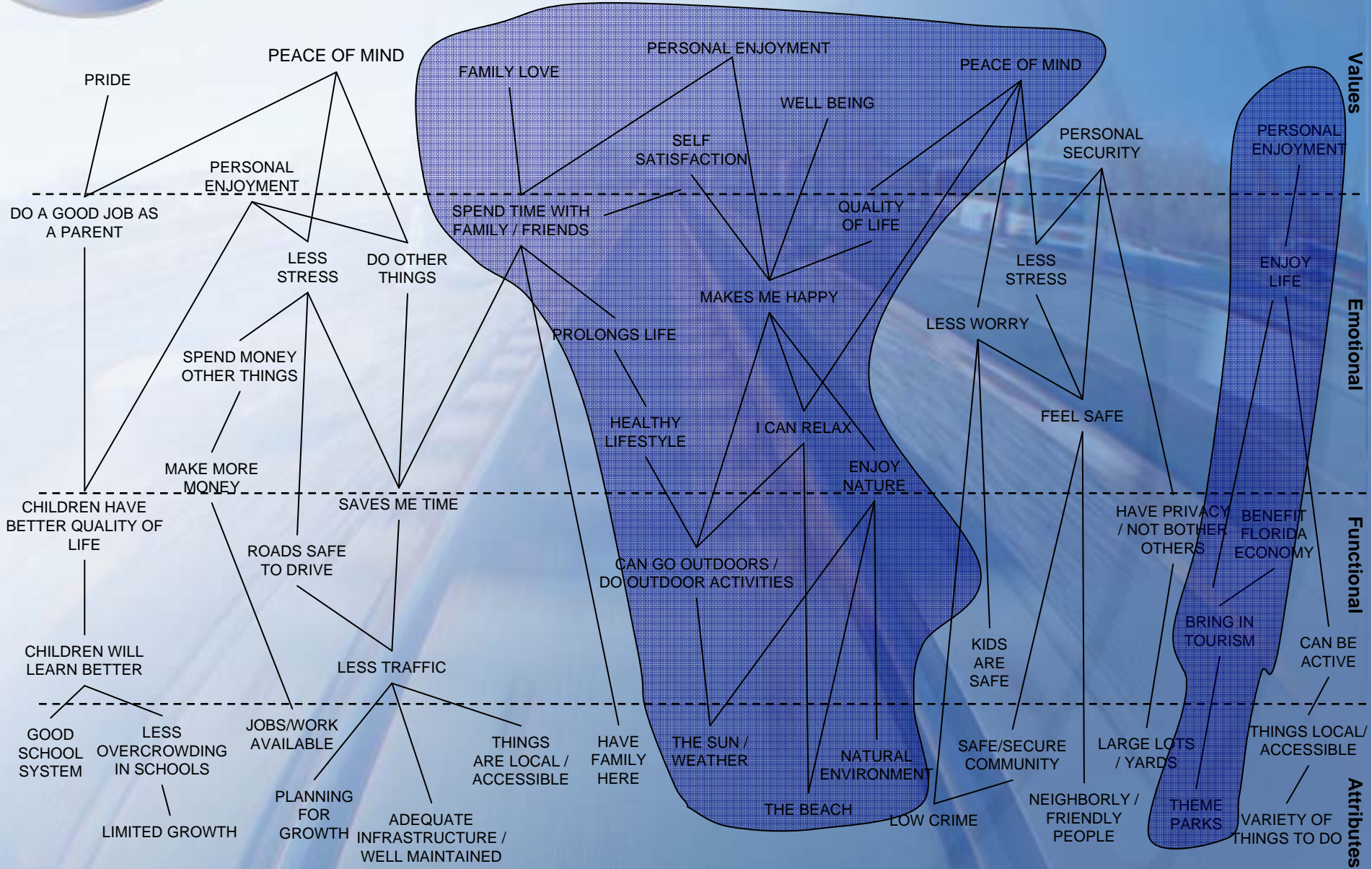
ATTRIBUTES



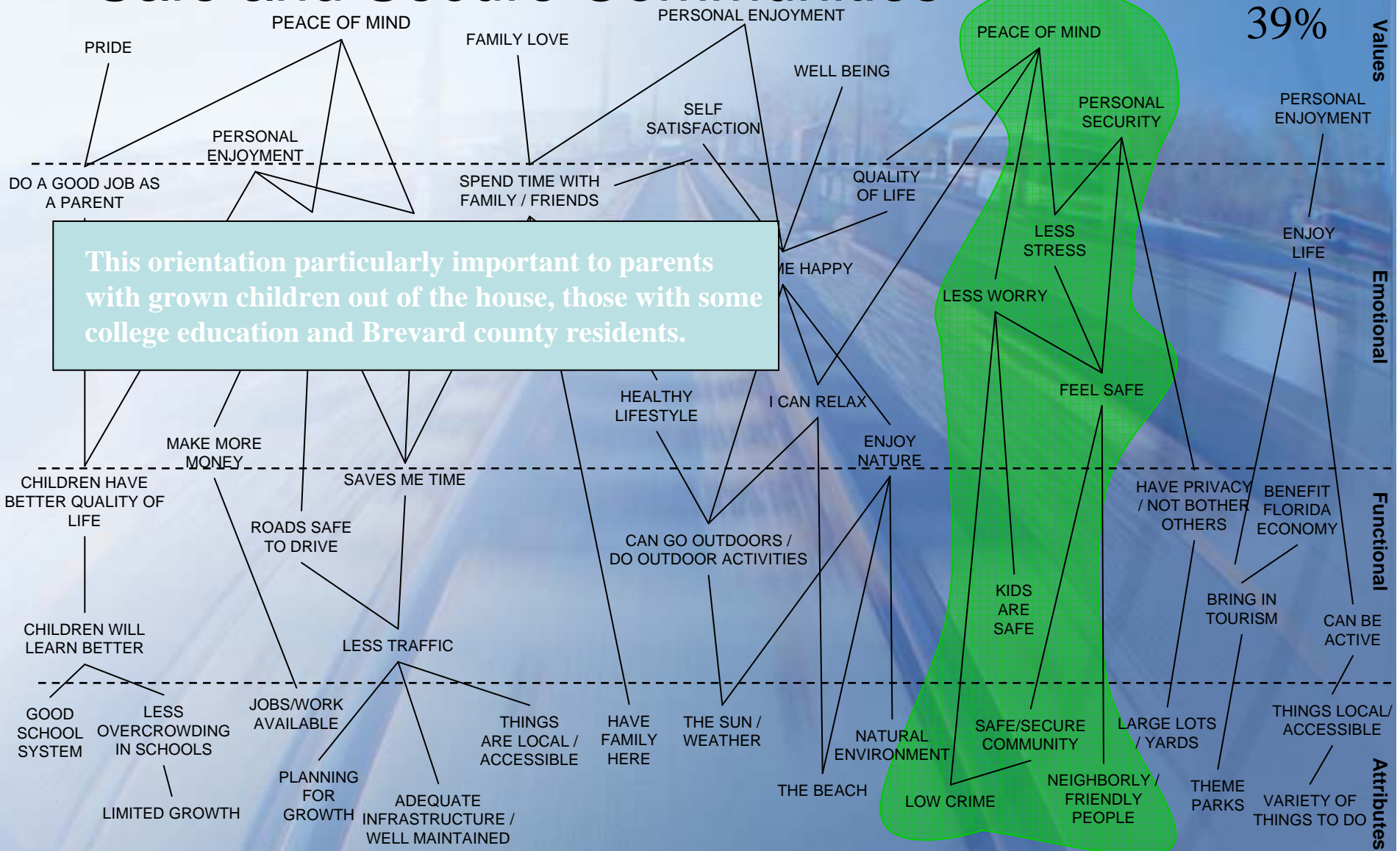
Central Florida Quality of Life Decision Making Map



Top of Mind Values Orientations



Peace of Mind and Security from Living in Safe and Secure Communities



Enjoyment in Family Friendly Activity

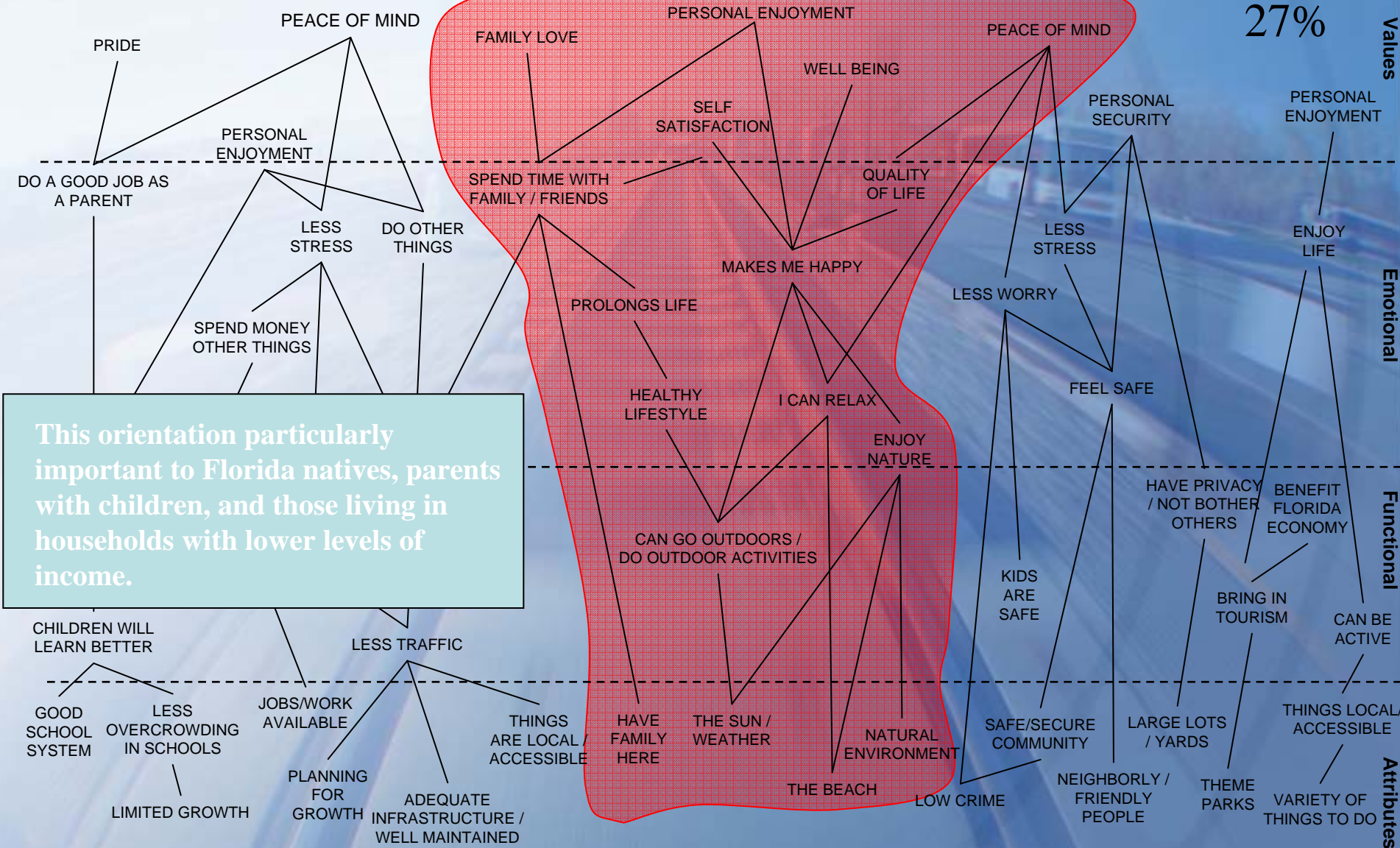
27%

Values

Emotional

Functional

Attributes



This orientation particularly important to Florida natives, parents with children, and those living in households with lower levels of income.

Parental Peace and Pride Through Good Educational Opportunities

16%

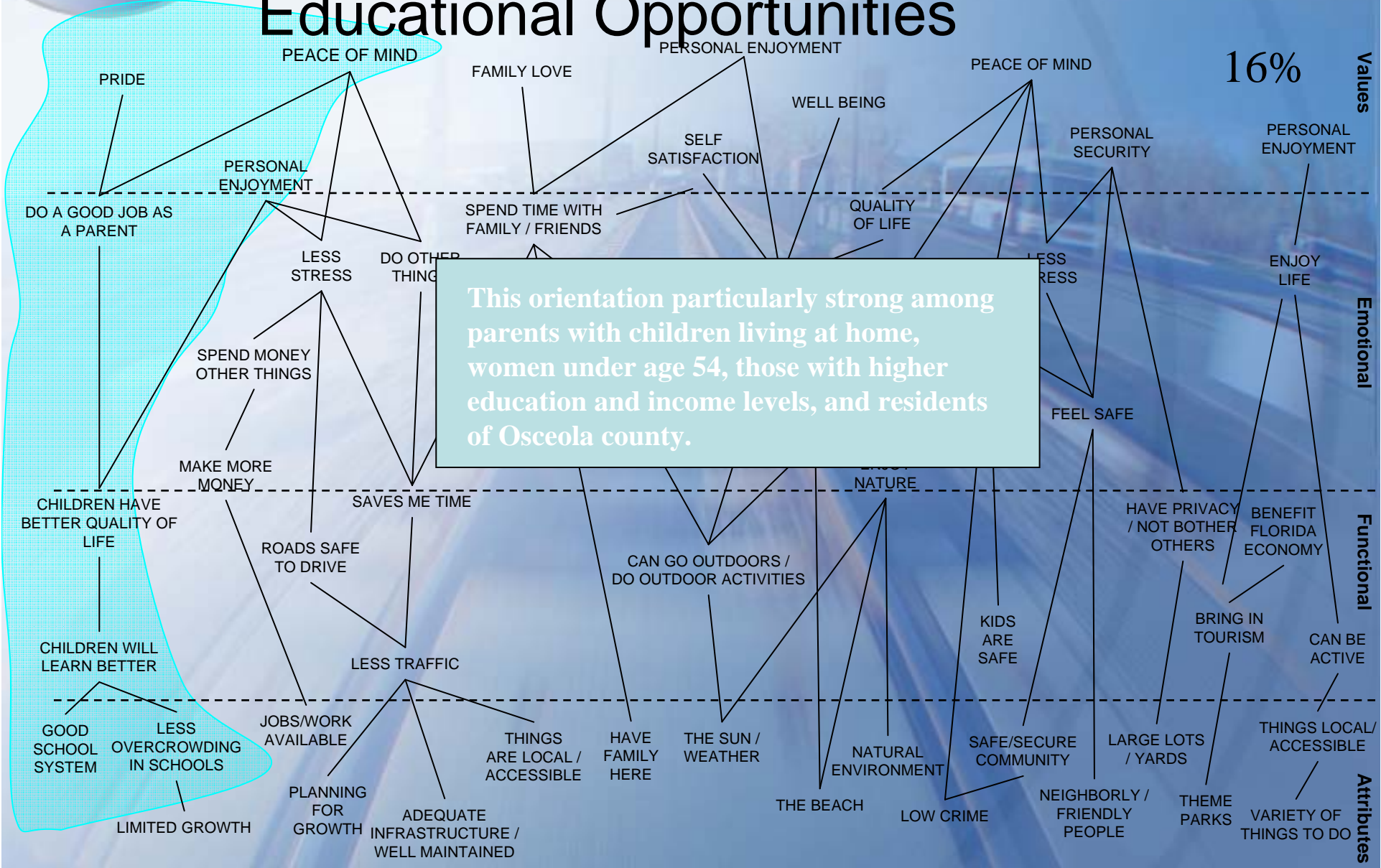
Values

Emotional

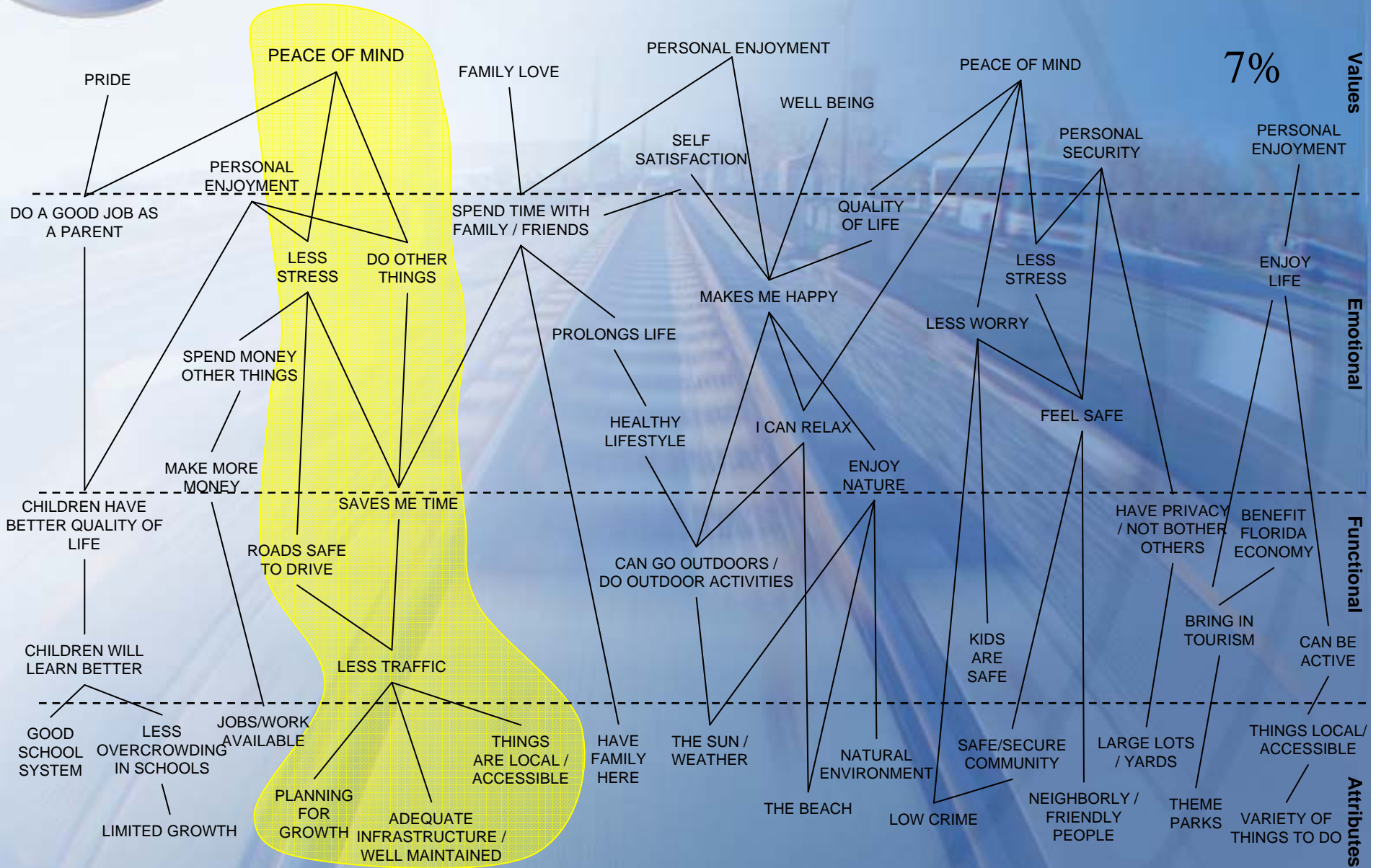
Functional

Attributes

This orientation particularly strong among parents with children living at home, women under age 54, those with higher education and income levels, and residents of Osceola county.



Aggravation From Traffic and Infrastructure



Three Foundational Values Pillars

Nature and the Outdoors

High Quality of
Life from
Enjoyment in
Family Friendly
Activity Nature
Allows

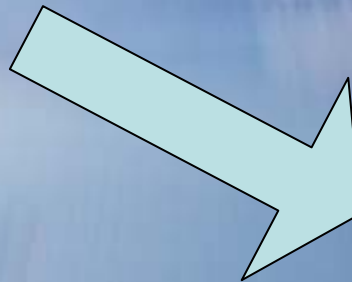
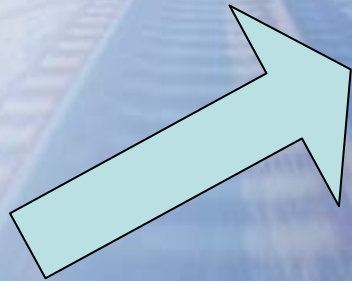
Safe and Secure Communities

Peace of Mind
and Security
from Living in
Safe and
Secure
Communities

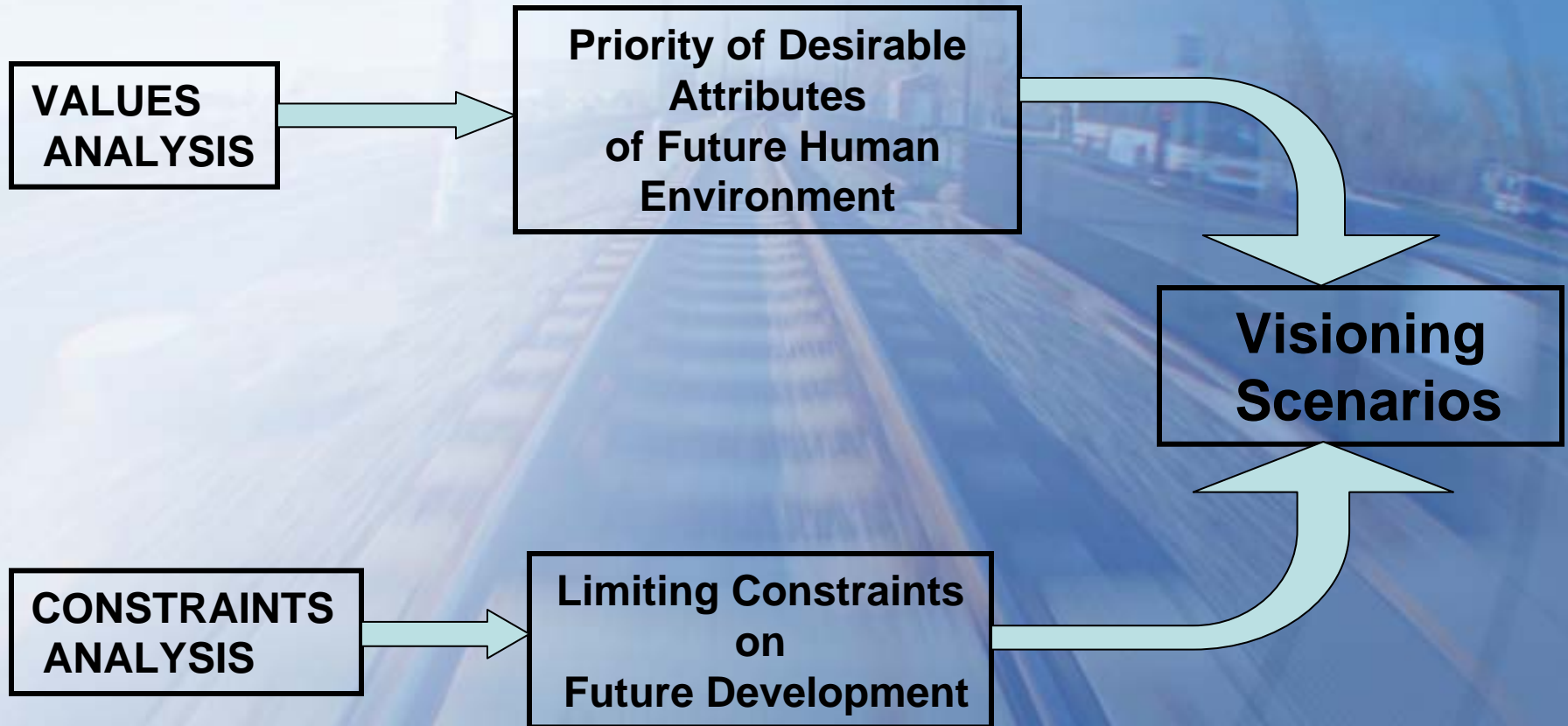
Education

Community
and Parental
Peace and
Pride
Through Good
Educational
Opportunities

Scenario Approach: Contrasts today's choices by showing long-term consequences



Visioning Process Inputs





“Give me a lever long enough . . . and I shall move the world.”

(Archimedes)

**The Transportation System
is the “Longest Lever” that creates a
Region’s future urban form**



Use Scenarios
to Ask

Important Questions

Trend Impact? If the housing price/income gap continues to increase, which will we need more of?



or



Trend Impact? If energy prices rise rapidly, which will we need more of?



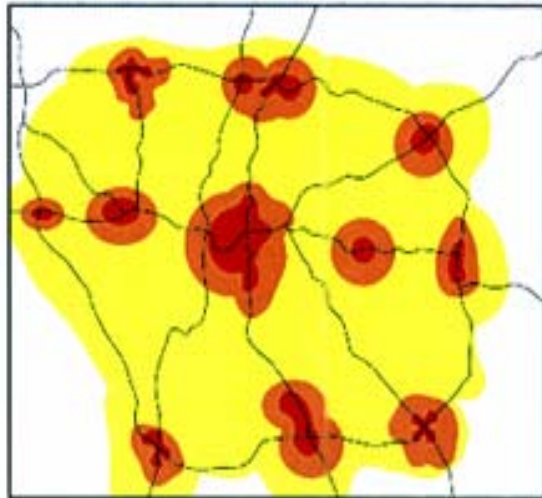
or



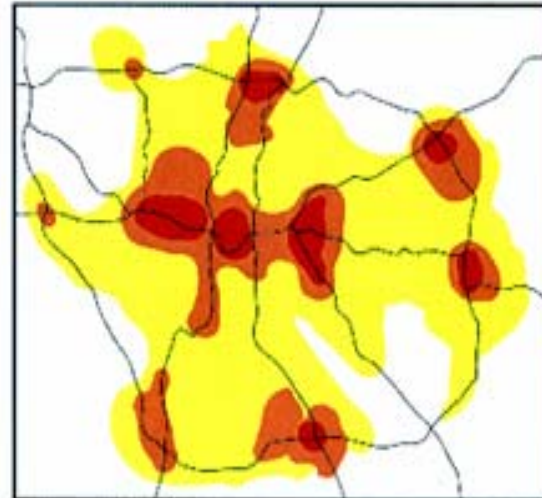
Scenarios Also Start with Regional Constraints And Opportunities

- **Physical Constraints**
- **Legal Constraints**
- **Market Constraints**
- **Fiscal Constraints**

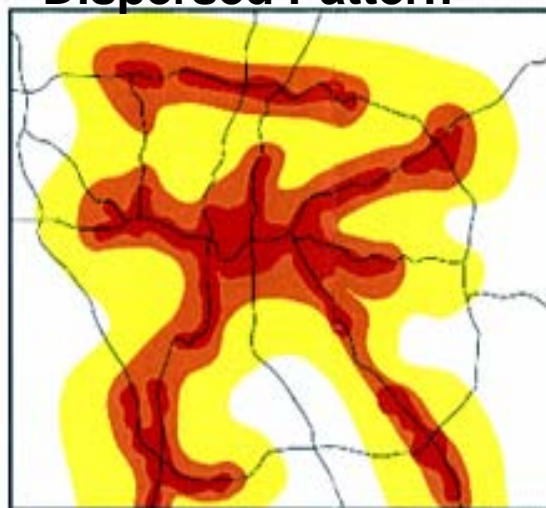
Develop a Range of Choices



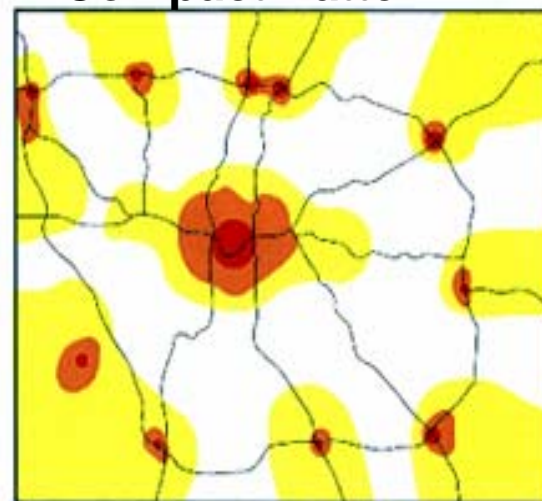
Dispersed Pattern



Compact Pattern



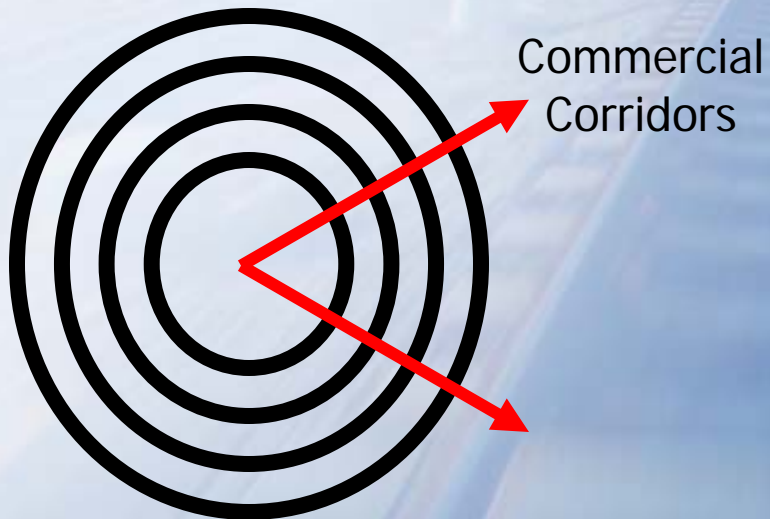
Corridor Pattern



Satellite Pattern

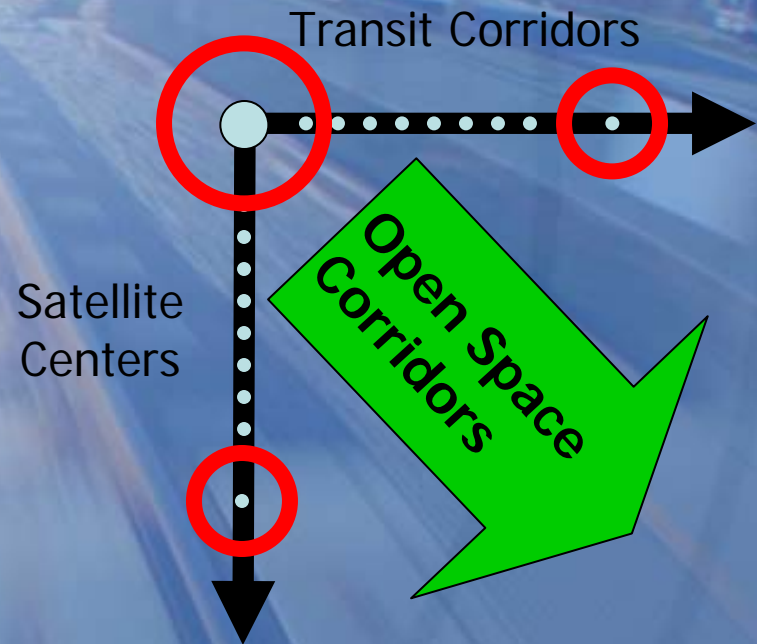
Growth Models

Accretion



Growth Added to the Edge

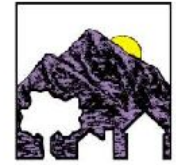
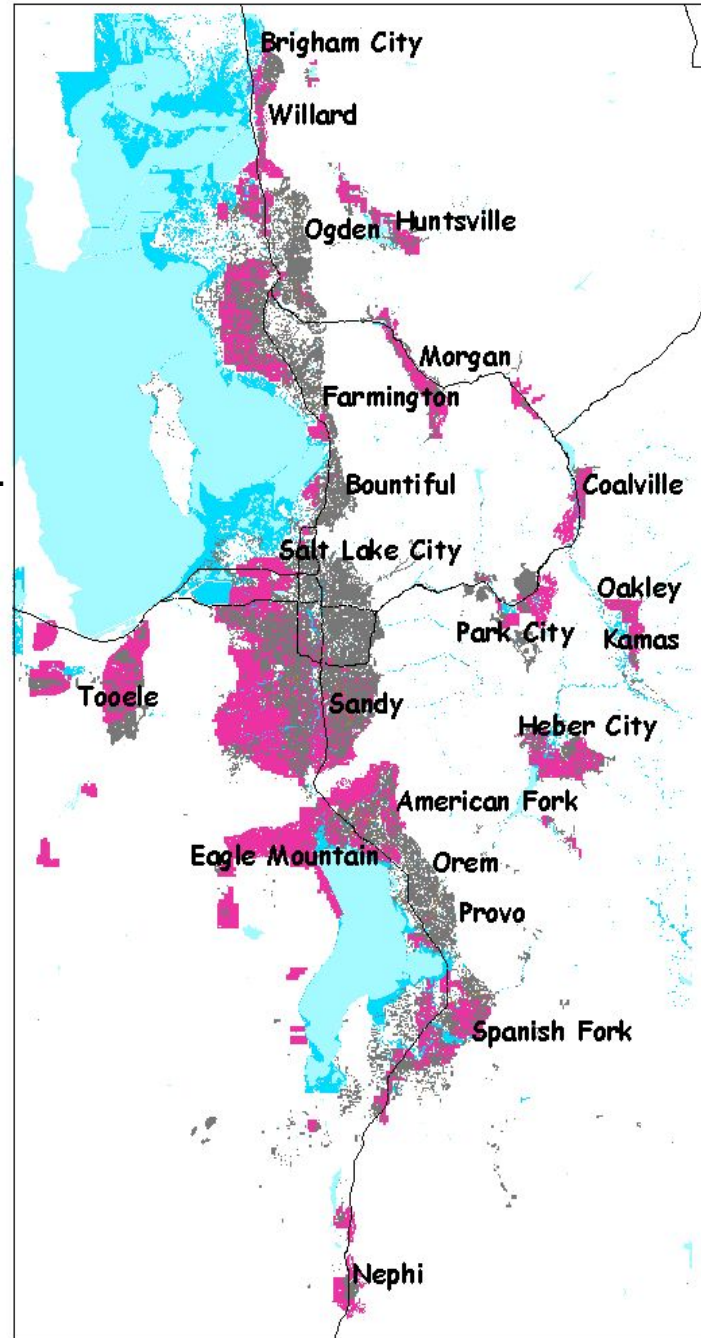
Corridors



Scenario A

New and Existing Development

- Continuation of Recent Trends
- Larger lot sizes
- More auto-oriented development will occur.



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A Partnership for Quality Growth

Scenario A

- Freeways
- New Development
- Existing Development
- Water Bodies
- Wetlands & Floodplain

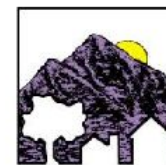
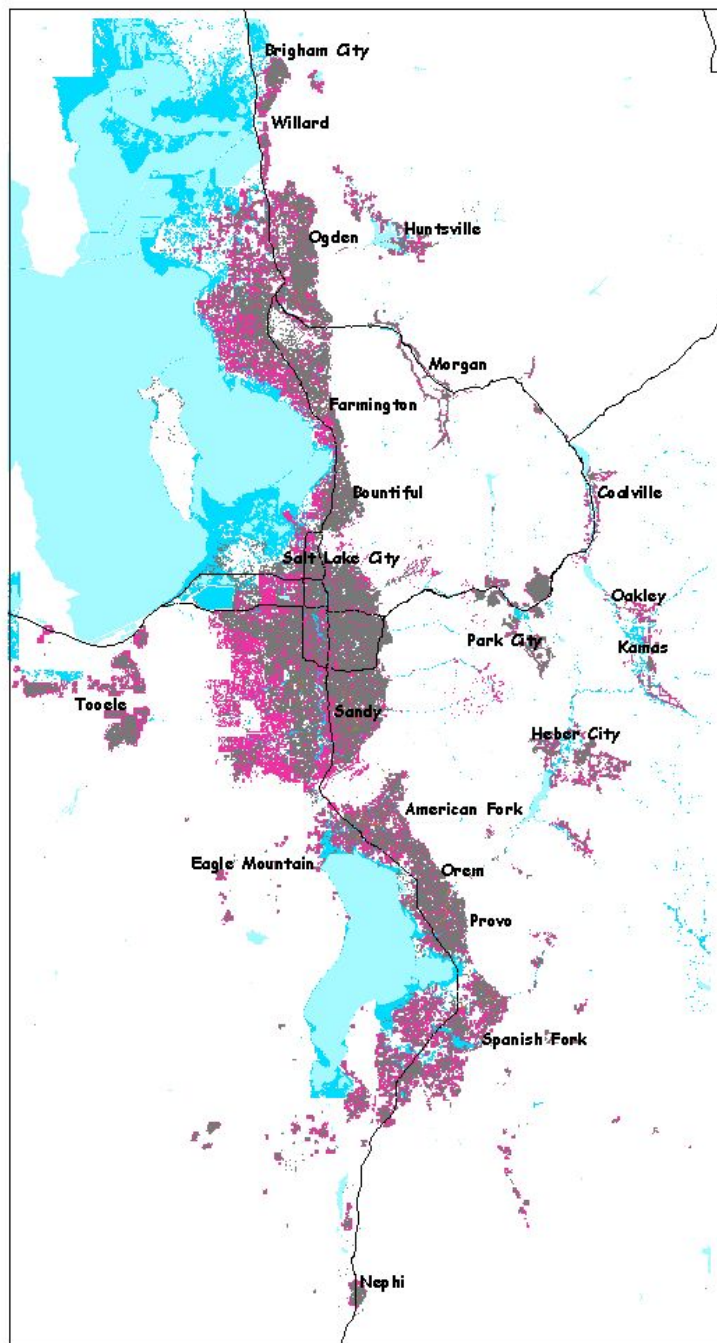
Fregonese
Calthorpe
Associates
Regional and Urban Planning



Scenario B

New and Existing Development

- Baseline - implement adopted plans
- Dispersed development pattern common in last 20-30 years



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Scenario B

Freeways

New Development

Existing Development

Water Bodies

Wetlands & Floodplain

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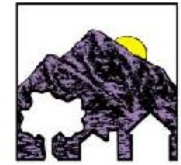
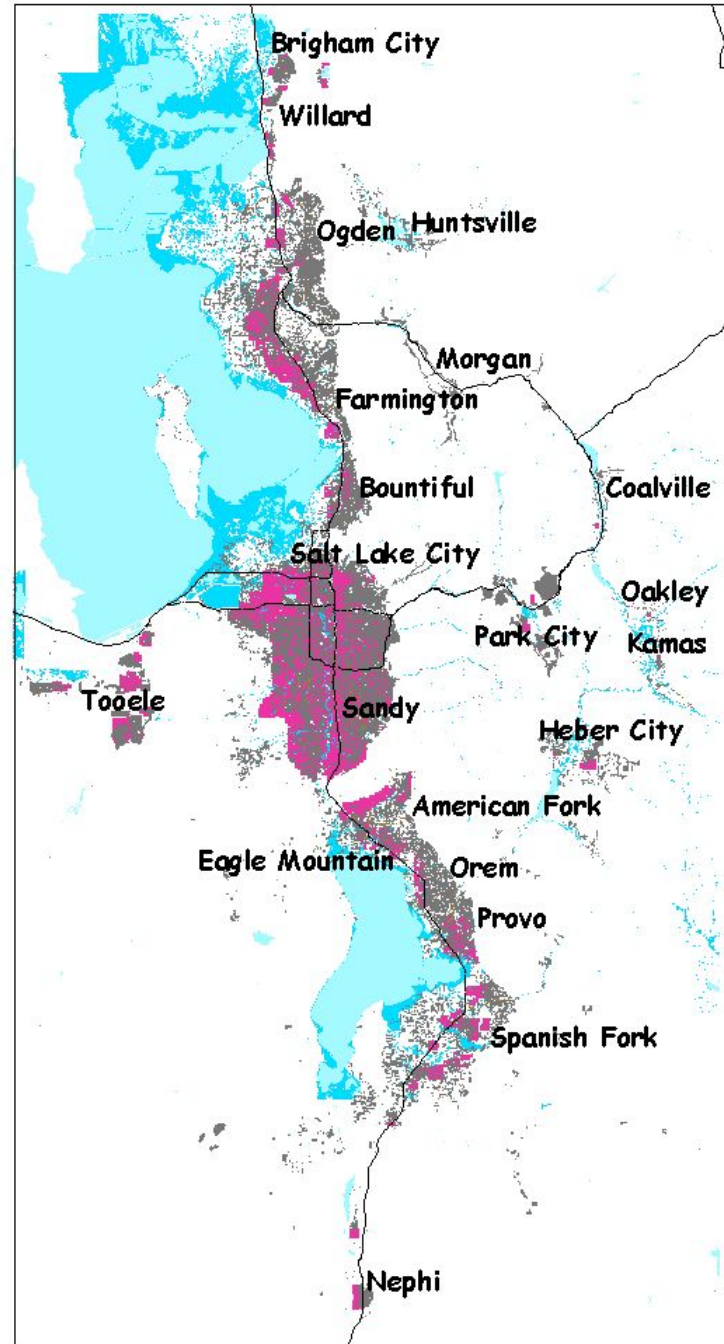
Regional and Urban Planning



Scenario C

New and Existing Development

- More infill and redevelopment
- Growth on new land focused into walkable, transit-oriented communities



ENVISION UTAH
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Scenario C

- Freeways
- New Development
- Existing Development
- Water Bodies
- Wetlands & Floodplain

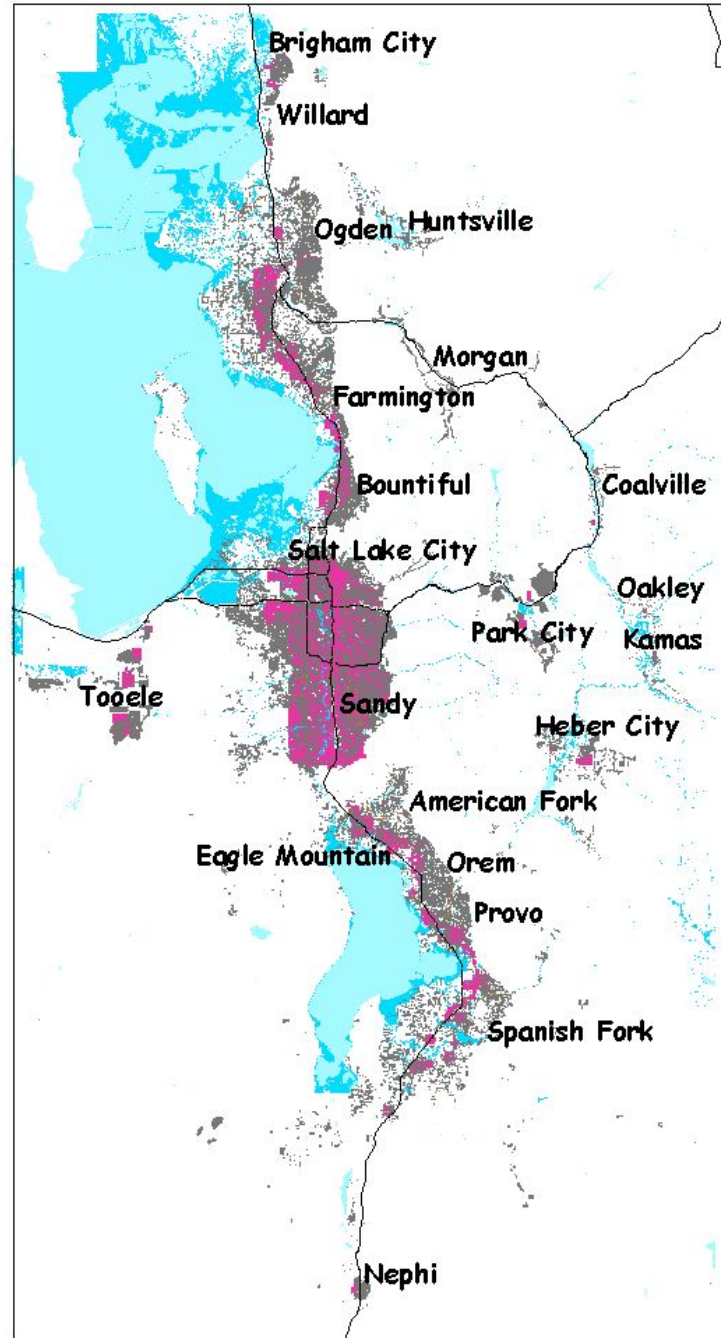
Fregonese
Calthorpe
Associates
Regional and Urban Planning



Scenario D

New and Existing Development

- Significant increase in densities
- Extensive infill and redevelopment
- Extensive transit system

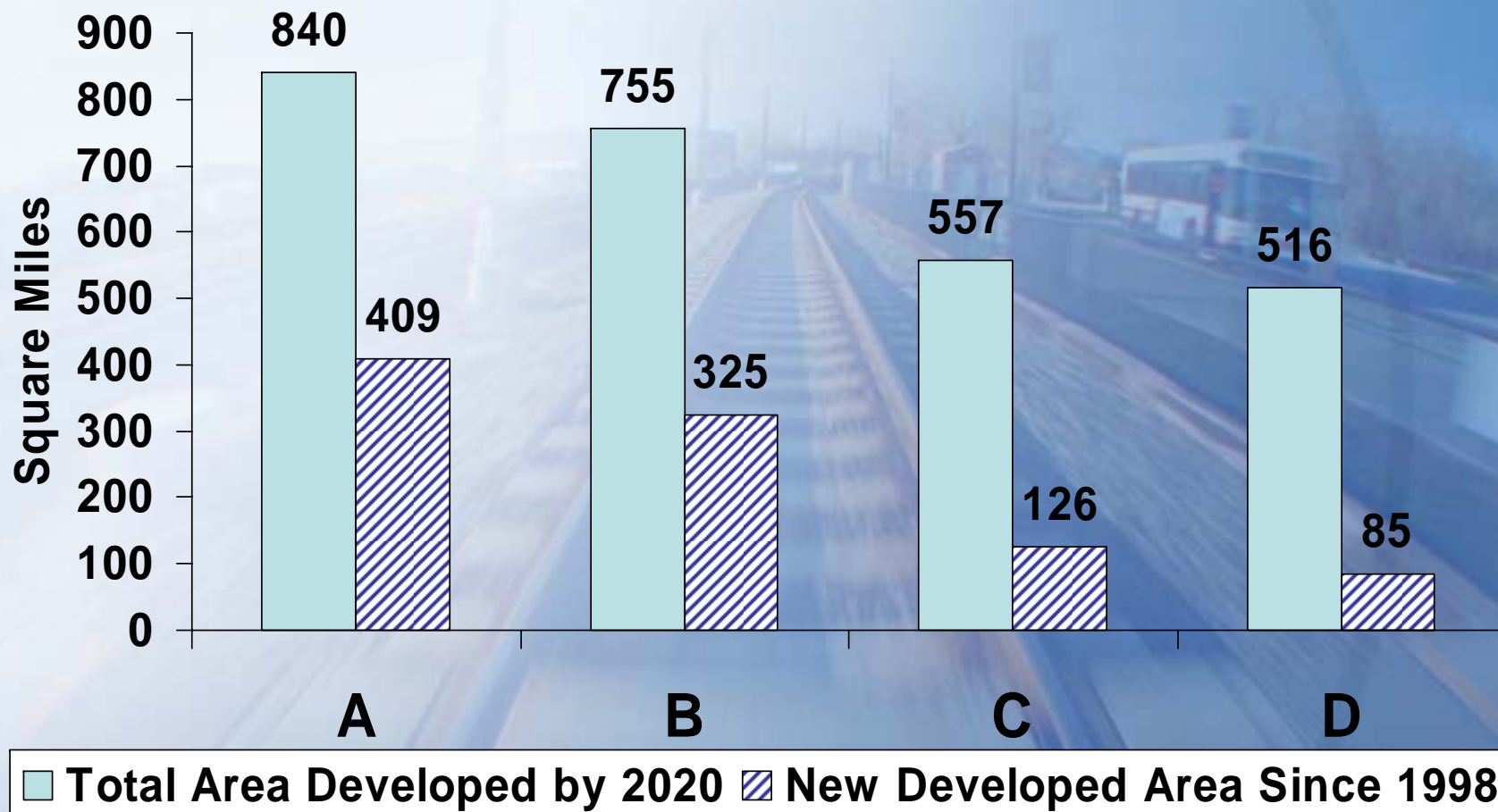


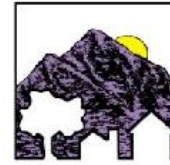
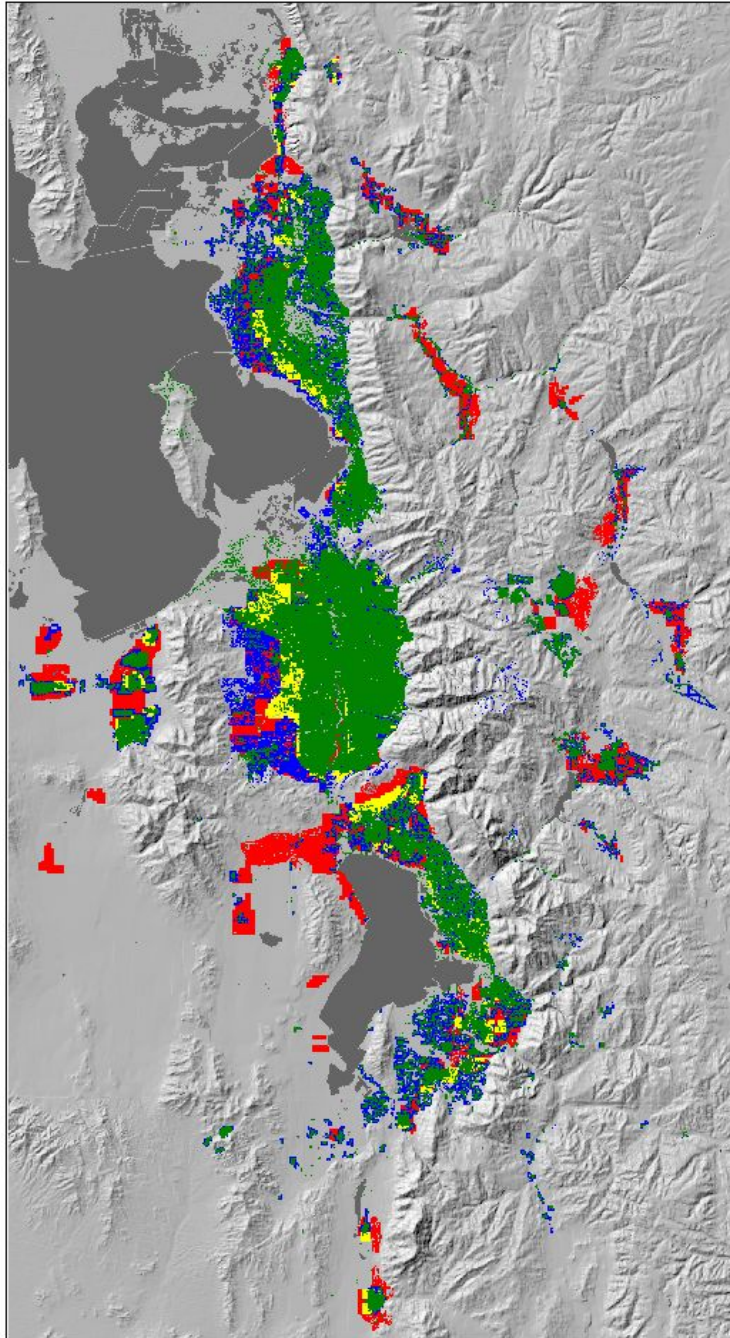
Scenario D

- Freeways
- New Development
- Existing Development
- Water Bodies
- Wetlands & Floodplain




Land Consumption





ENVISION UTAH
A Partnership for Quality Growth

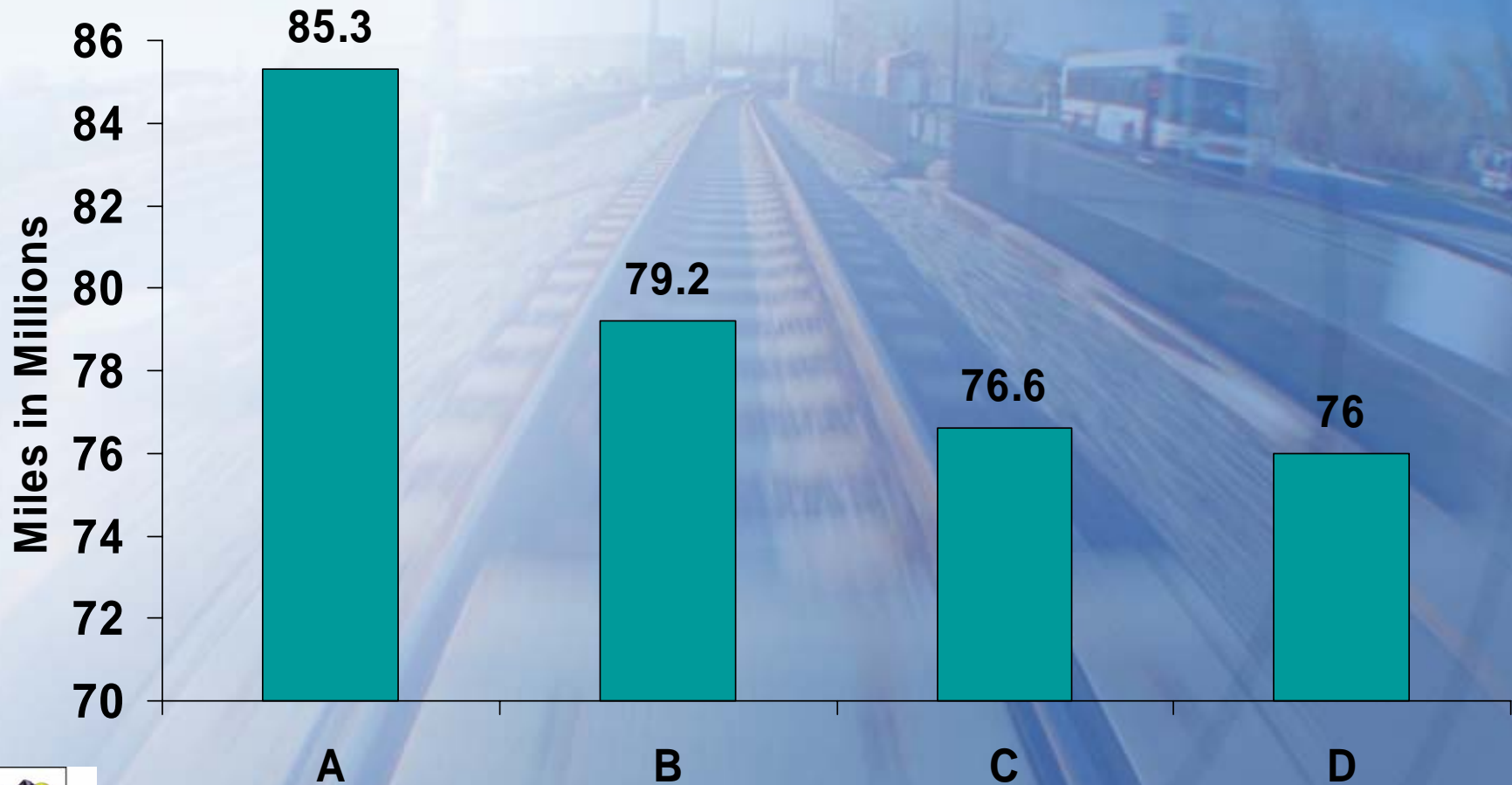
Developed Area

-  Scenario A
-  Scenario B
-  Scenario C
-  Scenario D

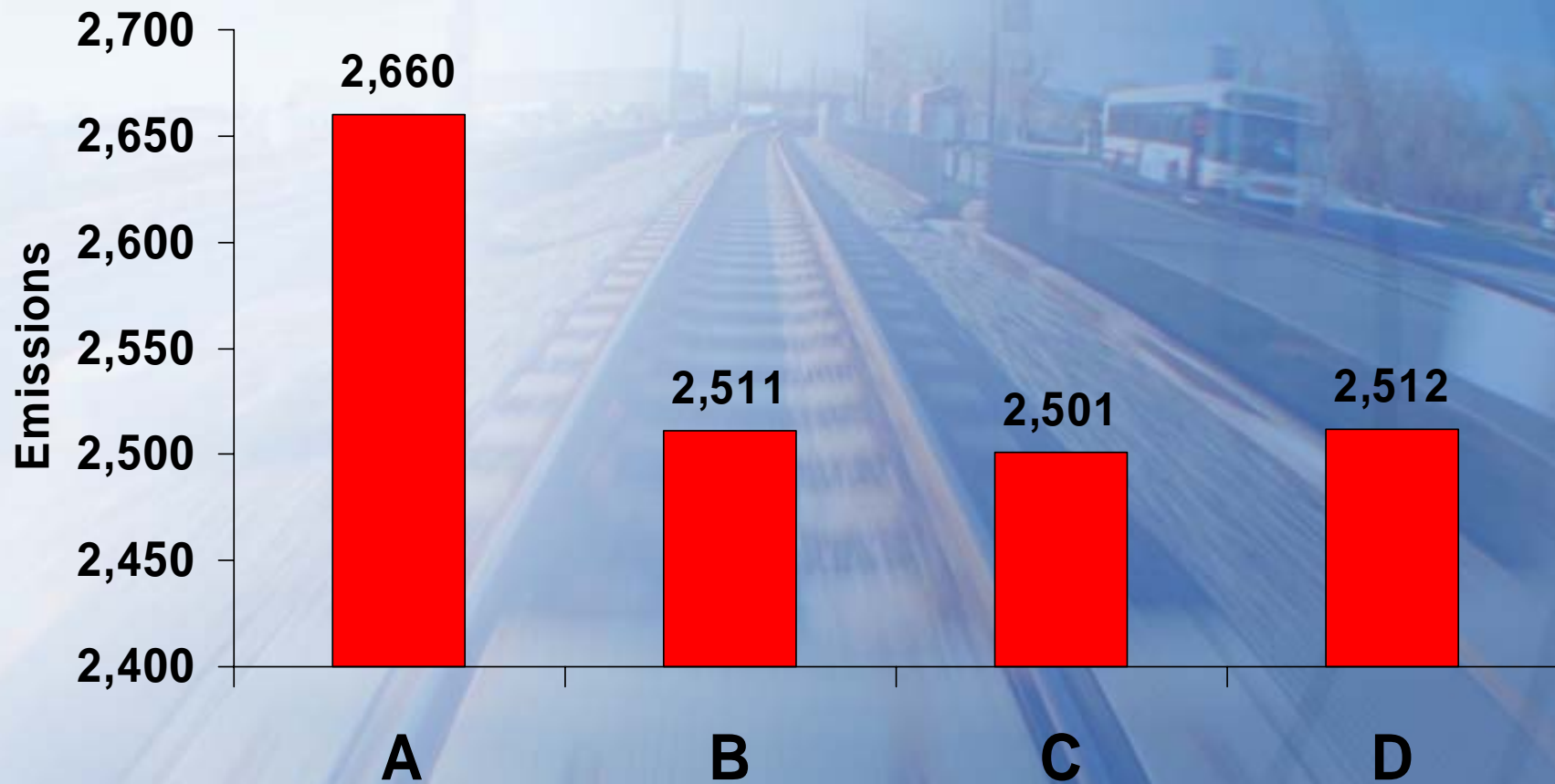
Fregonese
Calthorpe
Associates
Regional and Urban Planning



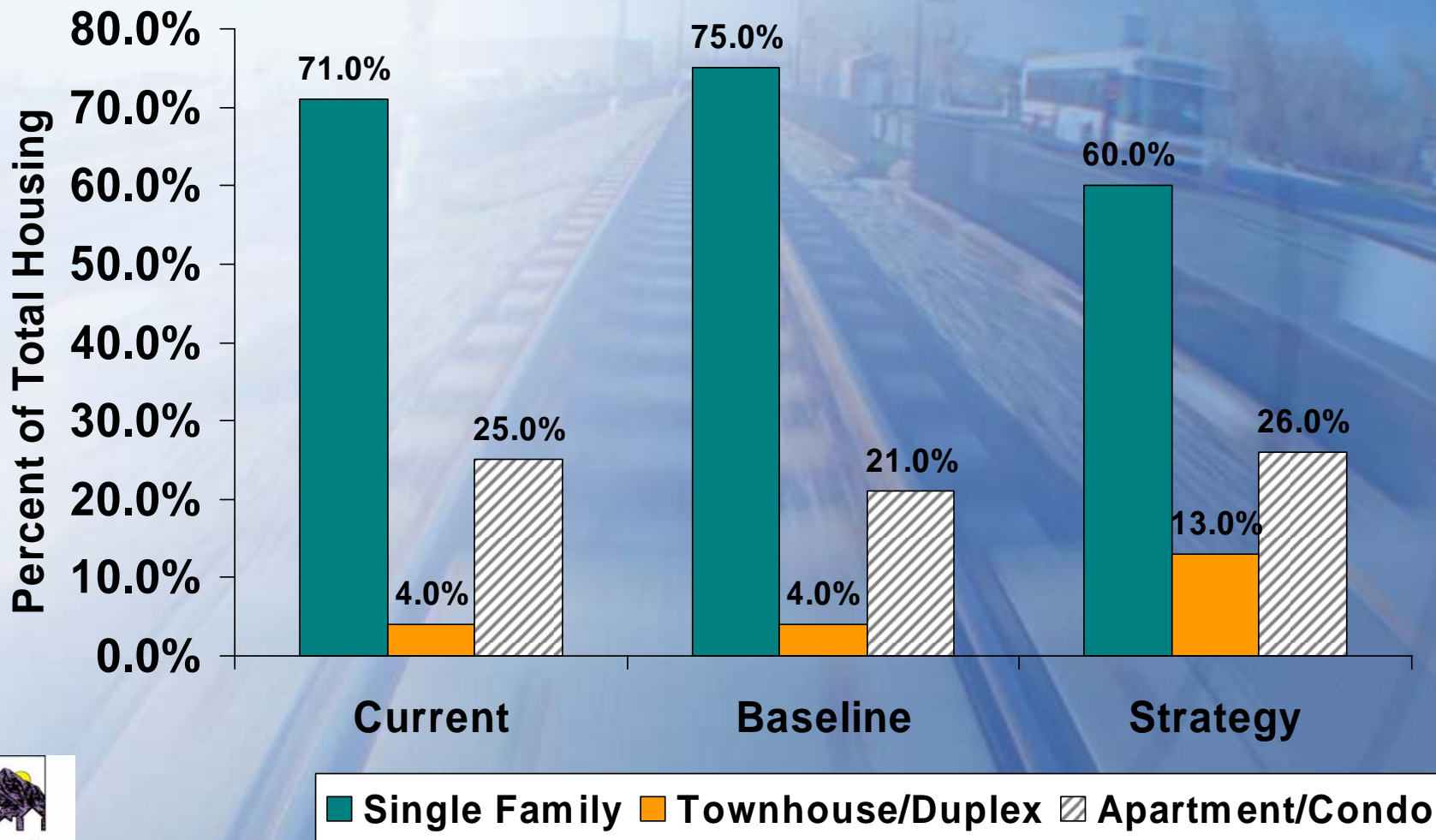
Vehicle Miles of Travel Per Day



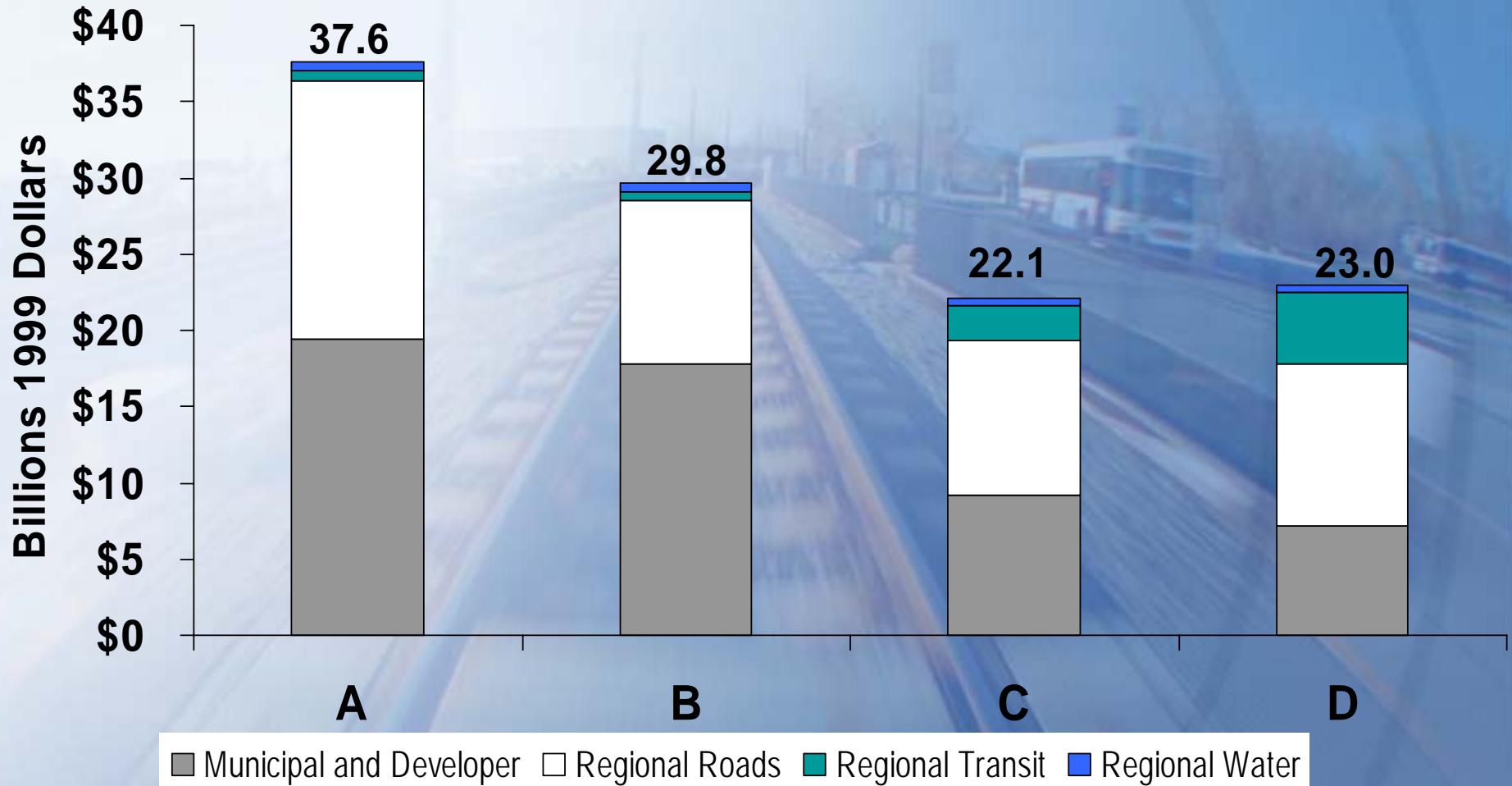
Total Emissions *Tons Per Day*



Housing Mix: Current and 2020



Total Infrastructure Costs



PUBLIC AWARENESS EFFORTS

Television, Radio and Newspaper



Let's start today creating more regional public transportation choices

*that will help maintain quality of life for us,
our children and grandchildren*

MORE INFO TODAY
CHANNEL 5 - 11:30 A.M.

More Choices for people from every walk of life

While most of us will continue to drive automobiles, the region will benefit from a more convenient and reliable public transportation system that will give us all more choices and options, more freedom and mobility, and provide more opportunities for people from every walk of life to get to and from work, shopping and recreation. A system can include commuter rail, light rail, lower cost self-powered rail, private vans and buses, and more bus routes with more frequent service. Your locally elected officials have developed a long-term region-wide plan to create a balanced public transportation system that will accommodate residents throughout the Greater Wasatch Area, but additional funds and citizen involvement will be necessary.

Investing today saves money

A region-wide public transportation system is a key Envision Utah strategy, which as part of a package of strategies, can help preserve our quality of life and can save the region 4-5 billion dollars over the next 30 years, as well as reduce personal transportation costs to those using the system.

Opportunities will be lost and expenses will go up if we fail to move forward now

With the addition of another million people by 2030, land will become more scarce and places to build new roads or rights-of-way for public transportation will become more expensive and difficult to find. Increasing the capacity of rail transit is more cost effective and uses less land than adding additional lanes to our roads and highways. Developing a region-wide public transportation system can help take the pressure off critical lands we may wish to preserve.



Cars, buses, & feet make up our future transportation

Benefits the economy and quality of life

The benefits go beyond transportation choices. Developments for housing, shopping, work, recreation and cultural amenities can economically and aesthetically enhance key sites adjacent to public transportation routes. Communities that provide convenient and reliable public transportation exhibit a vitality that gives them a competitive edge in capturing economic development and in attracting and retaining businesses and workers.

A region-wide public transportation system also benefits non-riders by reducing the increase of congestion and time spent in traffic, resulting in more time to spend with family and friends. In addition, it helps reduce mobile emissions released, which will help keep Utah's air clean.



Passengers boarding commuter rail

It's up to you!

Learn more about these and other Envision Utah strategies today.
11:30 A.M. ON KSL CHANNEL 5



Facts and information

Envision Utah's Quality Growth Strategy through the year 2020

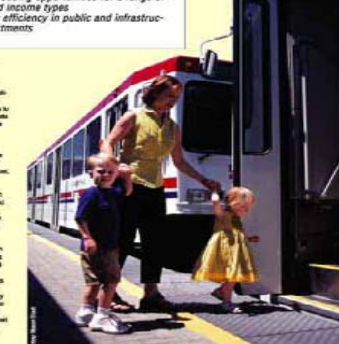


Population Centers and Critical Land

- Population Centers
- Rail Transit
- Greater Land Use
- Public Land & Private Lands
- Forestland
- Wetlands & Shrublands
- Unpopulated Area

ENVISION UTAH'S QUALITY GROWTH STRATEGY IDENTIFIES SIX PRIMARY GOALS

- Increase mobility and transportation choices
- Enhance air quality
- Preserve critical lands
- Conserve and maintain the availability of water resources
- Provide housing opportunities for a range of family and income types
- Maximize efficiency in public and infrastructure investments

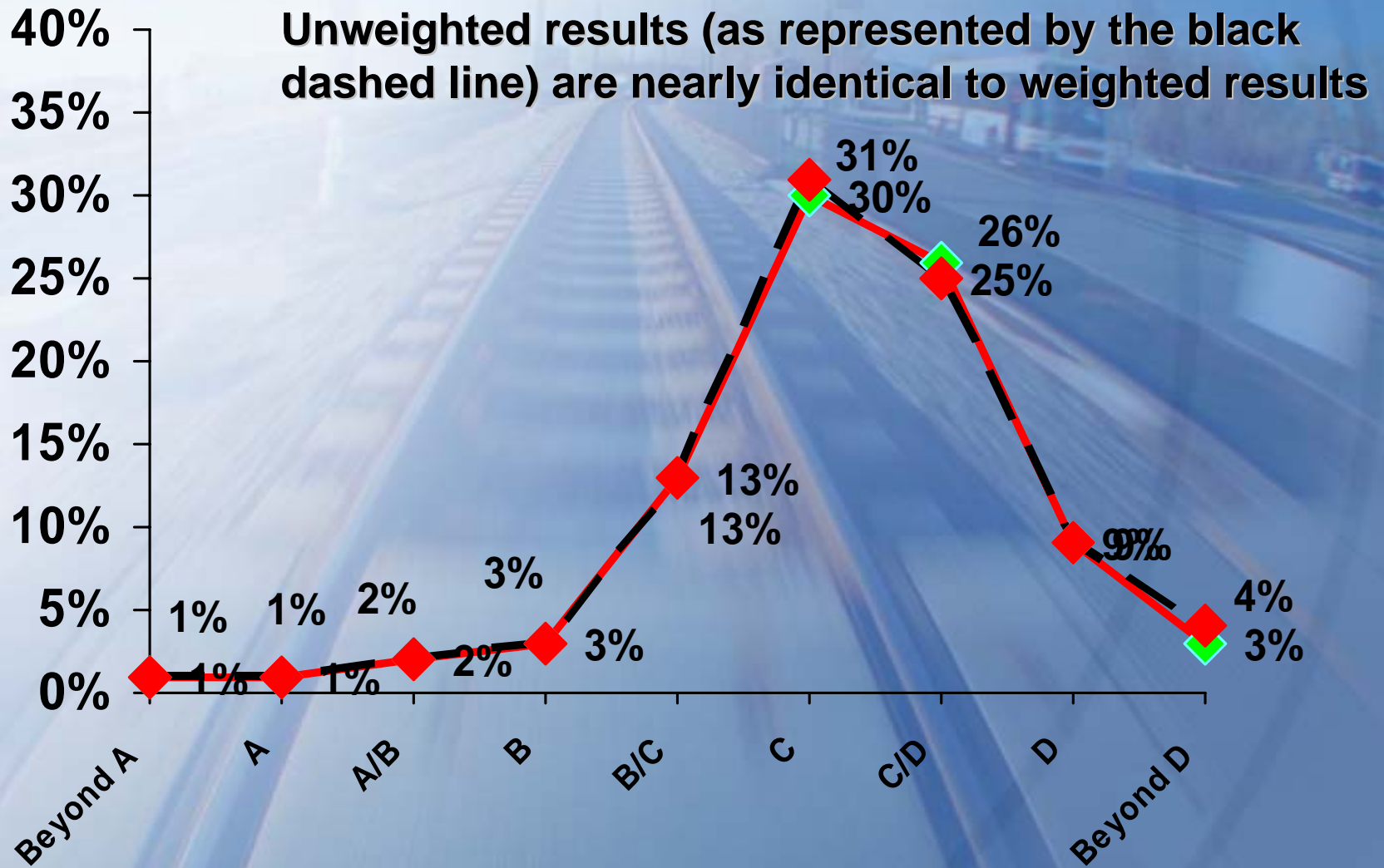


Envision Utah Keeping Utah beautiful, prosperous and neighborly for future generations

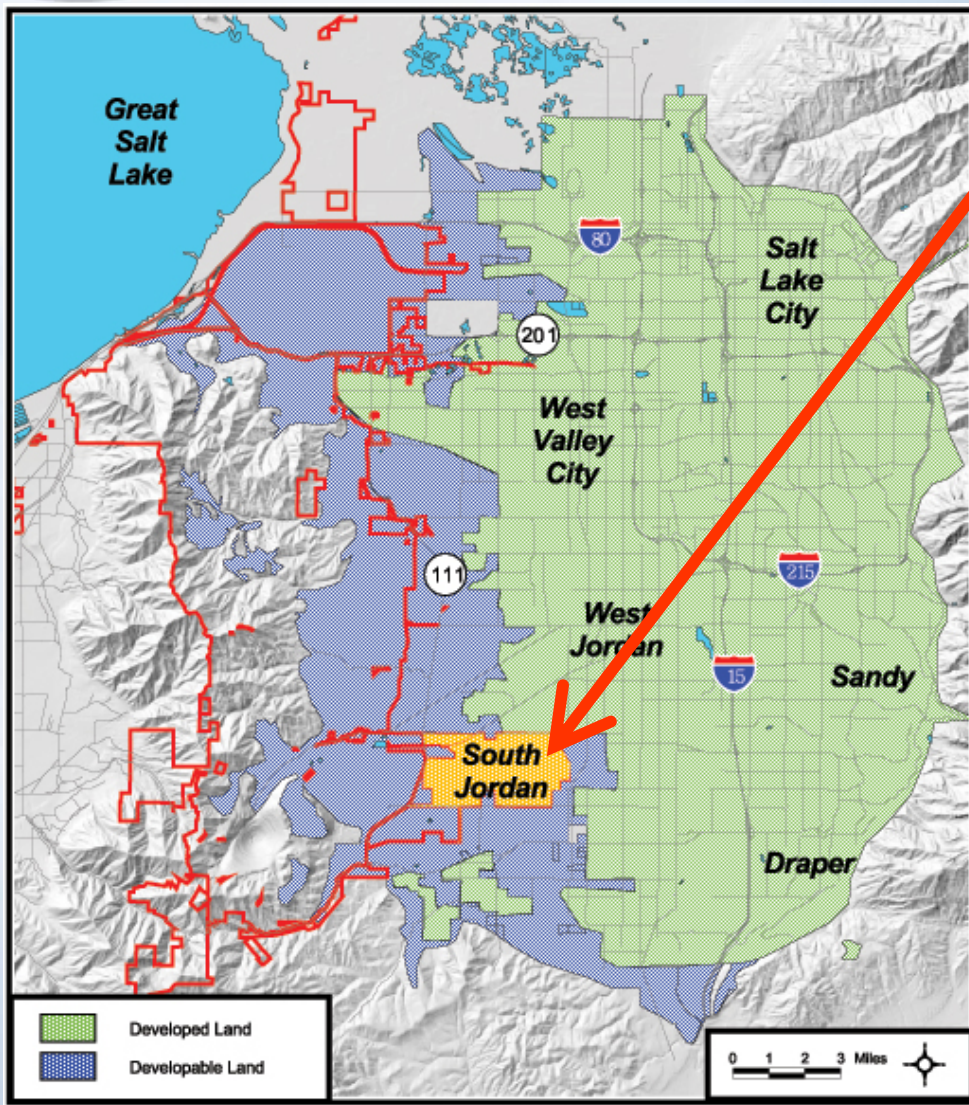
Fund for with private funds by the Coalition for Utah's Future, sponsors of Envision Utah

Choosing a Scenario

(Weighted vs. Unweighted Results)



Daybreak



Quality Growth Strategy

Six Goals, 42 Strategies

- Enhance Air Quality
- Increase Transportation Choices
- Preserve Critical Lands
- Conserve Water Resources
- Provide Housing Opportunities
- Maximize Efficiency in Public Investments

Development Types

Non-Walkable

- Low Density Residential
- Industrial, Office Activity Center

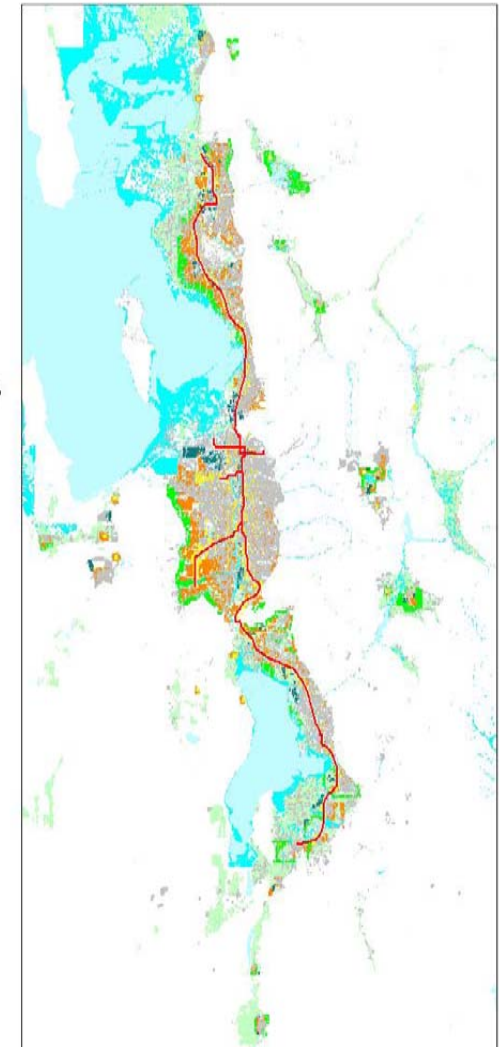
Walkable

- Town and Village
- Downtown

Open Space

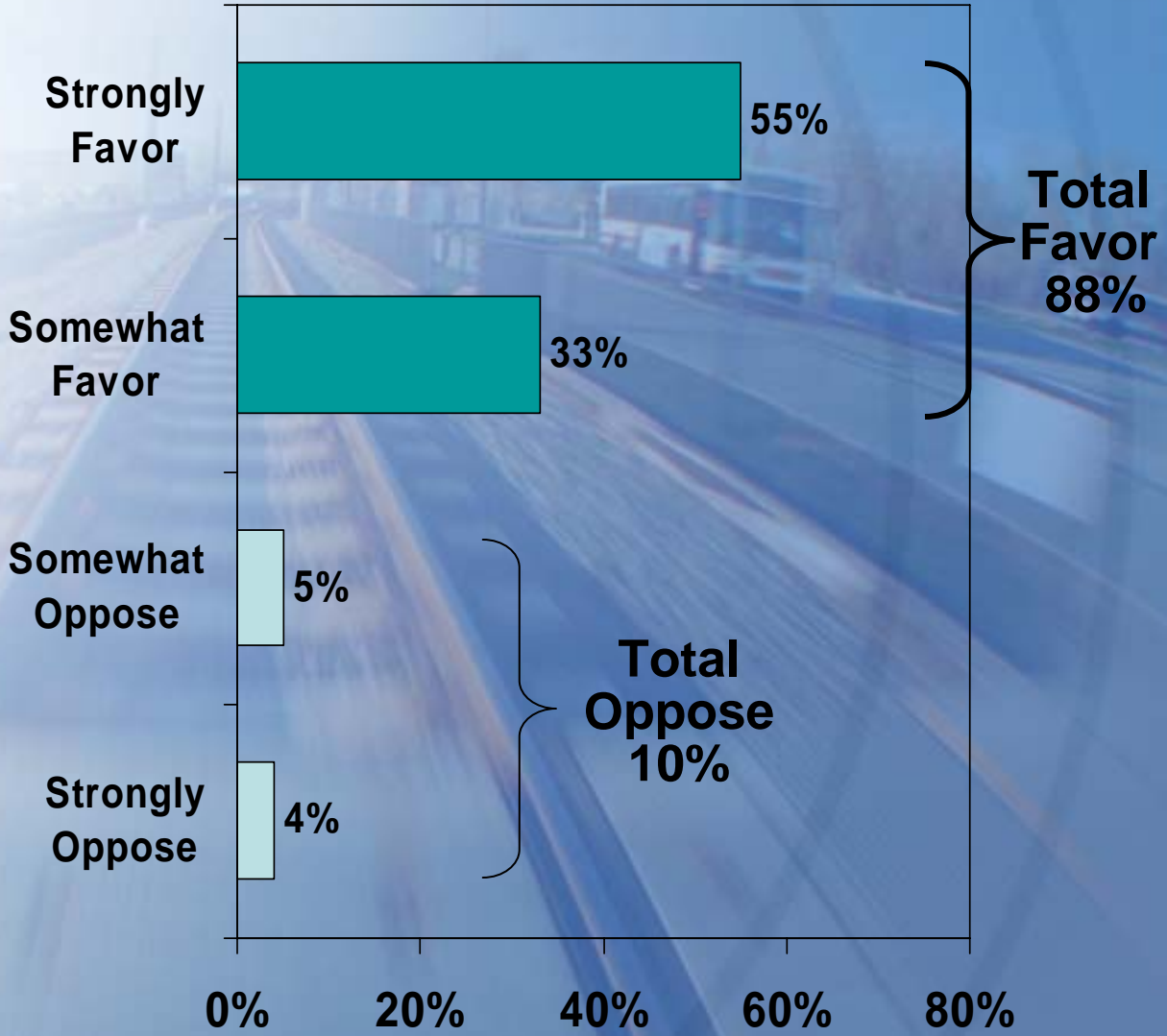
- Rural Cluster

- Rail Transit



Utah's Public Transportation

Do you favor or oppose the EXPANSION of light rail, often referred to as TRAX, and other public transportation systems?



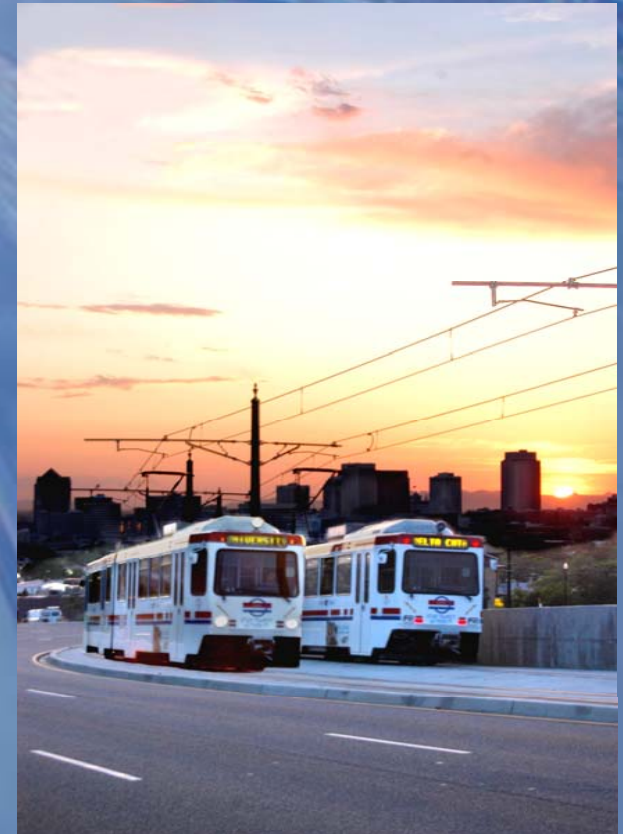
The Long Range Plan is an Integrated Road and Transit Plan

A Complete Mobility System



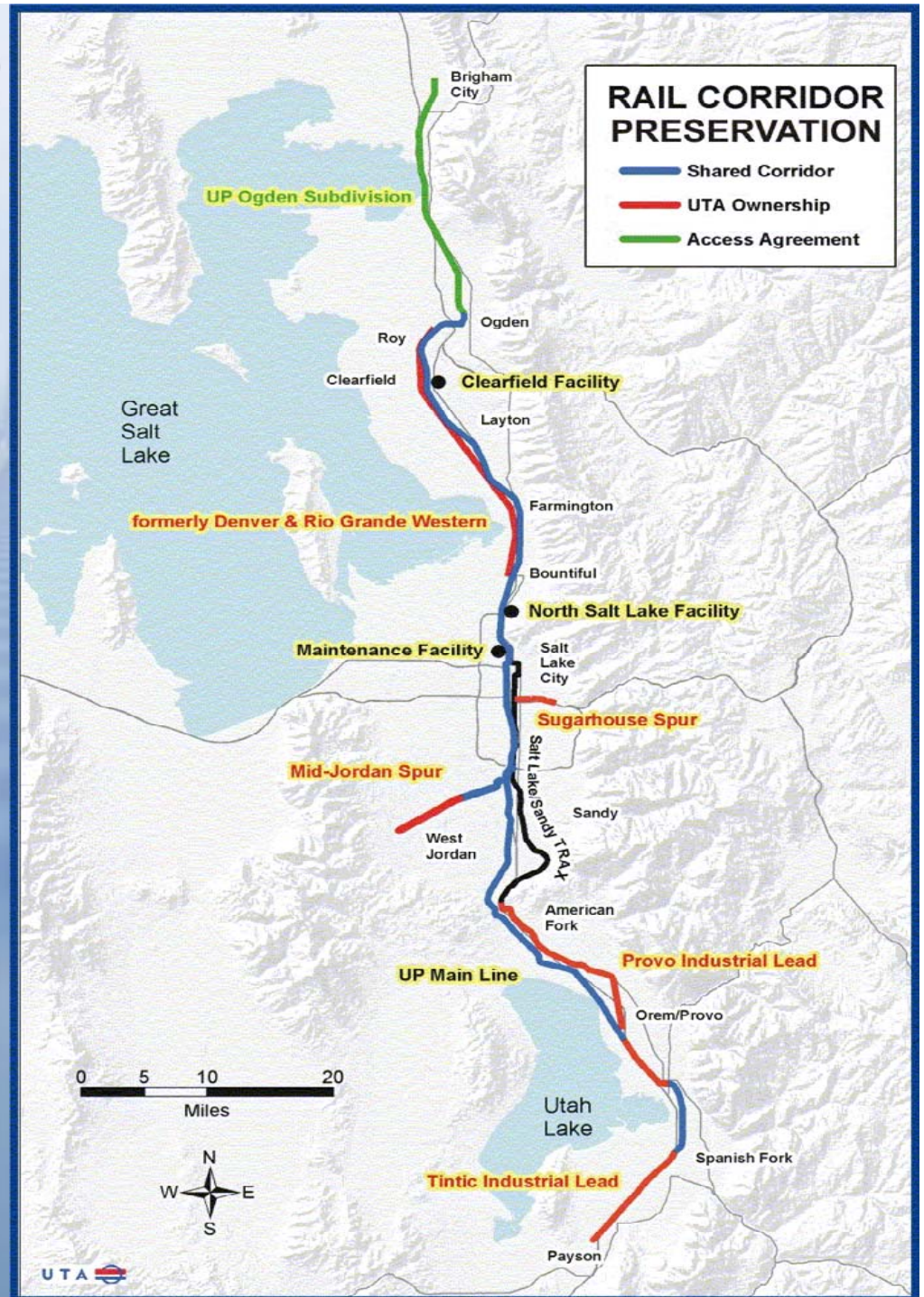
+

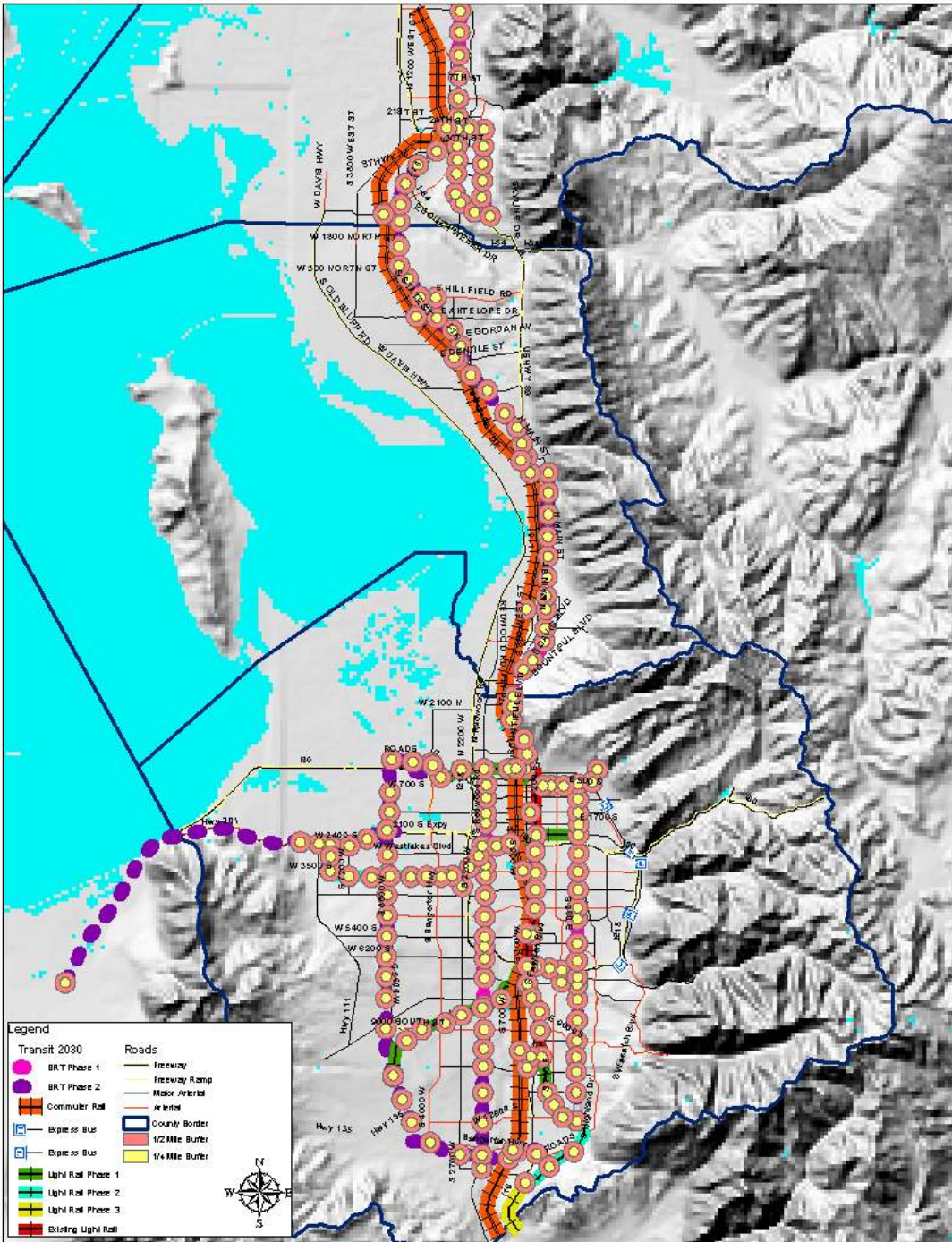
**We
Need Both**



Future Transit

- \$185 million acquisition
- Purchased 175 miles of rail right-of-way
- Created nine future transit corridors





Estimated Statistics between Salt Lake, Davis and Weber Counties:

Acres within ½ mile of transit nodes:

80,000

Housing units within ½ mile transit nodes @ 8 DU/acre on half of the acres:

320,000 units

Population estimate @ 3 persons per household:

960,000

80,000 Acres = 125 Square Miles



Employment Centers



Walkable Mixed-Use Villages



Housing opportunities



Communicating
a Vision
to the Public

Public Transportation Maintains Affordability

Convenient transit

=

**Lower transportation
costs**

=

**Less need to “drive until
you qualify”**



City Growth on New Land

**11 square miles of
development per
year**





The earlier we build the public transportation system, the greater the benefits on the future quality of our lives.

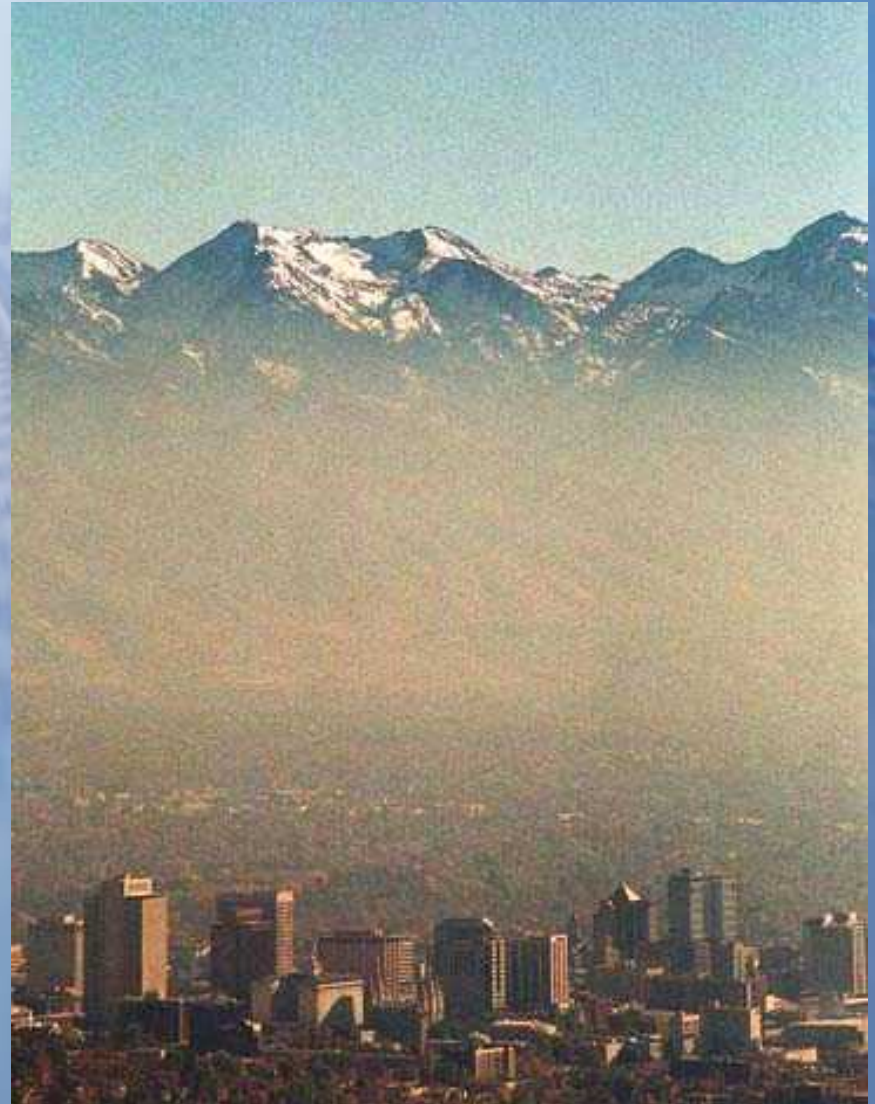
Transit Moves the Most People When Roads Need the Most Relief

Light Rail in rush hour currently carries equivalent
of one interstate lane of traffic



Air Pollution

- Air quality affects our health
- Stricter air quality standards could cut off federal road funds
- Violations could limit growth of existing and new businesses



Transit and Economic Growth

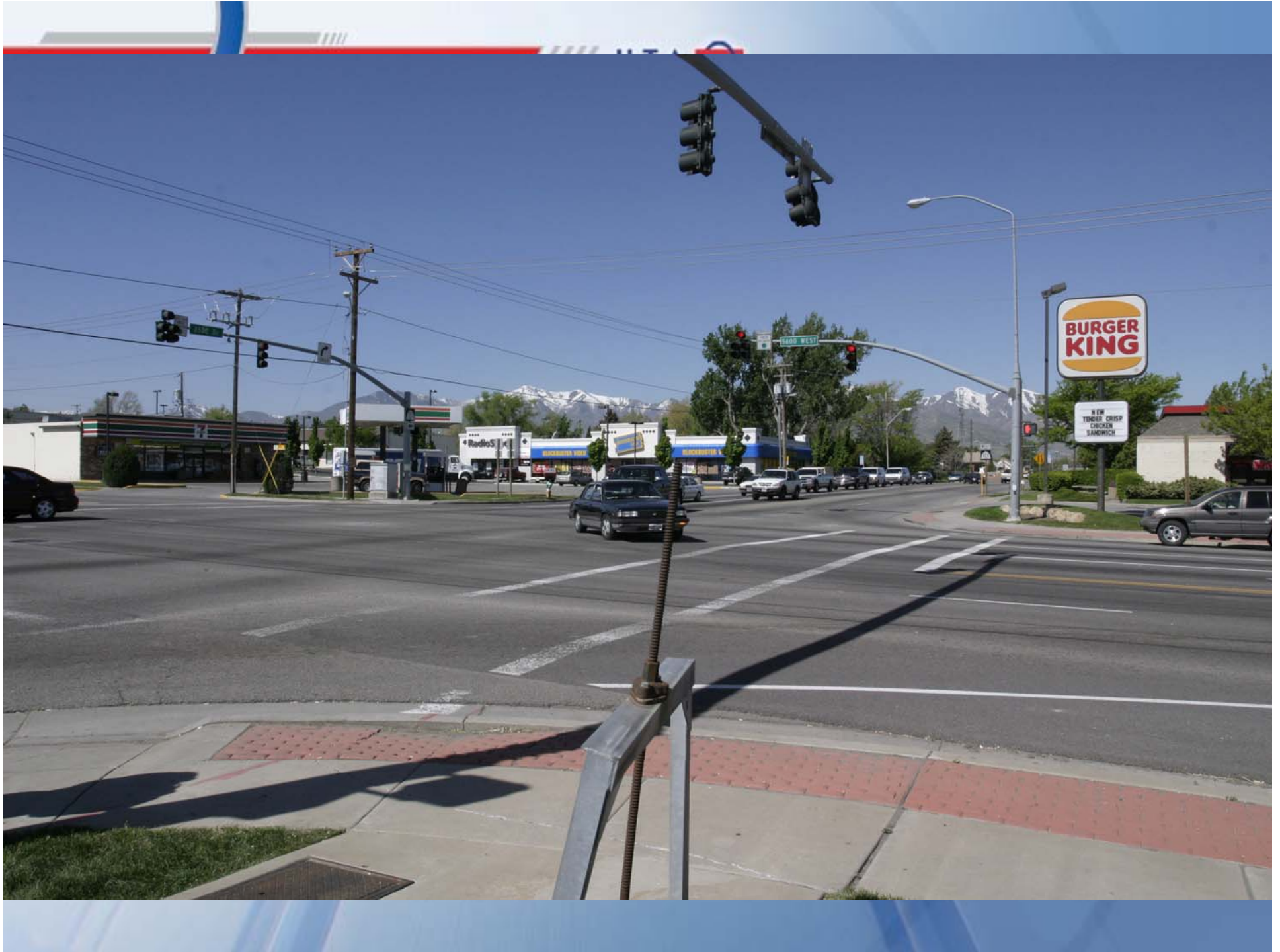
77 percent of new economy companies rated access to mass transit as an extremely important factor in selecting corporate locations (Jones Lang Lasalle).

What Kind of Community Do We Want To Be?

“The true character of a community is best reflected in how they treat the new, the poor, and the disadvantaged among them.”

Public Transportation is Vital to Elderly, Disabled, and Poor

- By 2030, 500,000 Utahns will be seniors- many will be unable to drive
- Currently, 175,000 adult Utahns have disabilities - 35% unemployed - due in part to lack of public transportation
- 94% of welfare recipients nationally do not own cars



UTA





Layton, UT: Main Street



Layton, UT: Main Street



Layton, UT: Main Street



Transit Increases Capacity in Corridors



Plans For The Future

- Bus Improvements
- Bus Rapid Transit (BRT)
 - 3500 South
 - 1300 East
 - Redwood Rd.
 - Tooele
 - South Davis
 - Washington Blvd.
 - Ogden/Layton
 - Ogden/WSU
 - Utah County
- Commuter Rail South
- Light Rail Extensions
 - Airport
 - Draper
 - Mid-Jordan
 - Sugarhouse
 - Daybreak
 - West Valley
- Transit Ways
 - East Bench
 - Mountain View Corridor
 - Ogden
 - South Davis
 - Sugarhouse

Current Projects

Commuter Rail: *FrontRunner*

First phase: Weber County to Salt Lake City

- 44-miles
- Eight stations
- Construction now 40% complete
- Open for service in 2008



FrontRunner Farmington Station



Future Success

- **Partnerships**

UTA needs community help in planning for the future and creating tomorrow's transportation legacy

- **New business model**

- **Integration of bus and rail**

- **Transit Friendly Land Use**

Local government's land use is critical to creating a successful transit system

- **Pedestrian Friendly Environments**

The Benefits Of Transit

Infrastructure Savings

- Transit invites re-use of buildings and land
- Decreases the need for new infrastructure
- Brings housing closer to jobs
- Keeps employment centers near neighborhoods

Other Community Benefits

- Improved mobility for everyone, including seniors, people with disabilities, etc.
- Health and air quality benefits

