

Strategy Analysis

**Prepared for:
Envision Utah**

**Prepared by:
Quality Growth Efficiency Tools (QGET)
Technical Committee**



November 15, 1999

Overview

- **Contributors**
- **Limitations**
- **Context**
 - **Motivations**
 - **Challenges**
- **Strategy Analysis**

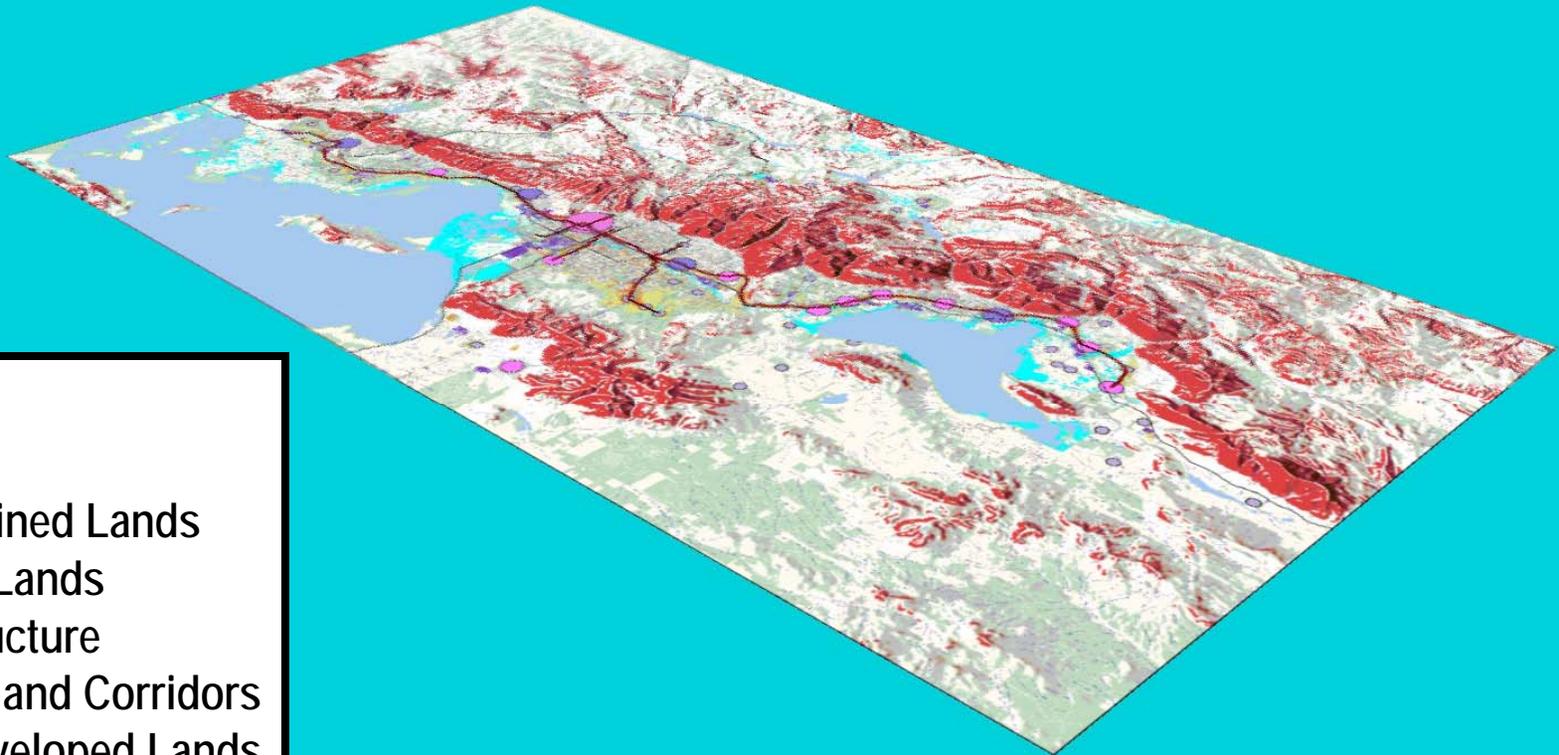
Contributors

- **88 Cities**
- **10 Counties**
- **2 Metropolitan Planning Organizations**
- **5 State Agencies**
- **Psomas Engineering**
- **Fregonese Calthorpe Associates**

Limitations

- **Work in progress**
- **Conservative estimate of benefits**
- **Prepared at the regional scale**
 - **Site or project specific inferences should not be made**
- **Limited scope**
 - **Transportation, air quality, land use, water, and infrastructure costs**

Quality Growth Strategy



Layers:

Constrained Lands
Critical Lands
Infrastructure
Centers and Corridors
New Developed Lands
Re-Developed Lands



QGET

November 15, 1999



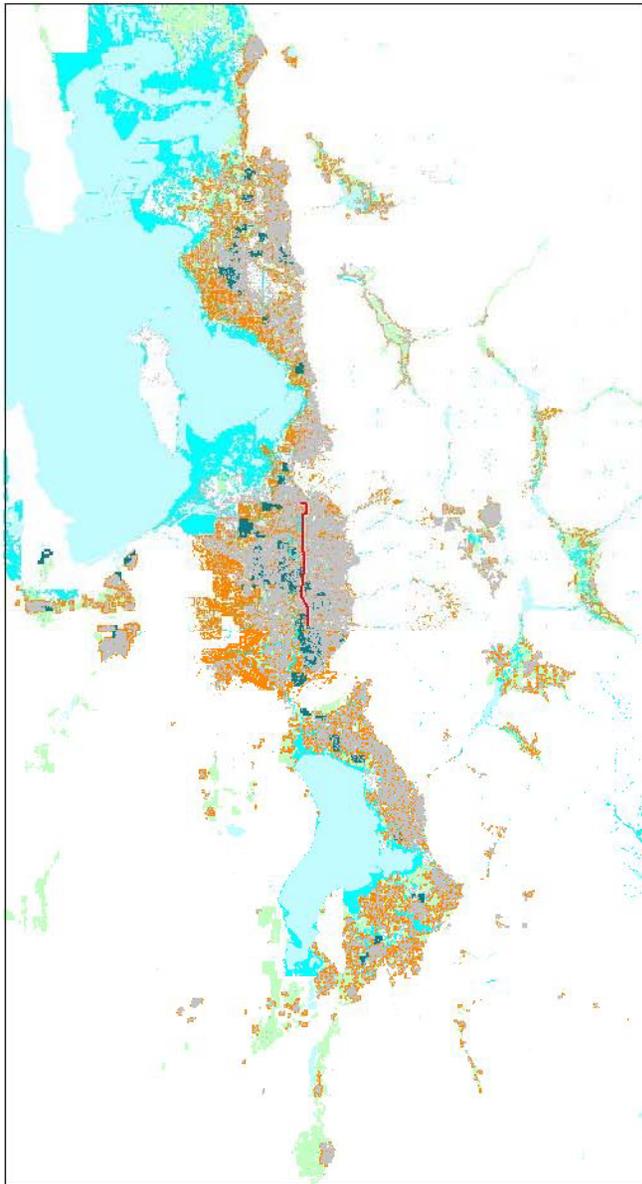
QGET

November 15, 1999



QGET

November 15, 1999



Baseline Scenario

Development Types

Non-Walkable

- Low Density Residential
- Industrial, Office Activity Center

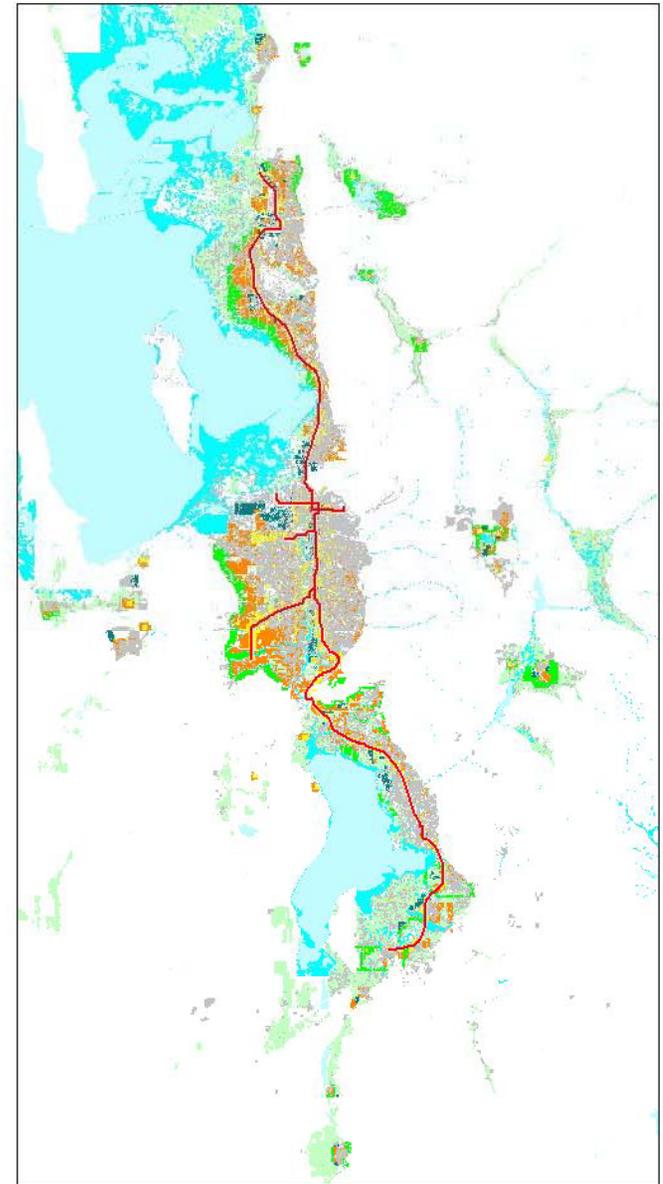
Walkable

- Town and Village
- Downtown

Open Space

- Rural Cluster

- Rail Transit



Quality Growth Strategy

Baseline

Depicts how the region is likely to develop based on recent plans

- **Salient Characteristics**

- **Refinement of past work (2nd revision)**
- **Includes the addition of approximately one million more people by 2020**
- **Snapshot of the future based on state and regional plans**
- **Based on trends of the past 20-30 years**

Strategy

Depicts how the region is likely to develop based on adherence to Envision Utah's goals and strategies

- **Salient Characteristics**

- Includes addition of approximately one million more people
- Depicts impacts of voluntary, interjurisdictional cooperation
- Reflects market-based housing mix
- Requires additional water conservation and telework
- Consistent with previously expected population and employment trends at the county-level
- Requires incremental changes from current development patterns

The pursuit of this strategy is motivated by the common and regional nature of many of our challenges. We share the same roads, airshed, water resources, and natural assets. We have an enviable quality of life, but we have major challenges.

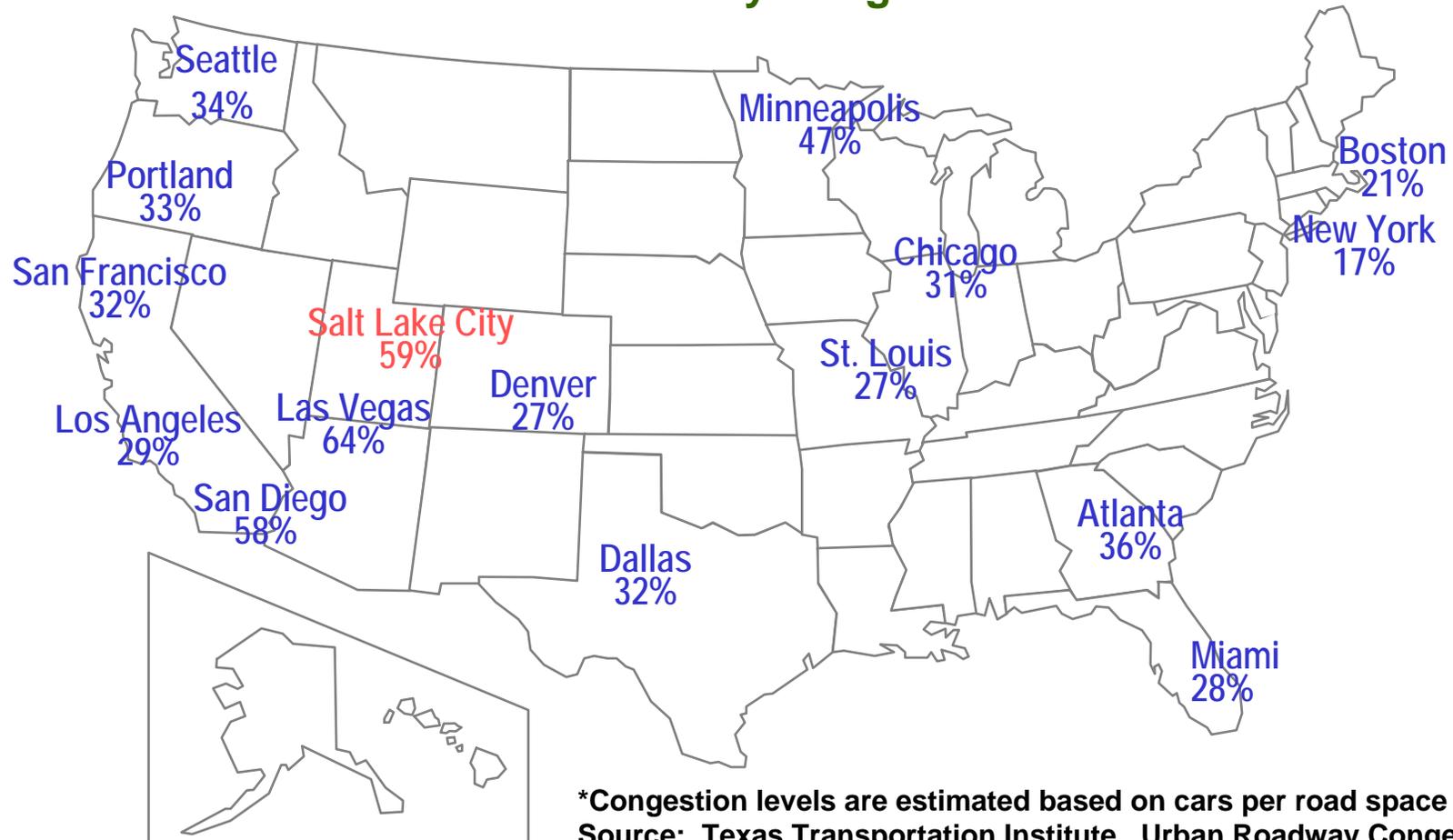


QGET

November 15, 1999

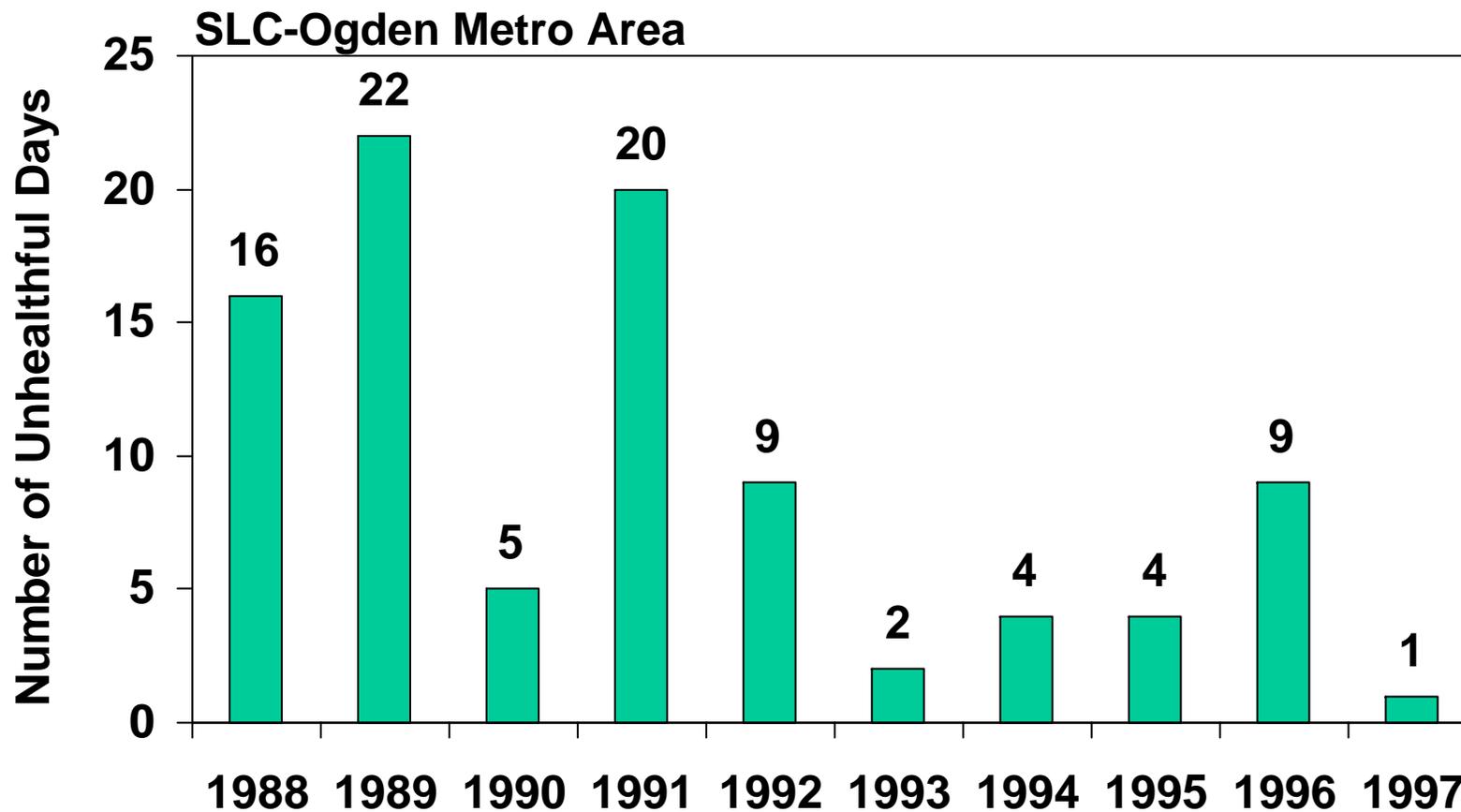
Challenge #1: Congestion

Percent Increase in Roadway Congestion: 1982-1996



*Congestion levels are estimated based on cars per road space
Source: Texas Transportation Institute. Urban Roadway Congestion: 1998

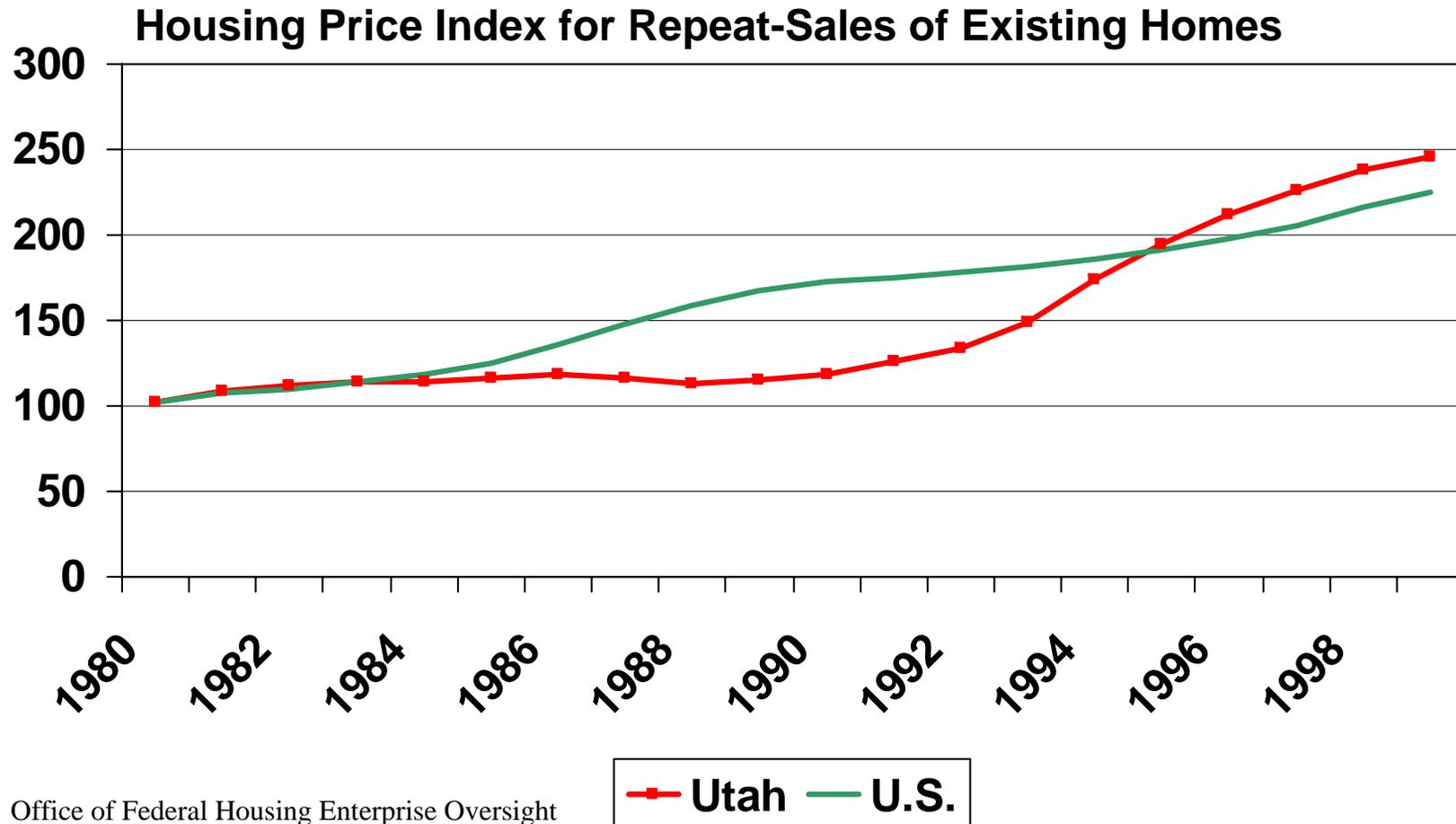
Challenge #2: Air Quality



QGET

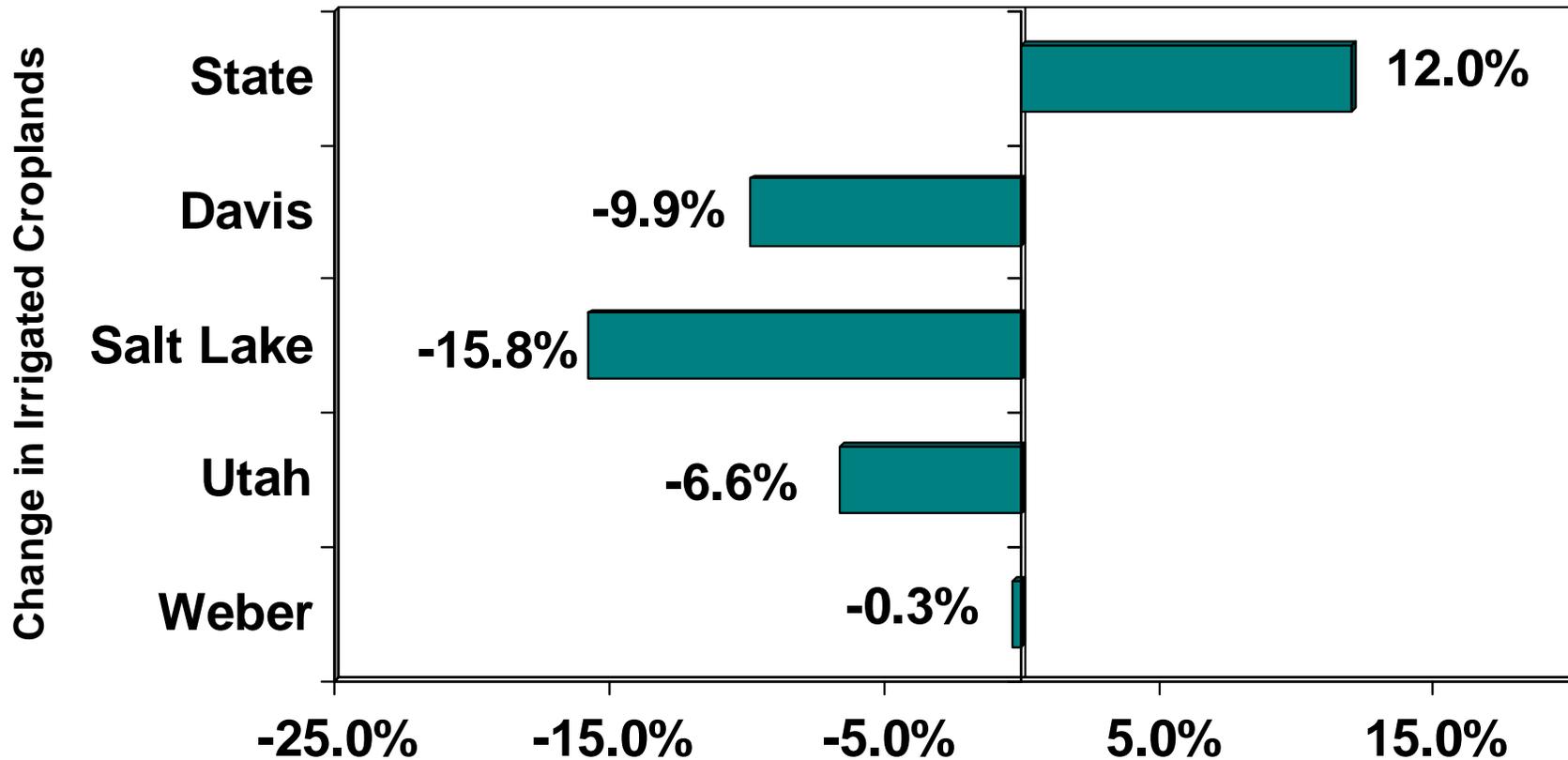
November 15, 1999

Challenge #3: Housing Prices



Challenge #4: Loss of Farm Land

1982-1997



Source: 1982 & 1997 Census of Agriculture

Challenge #5: Infrastructure Costs

Infrastructure Costs

Collector	\$6 Million/Mile
Arterial	\$16 Million/Mile
Light Rail	\$20 Million/Mile
Water Transmission	\$690 Thou/Mile
Sewer Transmission	\$70 per Foot

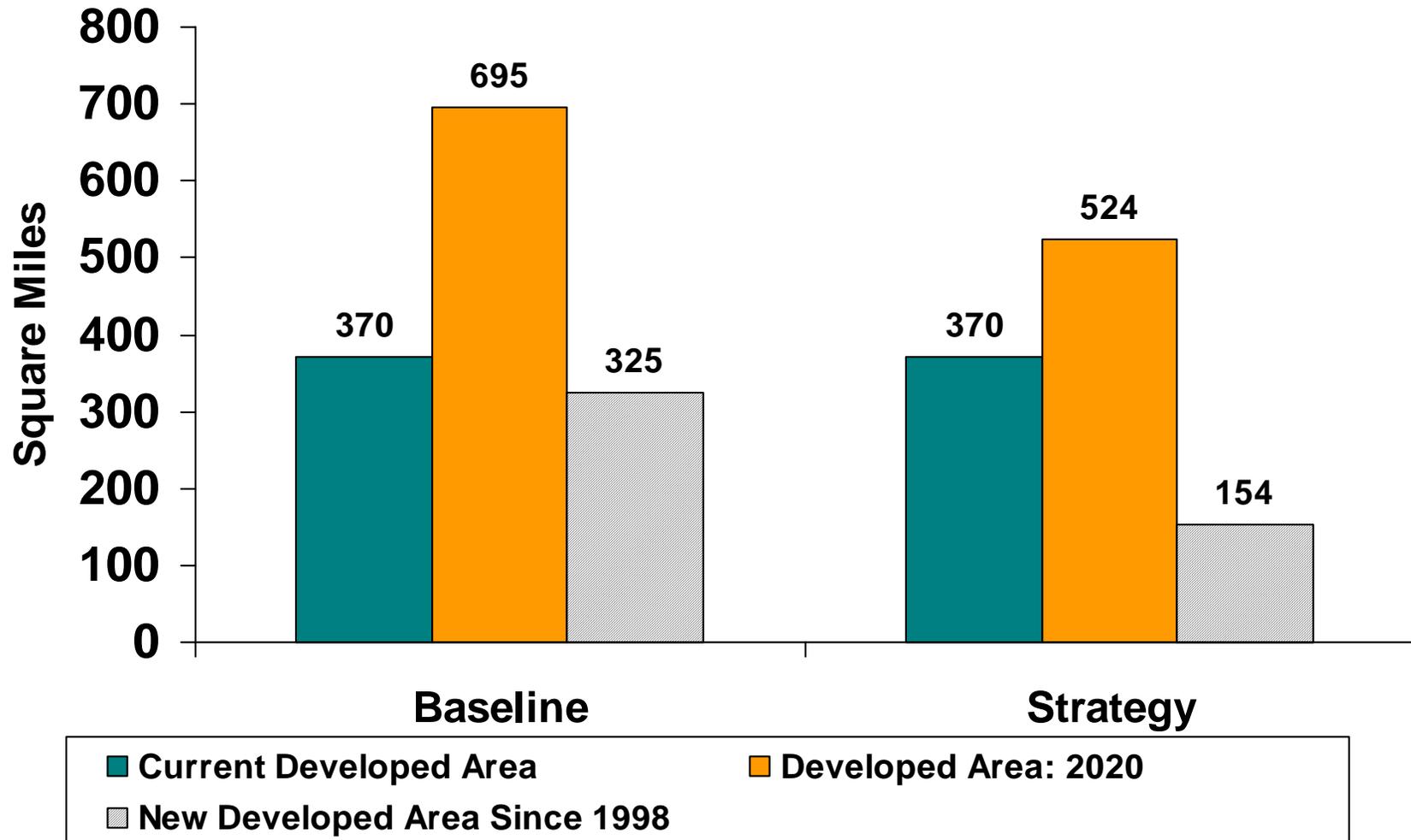


***State of Utah appropriated
\$955 Million in FY 2000
for Transportation and
Water Projects***

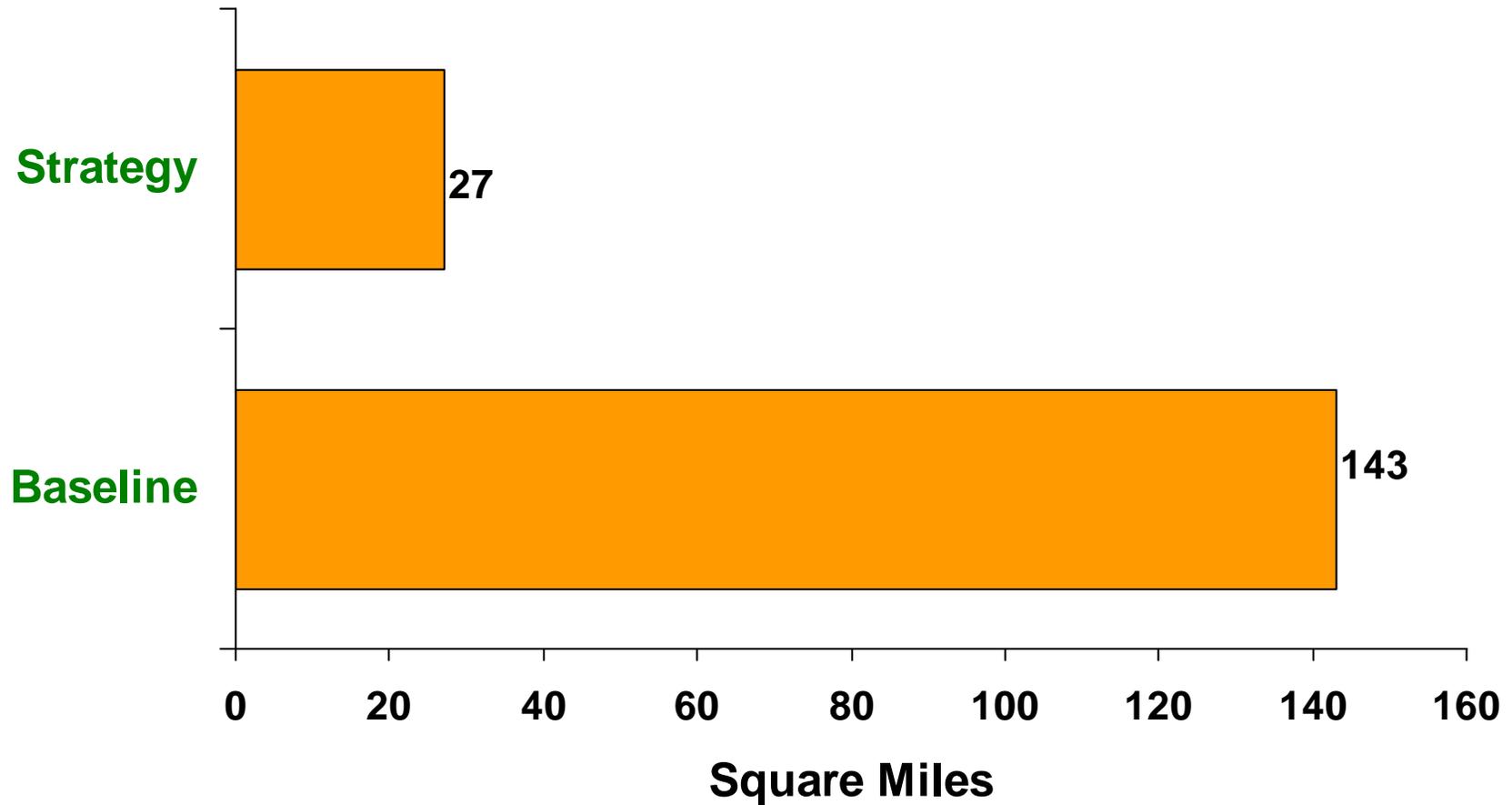
Strategy Analysis

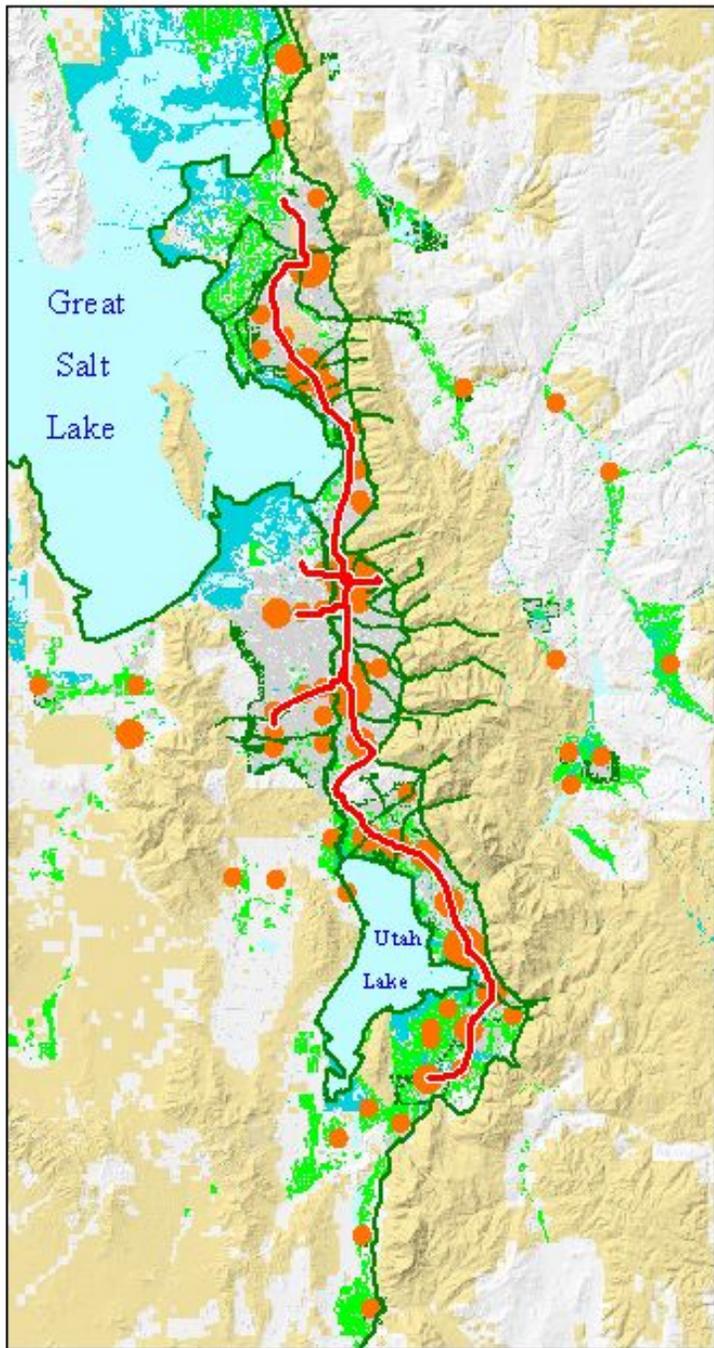
- **Land Use -- Conserves More Land**
- **Housing -- Provides More Choice, Market Driven**
- **Transportation -- More Efficient, Less Congestion**
- **Air Quality -- Lower Emissions**
- **Water Demand -- Reduces Consumption**
- **Infrastructure Cost -- Requires Less Money**

Land Consumption

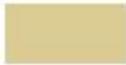
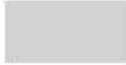


Agricultural Land Converted to Urban Use

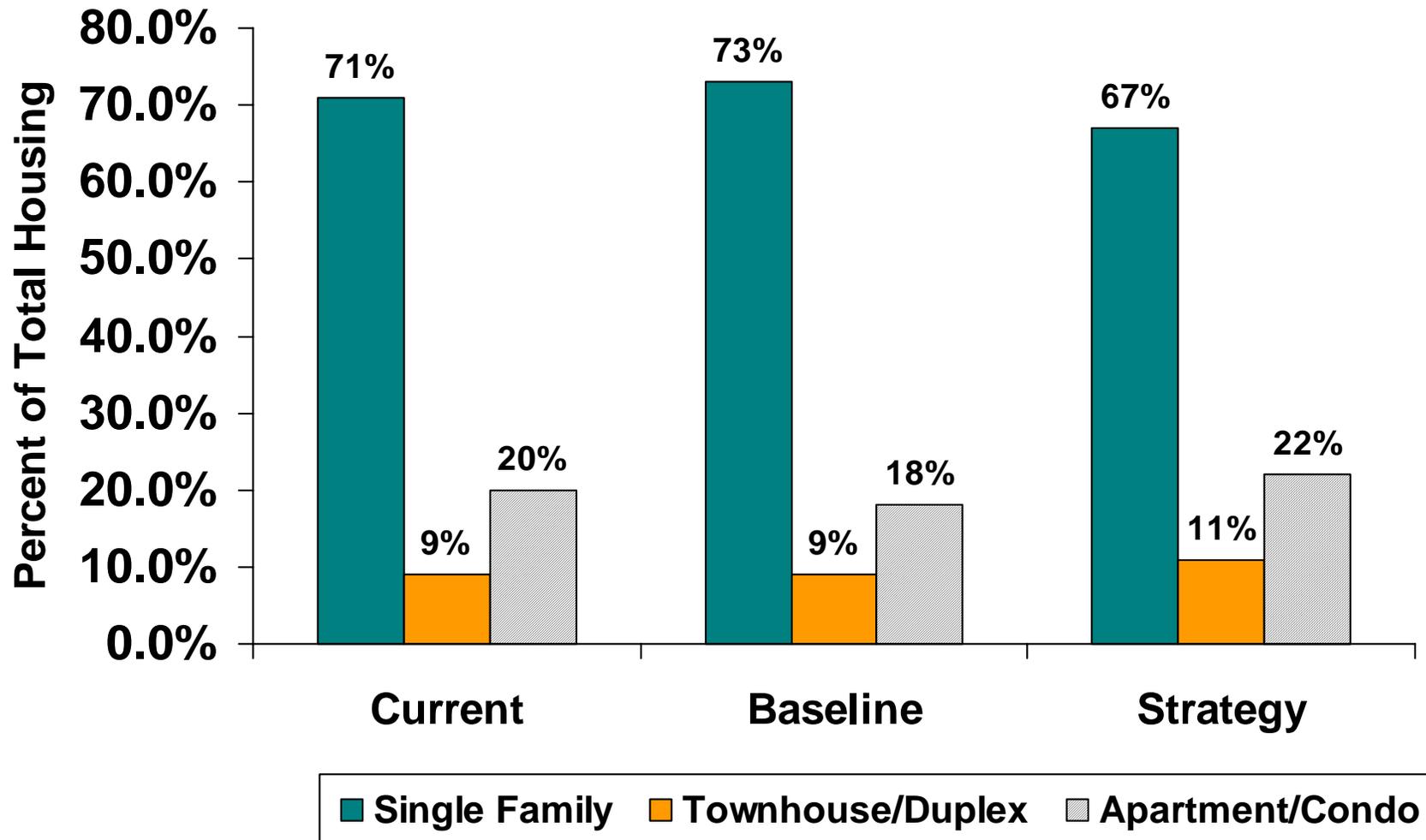




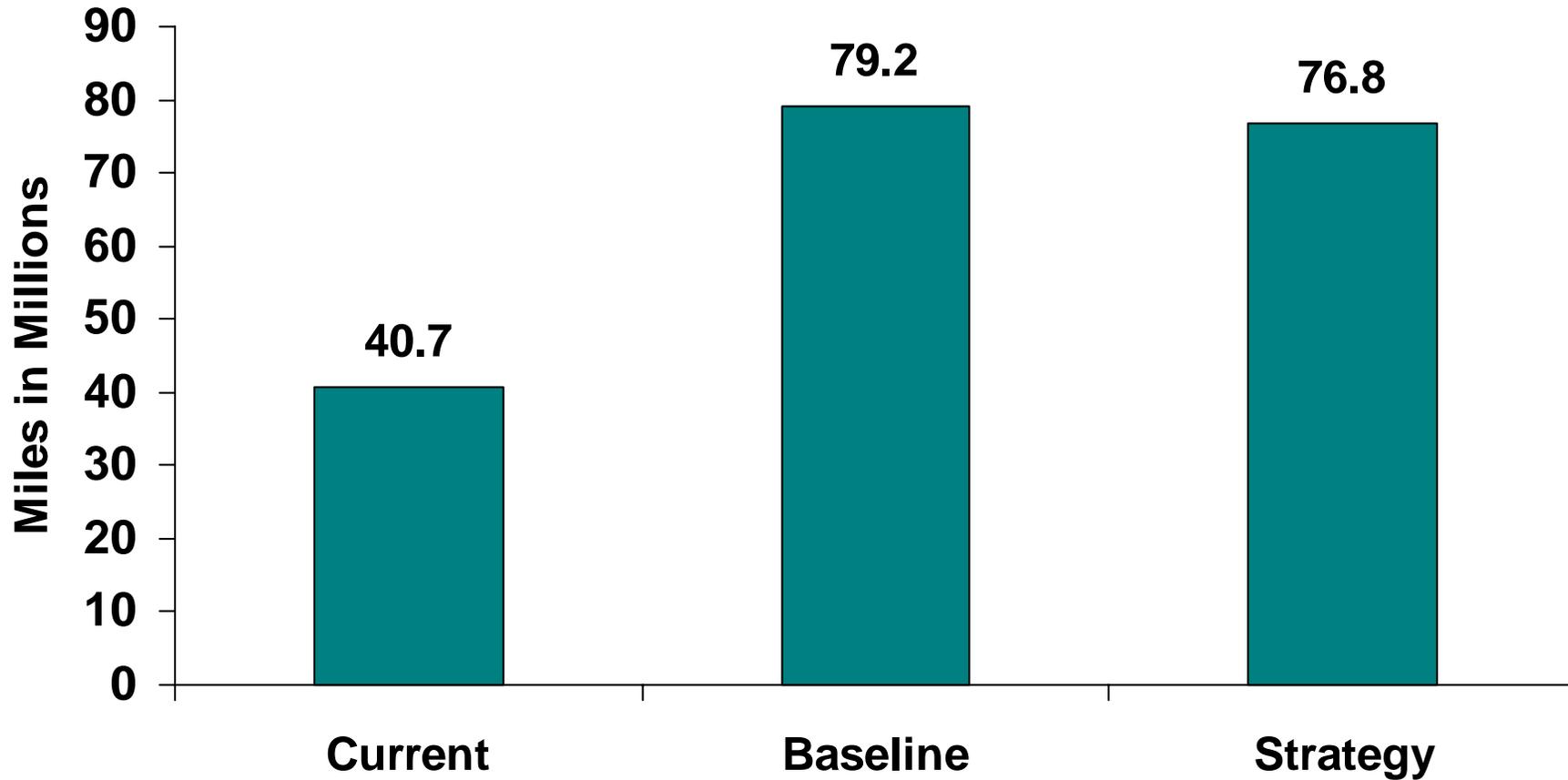
Population Centers and Critical Land

-  Population Centers
-  Rail Transit
-  Critical Lands Conserved
Rural Cluster Development
Trail/Stream Corridor
Lake Buffer
-  Public Lands &
Mountain Areas
-  Farmland
-  Wetlands &
Floodplain
-  Developed Area

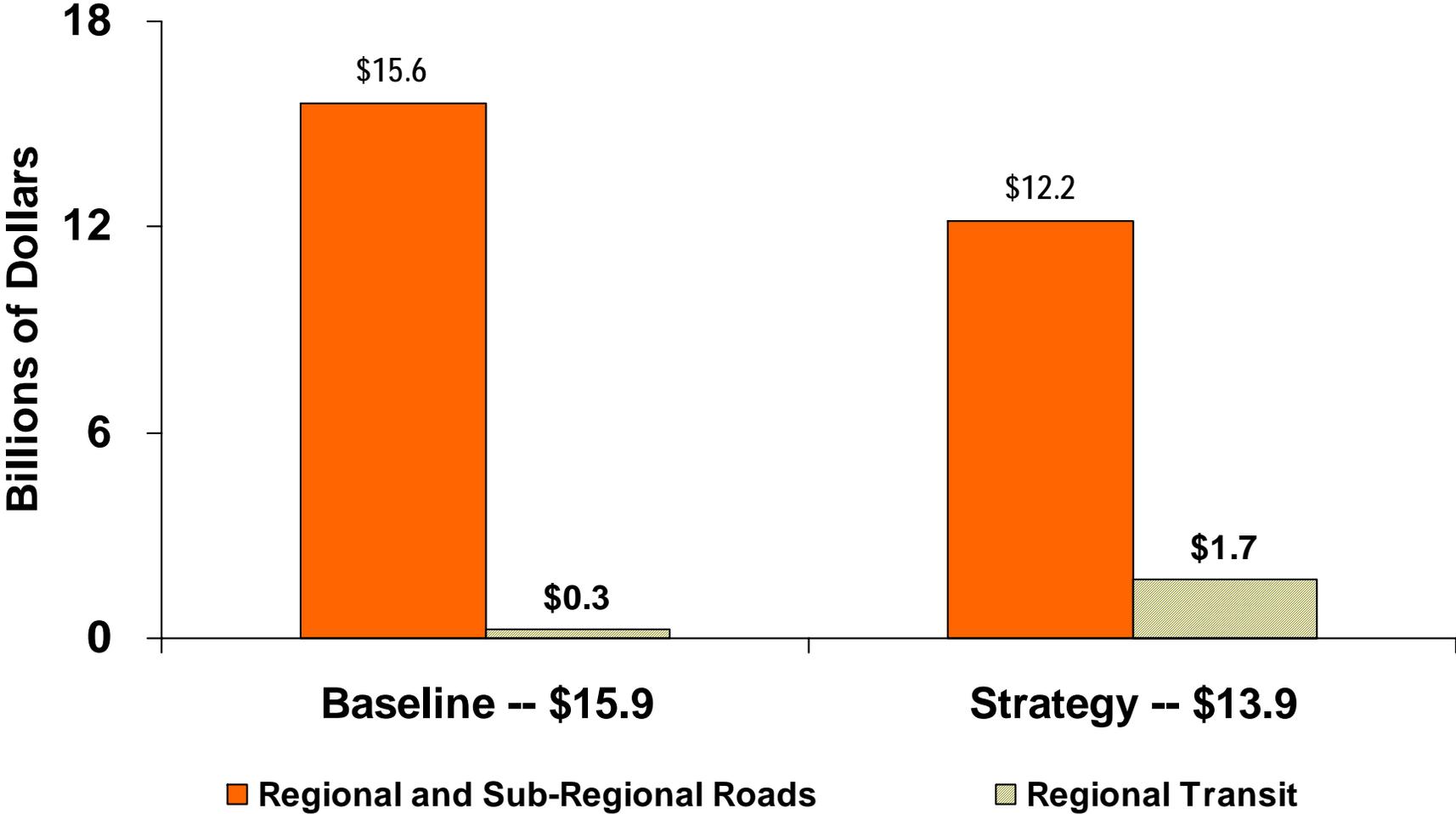
Housing Mix: Current and 2020



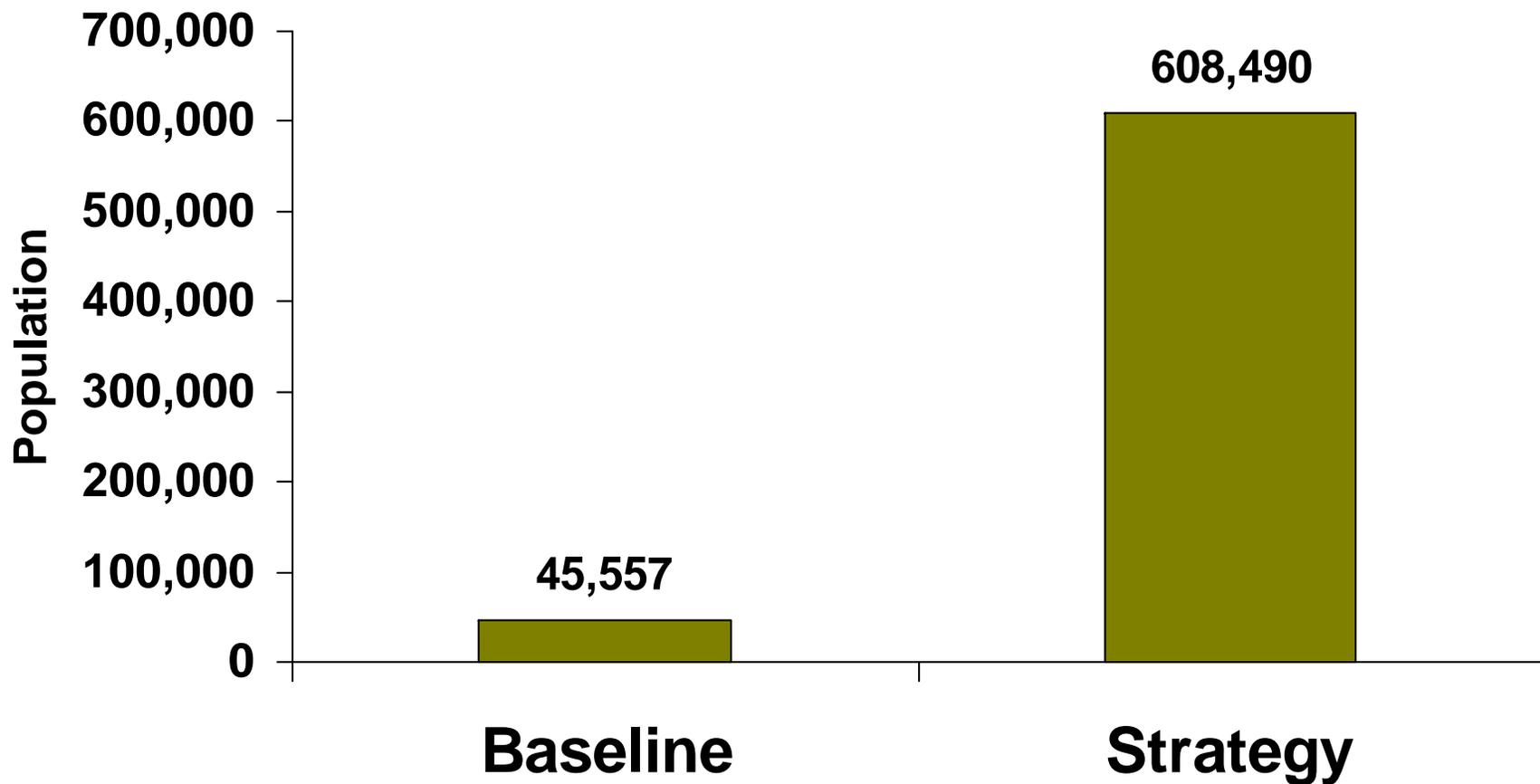
Vehicle Miles of Travel Per Day: Current and 2020



Transportation Investment: 1997-2020

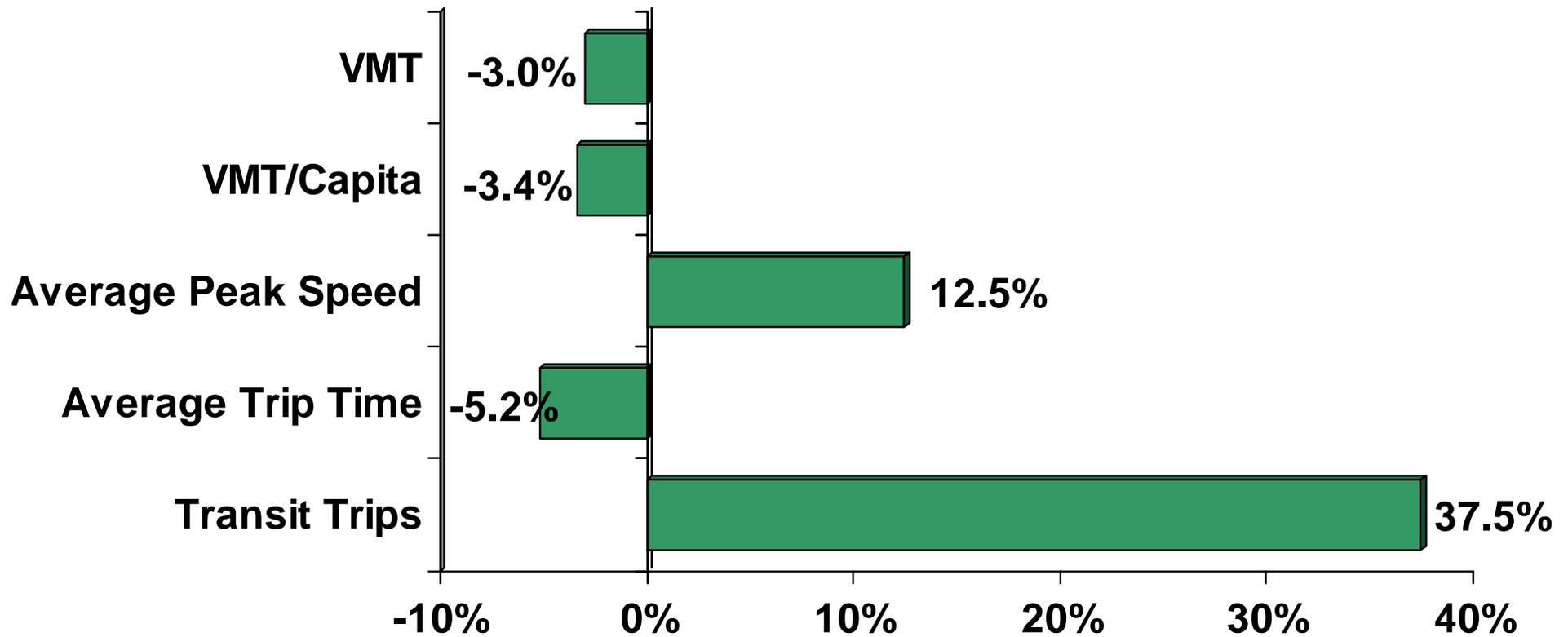


Population Within 1/2 Mile of Rail Transit: 2020

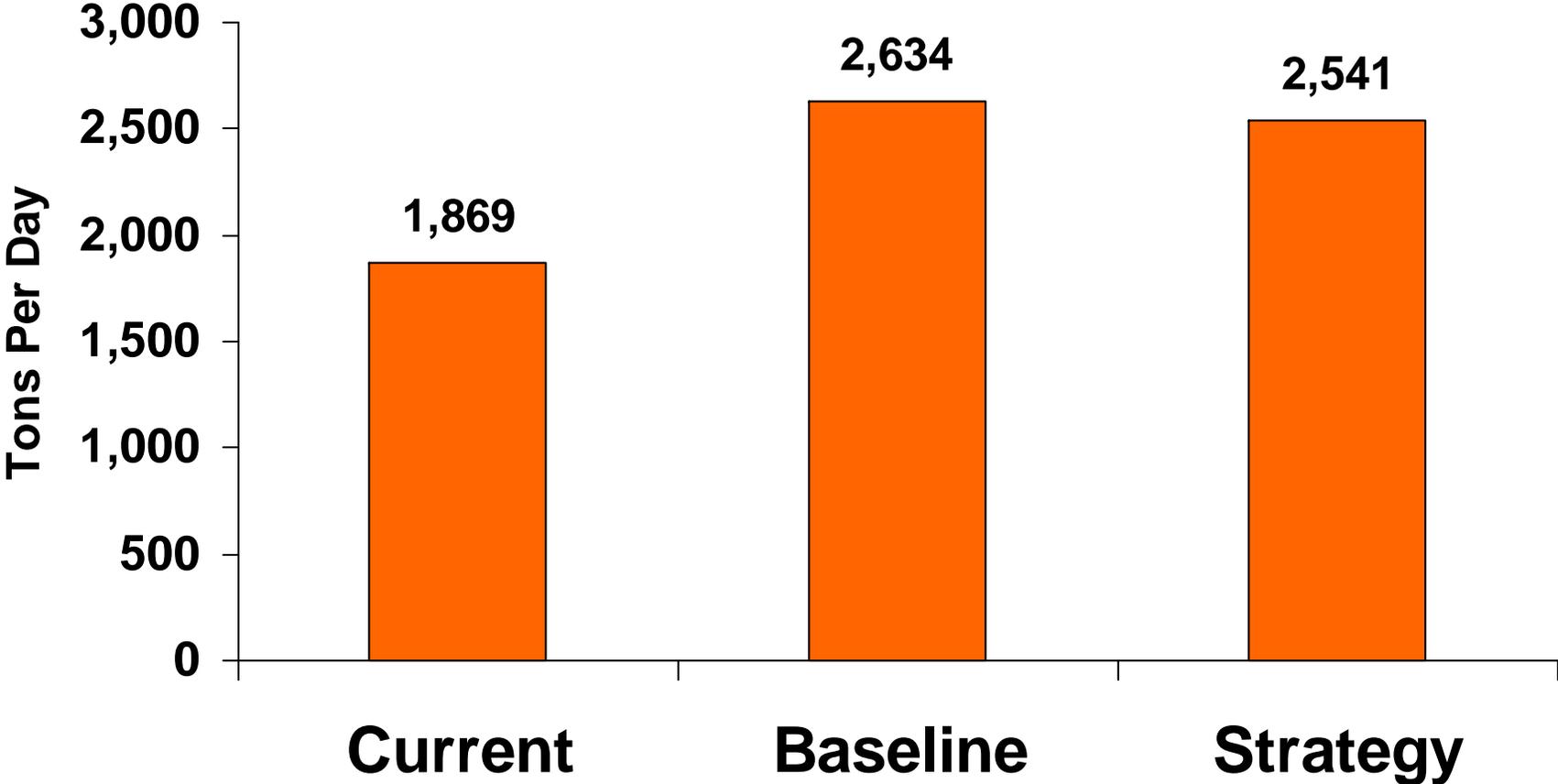


Transportation Comparison

Percent Difference Between Strategy and Baseline: 2020

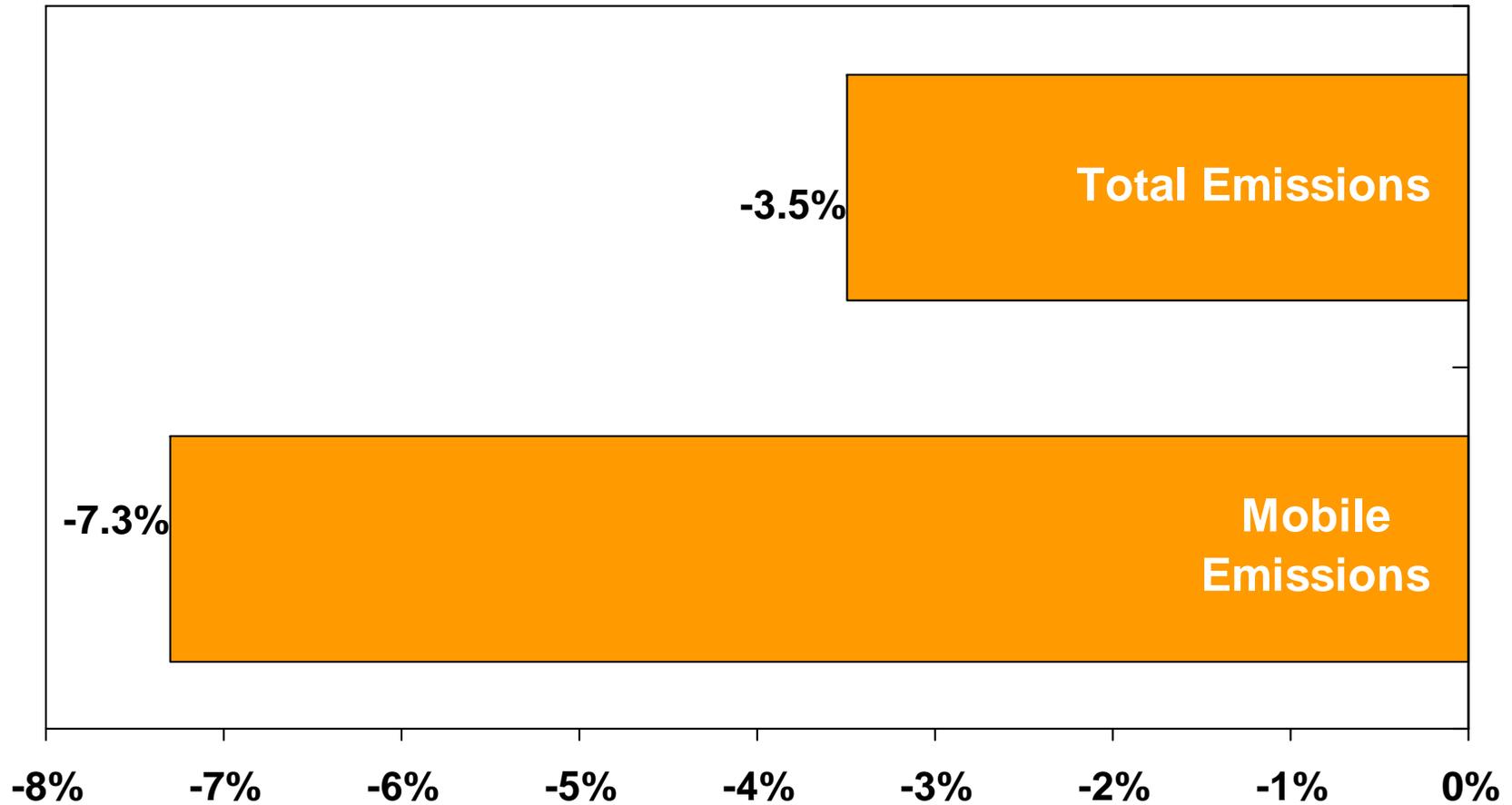


Total Emissions: Current and 2020

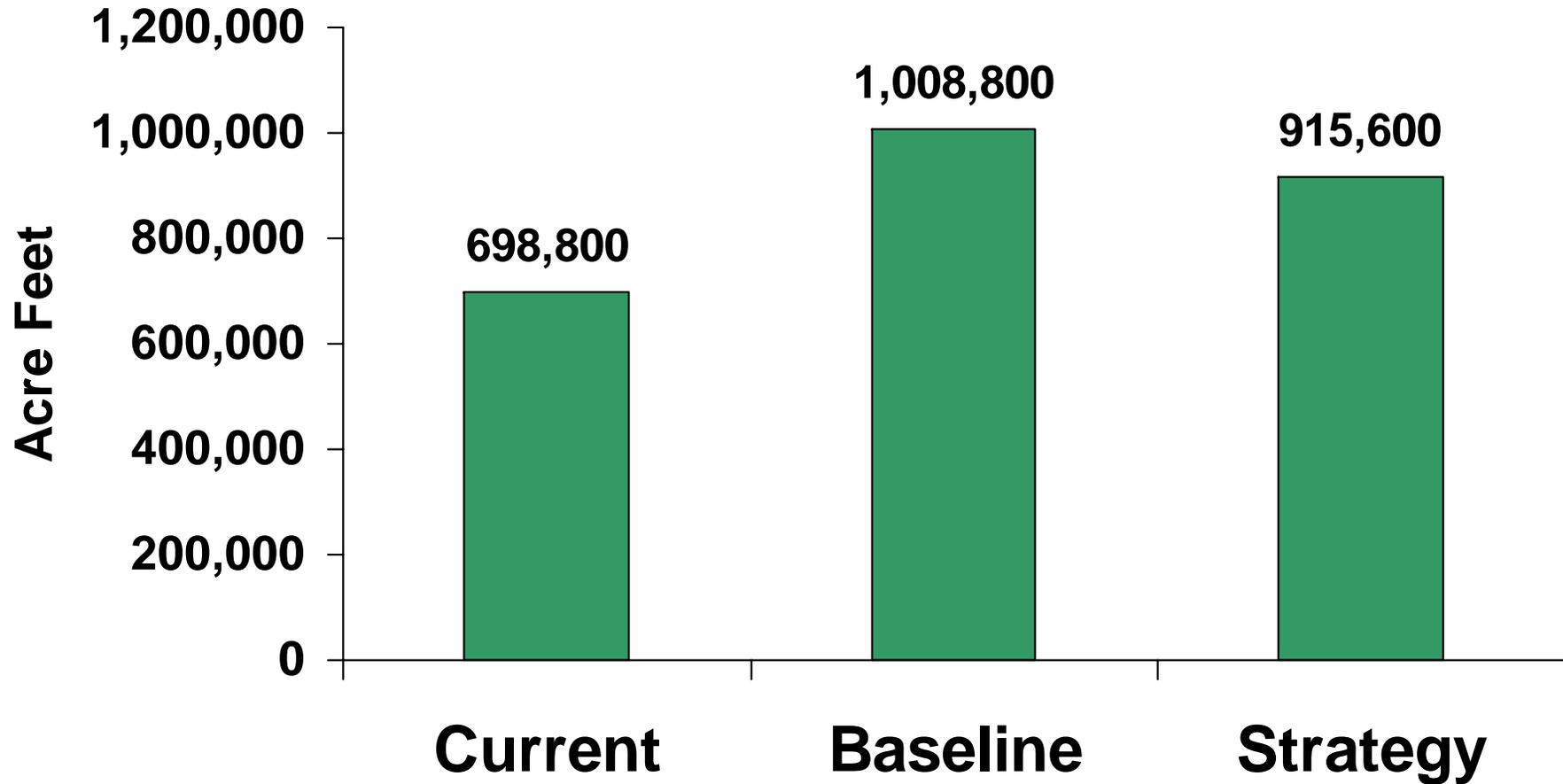


Emissions Comparison

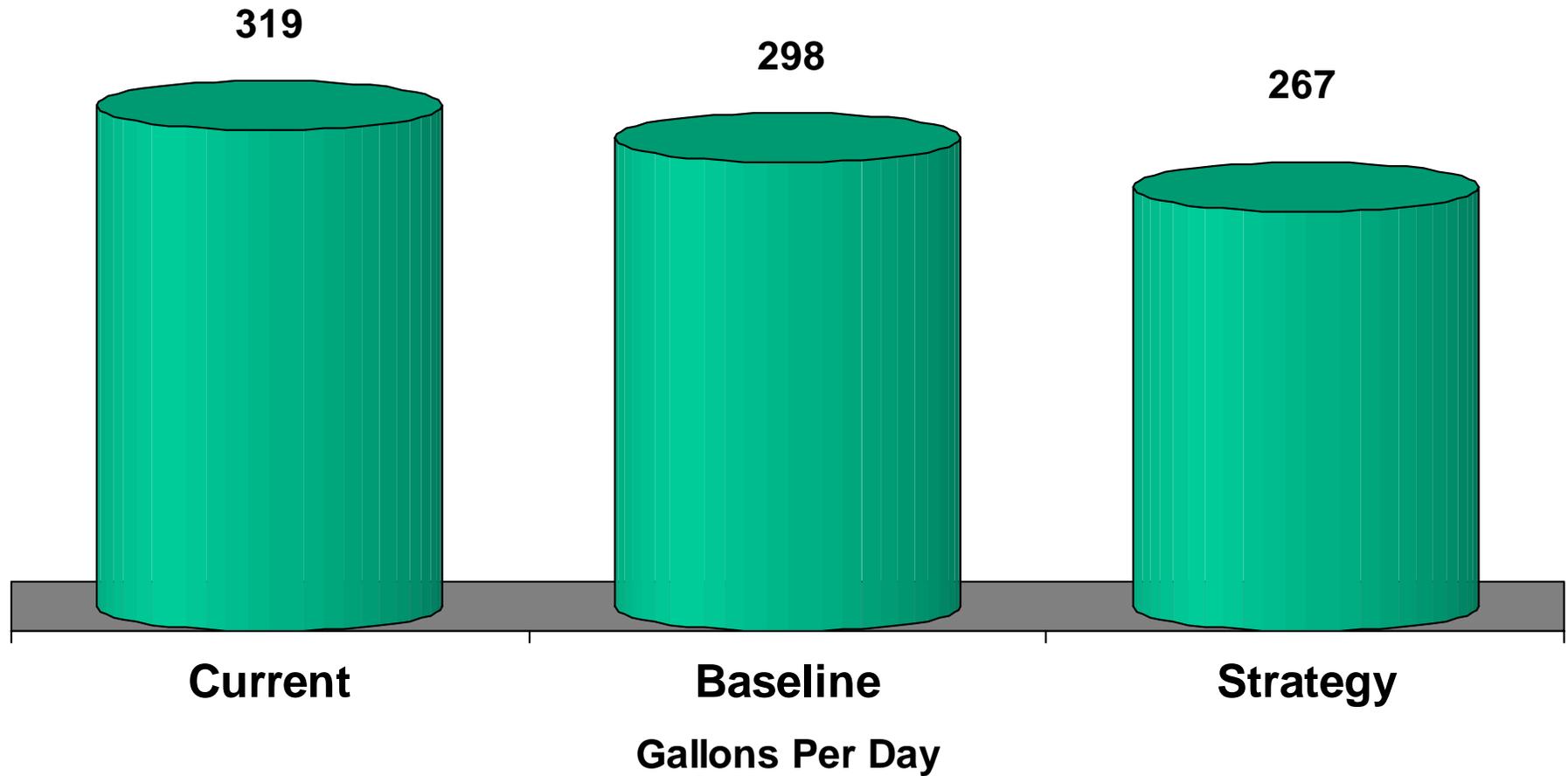
Percent Difference Between Strategy and Baseline: 2020



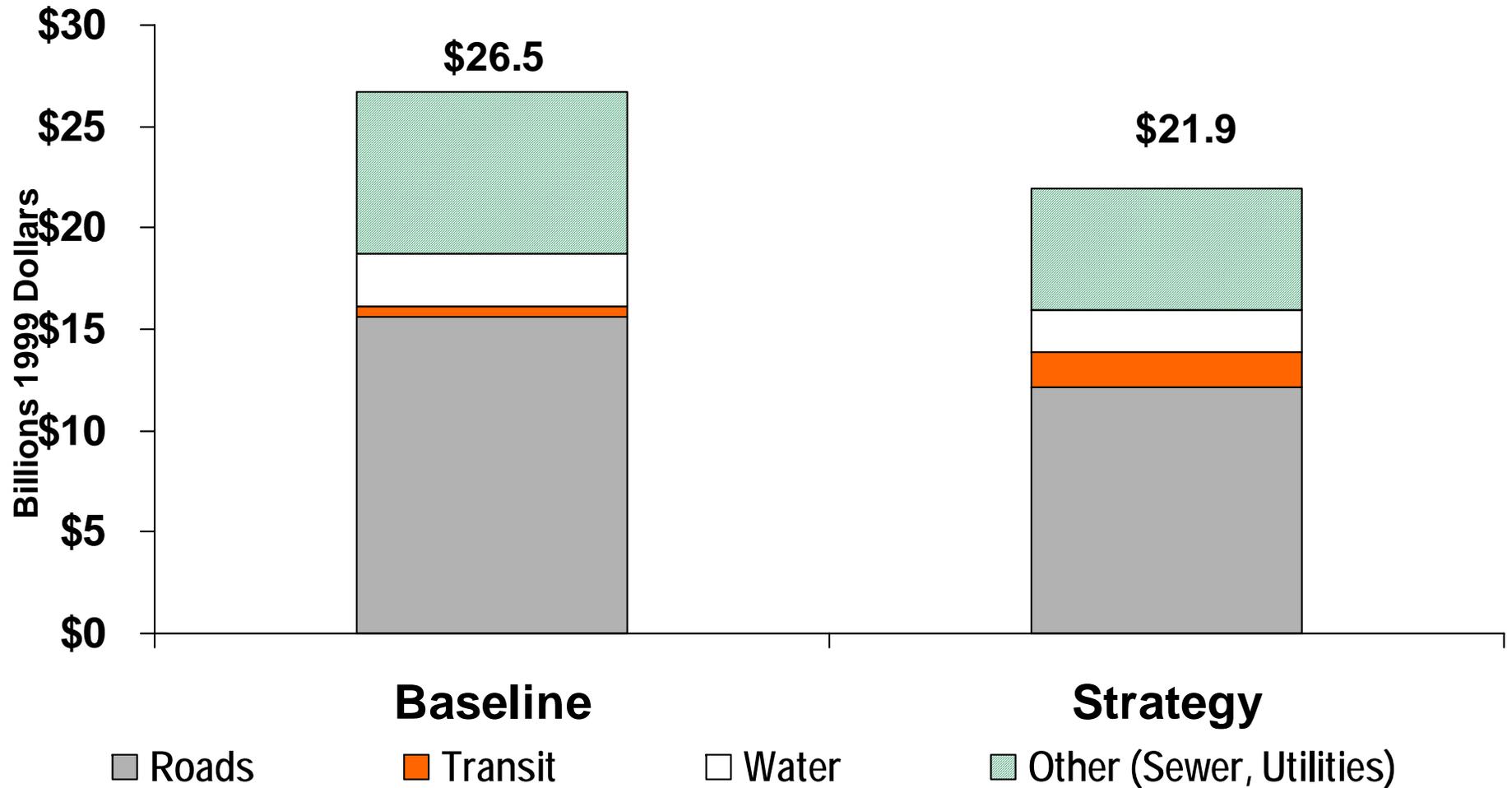
Water Demand: Current and 2020



Per Capita Water Use: Current and 2020



Total Infrastructure Costs: 1998-2020



Quality Growth Commission and Envision Utah

- **Dedicated to preserving quality of life present in Utah**
- **Jointly funded six quality growth demonstration projects**
- **Envision Utah will benefit from Commission's work in the coming months to define quality growth**
- **Continued collaboration is essential**

