Joint Project

- Wasatch Front Regional Council
- Mountainland Assoc. of Governments
- Envision Utah
- Utah Dept. of Transportation
- Utah Transit Authority
Past Long Range Transportation Planning

Region's Future

Land Plans

Transportation
Impetus for Wasatch Choices
2040 Visioning Process

- Growth Issues
  - 1 million additional residents by 2030 along the Wasatch Front

![Population Chart](chart.png)
Impetus for Wasatch Choices
2040 Visioning Process

- Need for Greater Public Outreach
- Broad-based community involvement better reflects communities’ values
Impetus for Wasatch Choices
2040 Visioning Process

Cost of Infrastructure and Land

- Land and construction costs have risen much faster than general inflation

Source: Deseret Morning News, August 5, 2007

Cost Index (1987=100)

Source: UDOT Construction Cost Index, April 2007
Impetus for Wasatch Choices
2040 Visioning Process

- Explore how Land Use/Urban Form might make our transportation system more efficient and less expensive.
Impetus for Wasatch Choices
2040 Visioning Process

- Funding and Political Support
  - Local officials and willing partners made WC2040 possible
13 Public Workshops

Trend Scenario

Scenario B

Scenario C

Scenario D

Values on growth and transportation

Open Houses, Discussion, Surveys,

DRAFT Vision and Principles

Cities, Counties

WFRC
Workshop Participation

- 13 Workshop
- 949 Participants
- 73 average
Try to Accommodate Expected Growth

- 4 Counties in 2040
  - 1.3 million more people
  - A new Murray each year

Twin Cities, Minnesota
Materials

- Map
- Markers
- Transportation Tape
- Stickers
- Chips
Transportation Elements

**FREeways**

Freeways are full access control (interchanges) multi-lane roads designed for high-speed traffic. Freeways are designed for interregional travel, and not for local trips. *(135’ Minimum ROW)*

**Expressways**

Expressways are at-grade, partial access control (signals) multi-lane roads designed for high-speed traffic. Expressways are designed for long distance trips. *(SR 201, Bangerter, etc.) (110’ ROW)*

**4- Lane Road (Aerterial or Boulevard)**

This is an at-grade, full access road with moderate speeds, designed for local trips. Usually has 4 lanes and one turning lane. *(Redwood Road, State Street, University Parkway, Wall Avenue) (80-90’ ROW)*
Commuter Rail

Commuter rail is a heavy rail that runs along a dedicated lane at ground level, and provides fast service over long distances (stops are around 5 miles apart). Commuter rail is normally powered by a diesel unit.

Light Rail (TRAX)

Light rail runs along a dedicated lane at ground level, on aerial structures, in subways or in streets. Light rail is normally powered by overhead electrical wires.

Rapid Busway (TRAX w/tires)

Rapid Busways are similar to light rail, only it runs on tires, not tracks. Rapid Busways have signal priority at intersections and have the option of using a dedicated lane. This is also known as Bus Rapid Transit (BRT) and is usually cheaper to build than light rail.

Bike & Pedestrian Routes

These include multi-use trails, bike lanes on roadways, and expanded pedestrian facilities such as wide sidewalks. Trails can be paved asphalt or a crushed gravel surface, and accommodate uses such as biking, walking, jogging, and equestrian uses.
Growth near Transportation

- General Land Use
  - Residential
  - Commercial & Employment

- Centers (intensified development)
  - Village
  - Town
  - City
Open Space

- Are there areas where we should preserve working farms or other critical lands?
Customize Your Chips

500 HH

500 HH

500 HH
Each table presents its ideas
After the Workshops ....

Digital comparison of results

- What locations were the most popular?
- What type of growth was preferred?
- What unusual and interesting ideas emerged?
WC2040 workshops: common themes

- Emphasis on growth centers
- Desire for land recycling
- Provide a variety of housing
- Emphasis on bike and pedestrian routes
Mix of Housing Types

- Weber
- Davis
- Utah
- Salt Lake

- Centers
- Multi-Family
- Town-homes
- Small Lot
- Medium Lot
- Large Lot
- Very Large Lot
Average HH density per map
Housing densities
Dominant Use (Mode)
WC2040 Workshops: diversity of opinion

- Road emphasis or transit emphasis
- What happens on the suburban fringe: rural ranchettes or smaller lots?
Road / Transit emphasis by map

- Transit
- Road
Public Transportation
Employment Density
Open Space frequency
Dominant Use
Scenarios

- **What they have in common**
  - Same population and employment totals

- **How they differ**
  - Growth patterns
  - Transportation Investments

- **We can attribute the projected consequences to the different growth strategies**
4 Scenarios

A

B

C

D
Scenario Evaluation: How They Compare

- Air Quality
- Developed Area
- Transit Riders
- Traffic
- Water Use
- Miles of Driving
- Open Space
- Housing Opportunities

2040 What-If? Scenario
Mix of Housing Types

New Housing, Now to 2040

Bar chart showing the percentage distribution of new housing types from 2020 to 2040.
Traffic Congestion

Time lost due to traffic delays, per household per day.
Driving Distances (auto)

Typical weekday household VMT in 2040
Growth Near Public Transportation

% Growth within short walk of transit
Land Reuse

% Growth Through Land Re-use

% of Households and Employees
Vacant Land Consumption

Expansion of Developed Land Area, now to 2040
New Water Sources (Outdoor Use)

Additional Water Needed for Outdoor Irrigation, now to 2040

Acre Feet per Year

A B C D
0 50,000 100,000 150,000 200,000 250,000
## ‘Ideal’ mix of transportation

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9 Growth Principles

1. Provide Public infrastructure that is efficient and adequately maintained
2. Provide regional mobility through a variety of interconnected transportation choices
3. **Integrate local land-use** with regional transportation systems
4. Provide **housing** for people in all life stages and incomes
5. Ensure **public health** & safety
6. Enhance the regional **economy**
7. Promote regional **collaboration**
8. Strengthen sense of **community**
9. Protect and enhance the **environment**
44 Objectives

EXAMPLES:

- Promote **redevelopment** to better utilize existing infrastructure
- Encourage **contiguous growth** to reduce infrastructure expenses
- Encourage cooperation and **coordination in the use of transportation and utility corridors** and rights-of-way
- Encourage future **commercial and residential areas within close proximity** of each other to reduce travel distances
- Encourage a **balance of jobs and housing** in each part of the region to reduce travel distances.
- **Promote interconnected streets** to reduce travel distances
- Promote **conservation of energy, water, and regionally significant critical lands**
- **Enhance air and water quality**
- Create and enhance **access to areas of natural beauty and recreation**
11 Recommended Strategies for Local Governments

I. Develop a Local Land Reuse Strategy
II. Provide incentives for Contiguous Growth and Infill
III. Preserve Future Transportation and Utility Corridors
IV. Create Walkable Commercial and Mixed-Use Districts
V. Plan for Transit Oriented Development
VI. Plan for and Build Neighborhood-friendly Elementary Schools
VII. Create a Plan for Workforce Housing
VIII. Interconnect Roadways and Pedestrian Paths
IX. Plan for Job Centers and Economic Development Readiness
X. Plan to Minimize Development and Maximize
XI. Plan for conservation on and near Critical Lands
Vision Map

- Illustrates one way the region might grow if we follow the Principles

- Helps us contemplate the magnitude of benefits we might look forward to
- Mixed use centers coordinated with transportation
- Balanced transportation that emphasizes connectivity
- Green access corridors and critical lands to conserve
Layton, UT:
Main Street
Layton, UT:
Main Street
Layton, UT:
Main Street
Application of growth principles can provide benefits

Increasing mixed use from 4 to 13 percent in new growth resulted in:

- 18% less congestion
- 12% more transit use
- 23 fewer square miles of land consumption
Local Government Visits and Input

- Growth Principles and “Vision” were presented to all local governments
Local Government Visits and Input

- Discussed land use implications
- Solicited input from elected officials
- Overwhelming majority agreed with WC2040 conclusions
Land Use Implications

- Mixed-use activity nodes connected by high-capacity transportation
- Reduce regulation interfering with market demand
Land Use Implications

- More compact growth in areas of regional transportation significance
Land Use Implications

- More Infill and redevelopment
Land Use Implications

- More housing choices responding to market demand
Land Use Implications

- More interconnected streets
Strategic Changes Make a Big Difference

- The benefits result from relatively minor changes to the region’s density and land use.

Utah Policy Daily

Utah Transportation Watch

Feature Story

2 Percent Good Development Equals 20 Percent Less Congestion
By LaVarr Webb

. . . “There seems to be evidence that these sorts of retail/job center/residential mixed-use clusters can reduce congestion. Envision Utah is working on a concept that has been tried in California that postulates that if only 2 percent of an area’s land is developed properly, it can resulting a 20 percent reduction in future traffic congestion.

The trick is to develop the 2 percent in a mixed-use way that combines residential, retail and job centers in close proximity, giving people the opportunity to work, shop and live in the same general area.”
Strategic Changes Make a Big Difference

- Strategic placement of mixed-use activity nodes/corridors in the region helps reduce travel demand.
Strategic Changes Make a Big Difference

- The “Vision” scenario calls for 13 percent of new growth to occur in mixed-use settings compared with 4 percent for the “business as usual” scenario.
Use of Growth Principles and “Vision” in the Regional Transportation Plan

- The “vision” land use was used as an input to the travel demand modeling process, influencing:
  - future traffic projections
  - type of project, mode, and capacities
  - VMT
  - the costs of providing transportation infrastructure
  - air quality and other environmental measures
  - congestion, economy, and general quality of life
Affects congestion, economy, and general quality of life.

Determines type of project, mode, and capacities.

Impacts the costs of providing transportation infrastructure.
Use of Growth Principles and “Vision” in the Regional Transportation Plan

- The Regional Growth Principles, and Goals and Objectives were used in creating criteria/measures for the Plan’s alternative transportation systems and projects
  - Reduce VMT growth rate compared to population growth rate
  - Increase transit passenger miles
  - Increase transit/highway speeds
Use of Growth Principles and “Vision” in the Regional Transportation Plan

**Goals and Objectives cont.**

- Improve/create access to major redevelopment, infill, and activity/mixed-use nodes and corridors
- Improve access for/impacts to disadvantaged populations
- Improve jobs/housing balance
- Improve air quality
- Minimize/avoid impacts to critical lands and historical neighborhoods
Minimize/avoid impacts to historic neighborhoods

Improve/create access to major redevelopment, infill, and activity/mixed-use nodes and corridors

Minimize/avoid impacts to critical lands

The Regional Growth Principles, and Goals and Objectives were used in creating criteria/measures for the Plan’s alternative transportation systems and projects
Implementing Wasatch Choices 2040

- Wasatch Choices 2040 can only make land use recommendations
Implementing Wasatch Choices 2040

- Wasatch Choices 2040’s sponsors can only make plans with land use recommendations.
Local governments can adopt WC 2040 provisions and have the power to take actions to implement the Regional Growth Principles and “Vision”
Implementing Wasatch Choices 2040

Transportation providers, such as UDOT and UTA, can incorporate WC 2040 provisions through their policies and practices.
Requested Local Government Action

- Councils and Commissions should formally adopt the Growth Principles and “Vision” by resolution or ordinance.
Requested Local Government Action

- Incorporate provisions of WC 2040 into General Plan
Requested Local Government Action

- Use the Growth Principles/”Vision” in crafting new development review criteria, ordinances, and policies
- Eliminate conflicts that may exist between WC 2040 and existing ordinances/policies
Requested Local Government Action

- Use the Local Government Implementation Strategies as a resource
Stewardship