

The Challenges Created by Growth

Overview

Utah is facing unprecedented population growth. On October 19, 2006, the Center for Public Policy & Administration and the Utah Intergovernmental Roundtable, a coalition of representatives from multiple levels of government interested in public policy issues that cut across different levels of government, convened experts to discuss the challenges of growth in five areas: population, education, transportation, water, and infrastructure. Actions taken now to address growth in these and other critical areas will have significant implications for long term quality of life in Utah

Several individuals made presentations at the UIR, including Robert Spendlove, Governor's Office of Planning and Budget; Ray Timothy, Utah State Office of Education; Carlos Braceras, Utah Department of Transportation; Fred Finlinson, Finlinson & Finlinson, PLLC; Stanley Postma, MWH Americas, Inc.; Alan Matheson, Envision Utah; and Robert Grow, O'Melveny & Myers LLP. Their presentations are summarized here. Their contributions, as well as the other contributors to the Summit, were critical to stimulating this discussion.

Growth Equals Challenges

Projections indicate that Utah's population will double by 2050 to over 5.4 million residents. Utah has a choice: growth can happen and the state can respond reactively; or alternatively, individuals can come together to discuss and plan for the challenges and opportunities of population growth.

Often issues are studied individually. Unfortunately, the impacts do not occur in a vacuum. If growth occurs, there are increased demands for education, water, and transportation. As a result, the most effective strategy is to take an integrated approach to the issues. For example, catastrophic events or "the unthinkable" such as earthquakes or pandemics must be planned for on an integrated basis. The following summarizes the challenges Utah faces in five areas: population growth, education, water, transportation and infrastructure, followed by a discussion of an approach to growth planning.

Utah's Long-Term Population Projections

Utah is one of the six fastest growing states in the nation which will result in a doubling of its population by the year 2050. Utah's main population centers, in the counties along the Wasatch Front as well as Iron and Washington counties, are home to over 2 million residents or 91% of the state's population according to 2000 U.S. Census data.

Utah's population growth can mostly be attributed to the highest fertility rate in the nation, but migration is also a significant factor. According to the U.S. Census Bureau, Utah's fertility rate was 2.6 in 2000 (versus 2.1 nationally). Migration con-

tributed 22% of Utah's population increase from 1950-2004 and is projected to be 26% until 2035.

School-age and retirement-age groups are increasing at the greatest rates. The 65 and older group, or retirement-age population, is about 217,000 presently; by 2030 the group is projected to increase almost 250% to over 530,000. During the same period, the school age current population of nearly 550,000 is expected to reach 862,000, which is more than a 150% increase.

Utah has had higher rates of employment growth than the nation; these are projected to continue. Proper planning will allow Utah to address the demographic growth and shifts while retaining its strong and vibrant economy.

The Impact of Growth on Public Education

In 2005, the annual change in Utah's public school student enrollment exceeded 10,000 students per year. Enrollment is expected to increase, resulting in an additional 140,000 total students over the next ten years. The major issues accompanying this growth in public education include: personnel, property, construction, maintenance and transportation.

Teacher shortages are already a concern for Utah schools as teacher attrition rates climb, low salaries reduce interest in teaching as a profession, and aging teachers prepare to retire. The population boom will compound these concerns, leading to unprecedented teacher and support staff shortages.

Property and construction expenses are also a mounting concern for Utah's educational system. Land values continue to soar with price tags of \$225,000 per acre. As a result, property acquisition expenses for elementary, junior and high schools average \$2.7, \$5.4 and \$12.3 million, respectively. In addition, construction costs have increased dramatically over the past two to three years. Estimated expenditures for elementary, middle/junior high schools have nearly doubled and projected high school costs have risen from \$40 million to over \$55 million. Beyond school construction hurdles is the inevitable increased cost of maintenance. Finally, an influx of students will increase the demand for transit routes to and from schools and for extracurricular activities.

If growth is in the projected range, Utah school districts will experience a 24% increase in student enrollment from 2001-2013. To illustrate this, if the growth is within the projected rate, a school district the size of either Cache or Provo school districts will have to be added each year to accommodate the growth.

Proven solutions to some of these challenges are: year round schedules, split/double sessions, portable classrooms and, of

course, building new facilities. Advanced planning and innovation will be critical to respond to Utah's growth and to meet the modern demands of personnel, property, construction, maintenance and transportation.

The Impact of Growth on Transportation

From 1990 to 2005, Utah's population increased by 43% while the miles traveled increased by 68%. Increases in population and travel unbalanced by increases in transportation infrastructure will result in significantly increased travel times. Projections indicate that if identified transportation projects are not undertaken, in the next 20 to 25 years the current travel time of one hour from Provo to Salt Lake City will double, while the travel time from Salt Lake City to Provo will triple from one to three hours. These increases will have a negative impact on mobility which will affect both Utah's quality of life and economic vitality. Survey data indicates that 86% of Utahns surveyed are already concerned about increasing congestion.

Statewide, transportation projects totaling \$29 billion have been identified, while combined federal, local, and state revenue reveals only \$6.5 billion earmarked for these. This leaves \$22.5 billion total unfunded highway capacity needs. Revenues are not keeping up with future transportation needs and costs are increasing significantly. Together these factors make it difficult to deliver projects on time.

A 2004 legislative taskforce identified potential road funding sources. A survey of public opinion indicated that the majority were opposed to these options including: a statewide sales tax increase (68% opposed); a fuel tax increase (75% opposed); and vehicle title and registration fees increase (61% opposed). The public showed more support for implementing managed lanes (favored by 75%) and increasing the auto sales tax (51% favored). A local option sales tax for transportation (favored by 41%) passed in Salt Lake County by 64%; this option also passed as an Opinion Question in Utah County by a vote of nearly two to one.

Managed lane concepts include reversible lanes, high-occupancy-vehicle lanes, high-occupancy toll lanes, and toll roads. Utah's first "managed lane" is on I-15 in Salt Lake County. Another option is toll roads such as the one being evaluated in the Mountain View Corridor. Tolling could pay for approximately two-thirds of the construction cost but tolling is a controversial issue.

Maintaining Utah's mobility is critical to maintaining quality of life and economic growth. Utah's transportation system helps people find jobs. Businesses choose to locate due to having a system that allows them to move goods and services efficiently. Utah is facing some serious financial challenges related to our transportation growth. These challenges could make it

difficult to deliver quality projects that maintain or improve our system difficult.

Water Challenges for Our Future

Utah's water belongs to the public. The right to use water is a property right and most water rights in Utah have been appropriated to users. Agriculture uses 85% of the state's water and Municipal and Industrial (M&I) uses account for the remaining 15%. The increased demand for water due to population growth means that the demand will soon exceed the amount of water available. As a result, water has been and will continue to be a growth limiting resource. Matching water resources to the most beneficial use will be one of the most critical challenges for further growth as will water development and conservation.

Development of additional water resources is costly and has a long lead time. For example, the Central Utah Project, conceived of over 50 years ago, is currently estimated to cost \$2.3 billion. The state has two potential big future developments being studied for feasibility: the Bear River and Lake Powell Pipeline.

The market place can serve as a mechanism to allow existing beneficial uses to change. For example, M&I users can afford to pay more for water than farmers raising hay and grain. This raises the question of how much the state's food and fiber supply should diminish to transfer water from agriculture to M&I use. Conservation can allow existing resources, but the water system, however, relies on return flow to meet downstream users needs. Conservation or increased water efficiency upstream may deny downstream users their water rights.

In addition heavy reliance on underground aquifers may exceed the safe yield of each water basin, changing the resource from a renewable resource to a "mined" or depletable resource. Another factor is that water use is dependent upon infrastructure to bring, treat, distribute, collect, and retreat water. Infrastructure is also a challenging water issue.

As the demand exceeds the available resource, competing users will dramatically increase the price of water and conflicts between water users will increase, whether up stream versus downstream users or new users versus old users. These conflicts will increase, resulting in regional competition for limited resources

Growth and Utah's Infrastructure

A state's infrastructure is the back bone of its economy. It provides basic services required by both businesses and general population, such as safe drinking water, waste management, and transportation access. Escalating growth patterns in Utah are putting additional pressure on these infrastructure services.

Key problems center on aging facilities and the difficulties of developing new ones. Many cities have facilities that date back 100 years. Repair and rehabilitation are expensive and time consuming. Constructing new facilities would take years, but the great need for additional infrastructure systems to accommodate Utah's growth cannot be ignored.

The American Council of Engineering Companies and the Utah League of Cities & Town surveyed 20 cities across the state and several engineering firms who work with cities and towns regarding their infrastructure. The survey compared needs with budgets and asked cities what shortfalls they had for funding of capital projects. The survey results placed a monetary value and/or a grade rating on the condition and needs of Utah's various infrastructure systems. The grade ratings were determined comparatively. The infrastructure systems rated included wastewater, drainage/urban runoff, water, dams, transit, bridges, airports, and roads. Grades ranged from 'D's' to 'C's'. The cost of improving the various utility systems adds up to at least \$2.5 billion over the next 20 years not including transportation, dams and transit, for which no value prediction was made.

The survey also revealed that most systems are being well managed with the limited resources available. Nevertheless, the aging workforce of operators and managers presents another problem. The recommendations from this study included: provide more support for training programs that will develop a new workforce to operate and manage the infrastructure; continue to emphasize efficient management of Utah's limited resources; shore up the existing funding mechanisms that will support expansion of infrastructure; and promote low-impact development standards to reduce impacts on existing infrastructure.

Outlook: Growth Can Result in Opportunities

The summaries above reveal that the pressures of growth are widespread and interrelated. For example, a growing population results in additional school age youth which increases demand on the education system as well as on water supply, transportation, and other infrastructure systems. Population growth will continue. The ways to address change can also change.

Land use decisions typically are based on a local perspective. More effective planning would result if local governments coordinated more closely to develop transportation systems and recognized how their land use decisions affect surrounding communities. Utah's present sales tax distribution system discourages local communities from taking the regional perspective. Local governments do not have an incentive to develop job centers, as opposed to retail. This dampens opportunities for bringing new wealth into the region. If a more regional perspective is taken, it will be easier to coordi-

nate more closely in developing transportation and other infrastructure systems.

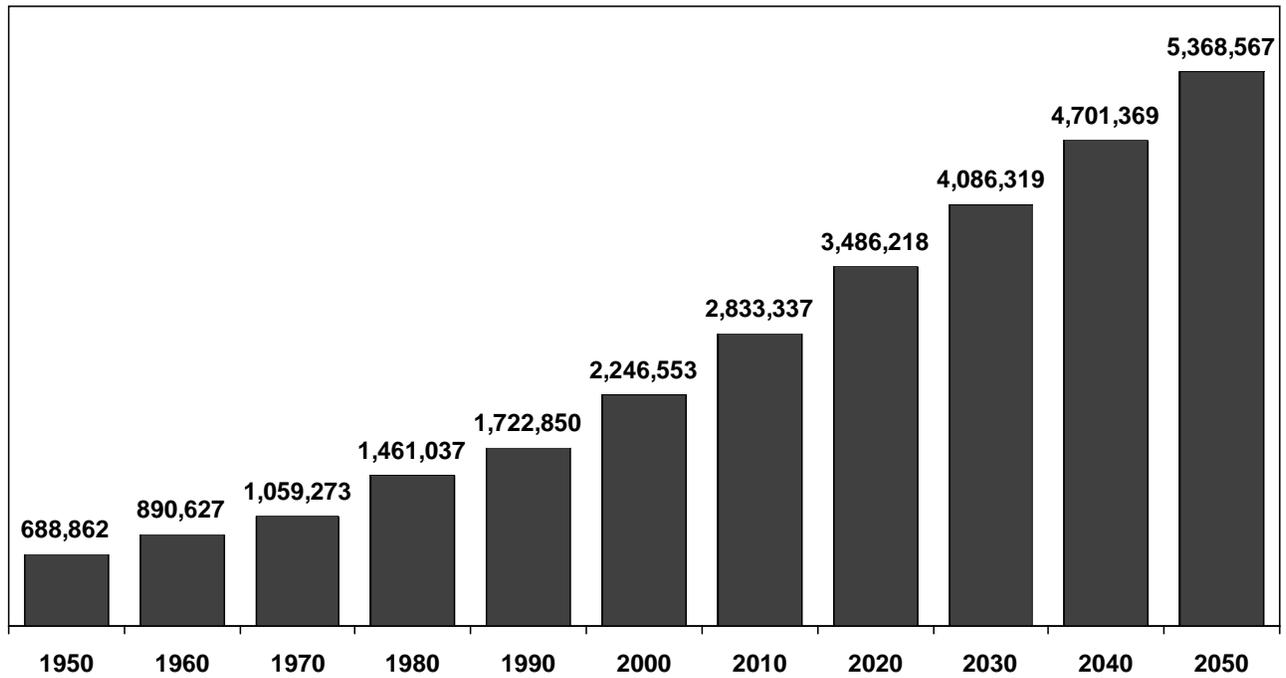
Regional visioning helps the public and today's decision-makers understand the long-term consequences of the choices they make. Regional visioning can be used to ask important questions about:

- people's values - what do people want, what is important to them?
- vision - how can our region provide it?
- strategies - how do we implement the vision, and
- how do we develop plans to build and fund the scenarios?

Multiple scenarios can be developed demonstrating the impact of various options for transportation, land use, environmental policy, and other decisions. The models can help identify the impact on factors such as energy use, job creation, air quality, land consumption, traffic, water use, open space, and housing demand. Envision Utah used this approach to involve key decision-makers and the community to guide development of a broadly and publicly supported Quality Growth Strategy--a vision to protect Utah's environment, economic strength, and quality of life for generations to come.

The future of the world's children will largely be determined by the success or failure of urban environments to meet the needs of its inhabitants. Is a future left to chance a legacy Utahns are willing to leave future generations?

Figure 88
A 100 Year Look at Utah's Population: Utah Population 1950 to 2050



Sources: Historical, U.S. Census Bureau; Projected, 2005 Baseline Projections