



# Executive Summary

## Utahns want to protect and increase food production in our State.

- **Current circumstances:**
  - Utah's food production has declined precipitously to where Utah now produces only 2% of its vegetables, 3% of its fruit, 25% of its dairy, 98% of its grains, and 135% of its protein needs, in part because the current land development process incentivizes the loss of water and land for farming.
  - These percentages could further decline significantly as Utah's population nearly doubles and we lose more prime farmland by 2050.
- **Survey findings:**
  - Ninety-eight percent of Utahns want to increase food self-sufficiency from agriculture by putting more land into production and/or changing crops to fruits and vegetables.
  - To do that, Utahns are willing to:
    - Cut back on watering their lawns and gardens to ensure we have enough water for agriculture
    - Avoid building on high-quality farmland
    - Spend more money to bring non-agricultural water to urban areas
  - Utahns do not want to take water or land from agriculture.

# Table of Contents

Executive Summary	2
Agriculture Action Team Background	4
Agriculture Action Team Members	5
YUYF Survey Background	6
Survey Methodology	12
Utah Agriculture Values	21
<b>YUYF Scenarios on Agriculture</b>	<b>24</b>
<b>YUYF Agriculture Results</b>	<b>31</b>
<b>Supporting Results</b>	<b>37</b>
You May Still Take the Survey	40

# The agriculture action team worked for 18 months to create scenarios for the future of agriculture in Utah.

## Agriculture, Public Lands, & Recreation Action Team

2013

Envision Utah and Governor Herbert invited agriculture, public lands, and recreation experts from across the state to join the *Your Utah, Your Future* action team for those topics. The team has **65 members** from the legislature, industry, local businesses and government, advocacy groups, research institutions, and other organizations. The task force is facilitated by Envision Utah.

## Utah Quality of Life Values Study

2014

The values study found that agriculture has become increasingly important to Utahns across the state. The study also concluded that Utahns care about agriculture because they want high-quality locally grown food and greater food self sufficiency

## Your Utah, Your Future Scenarios & Choices

2015

The action team worked for **18 months** to research and model what Utah's agricultural future could be like in 2050 under various assumptions. They created **four scenarios** based on different strategies and outcomes for food production. Based on the public's responses in the *Your Utah, Your Future* survey, the action team will create a vision for Utah's agricultural future.



# Agriculture, Public Lands, & Recreation Action Team Members

Action team members were selected by Governor Gary Herbert and Envision Utah to represent a spectrum of experience and political persuasions. All action team members were invited to participate by Governor Herbert.

- **Leonard Blackham, Utah Department of Agriculture and Food, Retired Commissioner\***
- **Kathleen Clarke, Public Lands Policy Coordination Office, Director\***
- **Wendy Fisher, Utah Open Lands\***
- **Brad Peterson, Governor's Outdoor Rec Office, Director\***
- Wayne Niederhauser, District 9, Utah State Senator
- Laura Hanson, Jordan River Commission, Executive Director
- Mike Styler, Department of Natural Resources
- Brent Tanner, Utah Cattlemen, Executive Vice President
- Ashley Patterson, Wasatch Community Gardens
- Warren Peterson, Farmland Reserve, Vice President
- Brad Barber, Barber Consulting
- Selma Sierra, Energy Dynamics Laboratory, Director of Energy and Environmental Policy
- Ashley Korenblat, Public Land Solutions
- Ron Vance, Forest Service, Recreational and Resource Manager
- Jon Hardman, Natural Resource Conservation Service
- John Fairchild, Division of Wildlife Resources
- Mark Clemens, Sierra Club Utah Chapter, Manager
- Jack Draxler, Utah State Legislature District 3
- Thayne Mickelson, Utah Conservation Commission
- Nathan Rafferty, Ski Utah, President
- George Sommer, Blue Ribbon Fisheries Commission, Chair
- Julia Geisler, Salt Lake Climbers Alliance, Executive Director
- Eric Sadler, Wasatch Mountain Club
- Mark Compton, Utah Mining Association, President
- LaNiece Davenport, WFRC Regional Planner
- Sarah Hinners, U of U Metropolitan Research Center
- John Bennett, Utah Quality Growth Commission
- Larry Crist, U.S. Fish and Wildlife Service
- Julie Peck Dabling, Salt Lake County Open Space & Urban Farming
- David Ure, Summit County Council (Former legislature)
- Vicki Varela, Managing Director Utah Office of Tourism
- Lynn Jackson, Grand County Council
- LuAnn Adams, Box Elder County Commission
- Gordon Topham, Sevier County Commissioner
- Elizabeth Tubbs, Grand County Council
- Gene Ciarus, Grand County Council
- Bruce Adams, San Juan County Council
- Roger Barrus, Utah House of Representatives District 18
- Mike Noel, Utah State Legislature, District 73
- Ralph Okerlund, Utah State Senator, District 24
- David Hinkins, Utah State Senator, District 27
- David Garbett, SUWA
- Randy Parker, Utah Farm Bureau
- John Mathis, Utah State Legislature, District 55
- Curtis Rowley, Cherry Hill Farms
- Scott Chew, Cattle and Sheep Uintah Basin
- Ed Sunderland, Sanpete County farmer
- Alma Adams, Iron County Commissioner
- Logan Wilde, Morgan County Council
- Kent Peatross, Duchesne County Commissioner
- Kerry Gibson, Weber County Commissioner
- Mike Kohler, Wasatch County Council
- Juan Palma, BLM state director
- Evan Vickers, Utah State Senator, District 28
- Kay Mccliff, Utah State Legislature, District 70
- Douglas Sagers, Utah State Legislature, District 21
- Peter Knudson, Utah State Senator, District 17
- Jim Dabakis, Utah State Senator, District 2
- David Livermore, Nature Conservancy, Utah State Director
- Alan Matheson, Governor's Office
- Chris McCandless, Sandy City Council
- John Evans, Petzl Climbing Equipment
- Mallory Bateman, Utah Foundation
- LuAnn Adams, Utah Department of Agriculture and Food
- Joan Degiorgio, Nature Conservancy
- Laynee Jones, Mountain Accord
- Hans Ehrbar, U of U Department of Economics
- Brandie Balken, Equality Utah
- Tara McKee, Governor's Outdoor Rec Office
- Wesley Smith, Salt Lake Chamber
- Michael Merrill, Salt Lake Chamber
- Dustin Rowley, Utah Association of Conservation Districts

\*Action Team Co-Chair

# Your Utah, Your Future Background

## In Need of a Solution

Projections show that Utah's population will nearly double by the year 2050. The *Your Utah, Your Future* survey was designed for Utahns to create a vision for the State of Utah for the next 35 years.

## Identifying the Issues

Envision Utah performed a values study to understand **what** Utahns care about regarding the future and **why** those issues are personally important to them. The study identified eleven key issues: agriculture, air quality, recreation, disaster resilience, public lands, transportation and communities, housing and cost of living, education, energy, jobs and economy, and water.

## Identifying Choices and Trade-offs

Four-hundred Utah experts worked in eight task forces to identify Utah's choices for each of the 11 topics. **The information and options in the survey were the direct findings of these taskforces.**

## Choosing a Future

The *Your Utah, Your Future* survey was designed to prioritize issues and their associated outcomes in order to make strategic decisions for Utah's future. Nearly 53,000 people weighed in on the future that they want to create in 2050.

## The Challenge:

By 2050, Utah's population will nearly double in size. Utah will not.



TODAY THERE ARE

**2,900,000**

PEOPLE IN UTAH

BY 2050 THERE WILL BE

**5,400,000**

PEOPLE IN UTAH



The *Your Utah, Your Future* survey asked Utahns to indicate their choices for Utah's Future on 11 specific issues.



Housing & Cost of Living



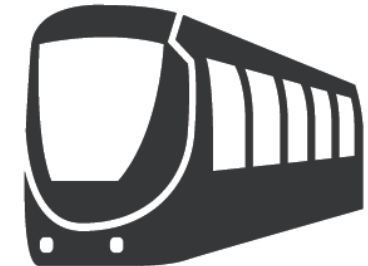
Education



Agriculture



Air Quality



Transportation & Communities



Economic Development



Disaster Resilience



Recreation



Water



Public Lands



Energy



# Your Utah, Your Future Background

Survey participants then chose between five overall scenarios for Utah's future, with each overall scenario proposing a set of choices for the 11 specific issues.

VOTE



**SEAGULL**  
SCENARIO

VOTE



**BONNEVILLE TROUT**  
SCENARIO

VOTE



**QUAKING ASPEN**  
SCENARIO

VOTE



**SEGO LILY**  
SCENARIO

VOTE



**ALLOSAURUS**  
SCENARIO

Our goal was for 50,000 Utahns to take the *Your Utah, Your Future* survey about their desires for the future for Utah.



Goal

50,000  
Respondents



Actual

**52,845**  
**Respondents**

# Your Utah, Your Future Background

The *Your Utah, Your Future* survey garnered more public participation than any such project ever has.



Envision Utah Quality Growth Strategy  
(Wasatch Front and Back—1998)



Show Your Love, San Diego



Heartland 2050  
(Omaha, NE)



PLANITULSA  
(Tulsa, OK)



(Atlanta, GA)



Louisiana Speaks  
(Southern Louisiana after Katrina)

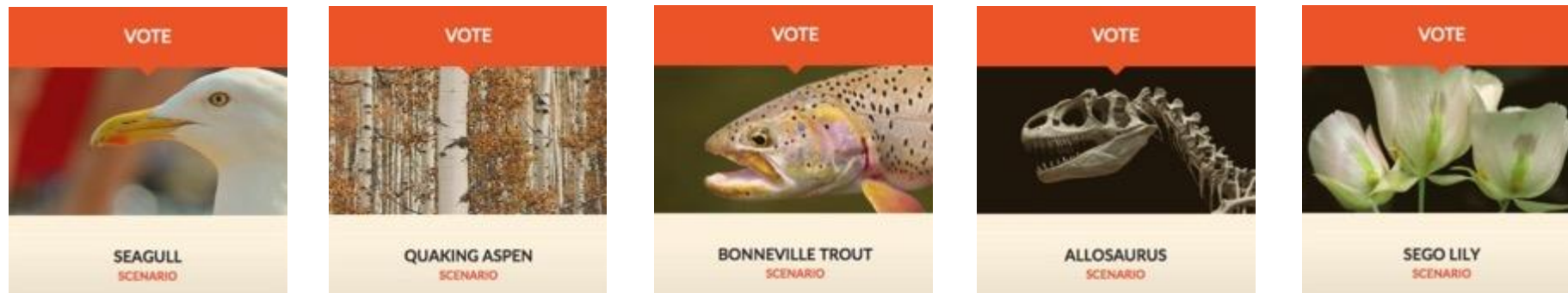
The original *Envision Utah* 1999 survey held the record with 17,500 public response for many years.



# Survey Structure—Part One

Utahns were invited to participate in two parts of the survey.  
In the first part:

Survey participants chose among five overall scenarios for Utah's future.



Each overall scenario was made up of a set of choices on 11 different topics.



Housing &  
Cost of Living



Education



Agriculture



Air Quality



Transportation  
& Communities



Economic  
Development



Disaster  
Resilience



Recreation



Water



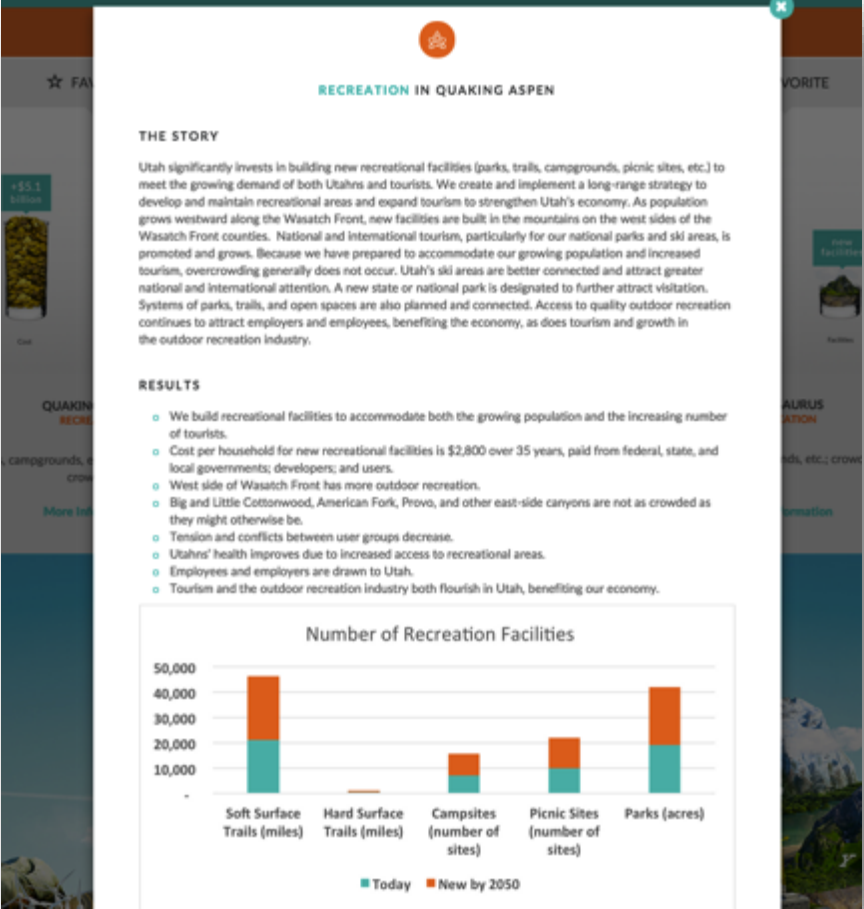
Public  
Lands



Energy

# Survey Structure—Part One (Cont'd)

Participants compared the different options within each topic and selected their preferred scenarios for that specific topic.



They were provided with in-depth information and background data for each of the topics and choices.








# Survey Structure—Part One (Cont'd)

After making selections for each of the 11 topics, participants could study a summary comparison chart and vote on their preferred overall scenario.

EDUCATION				
Moderate investment increase; no consistent strategy; little performance improvement	Significant, strategic investment increase; Utah in top 10 states	Moderate, strategic investment increase; moderate performance improvement	Significant, strategic investment increase; Utah in top 10 states	Investment does not keep up with growth; no strategy; performance declines
ENERGY				
Natural gas, some renewables; 3% cost increase	Renewables, natural gas, energy storage; 58% cost increase	Natural gas & renewables; 3% cost increase	Natural gas, renewables, & nuclear; 12% cost increase	Natural gas, some renewables; 3% cost increase
HOUSING & COST OF LIVING				
High housing and transportation costs	Reasonable housing and transportation costs	Reasonable housing costs; average transportation costs	Reasonable housing and transportation costs	High housing costs; high transportation costs in suburbs; low in downtown
JOBS & ECONOMY				
Average economy	Strong economy	Strong economy	Very strong economy	Struggling economy

Most Favored

VOTE	VOTE	VOTE	VOTE	VOTE
				
3 ★	8 ★	6 ★	1 ★	1 ★
<b>SEAGULL SCENARIO</b>	<b>QUAKING ASPEN SCENARIO</b>	<b>SEGO LILY SCENARIO</b>	<b>ALLOSAURUS SCENARIO</b>	<b>BONNEVILLE TROUT SCENARIO</b>
Utah makes targeted individual and collective efforts to keep the economy and quality of life strong, without making significant changes or large investments.	Utah becomes more economically resilient through economic diversification, connections to economies around the country and world, improved resilience to natural disasters, and increased ability to rely on local energy and food.	Utahns minimize their impact on the environment, conserve resources, and focus on improving both environmental and community health.	We do not implement strategies to achieve a vision of the future. Individuals, businesses, cities, counties, and other groups work separately to further their own interests.	Utahns continue doing what we're doing now. Our actions are the same as those in recent years. However, the outcomes of our future choices may not be the same as today because of growth and changing circumstances.
<a href="#">More Information</a>	<a href="#">More Information</a>	<a href="#">More Information</a>	<a href="#">More Information</a>	<a href="#">More Information</a>

# Survey Structure—Part Two

In the second part of the survey, Utahns participated in more traditional survey exercises.

## Prioritizing Issues

	Most Important	Least Important
⚡ What sources of energy we use in Utah (e.g., do we use more natural gas, solar, wind, or nuclear energy) and how much we use	<input type="radio"/>	<input type="radio"/>
💰 How high taxes are in Utah	<input type="radio"/>	<input type="radio"/>
☁️ Air quality in the State of Utah	<input type="radio"/>	<input type="radio"/>
🏠 How resilient Utah is to a natural disaster (how many people would be killed/injured, how much damage would occur, and how quickly our economy and way of life would bounce back)	<input type="radio"/>	<input type="radio"/>

## Weighting Outcome Preference

**JOBS AND ECONOMY**

When thinking about jobs and the economy, there are many things to consider regarding Utah's future. Below are some potential outcomes to contemplate.

Please indicate each outcome's relative importance by allocating 100 points across all outcomes. The more points you allocate to a given outcome, the more important it is to you to achieve that outcome.

Some areas may be left blank, but the sum must total to 100.

- Ensuring Utah's economy is strong so that it provides a lot of tax revenue to spend on our needs
- Ensuring Utah's economy is strong so that we have plentiful, good jobs and high wages
- Limiting how much we spend in taxes and other resources
- Ensuring that a strong economy doesn't attract additional population growth

**Total**

## Indicating Tradeoff Willingness

**ENERGY**

If Utah were to focus on using natural gas to produce our electricity as we move into the future, costs for electricity would stay as low as possible.

In order to get this outcome, some combination of the following trade-offs would have to take place.

Please indicate your willingness to make each trade-off in order to focus on natural gas as the primary energy source in Utah.

	Not At All Willing to Make This Trade-off 1	2	Somewhat Willing to Make This Trade-off 3	4	Very Willing to Make This Trade-off 5
We will be vulnerable to supply shocks/price spikes because of reliance on a single energy source that is shipped throughout the country	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There will be more air pollution emissions in rural Utah (where the energy is produced) than if we used other energy sources, but fewer than today, because today we are primarily using coal for our electricity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More land will need to be used for natural gas wells, which have environmental impacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Together, the results of parts one and two of the survey allow a sophisticated analysis of what Utahns want, why they want it, and what they're willing to do to achieve their goals.



Each part of the survey had different goals and provided important information.

Process

1

## SCENARIO SELECTIONS

Issue  
"Favoriting"

Scenario  
Vote

Goals

1. Educate Utahns on the key issues facing the state
2. Quantify preferences for issue-specific outcomes
3. Identify areas of consensus and disagreement across issues
4. Quantify preferences for defined scenarios



2

## TRADE-OFF SURVEY

Issue Prioritization

Importance of  
Outcomes

Trade-off Willingness

1. Force Utahns to prioritize importance / level of concern for all issues
2. Quantify importance of outcomes related to specific issues
3. Assess willingness to make trade-offs in order to reach desired outcomes



A random sample survey of Utahns was used to cross-check outreach results

## OUTREACH SAMPLE

Utahns that heard about the survey through Envision Utah's outreach efforts and went to the website to vote

- School outreach
- Digital media
- Partner organization emails and posts
- Radio advertisements
- News coverage

**Total participants: 52,845**

## RANDOM SAMPLE

A statistically representative sample of Utahns randomly sampled to participate in the survey

- Direct email
- Physical mail (postcard invitations)
- Phone recruiting

**Total participants: 1,264**

All Participants participated in Part One



**OUTREACH**

n=52,845

**RANDOM SAMPLE**

n=1,264

Outreach Participants had the option to participate in Part Two



**OUTREACH**

n=13,459

All Random Sample Participants participated in Part Two



**RANDOM SAMPLE**

n=1,264

Outreach and Random Sample participant responses were very much aligned across issues and preferences.

	Variance Across Most Responses
Issue "Favoriting"	+/- 3%
Scenario Vote	+/- 4%
Issue Prioritization	+/- 1.2%
Importance of Outcomes	+/- 2%
Trade-off Willingness	+/- 7%

**“We can conclude that the results represent the desires and opinions of Utahns.”**

“Results were obtained via the largest public outreach effort in the history of Utah, resulting in public input from more than 50,000 people; an effort that was cross-checked with a random sample of 1,264 Utahns, and overseen by Dan Jones & Associates.”

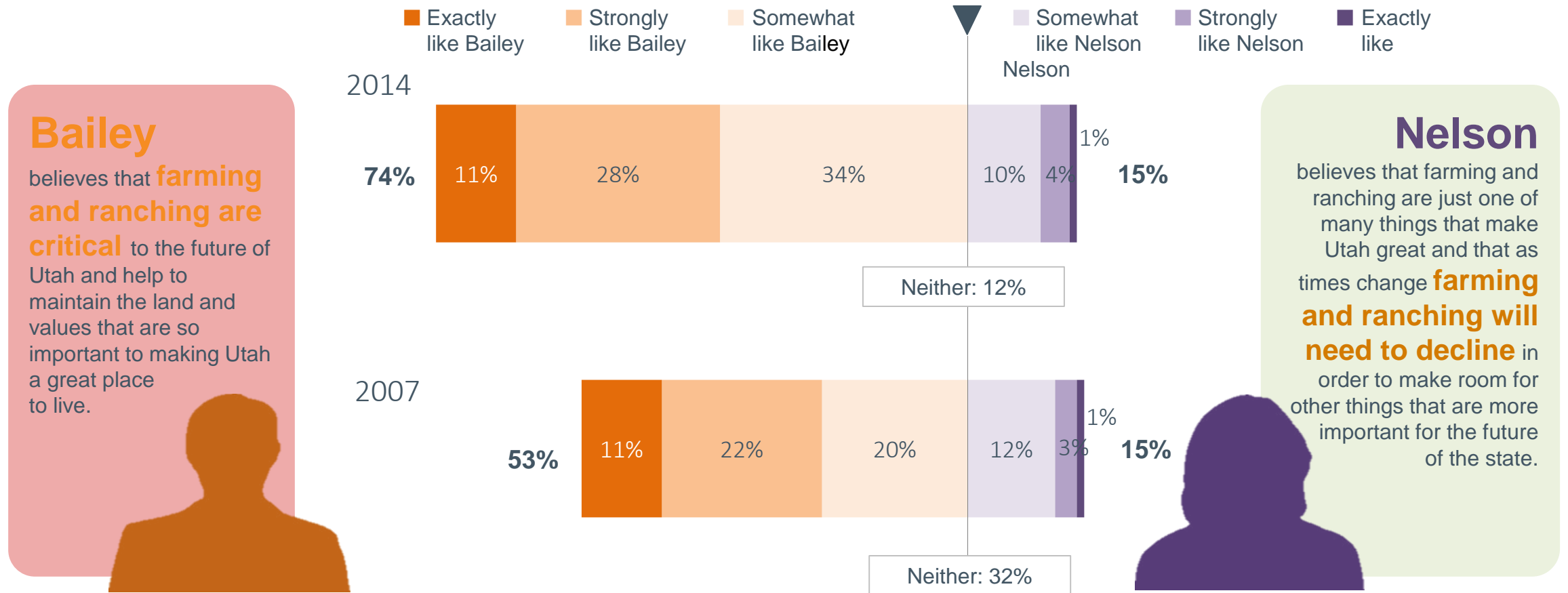
—Cicero; Dan Jones & Associates

Envision Utah performed a values study in 2014 to understand what Utahns care most about regarding the future. The study found a significant increase in the importance of agriculture to Utahns.



# Agriculture Values

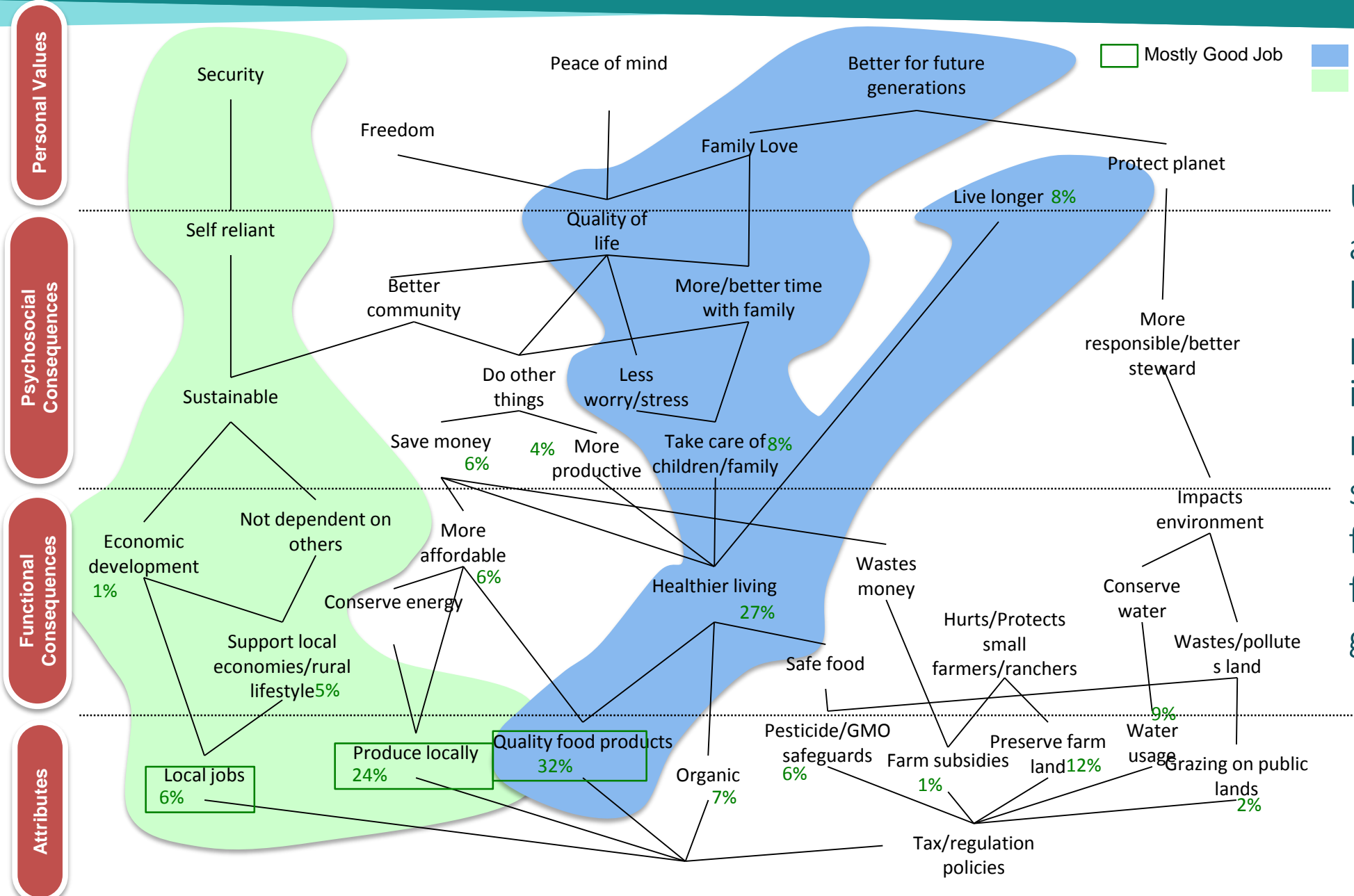
In 2007, almost a third of Utahns did not have a strong opinion about farming and ranching. However, by 2014, 74% agree that it is critical to Utah's future.



BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q720. Below are the opinions of two hypothetical Utah residents. Please indicate which opinion comes closest to your own. Is your opinion more like Mr. Bailey or more like Mr. Nelson?

# Agriculture Value Pathways



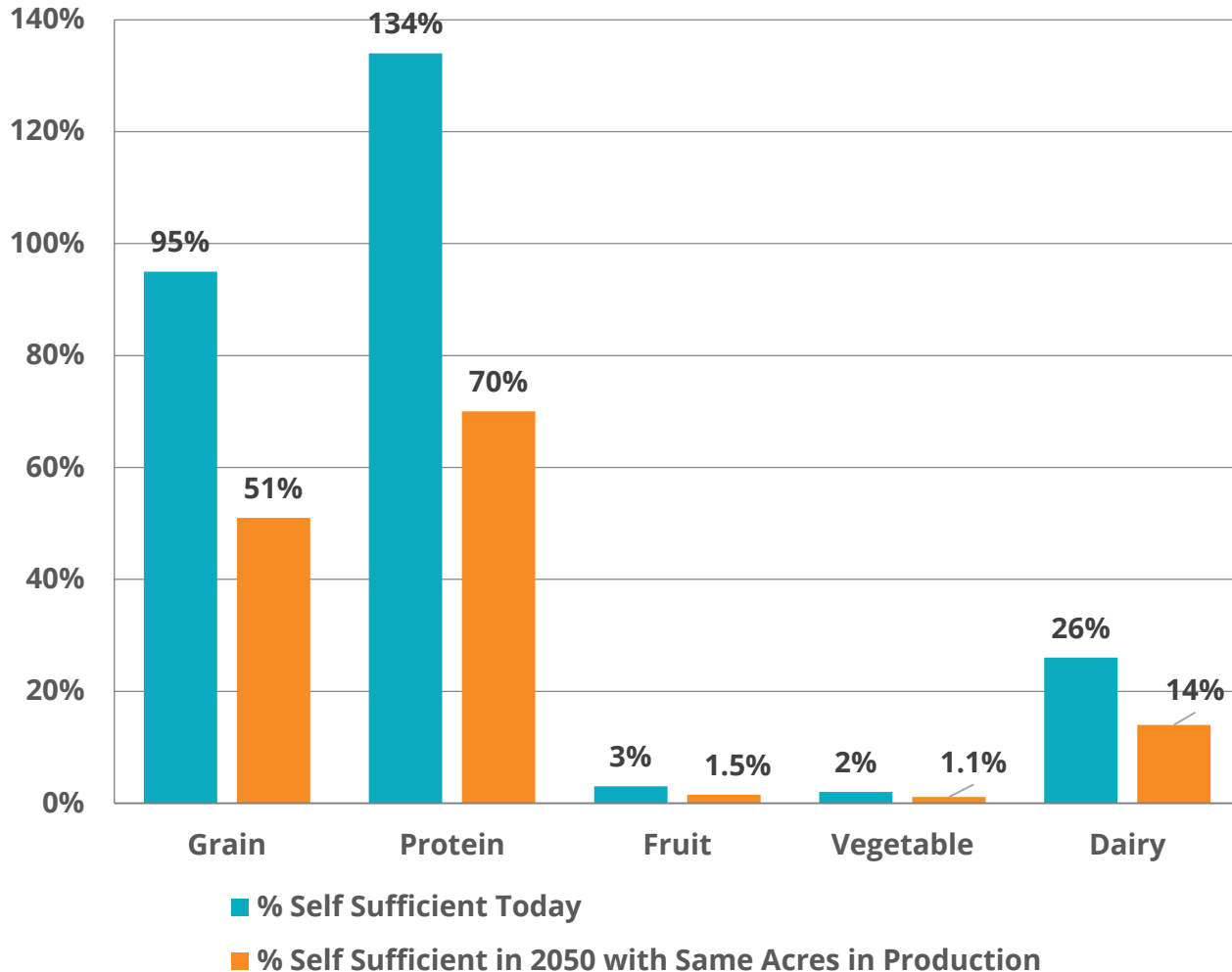
Utahns care about agriculture because locally grown food provides jobs, improves Utah's self reliance and food security, and is better for the health of Utah families and future generations.

In the *Your Utah, Your Future* survey, Utahns were given information about Utah's agriculture today and four different scenarios for what our agriculture and food supply could be like in 2050 depending on the choices we make.





# Utah's Agriculture Today

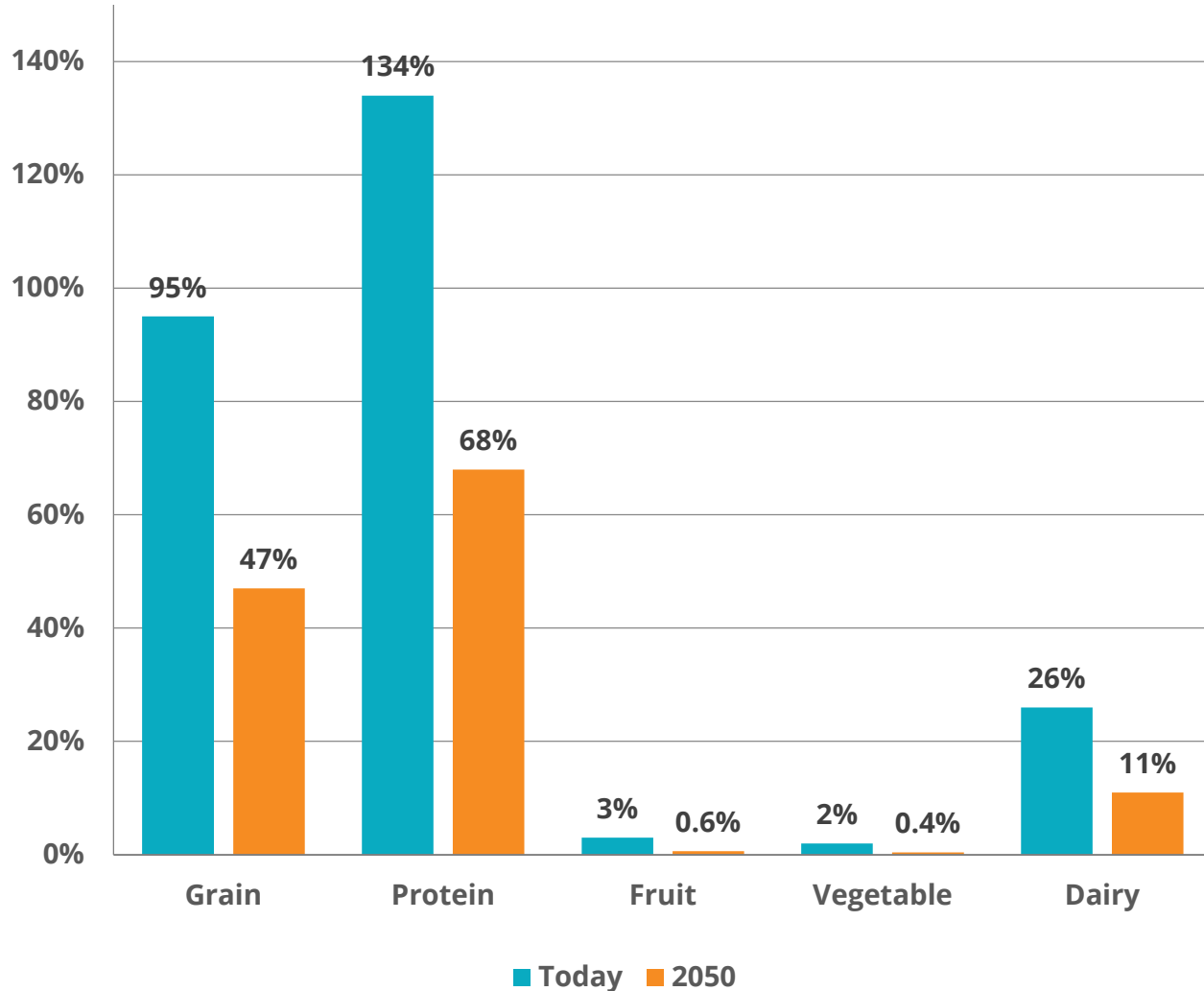


- We produce only 3% of our fruit and 2% of our vegetables
- By 2050 we will cut our per person production in half by population growth alone
- If we continue to urbanize prime agriculture land/take water from farmland we will produce almost no fruits and vegetables in Utah, and very little dairy

# Questions Concerning the Future of Agriculture

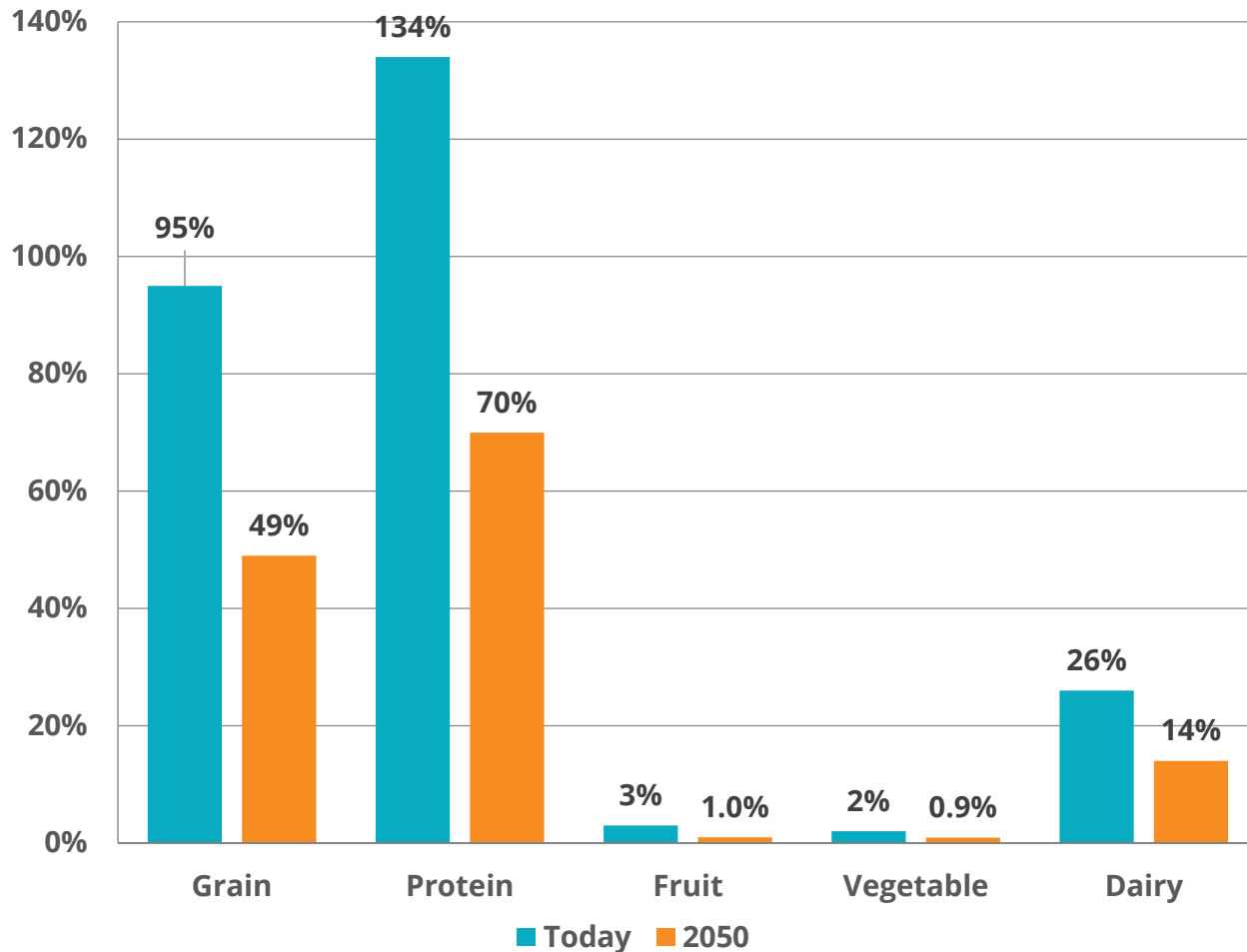
- Should we urbanize high-quality agriculture land as we grow?
- Can we continue to increase farm efficiency?
- Should we shift from alfalfa to more fruits and vegetables in some places?
- Should we expand agriculture onto additional lands (private and public)?

## Allosaurus Scenario



- Homes & businesses replace most Wasatch Front farms
- Water also moved from working farms
- Food self-sufficiency decreases significantly

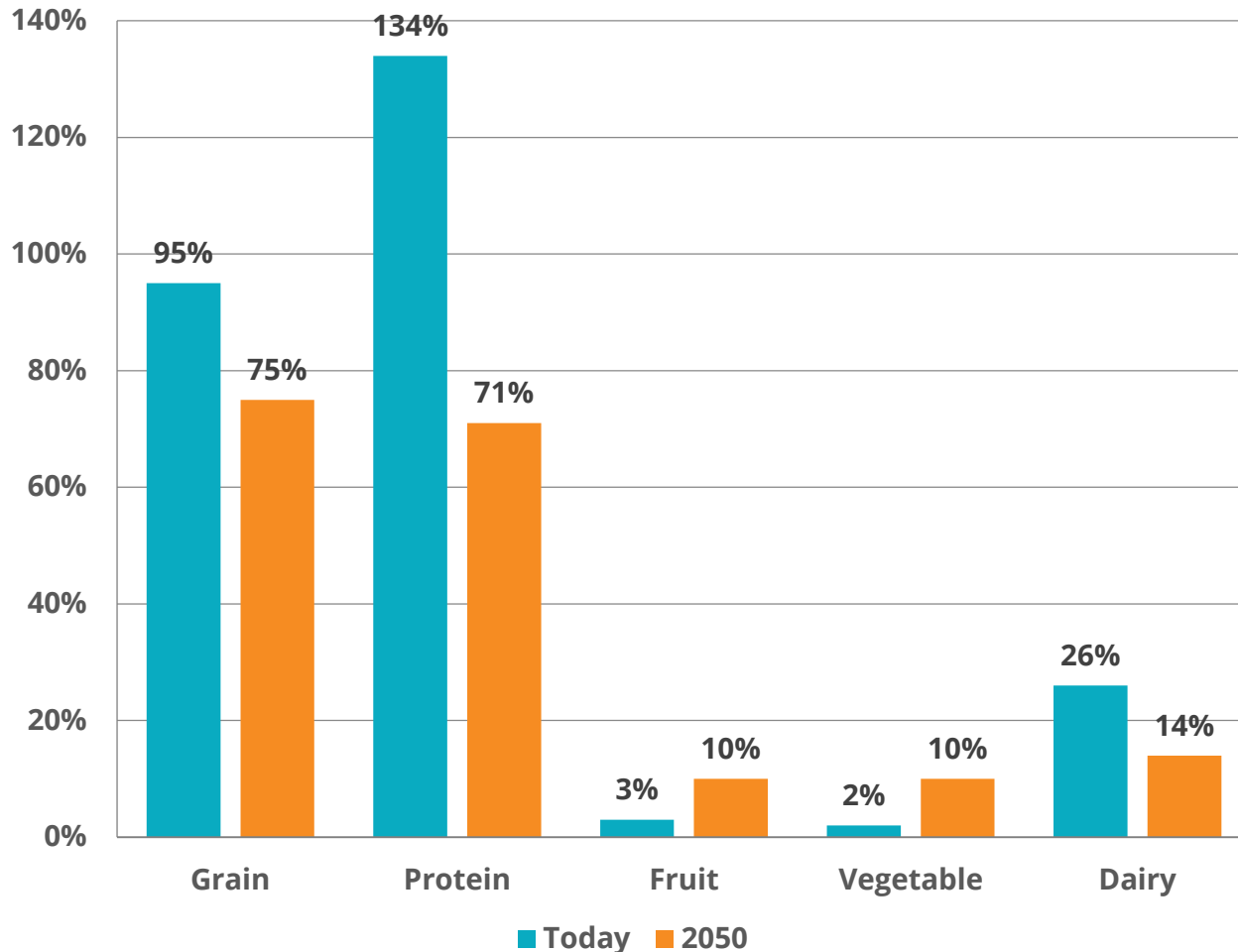
## Bonneville Trout Scenario



- Homes & businesses replace most Wasatch Front farms
- Water not moved from working farms
- Food self-sufficiency decreases

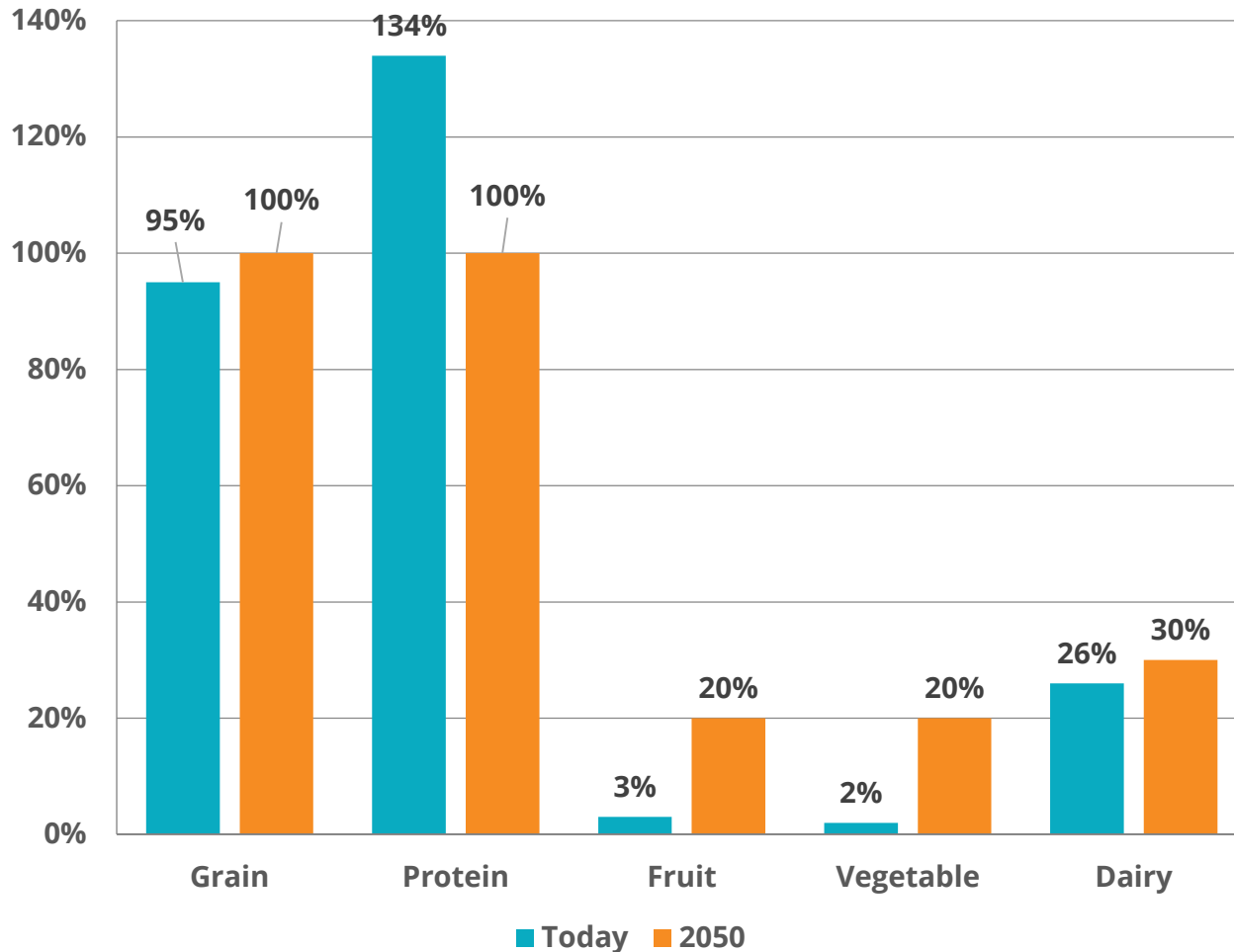
This is a likely outcome if Utah does not change the current approach to urban development of agricultural land and water.

## Seagull & Seego Lily Scenarios



- Homes & businesses replace farms more slowly
- Some shift of alfalfa/hay to fruits & vegetables
- Food self-sufficiency increases some

## Quaking Aspen Scenario

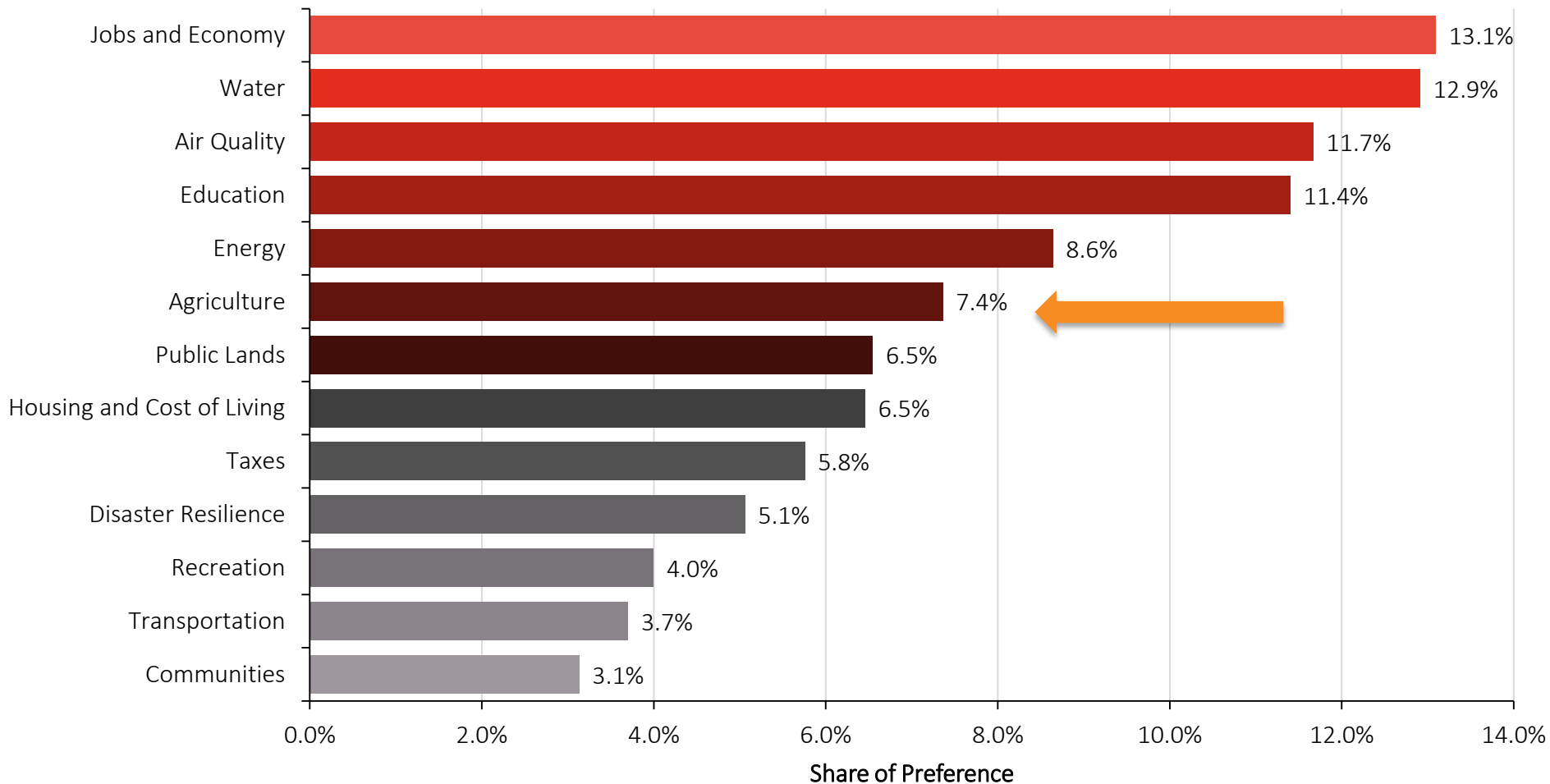


- Homes & businesses replace farms more slowly
- Cropland added: significant shift of alfalfa/hay to fruits, vegetables & dairy
- Food self-sufficiency improves significantly



### Level of Concern for the Future—Outreach Sample Results

Share of Preference, n=13,459



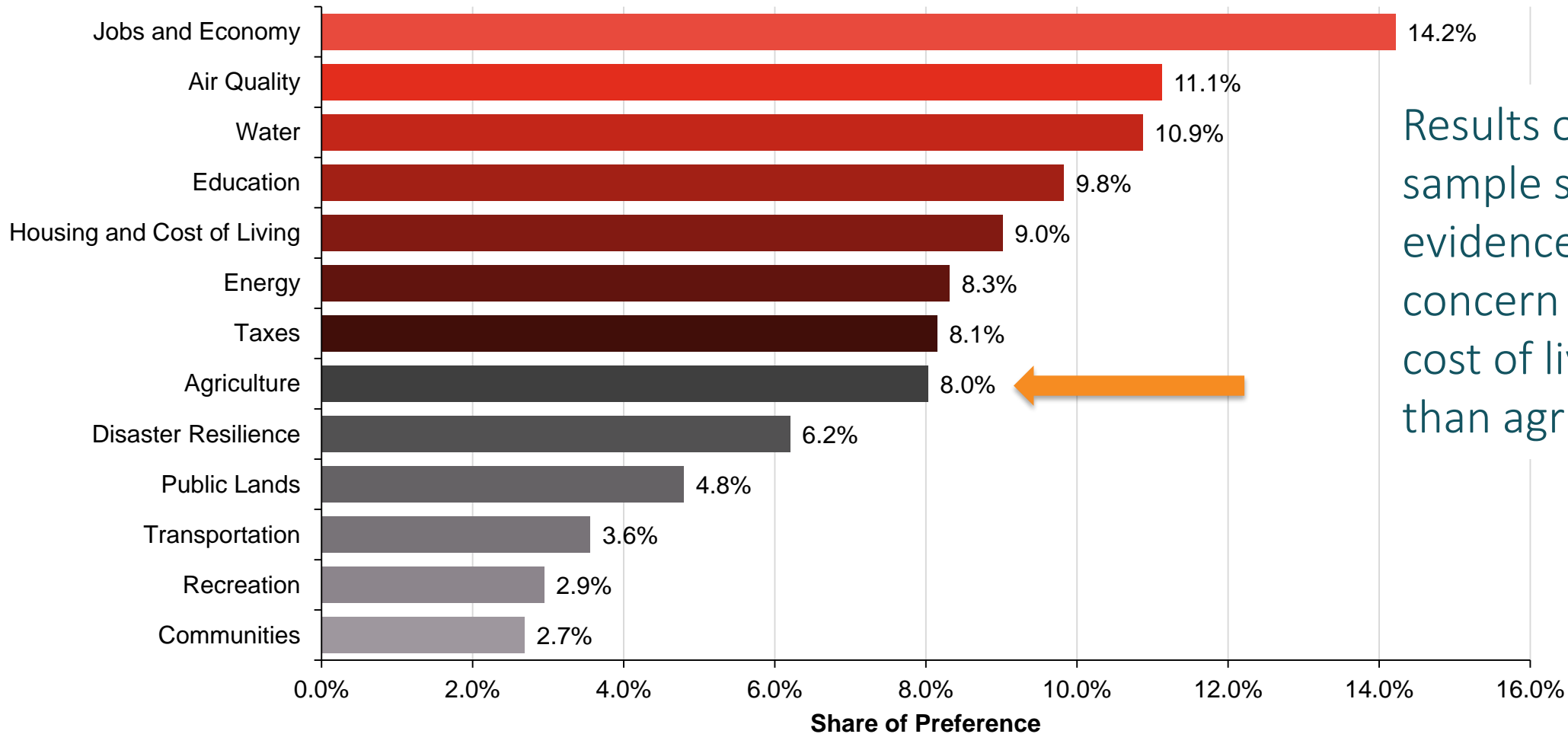
In the 2014 values study, Utahns ranked all 11 issues as being important to Utah’s future. The 2015 survey used a sophisticated technique to force a “weighting” of the issues, providing a wider gradation of concern.



## Level of Concern for the Future—Random Sample Results

Share of Preference, n=1,264

RANDOM  
SAMPLE  
n = 1,264

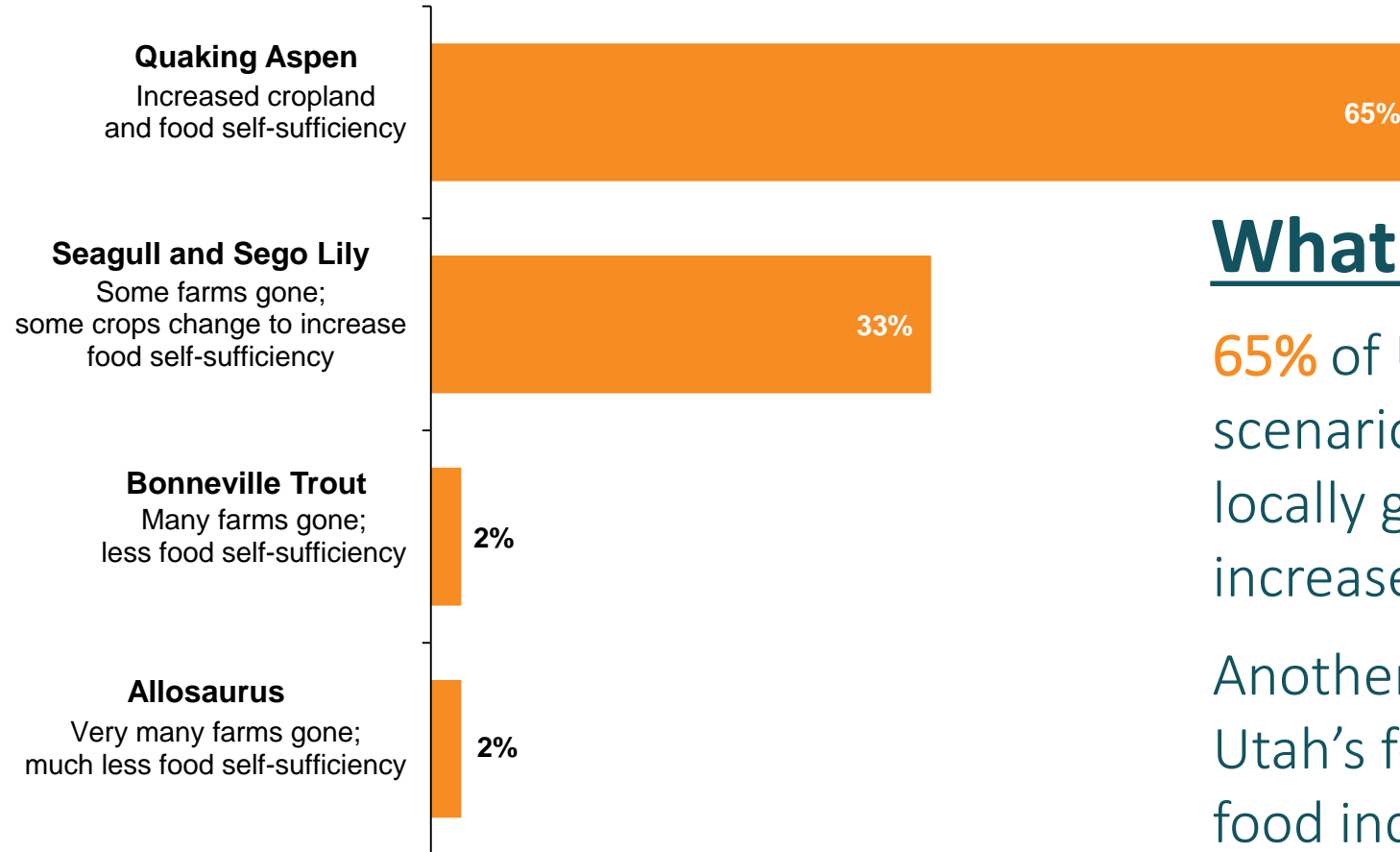


Results of the random sample survey evidenced greater concern for housing & cost of living and taxes than agriculture

Source: Survey – Keeping in mind that between now and the year 2050, Utah will almost double in population, please consider how important each of the following issues is to you. Considering only these four issues, which is the Most Important and which is the Least Important as you think about Utah’s future?

### Issue-specific Scenarios

% "Favorite" Selections, n=19,389



## What Utahns Want:

65% of Utahns selected an agriculture scenario in which Utah’s food self-sufficiency, locally grown food, and cropland significantly increase.

Another 33% chose a scenario in which Utah’s food self-sufficiency and locally grown food increase, but to a somewhat lesser extent.

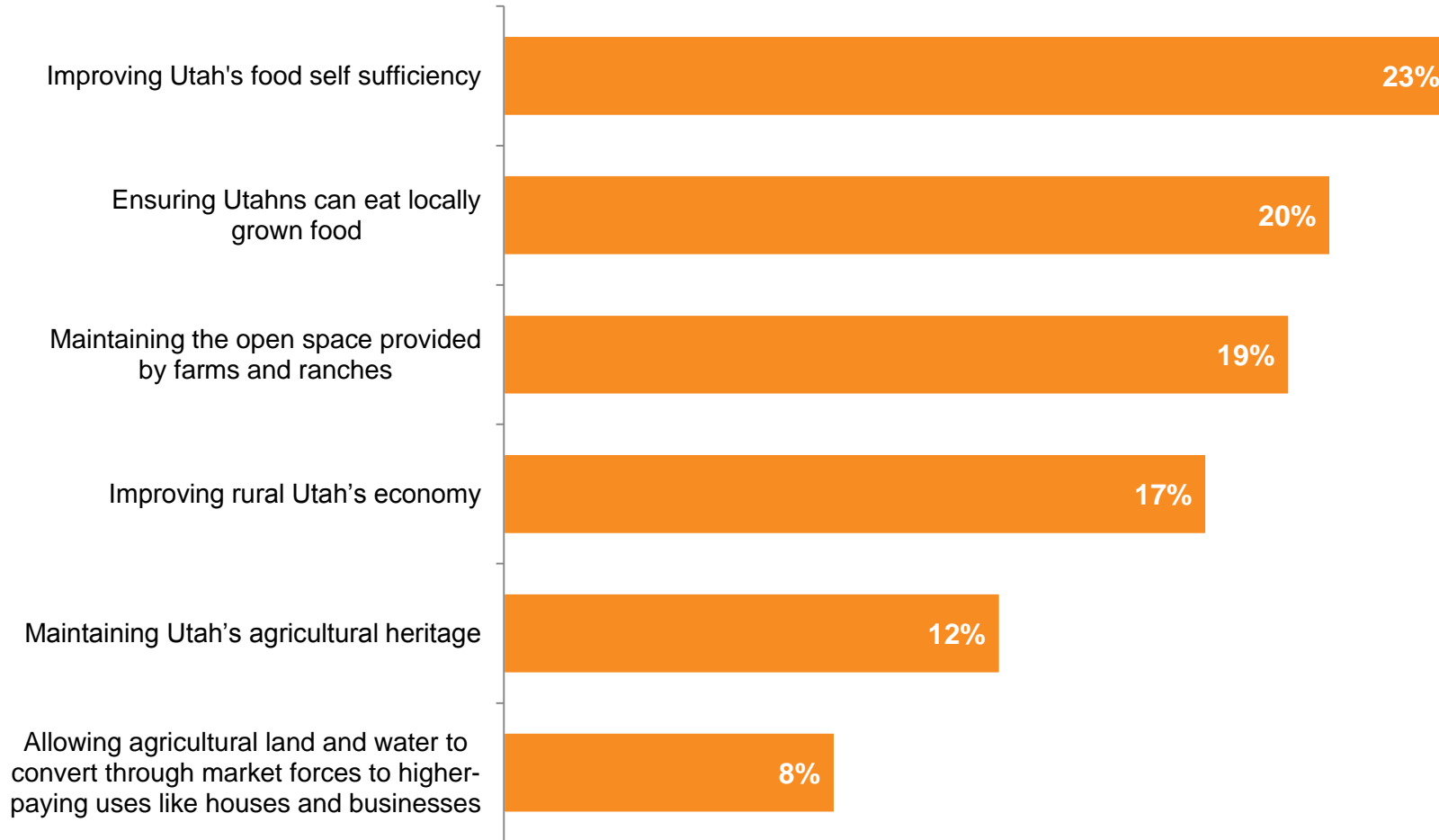
Only 4% want food production to continue to decline.

Source: Website – Select your favorite agriculture outcome(s) from the 4 presented below for Utah in 2050. Consider our self sufficiency from local agriculture.

OUTREACH  
n = 52,845

### Importance of Outcomes

Average % Allocated, n=4,875



## Why Utahns Want to Improve Agriculture:

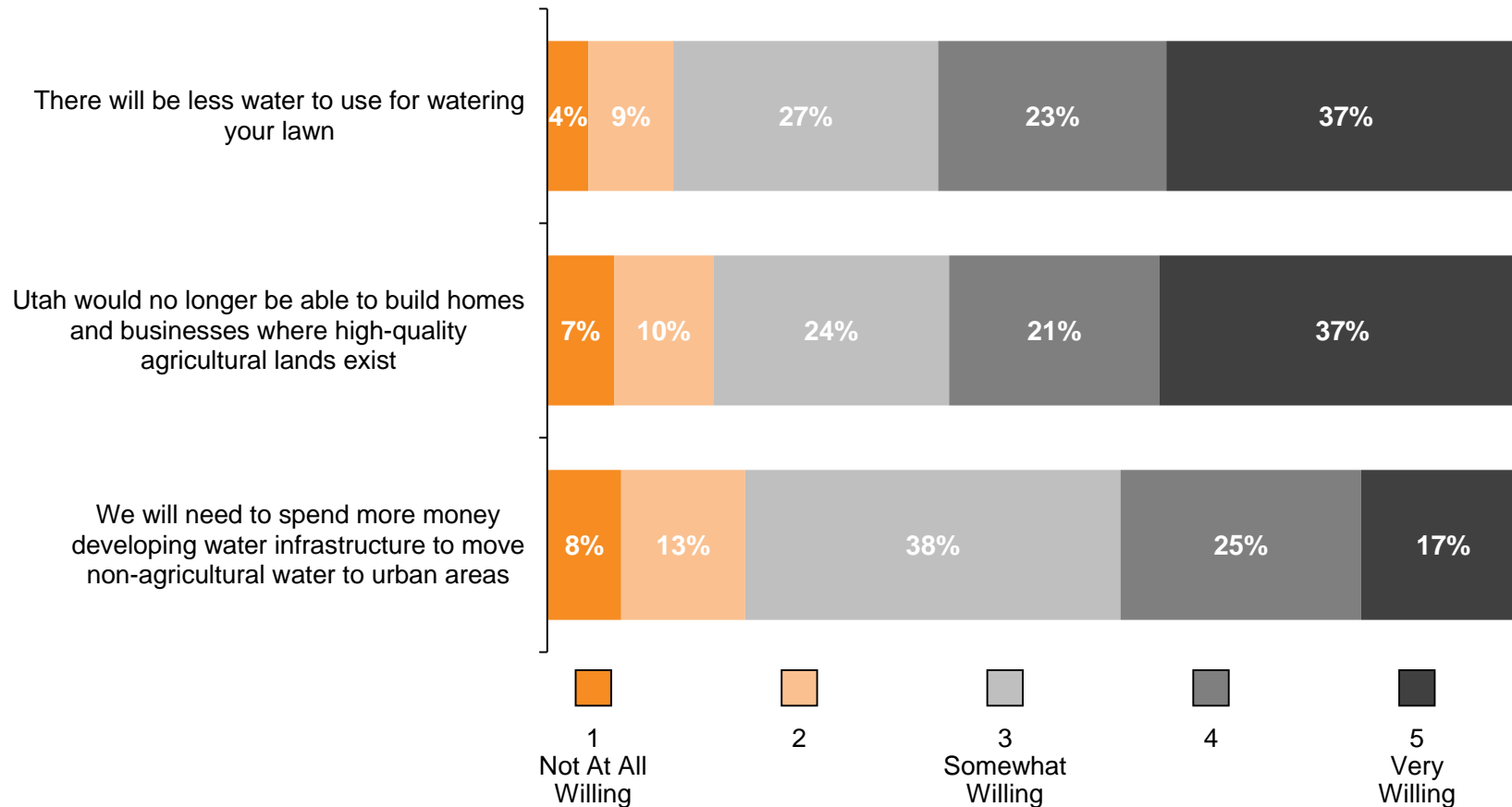
Utahns want the state be more self sufficient in supplying its own food, as well as have high-quality locally grown food for themselves and their families.

Source: Website – Please indicate each outcome's relative importance by allocating 100 points across all outcomes. The more points you allocate to a given outcome, the more important it is to you to achieve that outcome.

**OUTREACH**  
n = 52,845

**Willingness to Make Tradeoffs**

% Level of Willingness, n=4,875



**What Utahns are willing to do:**

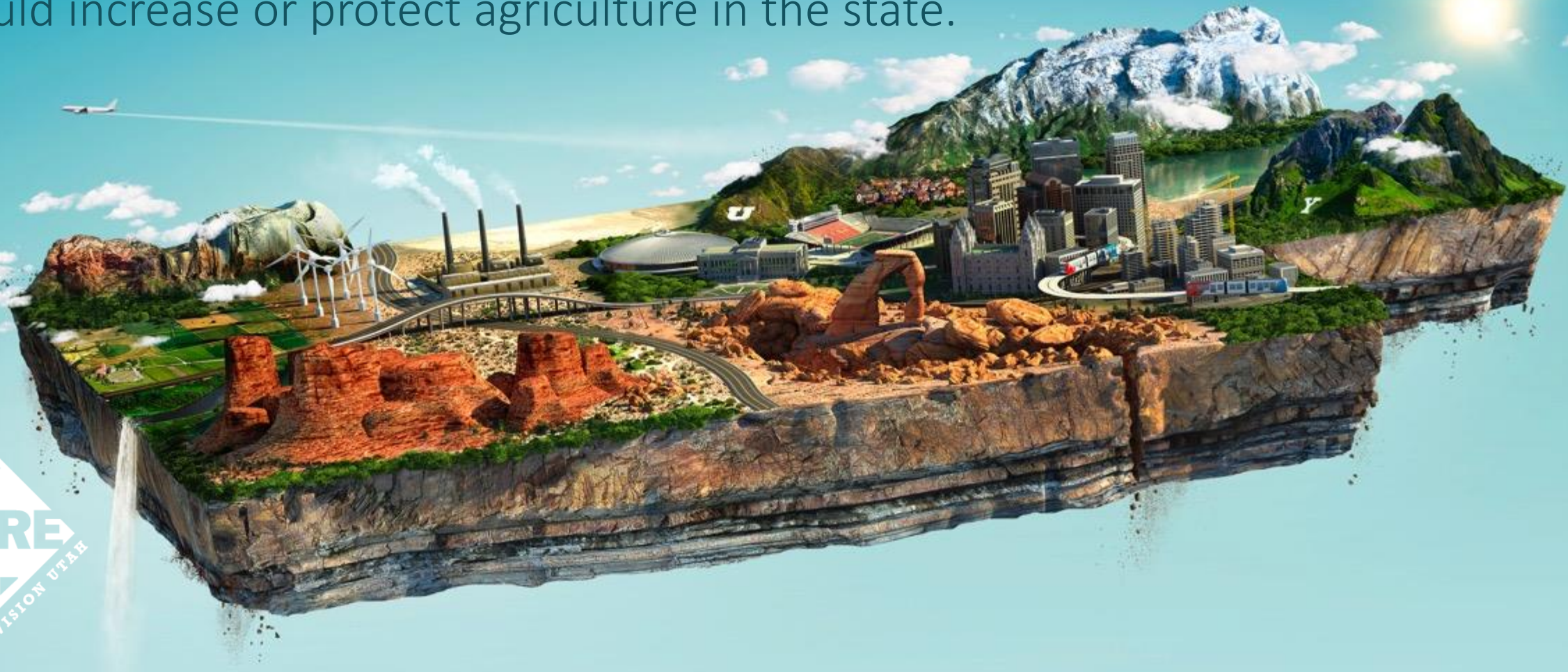
Utahns are willing both to have less water available for lawns and to avoid taking land and water from agriculture, even if it means water costs increase to develop non-agricultural water for urban use.

Source: Survey – Please indicate your willingness to make each trade-off in order to secure and expand agriculture in Utah. Outcomes:

- Increased locally grown food
- Less need to import food
- Increase agriculture exports

**OUTREACH**  
n = 52,845

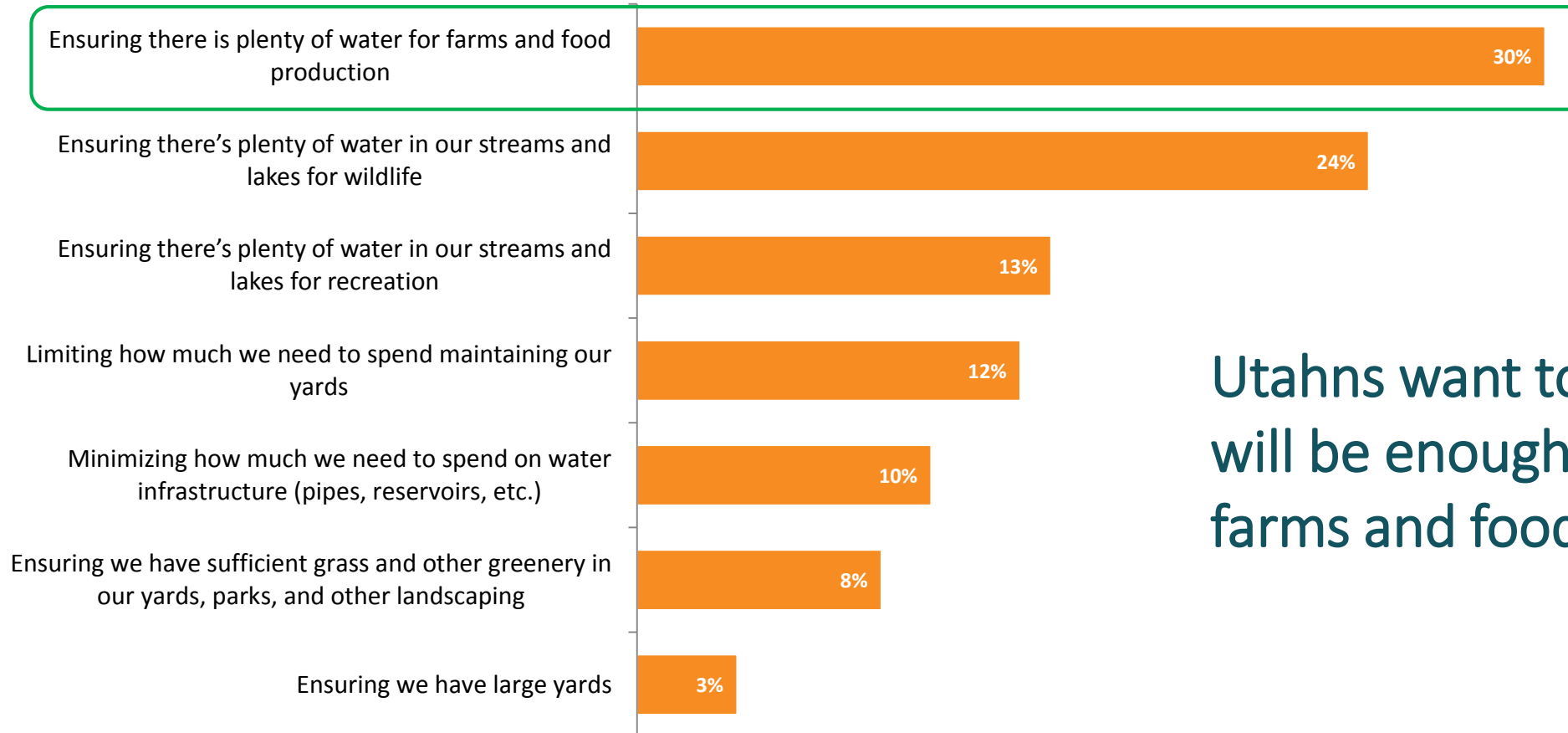
In addition to the specific results from agriculture questions, a number of results from other topics show strong support for outcomes or strategies that would increase or protect agriculture in the state.



OUTREACH  
n = 52,845

## Importance of Outcomes—Water

*Average % Allocated*



Utahns want to ensure there will be enough water for farms and food production.

Source: Survey – Please indicate each outcome's relative importance by allocating 100 points across all outcomes. The more points you allocate to a given outcome, the more important it is to you to achieve that outcome.

**OUTREACH**  
n = 52,845

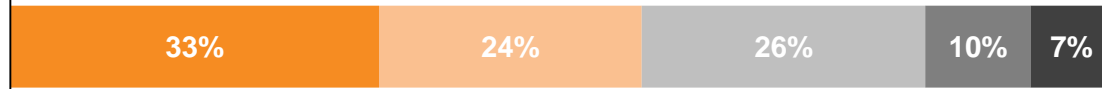
## Willingness to Make Tradeoffs for Larger Home Lot Sizes

% Level of Willingness, n=4,849

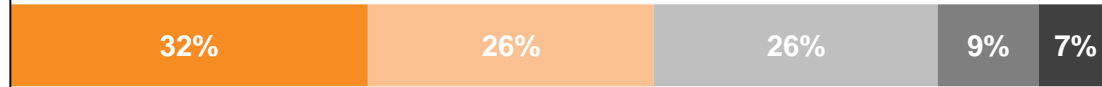
We will spend more money building and maintaining infrastructure like roads and pipes, which will have to stretch farther



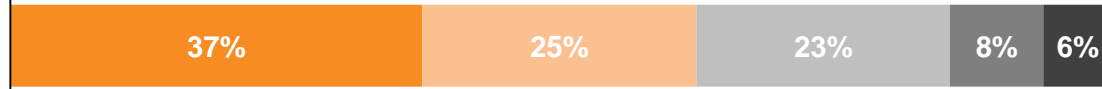
Socioeconomic classes will not mix as much because larger lots are more expensive, thus leading to more income-segregated communities



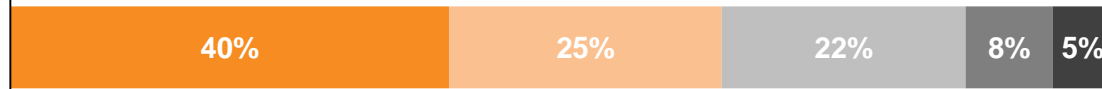
Household transportation costs and time spent driving will increase because homes will be further from city centers, shopping, jobs, and other destinations



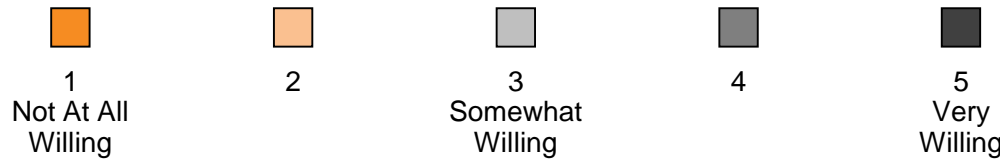
People will be less able to travel by public transportation, walking, or biking because everything will be farther apart



We will have to spend more money on infrastructure and impact the environment to develop and move water supplies because larger lots use more water



We will convert more farmland into houses



Utahns are largely unwilling to convert agricultural land for housing.

Source: Survey – Please indicate your willingness to make each trade-off in order to maximize home sizes in Utah. Outcome:  
• Bigger yards in more distant locations relative to city centers

# The Survey is still available!

Visit **[envisionutah.net](https://envisionutah.net)** to view the choices for **agriculture** and each of the 11 topics in the *Your Utah, Your Future* survey.

