

UTA Service Choices

Board Decision Memo

JULY 3, 2019



JARRETT WALKER + ASSOCIATES



Table of Contents

The Board’s Decision

Introduction.	4
The Key Questions	4
What did we hear from community leaders and members of the public?	5
Background: Why These Questions?	7
Who would be impacted?	9
Options for the Board: Ridership-Coverage Tradeoff	13
Options for the Board: Coverage Priorities	14
Options for the Board: Strength of Policy Commitment	14

Appendix A: Summary of Outreach Activities

Web Survey	17
Ranking Transit Goals	19
Balance of Service with Existing Resources	21
Balance of Service with Additional Resources	22
Community Leader Workshops	24

Appendix B: Demographic Profile

Who took our survey?	31
Race & Ethnicity	32
Income	36
Vehicles Available in Household	40

Appendix C: Geographic Distribution of Survey Responses

Where did our survey responses come from?	45
---	----

The Board's Decision

Introduction

The UTA Service Choices project aims to fully review, and if necessary redesign, the pattern of bus service across the UTA network, as well as setting standards for future service changes.

A network redesign should reflect the priorities of the Board, informed by input from the community. For this reason, UTA has embarked on a major outreach effort seeking public comment about what priorities should govern the project. This memo summarizes the input that has been received thus far.

The goal of this memo is to give the Board all the information it needs to make a decision about the priorities for UTA's bus service.

The following pages describe the choice before the Board, and our recommended method of articulating a position on the major service policy questions that will shape the design of the Draft Plan.

The appendices to this document describe in detail the result of the public and community leader engagement processes carried out in Spring 2019.

The Key Questions

A statement of priorities expresses a difficult decision about how to balance competing goals. We identify goals as competing if implementing them would require different kinds of network design.

The decision that is needed is thus fundamentally like a budget decision, where the question is not "are these good things to spend money on?", but rather "which are more important, given that we cannot afford everything?"

We have identified three critical questions on which we need direction. The next section describes these choices in more detail.

1. When deploying the existing operating budget (potentially moving service from one

place to another), how should UTA balance the competing goals of ridership and coverage?

2. When deploying new resources, how should UTA balance the competing goals of ridership and coverage? (This question was asked in all business units but is currently relevant only in the Salt Lake Business Unit, where new resources for bus service are available.)

3. When deploying service with a coverage goal – in expectation of low ridership – what should be the primary principle governing that service design:

- Serving people with no alternatives, including seniors, youth, and people with low incomes.
- Responding to growth, by extending service to newly developing communities.
- Serving everyone who pays taxes. This principle would lead us to try to provide service absolutely everywhere in the service area.

To provide clear direction for the study, the Board needs to adopt a statement answering each of these questions.

What did we hear from community leaders and members of the public?

This outreach process involved many tools, including a public online survey and hands-on workshops with community leaders. Each were designed to directly ask people about their priorities for transit.

Before sharing their opinion on these important questions, all participants in the community leader workshops were provided a briefing summarizing the findings of the Choices Report, and then were lead through an interactive exercise teaching the tools and tradeoffs of transit. In total, community leaders spent 3-4 hours engaged in each workshop, compared to the 10-15 minutes the public web survey was designed to take.

Much more detail is available on the results of outreach in appendices A, B and C of this document, but the two tables on this and the following page provide a succinct summary.

Balance of Service by Region

Figure 1 summarizes the results emerging from the public web survey and community leader workshops relating to the balance of service between ridership and coverage goals. The summary presented here is based on the median response on the ridership/coverage scale question, where participants were asked to allocate bus operating resources using a scale of ten percent increments from 100% ridership / 0% coverage to 0% ridership / 100% coverage.

In each region, a majority of community leaders voted to shift the balance of service with existing and additional resources towards ridership.

North Region

In the north, public survey respondents generally said to move slightly more towards ridership.

Central Region

In the central region, public survey respondents tended to opt to maintain the existing balance.

South Region

In the south, the median response from the public survey was to maintain the existing balance, but if new resources became available to focus them on coverage services to a greater degree than today.

Figure 1: Balance of Service by Region

Region	Public Web Survey		Community Leader Workshops	
	Balance of Existing Resources	Balance of Additional Resources	Balance of Existing Resources	Balance of Additional Resources
North	Focus more on ridership services	Focus more on ridership services	Focus more on ridership services	Focus more on ridership services
Central	Maintain existing balance of services	Maintain existing balance of services <i>Note: when weighted by zip code population, the median response in the Central region was to focus more on coverage services.</i>	Focus more on ridership services	Focus more on ridership services
South	Maintain existing balance of services	Focus more on coverage services	Focus more on ridership services	Focus more on ridership services

Red = input suggests move towards ridership Blue = input suggests move towards coverage

Figure 2: Coverage Priorities by Region

Region	Public Web Survey			Community Leader Workshops		
	Service for people with no transportation alternative	Service responding to growth or new development	Service to all taxpayers	Service for people with no transportation alternative	Service responding to growth or new development	Service to all taxpayers
North	1	2	3	1	3	2
Central	1	2	3	1	2	3
South	2	1	3	1	2	3

Note: when weighted by zip code population, in the South region, the top priority was "service for people with no alternative".

Coverage Priorities by Region

Figure 2 shows the most common ranking of coverage priorities by public survey respondents and community leaders for each region. There are three main reasons to provide coverage service, and each has different network implications:

- Service for people with no transportation alternative
- Service responding to growth or new development
- Service to all taxpayers

North Region

In the north region, public web survey respondents and community leaders had the same top priority: service for people with no transportation alternative. However, while the public survey respondents ranked service responding to growth second and service to all taxpayers last, community leaders instead ranked service to all taxpayers as their number two coverage purpose.

Central Region

In the central region, community leaders and public web survey respondents had the same order of coverage priorities: 1) service for people with no transportation alternative; 2) service responding to growth or new development; 3) service to all taxpayers.

South Region

In the south region, public web survey respondents' top coverage priority was "service responding to growth or new development", while community leaders' top priority was "service for people with no transportation alternative".

However, when public survey responses were weighted by zip code, the top priority was "service for people with no transportation alternative". This is mainly due to the fact that in the south, a large volume of responses (100+) were received from the zip code covering Saratoga Springs and the surrounding area. Responses from this area tended to prioritize "service responding to growth or new development" to a greater extent than those from other parts of the south region.

Background: Why These Questions?

In the Choices Report, we identified two key questions the Board must provide direction on in order to design a coherent Draft Service Plan.

Public transit agencies are asked to serve many different goals at the same time. For example, people often mention one of these goals:

- Reduce traffic congestion on the busiest corridors.
- Reduce air pollution.
- Provide a 'permanent' service to stimulate dense development in urban centers.
- Provide an affordable transportation option for people with limited or no access to personal cars.
- Get workers to their jobs.
- Be available near the homes of everyone who pays taxes to support the service.
- Support future development opportunities.
- Connect clients to social service agencies.
- Get students to class.

UTA receives many different comments requesting changes to service in order to pursue these goals, but UTA has a limited budget, so doing more of one thing can mean doing less of another. That's why the UTA Board needs to articulate its priorities.

Ridership or Coverage?

The many different goals of transit service can be sorted into two major categories: ridership goals and coverage goals.

Ridership means attracting as many riders as possible, even if service is not available in as many places.

When we do this, we also work towards the following goals:

- Compete more effectively with cars, so that more people can travel down a busy road.
- Collect more fare revenue, increasing the share of our budget paid for by fares, assuming that fares don't change.
- Make more efficient use of tax dollars by reducing the cost to provide each ride.
- Improve air quality by replacing single-occupancy vehicle trips with transit trips, reducing emissions.
- Support dense and walkable development and redevelopment.
- Provide the most useful and frequent services to more people.

When we concentrate our most useful services in the places where the most people can take advantage of them, we do all of these things at once.

Coverage means being available in as many places as possible, even if not many people ride. When we do this, we can also work towards the following goals:

- Access for people without other travel options. This can include low income people, elderly people, and disabled people, among others.
- Provide some service to everyone who pays taxes to support UTA.
- Support for lower density development, such as new low-density suburbs around the edge of the region.

These goals lead us to spread service out so that everyone gets a little bit, which is different than what we do when we are seeking ridership.

Spreading service out means spreading it thin. If UTA buses need to cover every part of the region, we have to run lots of routes. When we spread our limited budget over all those routes, we cannot afford to run very much service on each

of them. That means those routes won't be very effective, because they won't run often enough, or late enough, to be there when you need them.

Ridership goals and coverage goals are both very popular. But no transit agency can pursue both goals with the same dollar, because the goals require very different kinds of bus networks. UTA, like every agency, has to decide how much of its budget it will spend pursuing ridership goals, and how much it will spend on coverage goals. There's no right or wrong answer to this question: It depends on your priorities.

What does planning for ridership mean?

Suppose, for a moment, that we planned the network for high ridership. This network would seek to be useful to the greatest number of people. What would that mean?

When a store or restaurant opens in new town, it will often fail or succeed based on its location. You want to open your business in a place with many potential customers, where it will be easy for people to make the decision to come into the store and buy your products. This is why you so frequently see a fast food restaurant or coffee shop at the intersections of busy streets, and not tucked away in neighborhoods. These businesses know that their best markets are where many people are always passing by, and where it's quick and convenient to stop in to pick up a cup of coffee or lunch.

When we are asked to plan for high ridership, we are being asked to think like a business; to identify the best markets with the most potential customers, where useful transit services can compete for the greatest number of trips. We'd concentrate cost-effective, useful service where lots of people can benefit.

Why are Coverage goals important?

Coverage services are not about ridership, they are about availability. For example, we might measure coverage as the percentage of the population that's within 1/2 mile of some service. The goal

of coverage service is to make that number high, even if the result is low ridership.

When people ask for coverage services, they usually give one of three reasons.

Transportation Options for People Who Cannot Drive

The first of these, "access for people who cannot drive", is about what people often call the social service function of transit. That is, a transportation option for people with few other choices, who are located in places where high-ridership service would not go.

This could include sites like senior living communities in suburban or rural areas, isolated lower-income communities with low vehicle ownership rates, and important destinations like community colleges or social service agencies that have chosen to build facilities in environments that are difficult for transit to serve efficiently. These are all places where some people need the service badly, but this doesn't mean that many people would use the service compared to higher-density areas that are more efficiently integrated into the rest of the transit network.

Some Service for Everyone Who Pays

Everyone who pays taxes into UTA could reasonably expect some service in return. This is the second common argument for coverage services.

You could also argue that even people who don't have a bus route close to home are benefiting from UTA through reduced traffic congestion and other benefits to the economy.

Still, some people want service to everywhere that pays taxes, and this is a common reason for coverage services to exist.

Supporting Future Development

The last reason is about the future. Sometimes, transit agencies are asked to offer a service today in places that are expected to develop in a way that may generate high ridership in the future. Developers of new neighborhoods often want

transit to be there early, before there are many people, so that it is available right as people move in. This is a low-ridership service until there are enough people there.

Dividing the Budget by Priorities

Every transit agency has to decide how much of its budget to spend on ridership goals as opposed to coverage goals.

A network that was 100% ridership 0% coverage would have excellent service in places where the community geometry supports high ridership transit, but there would be little or no service anywhere else. A 100% coverage network would spread routes across the entirety of the service area, but because spreading it out means spreading it thin, these routes would not be very frequent, and as a result not many people would find them useful.

Any decision regarding the balance of service between the two goals must be made at the level of UTA's three main service regions, internally referred to as "business units". Each region consists of UTA's services operated within one or more counties:

- Northern Region - Davis & Weber Counties & Portions of Box Elder County
- Central Region - Salt Lake County & Portions of Tooele County
- Southern Region - Utah County

Perhaps today's ridership-coverage balance in each business unit is right for the future, or perhaps the community will value a shift in emphasis. The direction of that shift—either towards higher ridership or towards wider coverage—is a question for the public, community leaders, and ultimately the Board.

Who would be impacted?

While the details of a service plan designed to shift the balance of service towards more coverage

or higher ridership can only be fully understood through a design process, we can generally describe which portions of the existing network would likely be impacted in either case.

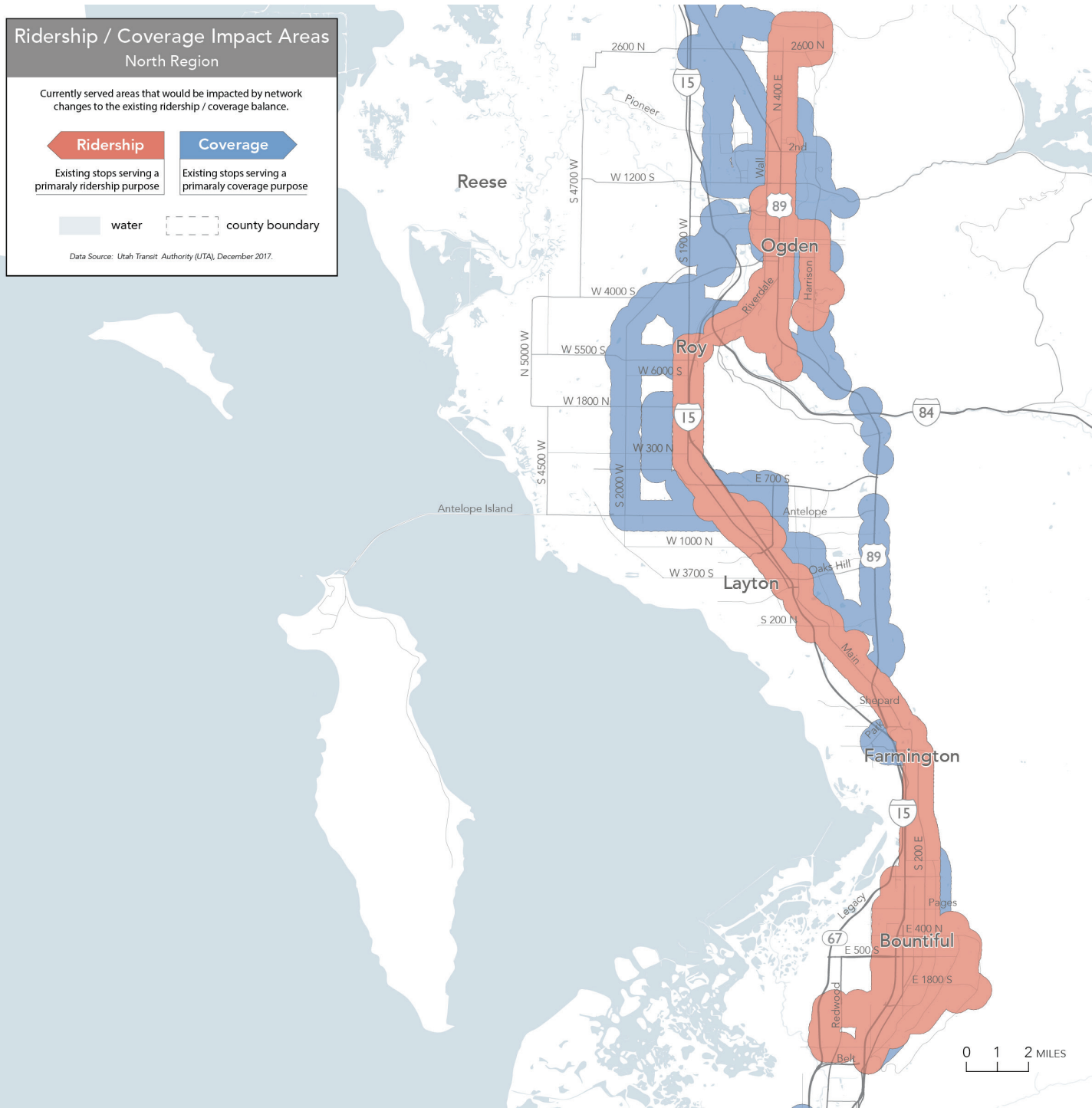
As part of the analysis included in the Choices Report, we developed a "network model" that produced the ridership/coverage budget split estimates for each network region referred to in this document and in the survey and other engagement materials. This analysis involved an examination of existing productivity, ridership, and supporting land use (residential density, density of lower-income people, density of zero-car households, employment density, density of low and middle wage jobs), which formed the basis of an estimated ridership/coverage purpose split for each route.

The maps on the next three pages color code the area around each bus stop by whether the purpose of the route is mainly ridership or coverage. **These maps do not include rail services, which are not part of this process.**

The areas shown in red are served by frequent, highly productive services, and contain dense, walkable land uses. The areas shown in blue are primarily served at lower-frequencies, and mainly contain lower-density, less walkable land uses.

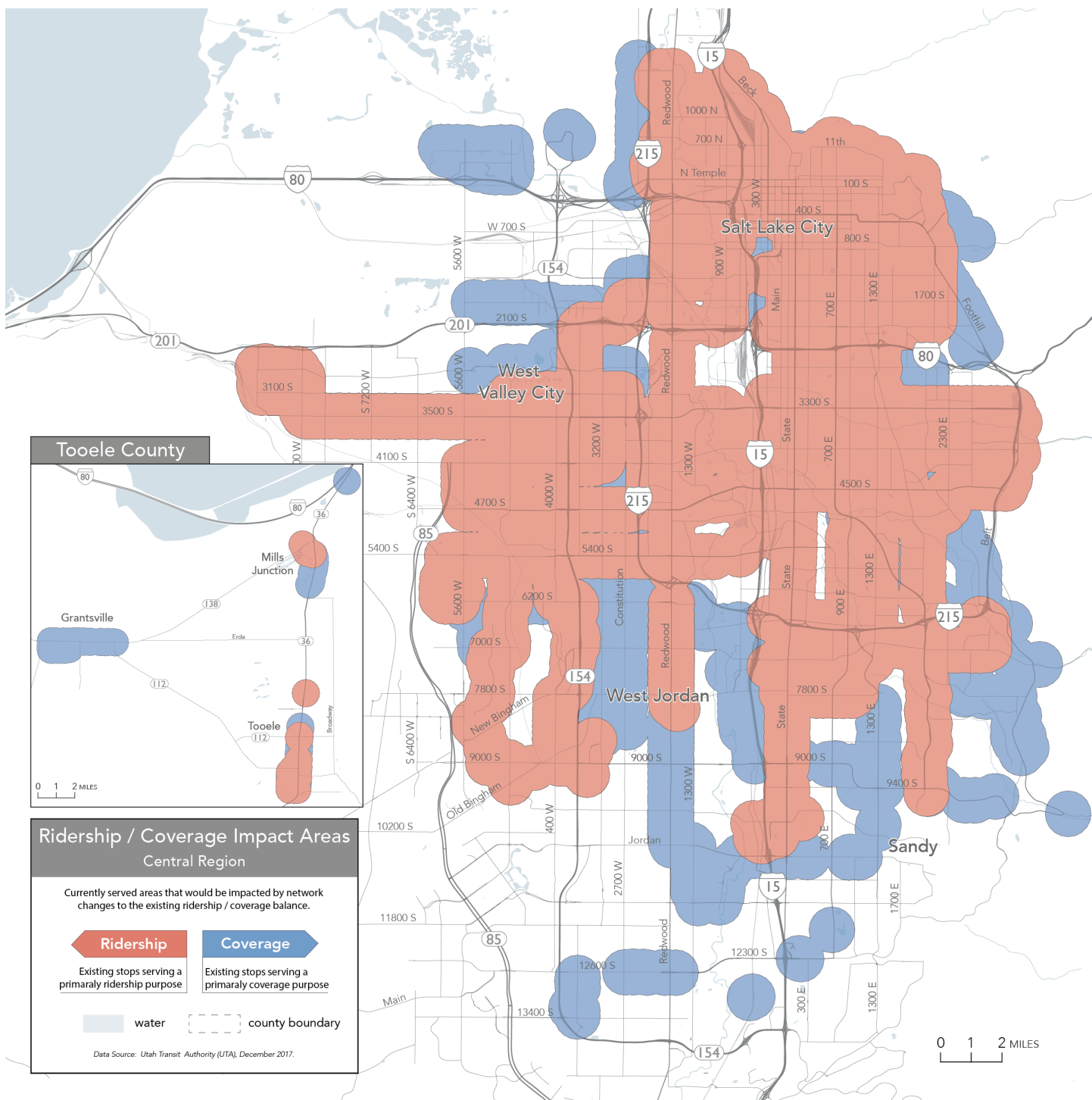
With existing resources, a shift of resources towards ridership would likely invest more service in these red areas, and reduce service in some blue areas. A shift of resources towards coverage would likely require reducing service levels in the red areas, in order to extend the blue areas to new parts of the region.

Figure 3: Example of Ridership / Coverage Impact Areas - North



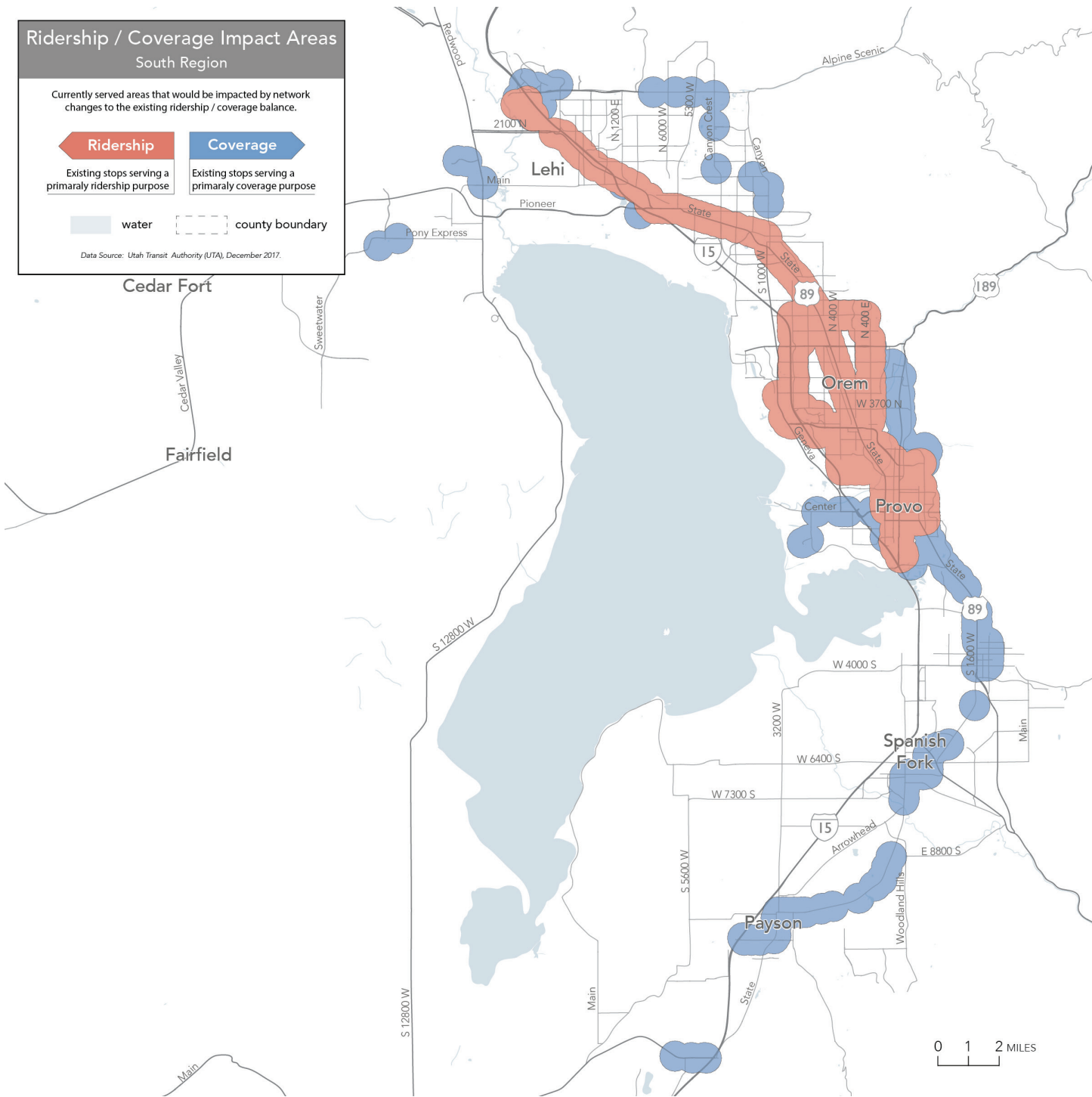
Disclaimer: this map is intended only as the most general illustrations of the portions of the network that could be impacted by a ridership/coverage decision that changes the balance of service. It should not be construed as a plan, proposal, or policy.

Figure 4: Example of Ridership / Coverage Impact Areas - Central



Disclaimer: this map is intended only as the most general illustrations of the portions of the network that could be impacted by a ridership/coverage decision that changes the balance of service. It should not be construed as a plan, proposal, or policy.

Figure 5: Example of Ridership / Coverage Impact Areas - South



Disclaimer: this map is intended only as the most general illustrations of the portions of the network that could be impacted by a ridership/coverage decision that changes the balance of service. It should not be construed as a plan, proposal, or policy.

Options for the Board: Ridership-Coverage Tradeoff

A board resolution answering our questions could consist of the following statements:

In the **Mt. Ogden Business Unit** (Davis, Weber, and Box Elder Counties), about 40% of bus service resources are now deployed for a ridership goal, while the other 60% serves a coverage goal.

- When deploying **existing resources**, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.
- Should **additional resources** become available, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.

In the **Salt Lake Business Unit** (Salt Lake and Tooele Counties), about 60% of bus service resources are now deployed for a ridership goal, while the other 40% serves a coverage goal.

- When deploying **existing resources**, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.
- In the context of **projected service growth**, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.

In the **Timpanogos Business Unit** (Utah County), about 60% of bus service resources are now deployed for a ridership goal, while the other 40% serves a coverage goal.

- When deploying **existing resources**, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.
- Should **additional resources** become available, this balance should be:
 - Unchanged, or
 - Shifted to a split of ___% ridership, ___% coverage.

Note that:

- When working in the context of existing resources, a direction to change the ridership-coverage split is a direction to remove service somewhere so as to deploy it somewhere else. Shifting in the ridership direction will cause all service to disappear on some low-ridership segments. Shifting in the coverage direction, it is expected that the frequency or duration of service would be reduced on some higher-ridership routes.
- While practically all service changes trigger some negative reaction from people who are used to the service as it is, service removals are likely to cause a particularly strong negative reaction.
- We presume that the Board will want to define a separate ridership-coverage split for each business unit, because the Mt. Ogden Business Unit has a much different split than the other two. Setting a single ridership-coverage split for the entire network would imply radical change to the existing splits in one or more units, causing that unit's network to change more than the others'. However, the Board may wish to apply a single policy to the whole network.

- For each business unit, the Board could choose to apply a single split to both existing and new resources (should they become available), effectively combining the last two questions. We asked the public to think separately about existing resources vs. new resources because shifting existing resources implies removing someone's service, while splitting new resources does not.

Options for the Board: Coverage Priorities

To the extent that service is designed for coverage, Board direction is needed on how to deploy coverage service, among the competing priorities of:

- Meeting needs, by focusing in places where people are especially likely to not have access to cars due to age or income. This priority would tend to generate coverage service specifically where these groups are concentrated.
- Serving new communities that are just being built.
- Providing some service to everyone who pays taxes. This priority would spread service thinly across the entire developed region, since there is someone paying taxes everywhere.

The survey showed strong support for the first two priorities and much less for the third. The Board is being asked to provide direction on how these priorities should be balanced. This could be expressed numerically, by providing a percentage of coverage service to devote to each goal. The Board could also make a more general statement indicating which priority is higher.

Options for the Board: Strength of Policy Commitment

At a minimum, the Board needs to answer these questions for the purposes of the Service Choices project. However, the Board should consider creating a more enduring policy answering these questions. Having standing policies has the following benefits:

- It is easier to show that service decisions are not being made arbitrarily, or based on lobbying by particular communities, because consistent rules are being applied fairly everywhere (at least everywhere within each business unit).
- The Board and Local Advisory Council would devote less effort to individual service decisions, as staff would have the direction needed to design service and present draft plans that meet the stated goals.
- Other potential funding partners would know that there is a clear boundary to what UTA will fund, which creates a simpler conversation about what a partner needs to contribute. For example, if a municipality wants to pay for more service than it gets from UTA anyway, it is helpful to have a clear policy indicating what level of service the municipality can expect from UTA's budget. That policy follows logically from answers to the questions we have stated.

Appendix A: Summary of Outreach Activities

Outreach Efforts

At the outset of the UTA Service Choices initiative, The Langdon Group (TLG) worked with the project team to identify specific outreach goals and discussed ways to measure the success of the engagement process. Three goals were identified along with their corresponding success measurement.

1. Furnish the UTA Board with a clear sense of the regional transit priorities of major stakeholders and the public.

- **Success Measurement:** Create a clear sense of regional transit priorities through the data collected from the Community Leader Workshops and the public survey. Within each of the outreach methods, gauge success by (1) showing that UTA directly reached and directly invited a broad cross-section of participants and provided an opportunity to engage and (2) using the demographic data from the survey to show a high level of participation and a diverse geographic and socioeconomic spread.

2. Build public awareness that ridership and coverage are distinct goals requiring very different networks.

- **Success Measurement:** Create an outreach campaign that includes education about ridership and coverage goals. This goal is slightly more difficult to track because education and building awareness tend to be more qualitative, rather than quantitative. Success can be gauged by tracking the analytics of the Service Choices social media posts, the website visits, and the reach of media coverage. The survey data can also indicate whether participants understood the ridership vs. coverage topic. If many participants provide conflicting input on a ridership or coverage network in their community, it could be inferred that the respondents did not understand the concepts.

3. Strengthen relationships with community partners and the public through a sincere engagement process.

- **Success Measurement:** Create a diverse set of outreach mechanisms that target a broad cross-section of stakeholders (elected officials, internal, general public, key community leaders, project partners, etc.). Gauge success by the number and diversity of outreach methods used (in-person meetings, open houses, online engagement, digital communication and advertising, etc.). Many opportunities to engage and a diversity of outreach methods will signify that UTA provided ample opportunity to all within the service area. Track participants and survey respondents to show actual participation in the process per audience group. If we see that all of the key audiences were engaged and participated, we have reached our goal of creating a sincere engagement process.

To better inform the balance between ridership and coverage, UTA with help from TLG and JWA, conducted a public outreach process that spanned the Wasatch Front metropolitan area and aimed to include all taxpayers, whether they were regular transit riders, occasional transit riders, or had never ridden transit.

Outreach efforts included:

- A **series of four community leader workshops** were held throughout UTA's service area. Jarrett Walker & Associates facilitated these workshops to inform community leaders and gather their feedback on the balance between ridership and coverage.
- A **public web survey**.
- **Engaging local elected officials**, partner agency leadership and staff was key to the overall engagement plan that JWA created. To reduce "planning fatigue" and to be efficient with busy schedules, the Service Choices messaging was presented to these audiences at meetings and engagement opportunities that participants already regularly attend.

- **Three public open houses** were held in the three UTA service areas, one per service area. Any member of the public was invited to attend these events; however, they were carefully crafted to be accessible for paratransit riders to further ensure that the Service Choices events were inclusive. The open houses were advertised on Facebook, UTA's website, and through mailers sent to paratransit riders with specific information about the public meetings. The public open houses featured information boards, an electronic survey station, and had UTA staff available to answer questions.
- **Six booths at public events** on fourteen days were staffed in the three service areas, totaling two per service area. These events were hosted in partnership with local community festivities with the goal to reach more members of the public at events they were already attending to engage a broader cross-section of the public.

The analysis in this section focuses on the web survey and community leader workshops, which were the primary methods producing input that pertained directly to the questions before the board.

Web Survey

Educating the public on the difference between a ridership-based network and coverage-based network and asking for the public's input on balancing the two goals was a complicated concept to convey. In order to get constructive public feedback, the public needed to be educated and informed. UTA and TLG transformed the complicated concepts of ridership and coverage and created an interactive online survey using the MetroQuest platform.

The online survey contained educational sections as well as five questions pertaining to the UTA service area that residents lived in (Davis, Box Elder, and Weber Counties; Salt Lake and Tooele Counties; or Utah County).



Figure 6: Community Leaders participate in interactive planning game exercise. Each workshop featured a 1-hour design segment, followed by a group conversation facilitated by Jarrett Walker where participants critiqued and compared their designs.

The online survey was provided in English and Spanish. For residents that needed additional assistance to complete in the survey, participants could call a UTA Customer Service Agent and have the survey administered verbally or mailed a printed copy. The MetroQuest survey was also converted into a Survey Monkey text-only version to accommodate visually impaired participants who use a reading service to digest online content.

The UTA Service Choices online survey was live and collecting feedback from March 7, 2019 to May 31, 2019. In total, 3,374 respondents participated in the survey.

Key Takeaways

- In the **Northern** region of the network, respondents generally suggested a **move towards a greater focus on ridership**. The median response to the questions regarding the balance of service with both existing and additional resources was 50% ridership / 50%

coverage, compared to today's split of 40% ridership / 60% coverage.

- In the **Central** region of the network (Salt Lake and Tooele Counties), **responses did not strongly suggest a direction to change the balance of service.** The median response to the questions regarding the balance of service with both existing and additional resources was 60% for ridership / 40% for coverage, the same as today's resource split. However, when weighted by zip code population, the weighted median response to the desired split of additional resources between ridership and coverage goals was more focused on coverage.
- In the **Southern** region of the network, the median response **with existing resources was to maintain the current balance**, 60% ridership / 40% coverage. In responses to how to balance the two goals **with (hypothetical) additional resources, more survey takers chose an option with a greater focus on coverage:** the median response with additional resources was 50% ridership / 50% coverage.

Demographic Characteristics and Geographic Distribution of Survey Respondents

- The survey population did not precisely represent the demographic characteristics or population distribution of within UTA's service area and three business units. This was not part of the goal or design of the survey.
- Demographic characteristics
 - The results of the major content questions were not appreciably different when weighted by race & ethnicity, vehicle ownership, or income.
 - More information on the demographic profile of survey respondents is available in Appendix A.
- Geographic distribution

- When weighted by zip code population, responses to the major questions were largely similar to the unweighted values, except that in the Central region of the network, the weighted median response to the desired split of additional resources between ridership and coverage goals was 50% ridership / 50% coverage, compared to 60% ridership / 40% coverage for the unweighted result. This means that respondents from the most heavily-sampled zip codes (clustered around downtown Salt Lake City and the University of Utah) tended to favor the existing ridership/coverage split. Responses from places with lower sampling rates (generally more suburban places where the existing network offers lower levels of transit services) tended to favor a slight move towards coverage.
- The highest sampling rates were found in zip codes near downtown Salt Lake City, the University of Utah, and Saratoga Springs.
- More information on the geographic distribution of survey responses is available in Appendix B.

Ranking Transit Goals

The first question asked respondents to rank their top five (of a list of eight) goals for transit. The list of goals reflects a set of different outcomes that are common reasons for people to value or support transit:

- Reduce Emissions
- Serve Dense Urban Areas
- Serve People in Need
- Serve Every Community
- Lower Cost Per Rider
- Manage Congestion
- Use Taxes Efficiently
- Serve Rural & Suburban Areas

There were two purposes to asking this question. First, if a single goal was found to be the priority of a great majority of respondents, there could be service design decisions that would take on additional urgency. Second, the policy goal ranking question was also a cue for respondents to think about the survey in terms of the policy goals and desired outcomes for the entire transit system, its users, and the community, not just the potential impacts on their own potential usage of the system.

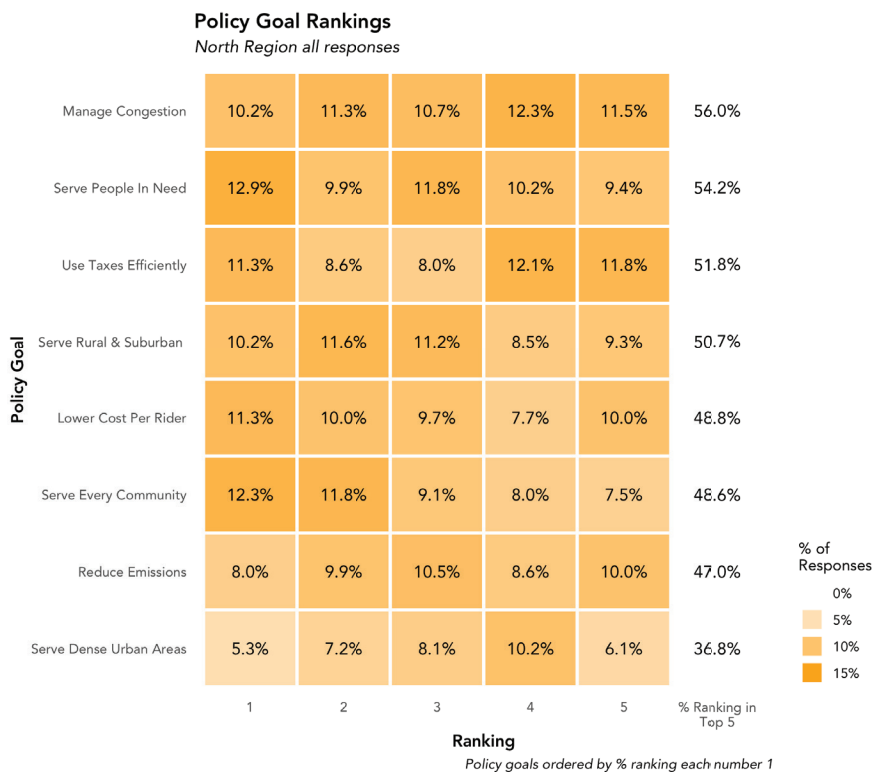
All Regions

In each region, respondents' policy goal rankings were remarkably well-distributed. No goal achieved a share of higher than 15.2% of "number one" rankings in any region.

The most common goals included in respondents' top 5 lists across all regions were "Reduce Emissions", "Manage Congestion", and "Serve People In Need". The first two are goals that require high ridership (since many people must use transit in order to accomplish either), while the third is a coverage goal. This illustrates how both

Figure 7: Policy Goal Rankings - North Region

How to read these charts: each cell shows the percent of respondents who ranked each goal in each position. The last column shows the percent of respondents who included each goal in their "Top 5" ranking.



ridership and coverage goals are popular transit outcomes among the public.

North Region

In the North region, there was very little consensus around the top priority - all but one goal ("Serve Dense Urban Areas") were included in at least 50% of top 5 lists, and 6 of 8 goals received between 10% and 13% of first-place ranks.

The top 5 policy goals in the North region as ranked by participants were:

- Manage Congestion (57.7% included in top 5)
- Serve People in Need (57.5%)
- Use Taxes Efficiently (56.3%)
- Serve Rural & Suburban Areas (52.2%)

- Reduce Emissions (51.5%)

However, more than 50% of respondents also included “Lower Cost Per Rider” and “Serve Every Community” in their Top 5.

The most common goal ranked #1 was “Serve People in Need”, which was the top priority for 12.9% of North region respondents.

Central Region

Figure 9 shows how respondents in the Central region ranked each goal, ordered by the percent who included the goal in their top five.

The top 5 policy goals in the Central region as ranked by participants were:

In the Central region, the most common goals that respondents included in their top five were:

- Reduce Emissions (59%)
- Manage Congestion (58.7%)
- Serve People in Need (57%)
- Lower Cost Per Rider (48.6%)
- Serve Dense Urban Areas (46%)

The most common goal ranked #1 was “Reduce Emissions”, which was the top priority for 15.2% of Central region respondents.

South Region

In the Southern region (Utah County), “Manage Congestion” was by far the most common goal included in respondents’ top 5 ranking at 60.3% (just 39.7% did not rank it).

The top 5 policy goals in the South region as ranked by participants were:

- Manage Congestion (60.3%)

Figure 9: Policy Goal Rankings - Central Region

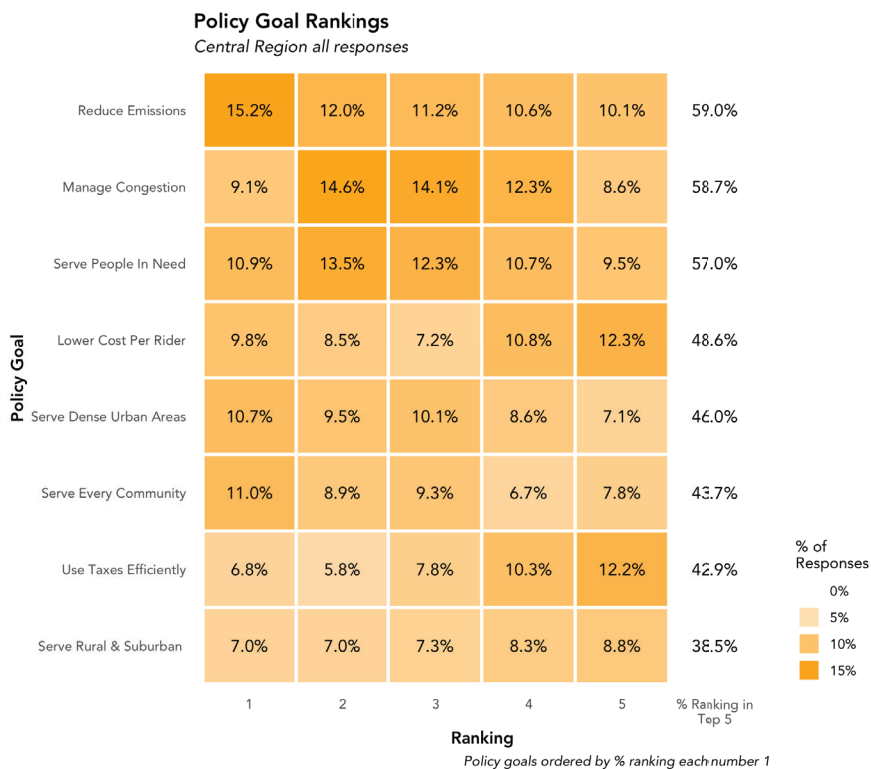
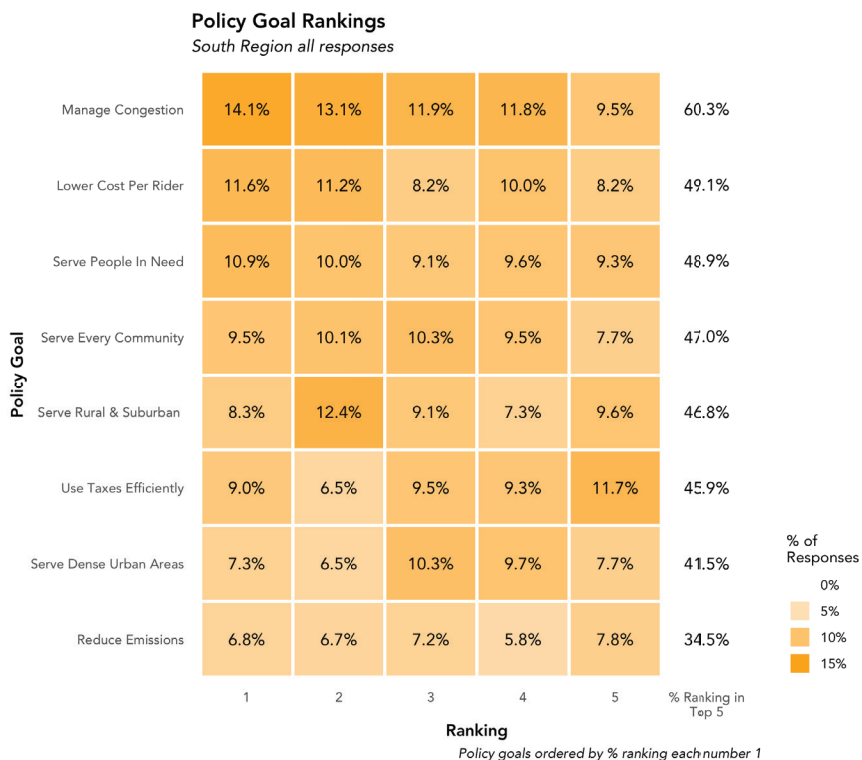


Figure 8: Policy Goal Rankings - South Region



included in top 5)

- Lower Cost Per Rider (49.1%)
- Serve People In Need (48.9%)
- Serve Every Community (47%)
- Serve Rural & Suburban (46.8%)

The most common goal ranked #1 was “Manage Congestion”, which was the top priority for 14.1% of South region respondents.

Balance of Service with Existing Resources

The second question asked respondents to share their opinion on the division of UTA’s bus service resources between the ridership and coverage goals. Respondents selected a position on a scale from 100% ridership / 0% coverage to 0% ridership / 100% coverage. This scale marked the current resource split; if they wanted to make changes, participants could “turn the dial” either towards a greater focus on ridership or on coverage.

North Region

In the Northern region of the network, respondents generally suggested a move towards a greater focus on ridership. The median response was 50% ridership / 50% coverage; this was also the most common response, with 21% of respondents selecting this option. About 57% of respondents selected an option with a greater focus on ridership than today. Only about 20% of respondents chose an option with an increased coverage focus.

Central Region

In the Central region, the most common choice was to maintain the existing balance of service; 22% of respondents selected this option. The remaining 78% were highly polarized on whether the balance should be focused more on coverage or ridership services. As a result, the median and weighted mean responses are effectively identical

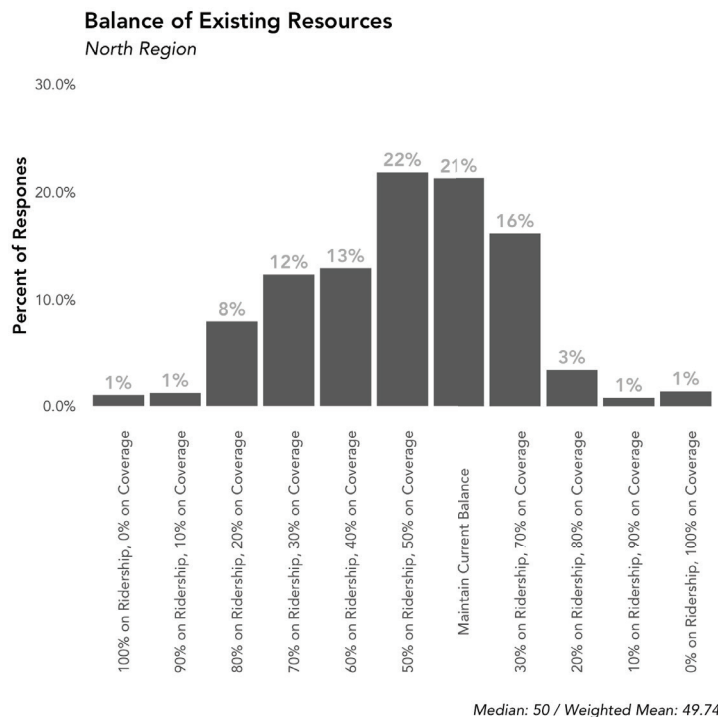


Figure 11: Balance of Service with Existing Resources - North

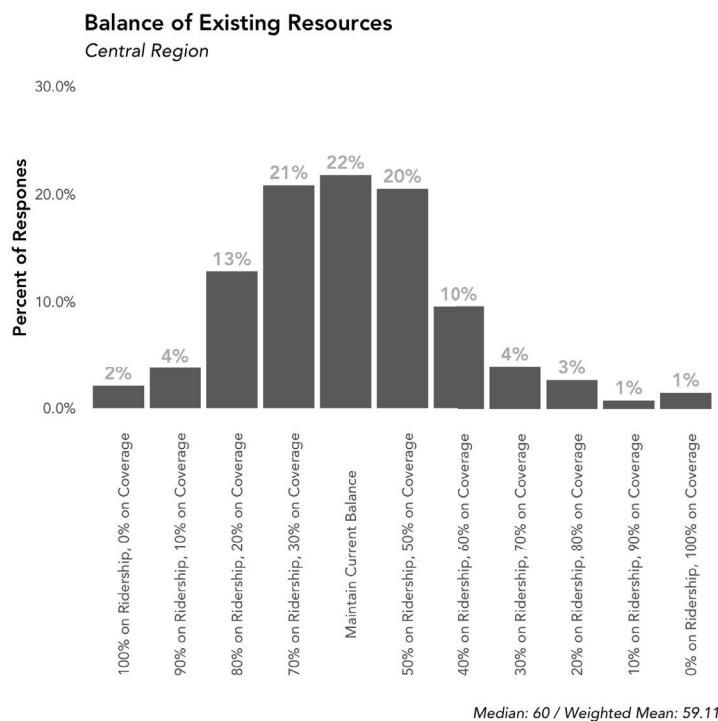


Figure 10: Balance of Service with Existing Resources - Central

to the current balance.

While opinion was polarized on this question, few respondents opted to turn the dial further than two “clicks”- only 15% of responses advocated for a balance of service that was outside of the range between an 80/20 and 40/60 split. The next two most common responses were 70/30 and 50/50 (21% and 20% respectively), which imply a slightly greater focus on ridership or coverage, but not a dramatic reallocation of service.

South Region

In the Southern region of the network, the median response with existing resources was to maintain the current balance, 60% ridership / 40% coverage, which was also the most common response at 27%. 73% of respondents did advocate for changing the balance; about 34% voted to move towards ridership and 40% towards coverage. While more respondents who changed the balance from today voted to move towards coverage, the median response to the survey is the existing balance of service.

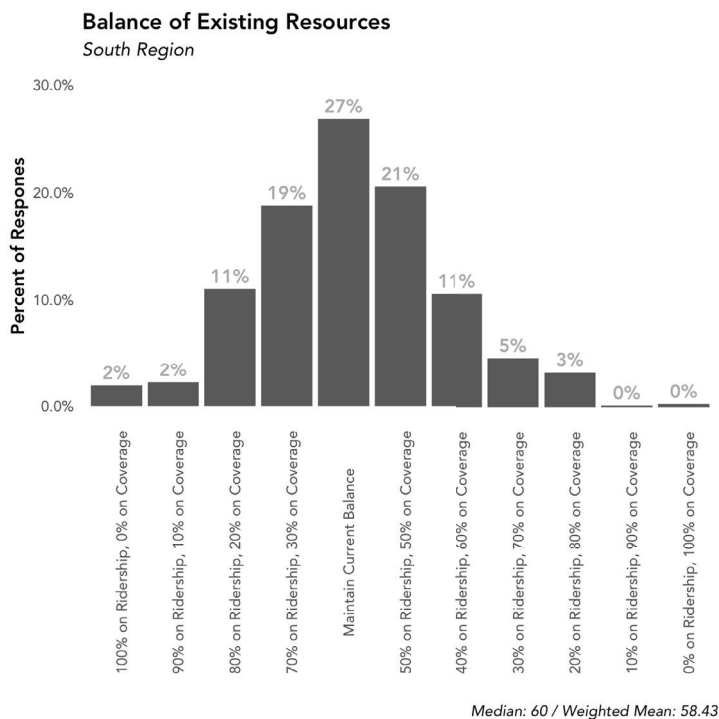


Figure 12: Balance of Service with Existing Resources - South

Balance of Service with Additional Resources

The third question asked the same question, but this time about how additional transit service resources should be invested, should they become available.

Note that this question is currently hypothetical for the North and South regions. In the Central region, this question has additional importance, because there are additional funds for transit that will be come available in the near future through the new “Fourth Quarter” sales tax increment.

North Region

In the North region, where the existing balance of service is approximately 40% ridership, 60% coverage, the median response was to allocate (hypothetical) future transit service resources with a greater focus on the ridership goal. The median

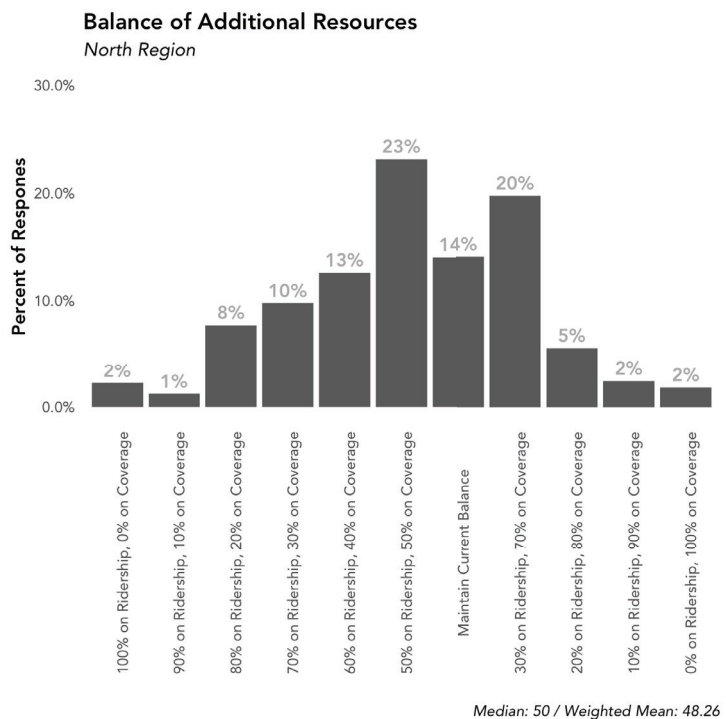


Figure 13: Balance of Service with Additional Resources - North

response was 50% ridership / 50% coverage, and 57% of all North region respondents shifted the balance of additional resources towards ridership to some degree.

Central Region

Responses in the Central region were also highly polarized around the split for additional transit resources. 88% of respondents opted to change the balance, with 38% shifting towards ridership, and 47% shifting towards coverage. The median response is 60% ridership, 40% coverage, the same as today's balance.

South Region

In the South region, the median response from participants suggested a greater focus on coverage. The median response was 50% ridership / 50% coverage, compared to the existing 60% ridership / 40% coverage split. With additional resources, about 29% of respondents shifted the balance towards ridership, while 54% shifted it towards more coverage.

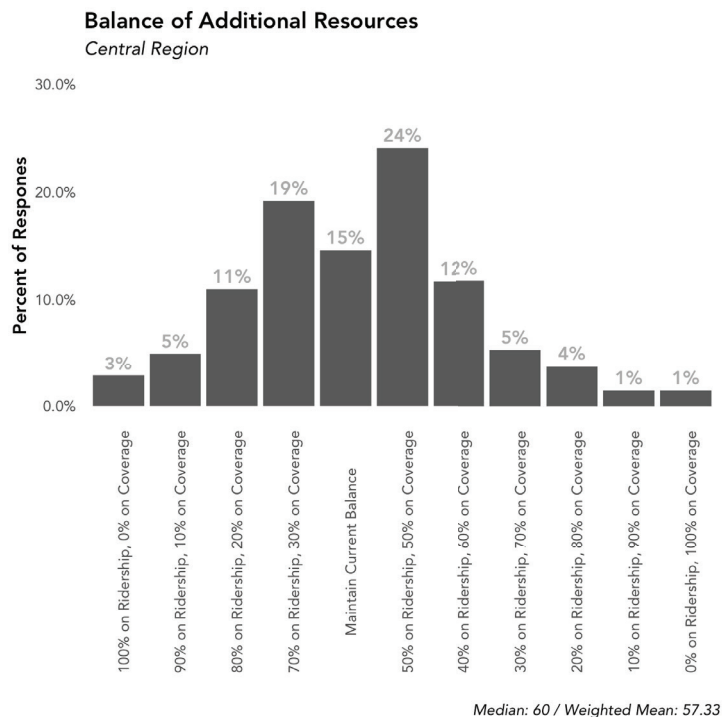


Figure 14: Balance of Service with Additional Resources - Central

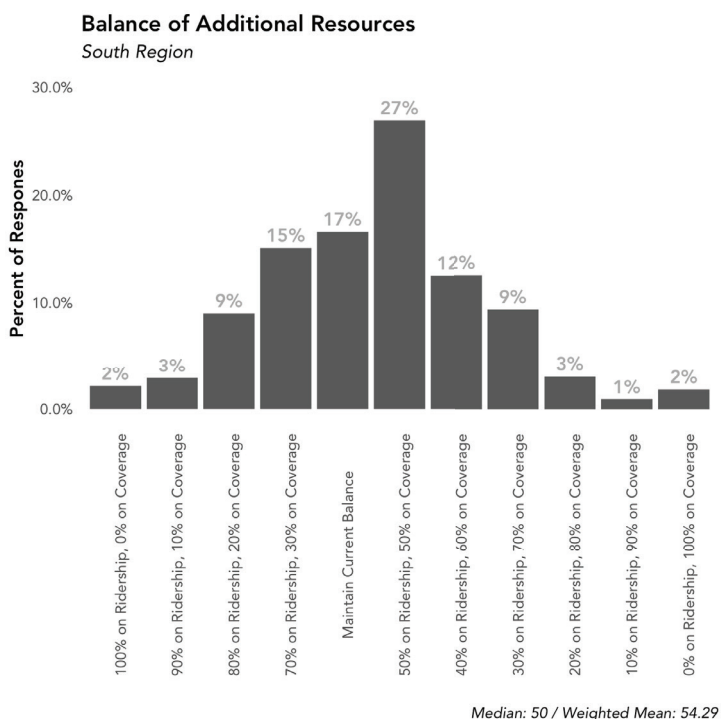


Figure 15: Balance of Service with Additional Resources - South

Community Leader Workshops

A series of four workshops were held throughout UTA's service area. Jarrett Walker & Associates facilitated these workshops to inform community leaders and gather their feedback on the balance between ridership and coverage.

- The Box Elder, Davis, and Weber County area had one workshop in Clearfield with 28 attendees.
- The Salt Lake County and Tooele County area had two workshops, with 35 attendees at the South Salt Lake event and 25 at the West Jordan event.
- Utah County had one workshop in Provo with 26 attendees.

The community leaders that were invited to attend the workshops included staff representing city and county government, NGO's, and community organizations.

Each of the four Community Leader Workshops included two major activities:

- An interactive planning game called "Prairieville", which is designed to teach people who are not experts in transit about the tools and tradeoffs of transit planning, so that they are able to share their opinions with the benefit of a greater degree of expertise.
- A set of anonymous polling questions focused on the major themes of this study. This activity used clicker polling devices to ask the community leaders about questions like the appropriate balance of resources between ridership and coverage goals in their region.

Community Leader Polling Results

The major input to the Service Choices process produced by these workshops are the results of the polling questions.

The relevant questions were the following (several other polling questions were asked to familiarize participants with the devices, and as part of the educational planning game):

- With our existing transit resources, how much should we spend on ridership or coverage? (Multiple Choice)
- If we had additional funds for transit service, how should those funds be divided between ridership and coverage? (Multiple Choice)
- When we design coverage service, which of the following is the most important goal we should pursue? (Multiple Choice)
- When we design coverage service, which of the following is the SECOND most important goal we should pursue? (Multiple Choice)

Balance of Existing Resources

In all workshops, a majority of community leaders expressed a desire to change the balance of existing transit service resources towards a greater focus on ridership. Figure 16 on the next page charts the spread of opinion among stakeholders in each workshop on this question.

In the Northern region, because the existing balance of service is much more focused on coverage (40% Ridership / 60% Coverage), there was more of a spread of opinion among participants about how far to move towards ridership. While a smaller number of people in each workshop did vote in favor of adding coverage, this never exceeded 20% of participants.

In the Central and Southern regions, which both have an existing balance of service of approximately 60% ridership / 40% coverage, most

With our existing transit resources, how much should we spend on ridership or coverage? (Multiple Choice)

Responses by Region and Workshop

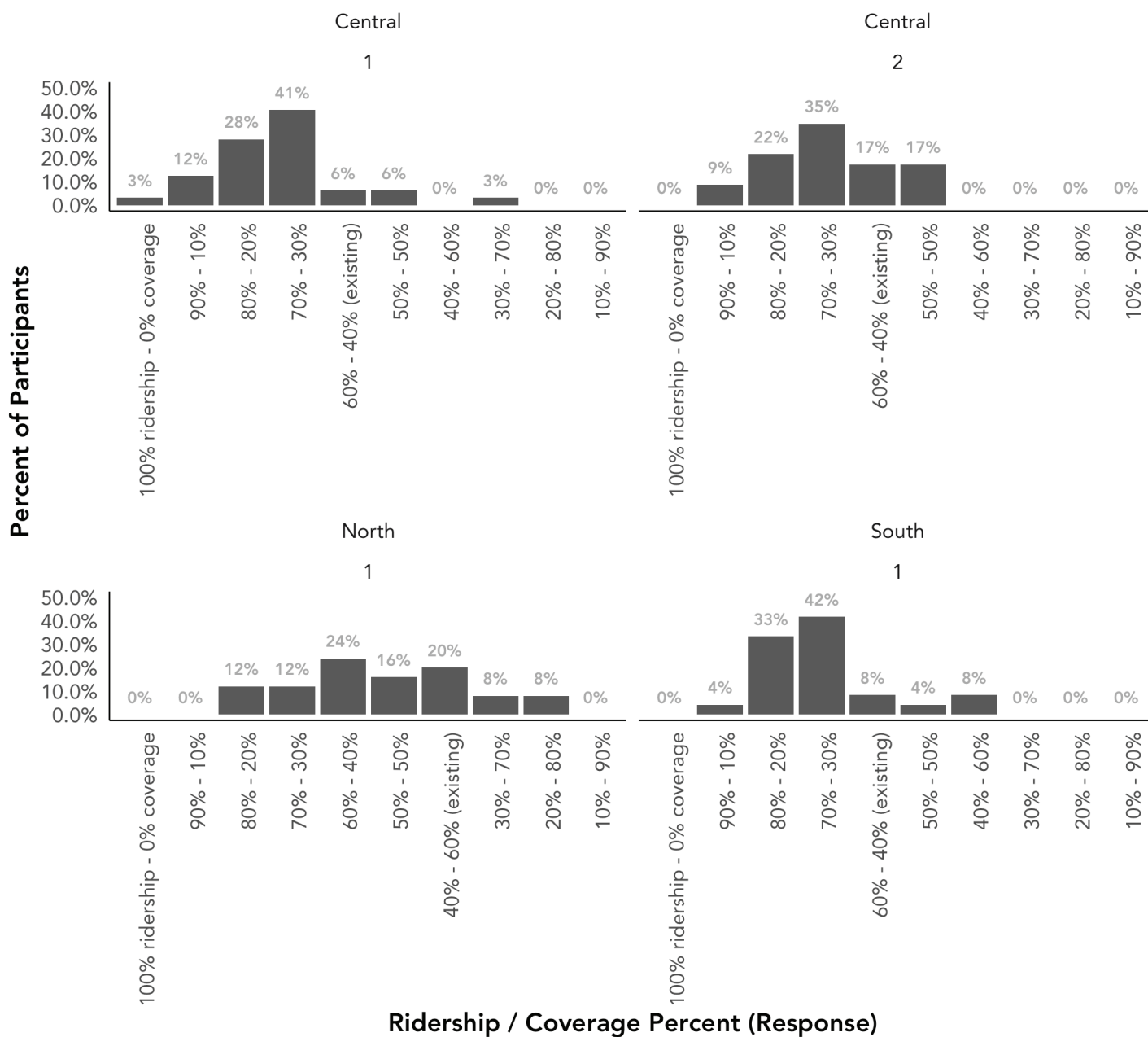


Figure 16: Community Leader Workshop Polling Results: With our existing transit resources, how much should we spend on ridership or coverage?

community leaders opted to turn the dial just one or two positions, to 70/30 or 80/20.

Balance of Additional Resources

In all workshops, a majority of community leaders told us that were new transit resources to become available, they should be focused on high-ridership services to a greater extent than are existing resources. When examining the results of the Community Leader Workshops, it's worth keeping in mind that participants were largely drawn from city and county staff, NGO's, and community organizations, who each had the benefit of a 1-hour educational activity, plus a presentation summarizing the Choices Report, when responding to these questions.

Figure 17 on page 27 charts the spread of opinion among community leaders on this question

North

Existing resources: 40% ridership / 60% coverage

While the North region currently has a much more coverage-focused network design than the Central and South regions, community leaders here too voted to move towards a greater focus on ridership.

The median response to the question of the ridership / coverage split was:

- With Existing Resources: 50% ridership / 50% coverage
- With (hypothetical) Additional Resources: 60% ridership / 40% coverage

Central

Existing resources: 60% ridership / 40% coverage

Central region workshop participants expressed a desire to move slightly further towards a more ridership-focused network with existing resources.

The median response to the question of the ridership / coverage split was:

- With Existing Resources: 70% ridership / 30% coverage
- With Additional Resources: 70% ridership / 30% coverage

South

Existing resources: 60% ridership / 40% coverage

The median response to the question of the ridership / coverage split was:

- With Existing Resources: 70% ridership / 30% coverage
- With (hypothetical) Additional Resources: 70% ridership / 30% coverage

If we had additional funds for transit service, how should those funds be divided between ridership and coverage? (Multiple Choice)

Responses by Region and Workshop

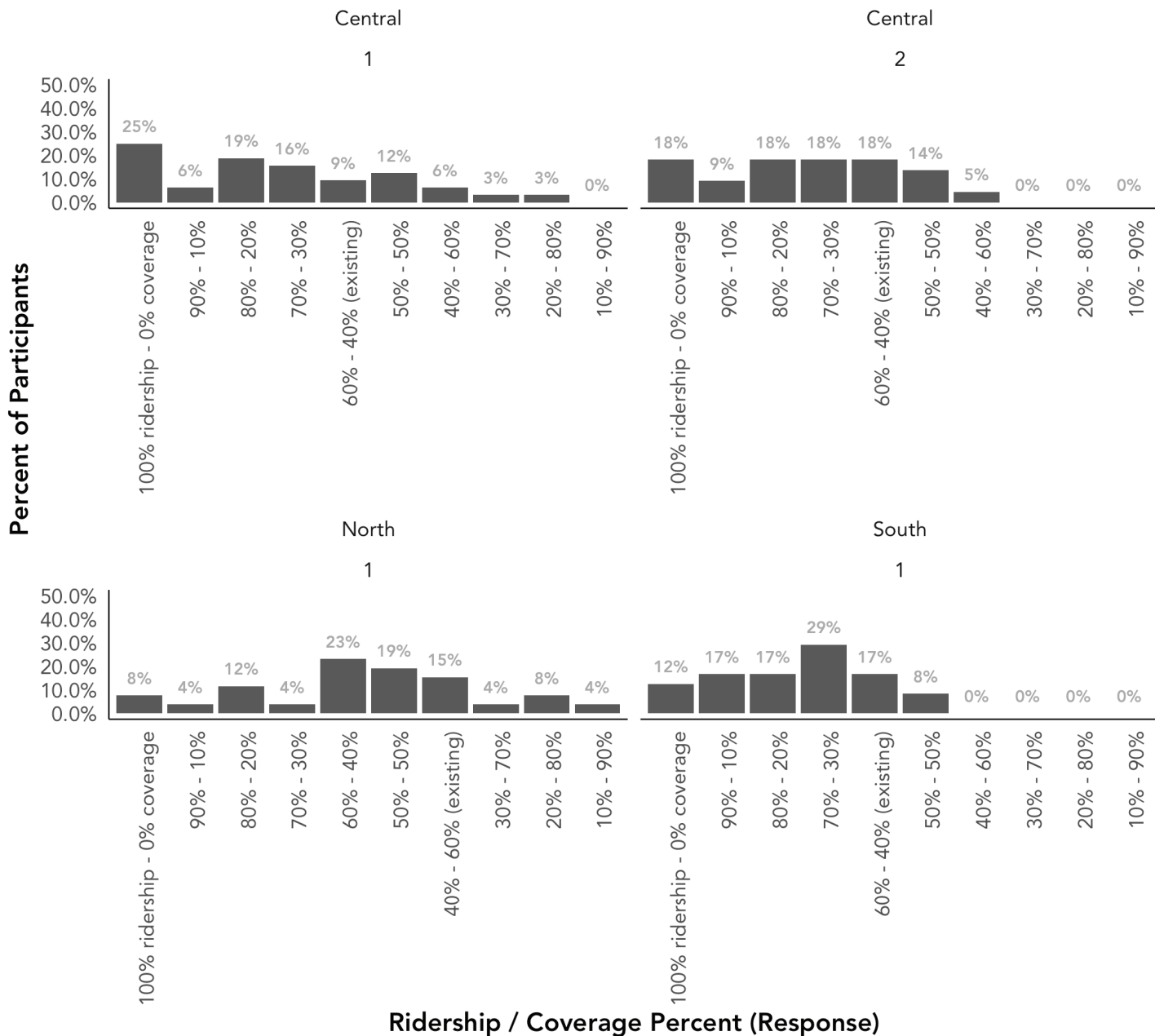


Figure 17: Community Leader Workshop Polling Results: If we had additional funds for transit resources, how should those funds be divided between ridership and coverage?

Coverage Priorities

The last two questions asked community leaders to share their top two priorities for coverage service. This is a simplified way of asking a similar question to that in the online public survey where respondents divided 10 points between three competing coverage purposes: responding to new development, service everyone who pays taxes, and serving people who have no alternative, including seniors and people with low incomes.

Figure 18 on page 29 shows the breakdown to coverage priority rankings from each workshop.

In each workshop in each region, the majority's top coverage purpose was to serve people who have no alternative. In the first central workshop, and in the north, this was overwhelmingly the case, with over 80% of participants selecting that option as their top priority.

In the second Central and the South workshops, community leader opinion on the top priority was split between serving people with no alternative, and responding to new development. In the second Central workshop, 35% of stakeholders ranked responding to new development as their top coverage priority. In the South workshop, 43% selected this opinion as their top priority.

Across all four workshops, few people selected serving all taxpayers at the number one or number two goal of coverage services. This coverage priority never garnered more than 12% of first place votes in any workshop, although 26% and 32% of participants did rank it as the number two priority in the first Central and South workshops.

When we design coverage service, which of the following is the most important goal we should pursue? (Multiple Choice)

Responses by Region and Workshop

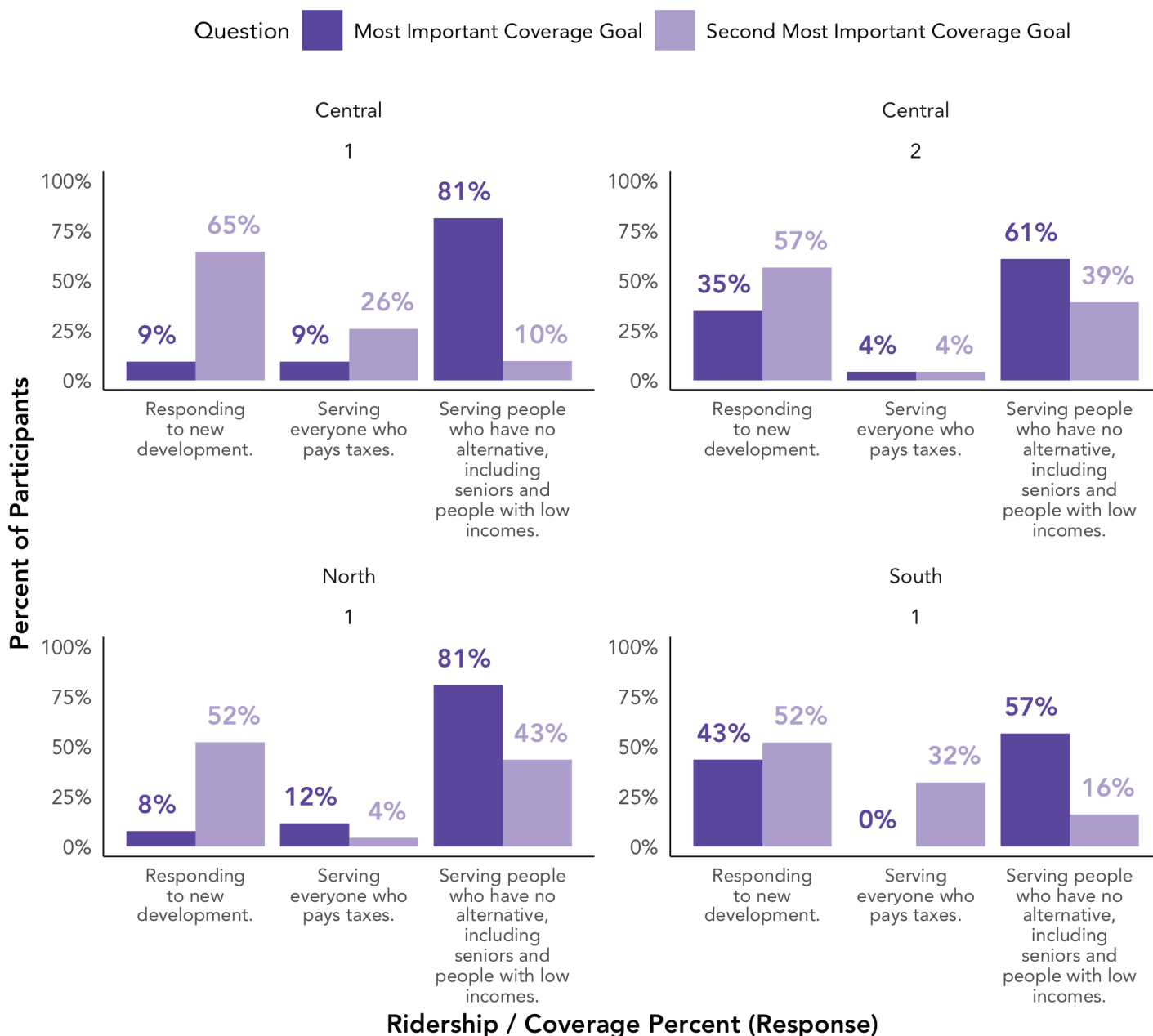


Figure 18: Community Leader Workshop Polling Results: When we design coverage service, which of the following is the most important goal we should pursue?

Appendix B: Demographic Profile

Who took our survey?

Three main optional demographic questions were asked at the end of the survey. Because these questions came after the main content questions, not every respondent filled out the demographic questionnaire.

This section provides an table of sampling rates for each demographic question, compared to the demographics of UTA's three business units as represented in the American Community Survey 5-Year Summary File.

Following each profile table, the main charts for the three key content questions (existing resources, additional resources and coverage priorities) are reproduced, with weighting applied to correct for over/undersampling.

The purpose of this analysis is to provide an idea of whether the major conclusions drawn from each question on the survey would differ if all residents of each region of the network took the survey, given what we know about the responses of those members of each group who did participate.

Normalizing in this way means that responses from participants that did not answer the demographic question are discarded, and then each remaining response is assigned a weight based on the degree to which the demographic group to which it belongs is over or underrepresented in the survey sample, compared to the general population of each business unit.

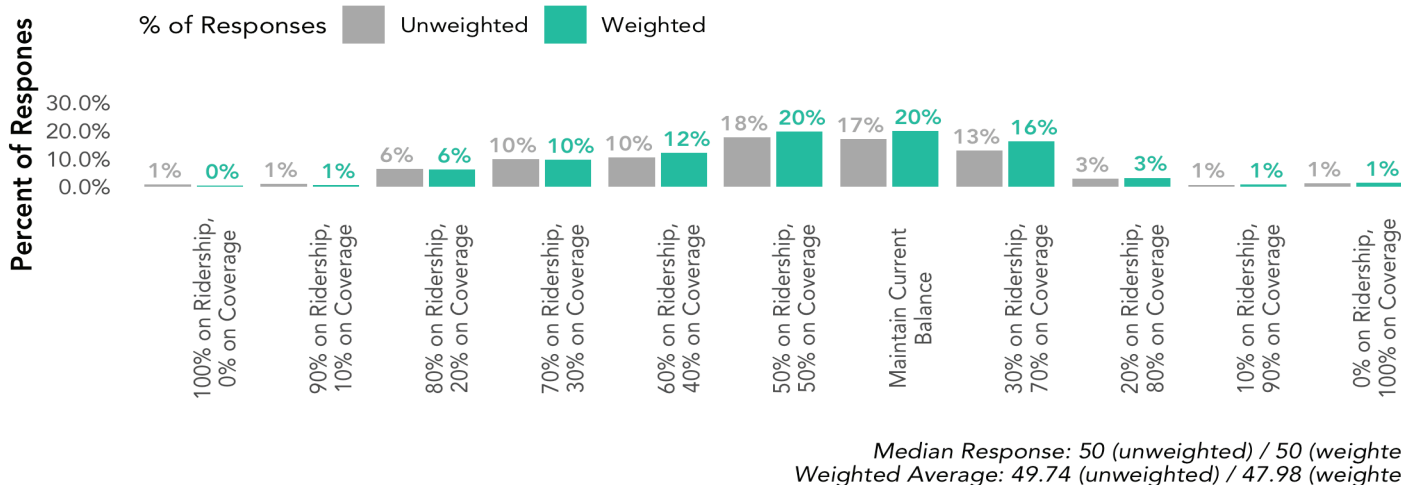
This section also includes charts similar to those shown for each of the three main survey questions comparing the weighted and unweighted median and weighted average response (expressed in terms of the ridership percentage on the ridership/coverage scale). In all cases, the weighted and unweighted median responses fall within the same 10% ridership/coverage split class, although the weighted average response does differ by an insignificant degree in each.

Race & Ethnicity

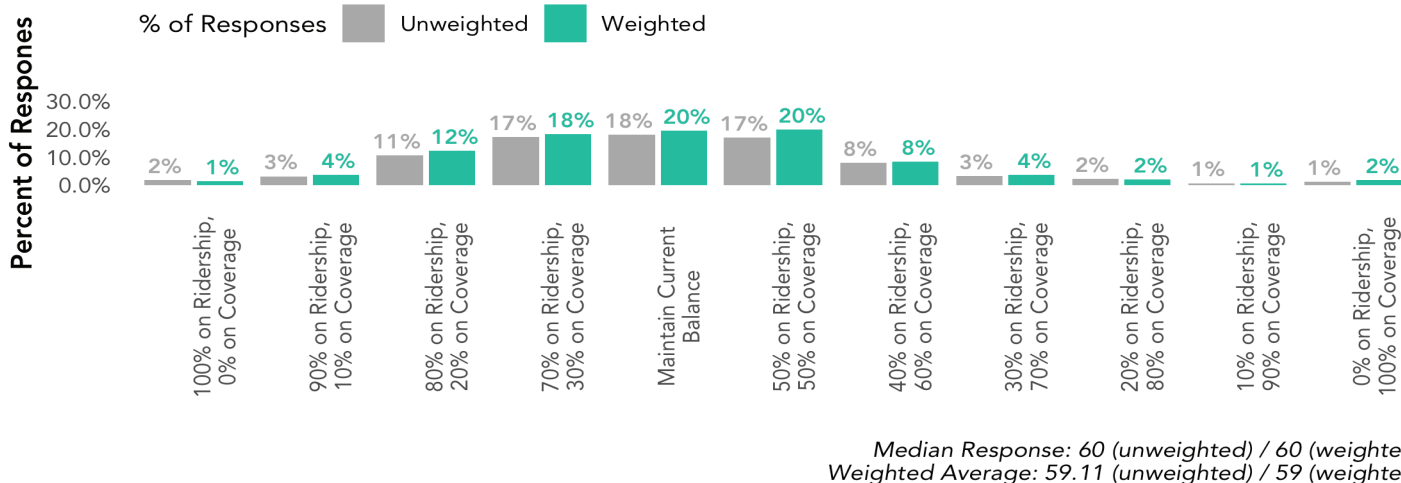
Response	Region	Population (ACS 2017 5-Year)		Sample (UTA Service Choices Survey)		Over/ Under Sample
		Count	% of total	Count	Response	
American Indian or Alaska Native	North	3013	0.5%	0	0%	-
Asian or Asian American	North	9276	1%	5	1%	67%
Black or African American	North	6848	1%	4	1%	73%
Hispanic or Latino	North	79306	13%	19	4%	30%
Multiracial or another race	North	26870	4%	8	2%	37%
Native Hawaiian or other Pacific Islander	North	2647	0.4%	2	0%	94%
White or Caucasian	North	515740	82%	433	85%	104%
Asian or Asian American	Central	43095	4%	28	2%	56%
Black or African American	Central	18653	2%	9	1%	41%
Hispanic or Latino	Central	205844	18%	55	4%	23%
Multiracial or another race	Central	48962	4%	28	2%	49%
Native Hawaiian or other Pacific Islander	Central	16891	1%	5	0%	25%
White or Caucasian	Central	850377	73%	1157	85%	117%
American Indian or Alaska Native	South	2335	0.4%	3	0%	121%
Asian or Asian American	South	8400	1%	14	2%	158%
Black or African American	South	2995	1%	3	0%	95%
Hispanic or Latino	South	65539	11%	25	4%	36%
Multiracial or another race	South	19289	3%	7	1%	34%
Native Hawaiian or other Pacific Islander	South	4414	1%	1	0%	21%
White or Caucasian	South	478514	83%	522	86%	103%

Figure 19: UTA Service Choices Web Survey Sampling - Race & Ethnicity

Balance of Existing Resources North Region - Weighted by Race & Ethnicity



Balance of Existing Resources Central Region - Weighted by Race & Ethnicity



Balance of Existing Resources South Region - Weighted by Race & Ethnicity

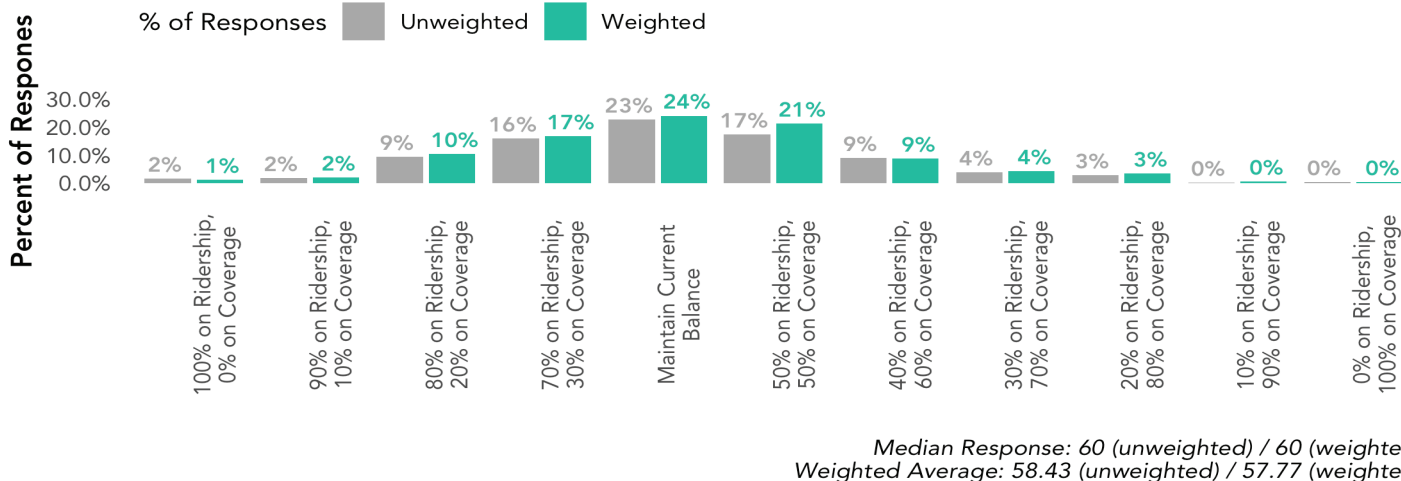
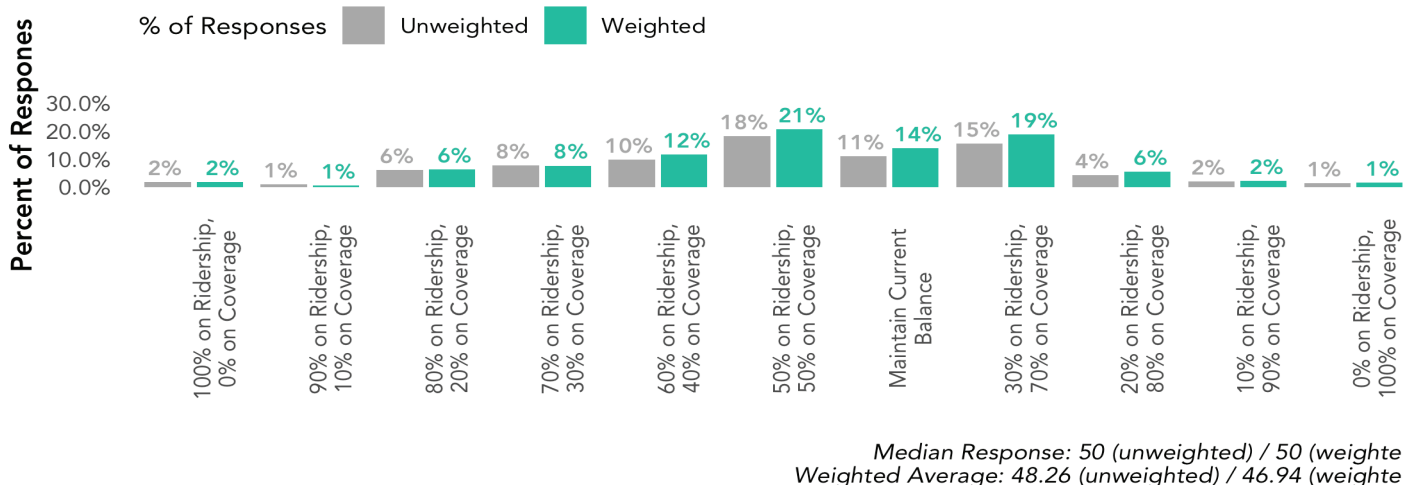
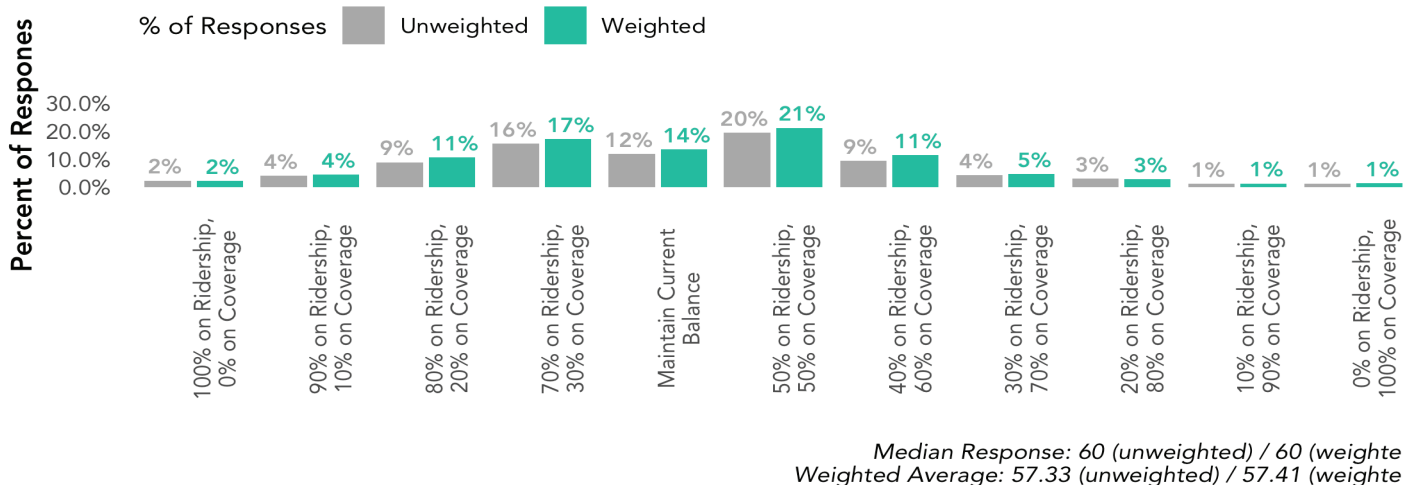


Figure 20: Balance of Existing Resources - Race & Ethnicity Weighting

Balance of Additional Resources North Region - Weighted by Race & Ethnicity



Balance of Additional Resources Central Region - Weighted by Race & Ethnicity



Balance of Additional Resources South Region - Weighted by Race & Ethnicity

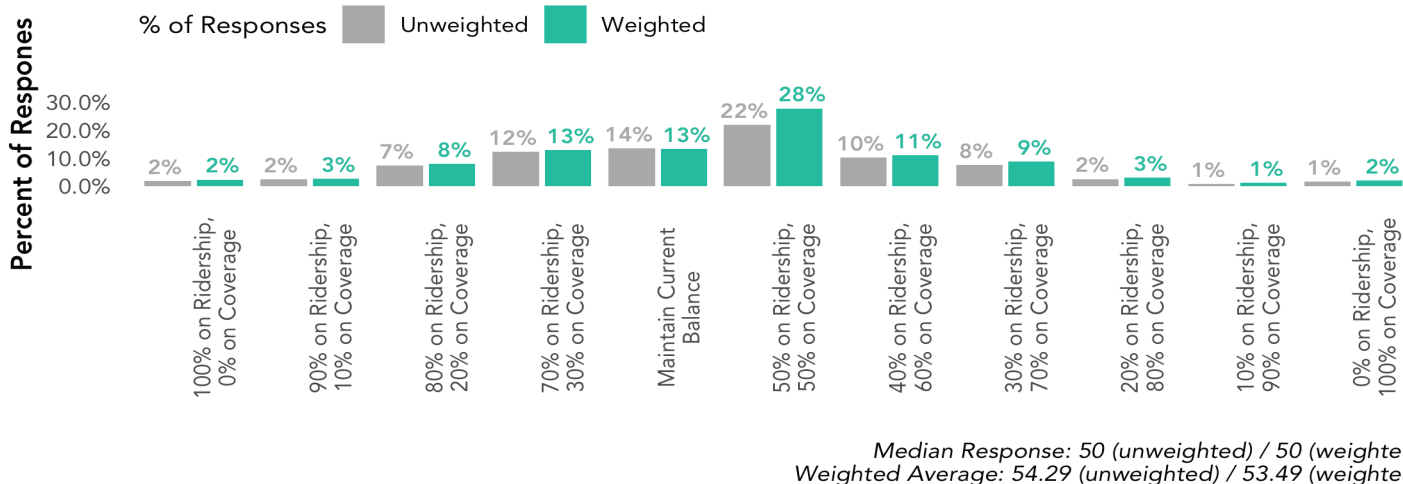


Figure 21: Balance of Additional Resources - Race & Ethnicity Weighting

Coverage Priority

Mean Coverage Priority Rank by Region - Weighted by Race & Ethnicity

% of Responses Unweighted Weighted

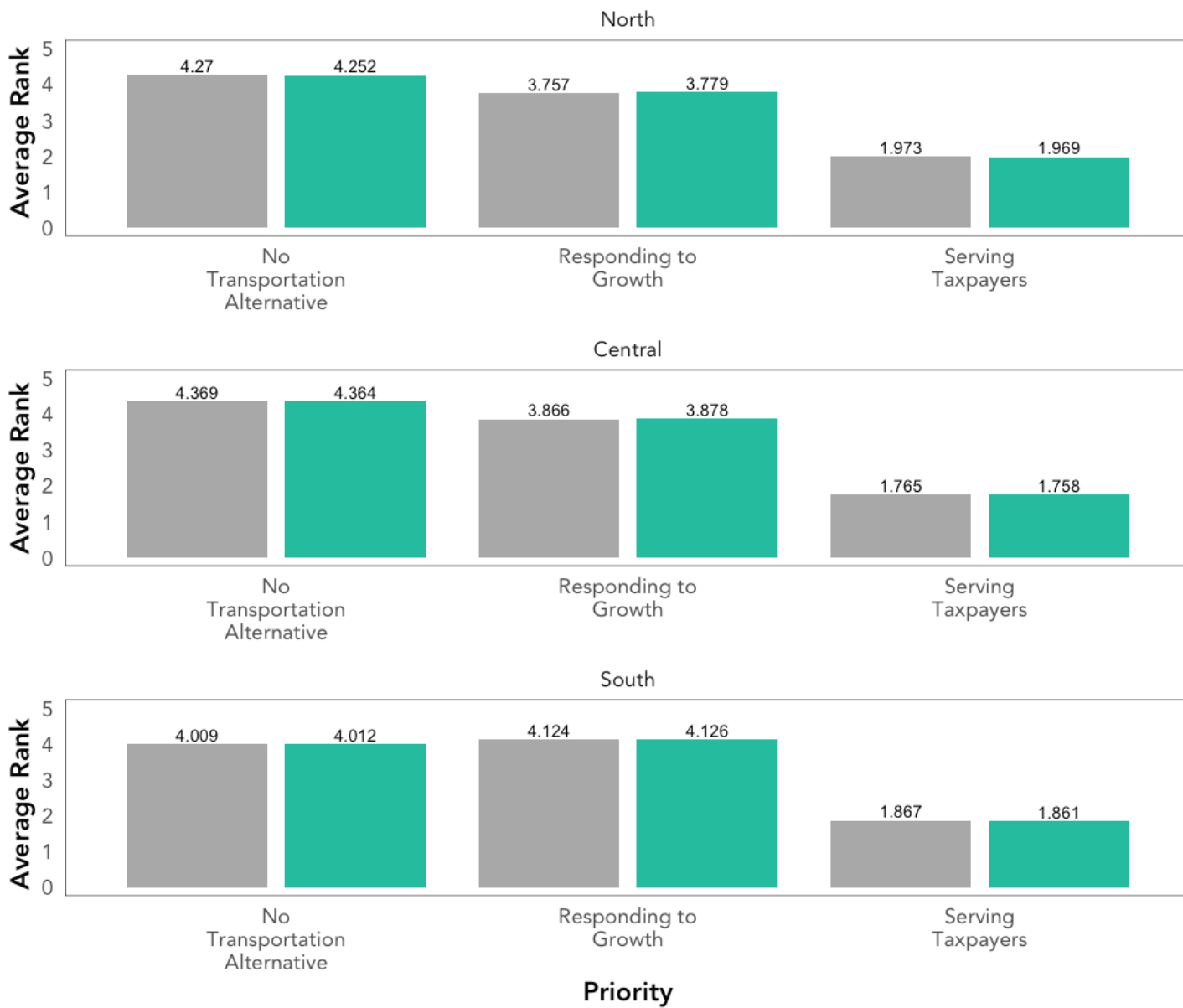


Figure 22: Coverage Priorities - Race & Ethnicity Weighting

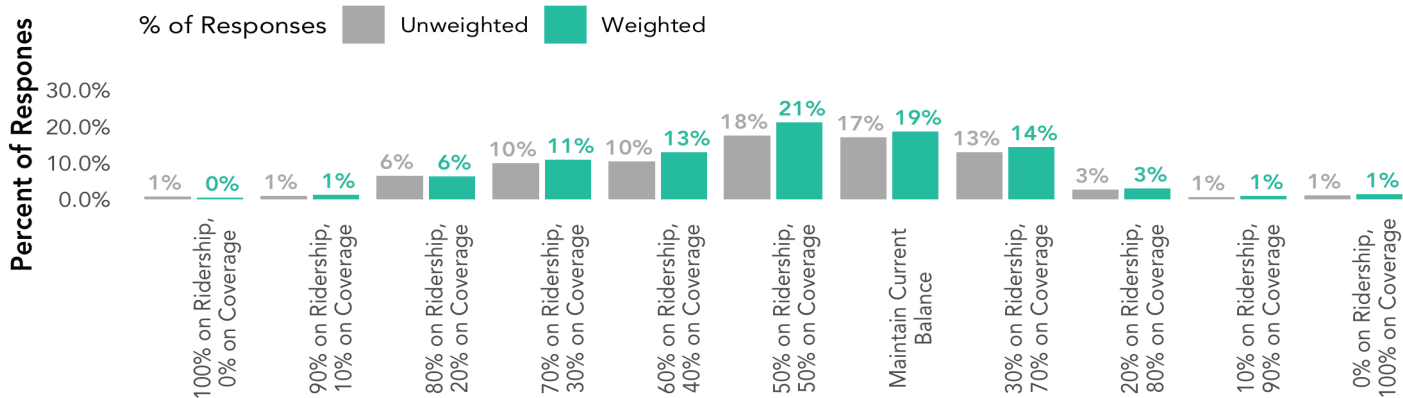
Income

Response	Region	Population (ACS 2017 5-Year)		Sample (UTA Service Choices Survey)		Over/ Under Sample
		Count	% of total	Count	Response	
Under 15000	North	14257	7%	14257	7%	119%
Between 15000 and 24999	North	12338	6%	12338	6%	80%
Between 25000 and 34999	North	15272	8%	15272	8%	59%
Between 35000 and 49999	North	25385	13%	25385	13%	95%
Between 50000 and 74999	North	43475	22%	43475	22%	93%
Between 75000 and 99999	North	33488	17%	33488	17%	117%
Between 100000 and 149000	North	35453	18%	35453	18%	112%
Between 150000 and 199999	North	12149	6%	12149	6%	105%
200000 or more	North	7938	4%	7938	4%	95%
Under 15000	Central	28384	7%	28384	7%	88%
Between 15000 and 24999	Central	26853	7%	26853	7%	93%
Between 25000 and 34999	Central	31188	8%	31188	8%	76%
Between 35000 and 49999	Central	47945	13%	47945	13%	74%
Between 50000 and 74999	Central	77552	20%	77552	20%	100%
Between 75000 and 99999	Central	57480	15%	57480	15%	119%
Between 100000 and 149000	Central	65074	17%	65074	17%	127%
Between 150000 and 199999	Central	24175	6%	24175	6%	104%
200000 or more	Central	23990	6%	23990	6%	82%
Under 15000	South	11363	7%	11363	7%	183%
Between 15000 and 24999	South	10896	7%	10896	7%	144%
Between 25000 and 34999	South	12609	8%	12609	8%	66%
Between 35000 and 49999	South	19925	13%	19925	13%	57%
Between 50000 and 74999	South	32222	21%	32222	21%	90%
Between 75000 and 99999	South	23972	15%	23972	15%	121%
Between 100000 and 149000	South	27397	18%	27397	18%	112%
Between 150000 and 199999	South	9496	6%	9496	6%	78%
200000 or more	South	7628	5%	7628	5%	43%

Figure 23: UTA Service Choices Web Survey Sampling - Income

Balance of Existing Resources

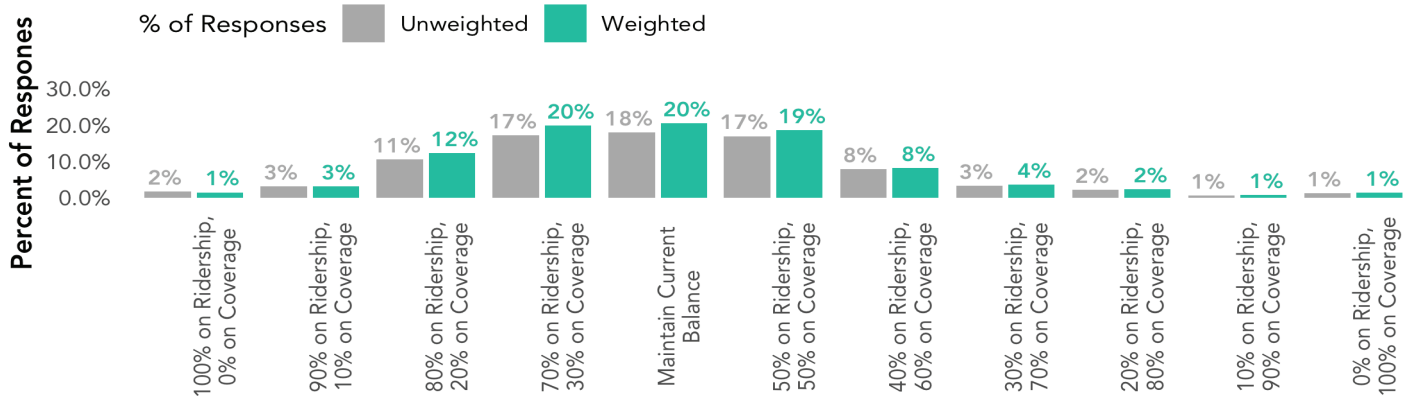
North Region - Weighted by Income



Median Response: 50 (unweighted) / 50 (weighted)
 Weighted Average: 49.74 (unweighted) / 49.32 (weighted)

Balance of Existing Resources

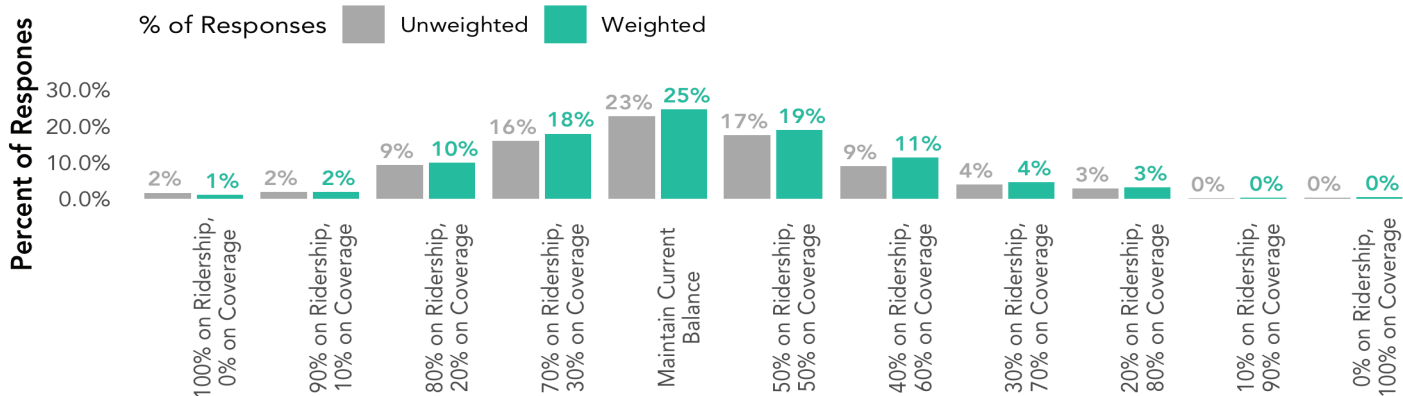
Central Region - Weighted by Income



Median Response: 60 (unweighted) / 60 (weighted)
 Weighted Average: 59.11 (unweighted) / 59.22 (weighted)

Balance of Existing Resources

South Region - Weighted by Income

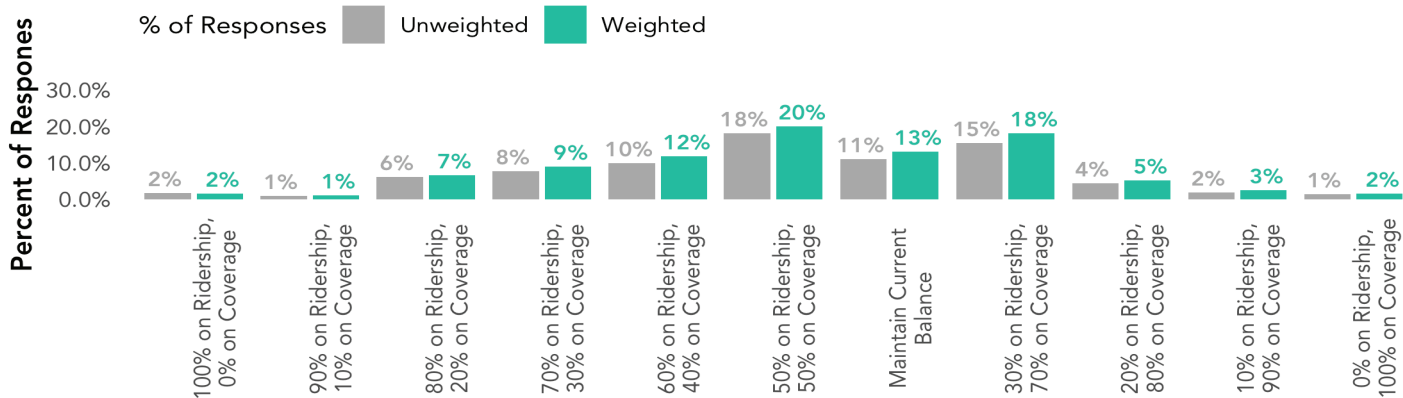


Median Response: 60 (unweighted) / 60 (weighted)
 Weighted Average: 58.43 (unweighted) / 57.54 (weighted)

Figure 24: Balance of Existing Resources - Income Weighting

Balance of Additional Resources

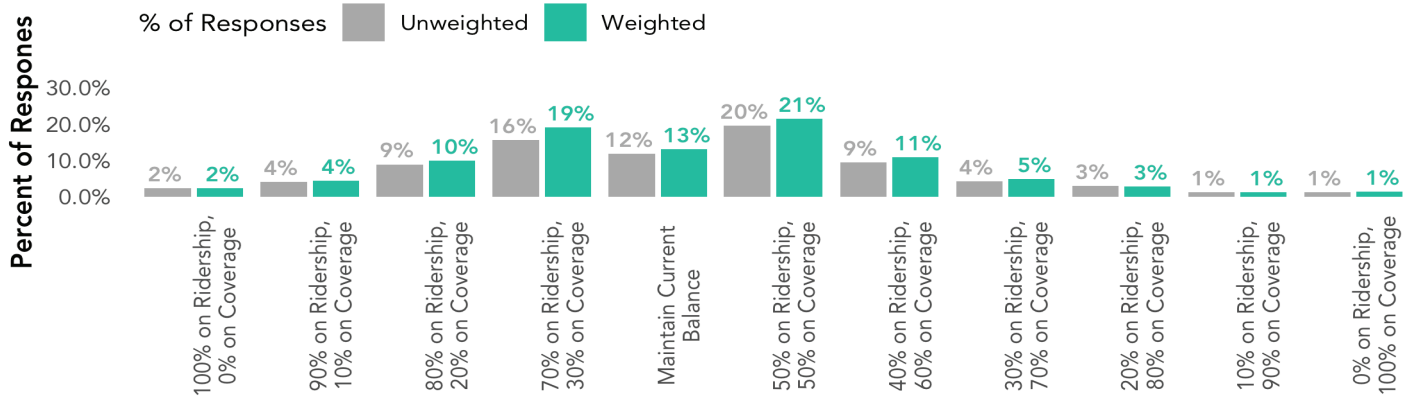
North Region - Weighted by Income



Median Response: 50 (unweighted) / 50 (weighted)
 Weighted Average: 48.26 (unweighted) / 47.62 (weighted)

Balance of Additional Resources

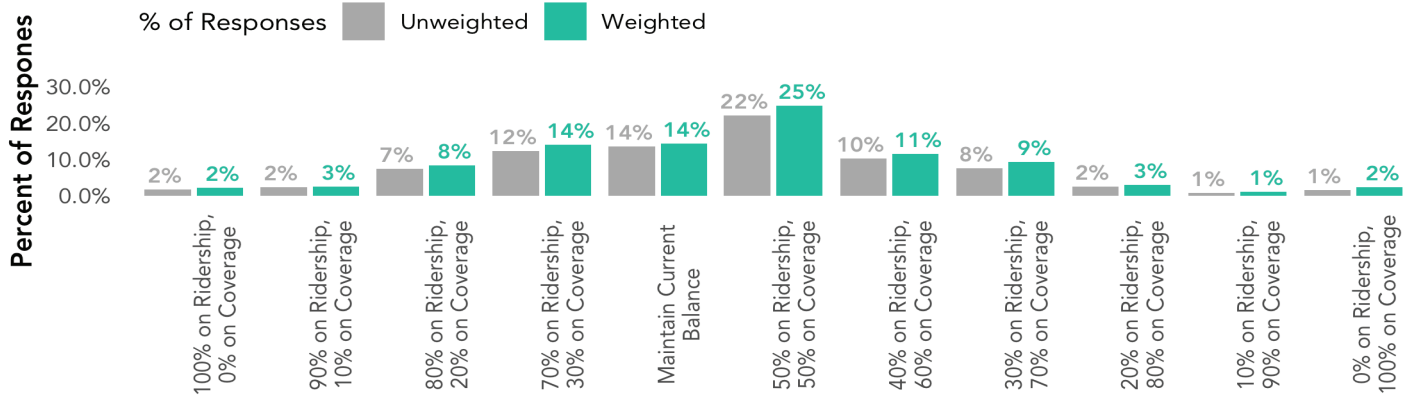
Central Region - Weighted by Income



Median Response: 60 (unweighted) / 60 (weighted)
 Weighted Average: 57.33 (unweighted) / 57.53 (weighted)

Balance of Additional Resources

South Region - Weighted by Income



Median Response: 50 (unweighted) / 50 (weighted)
 Weighted Average: 54.29 (unweighted) / 53.55 (weighted)

Figure 25: Balance of Additional Resources - Income Weighting

Coverage Priority

Mean Coverage Priority Rank by Region - Weighted by Income

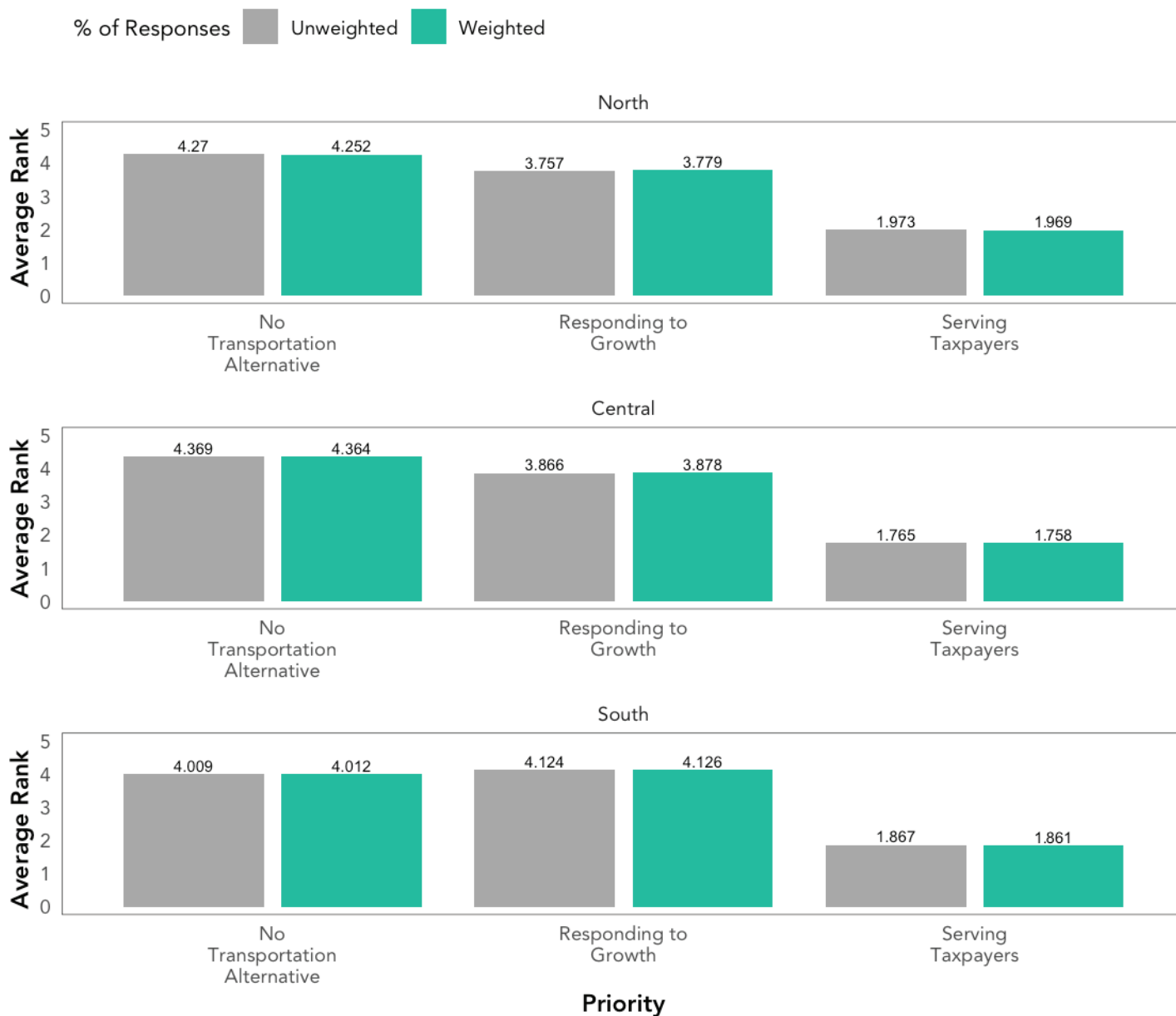


Figure 26: Coverage Priorities - Income Weighting

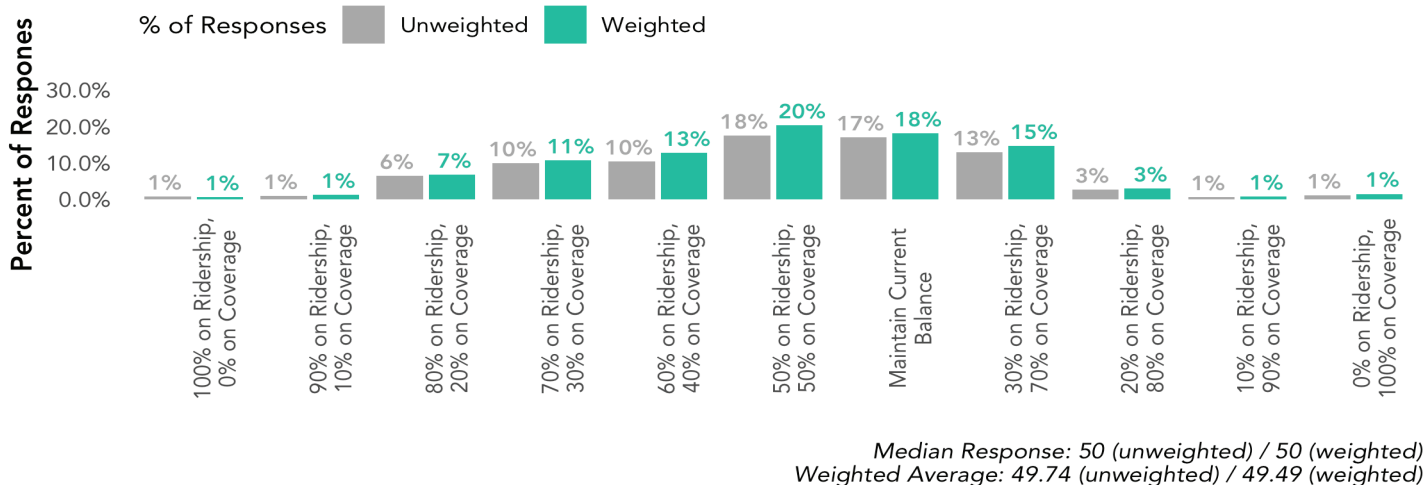
Vehicles Available in Household

Response	Region	Population (ACS 2017 5-Year)		Sample (UTA Service Choices Survey)		Over/ Under Sample
		Count	% of total	Count	Response	
0	North	8215	4%	29	6%	155%
1	North	44776	22%	106	23%	104%
2	North	84134	42%	212	46%	110%
3 or more	North	62630	31%	106	23%	74%
0	Central	19684	5%	133	11%	210%
1	Central	107678	28%	406	33%	117%
2	Central	157201	41%	490	40%	97%
3 or more	Central	98057	26%	194	16%	61%
0	South	4510	3%	41	7%	250%
1	South	32099	21%	175	31%	150%
2	South	69473	45%	247	44%	98%
3 or more	South	49582	32%	102	18%	57%

Figure 27: UTA Service Choices Web Survey Sampling - Vehicle Ownership

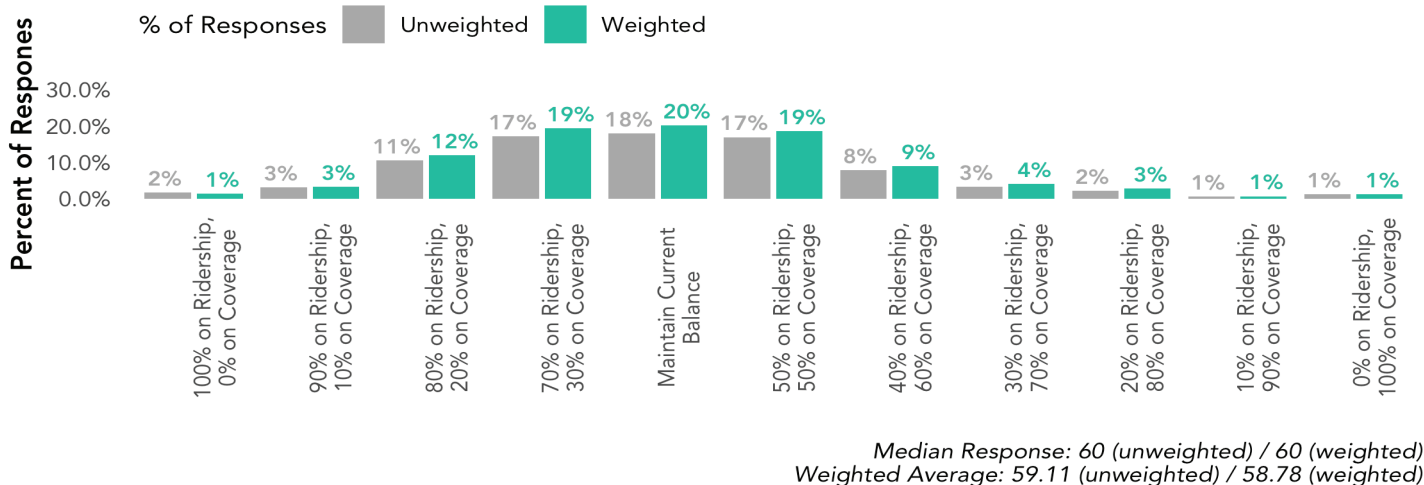
Balance of Existing Resources

North Region - Weighted by Vehicles Available



Balance of Existing Resources

Central Region - Weighted by Vehicles Available



Balance of Existing Resources

South Region - Weighted by Vehicles Available

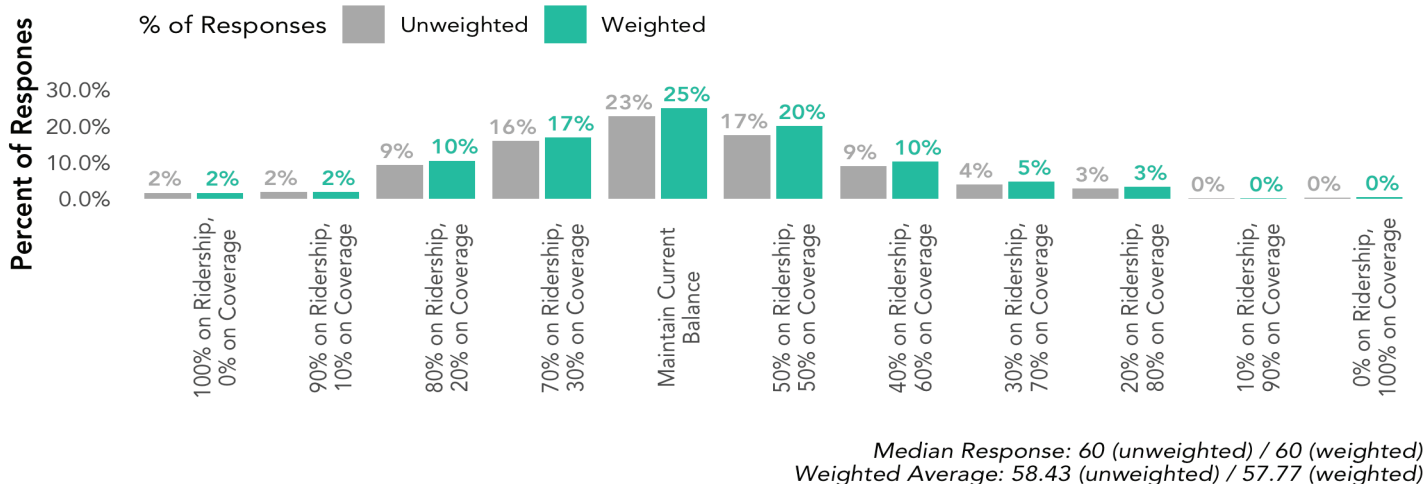
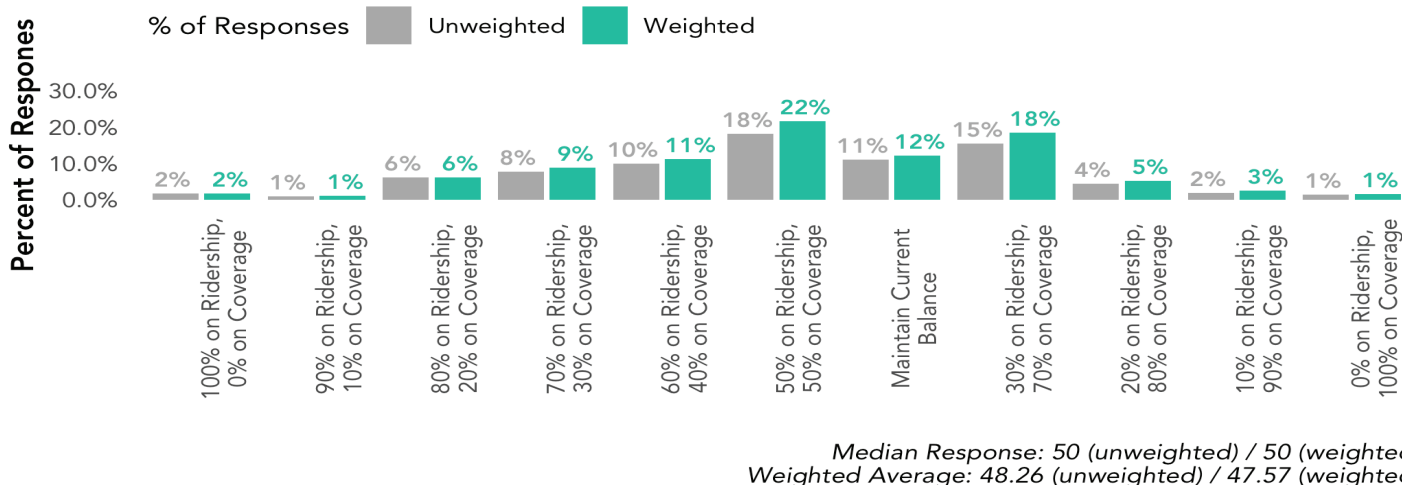
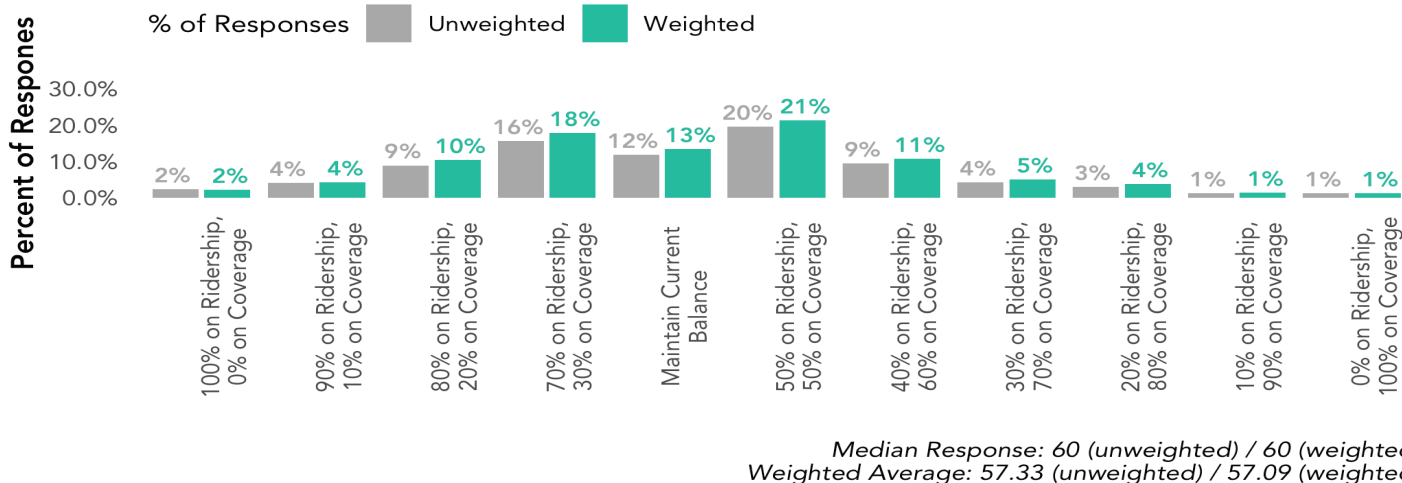


Figure 28: Balance of Existing Resources - Vehicles Available Weighting

Balance of Additional Resources North Region - Weighted by Vehicles Available



Balance of Additional Resources Central Region - Weighted by Vehicles Available



Balance of Additional Resources South Region - Weighted by Vehicles Available

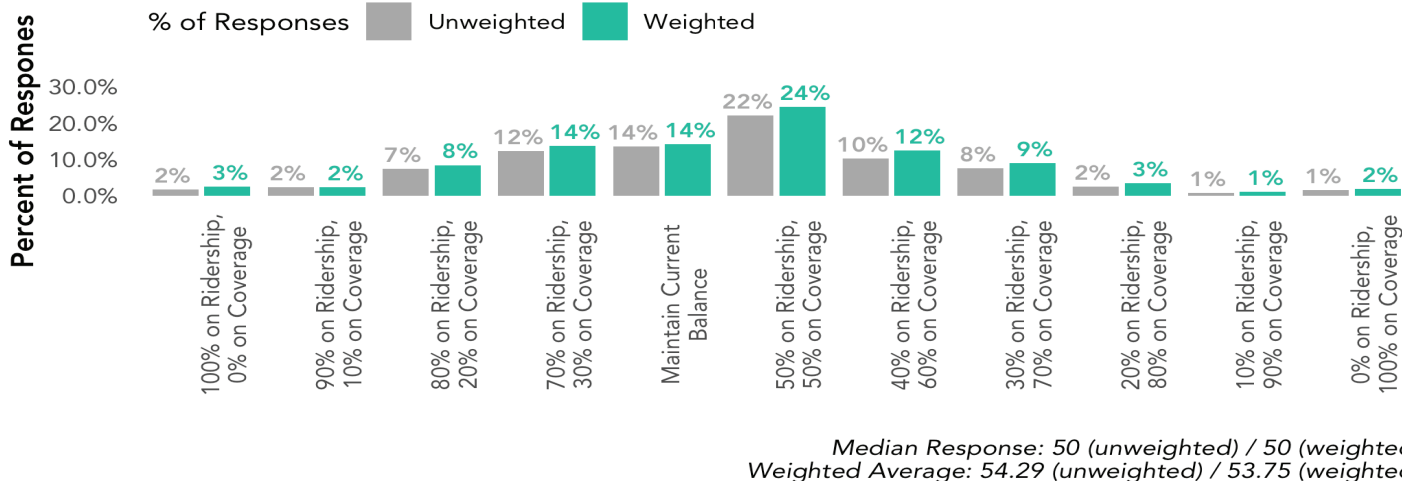


Figure 29: Balance of Additional Resources - Vehicles Available Weighting

Coverage Priority

Mean Coverage Priority Rank by Region - Weighted by Vehicles Available

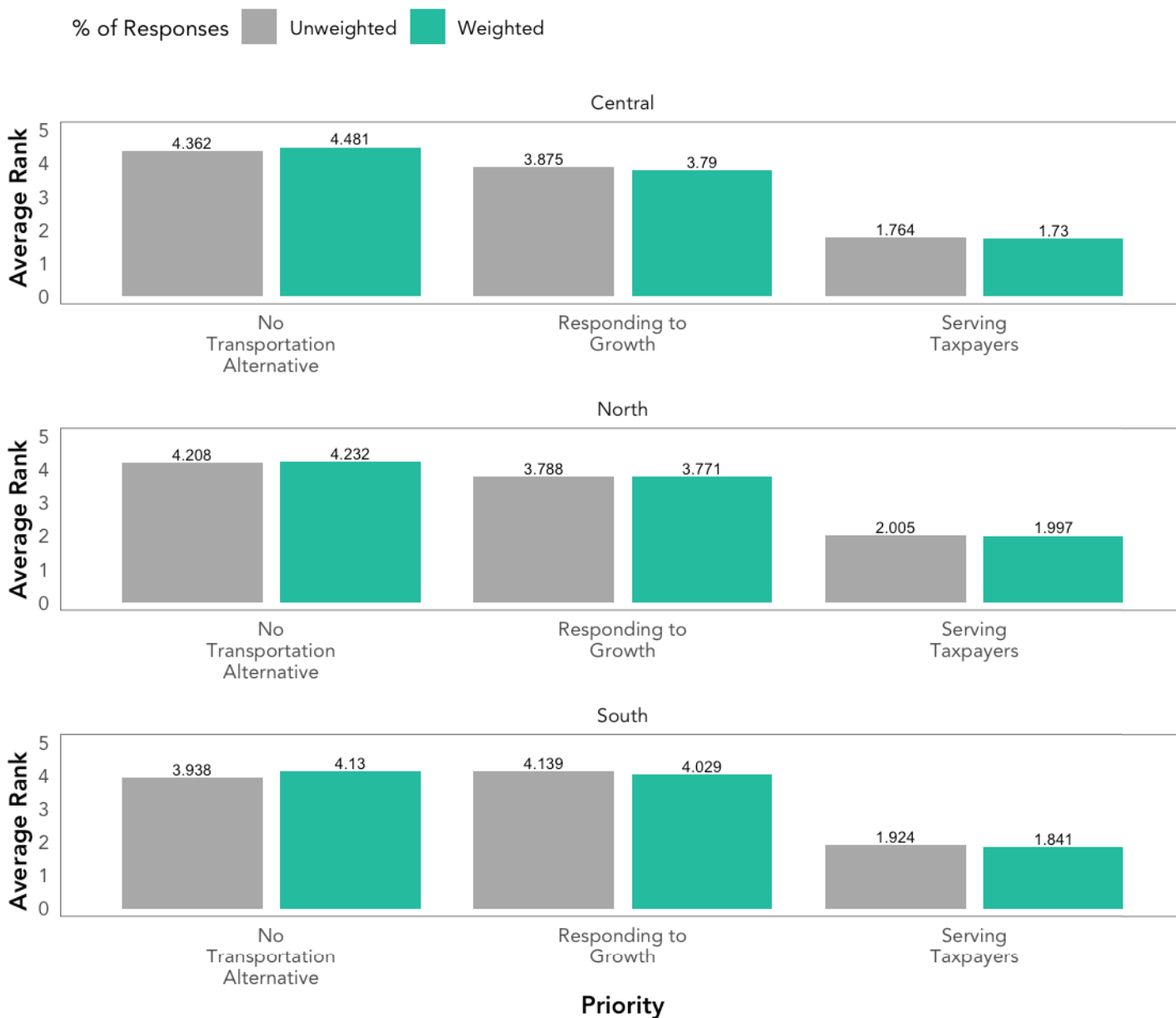


Figure 30: Coverage Priorities - Vehicles Available Weighting.

When weighted by vehicle ownership, the order of priorities in the South region changes so that “Service for People with No Transportation Alternative” is a slightly higher priority than “Responding to Growth”. However, the absolute value of the average scores are very close in both cases.

Appendix C: Geographic Distribution of Survey Responses

Where did our survey responses come from?

While people from each region of the network were able to take regionally-specific versions of the survey, we were also interested in which places within each region contributed more or fewer responses. To enable this, we asked respondents to provide their zip code, which could be used in combination with Census data on population by zip code to for later geographic normalization.

The maps on the next two pages show where survey results originated from, and where the sampling rates were highest (the % of each zip codes' population which completed the survey).

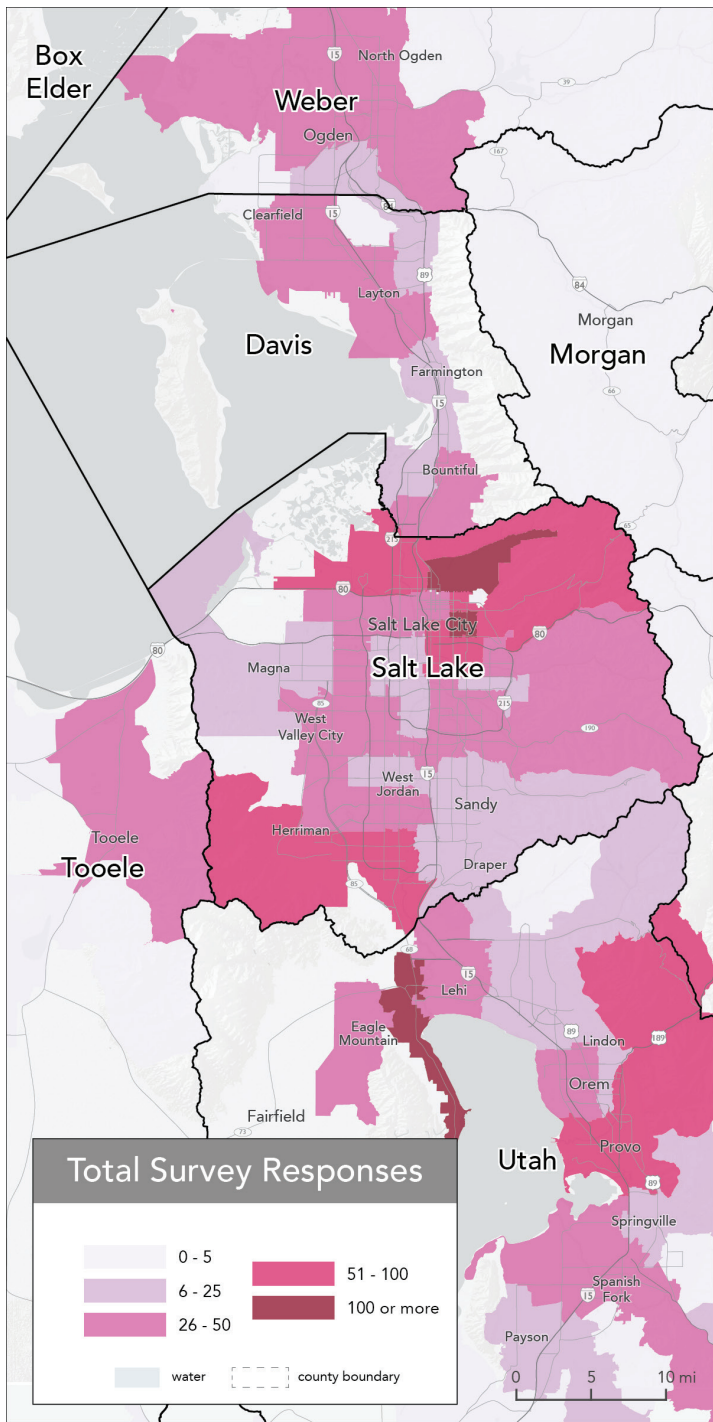


Figure 31: Total Survey Responses by Zip Code

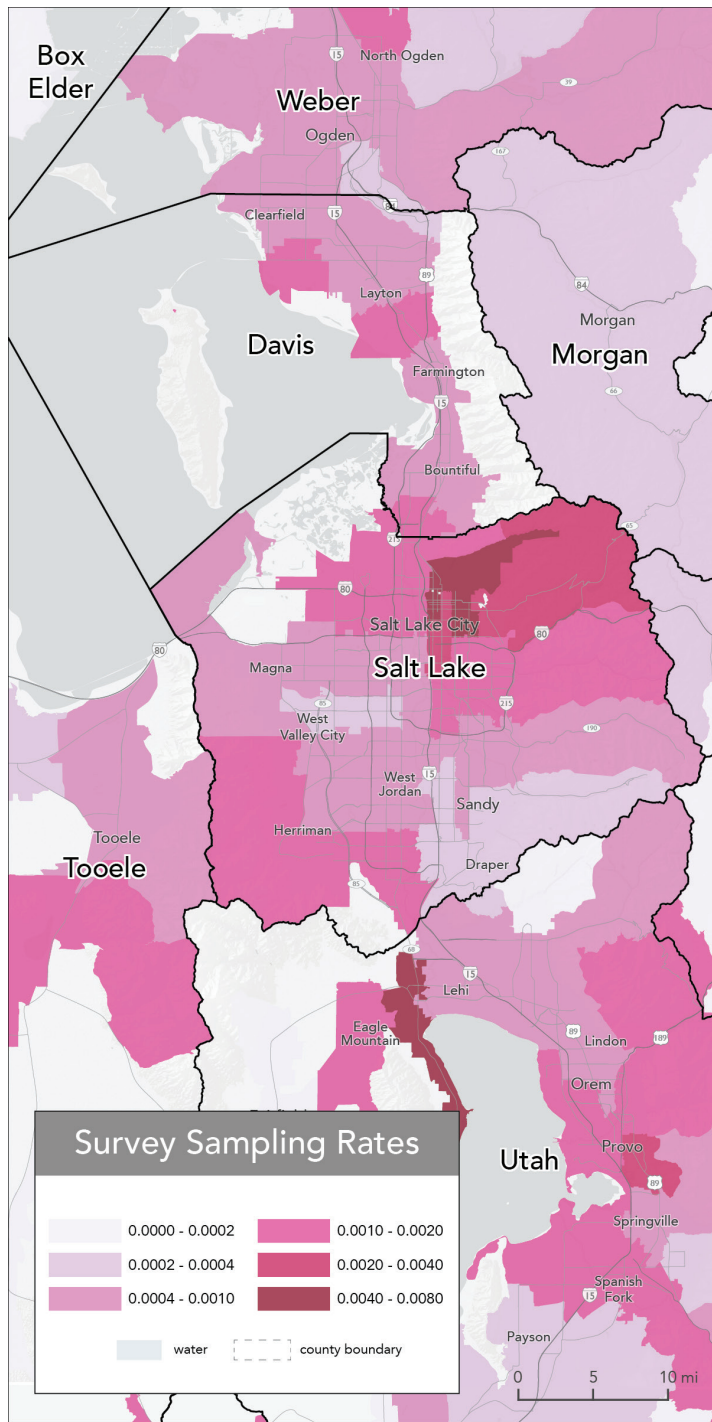


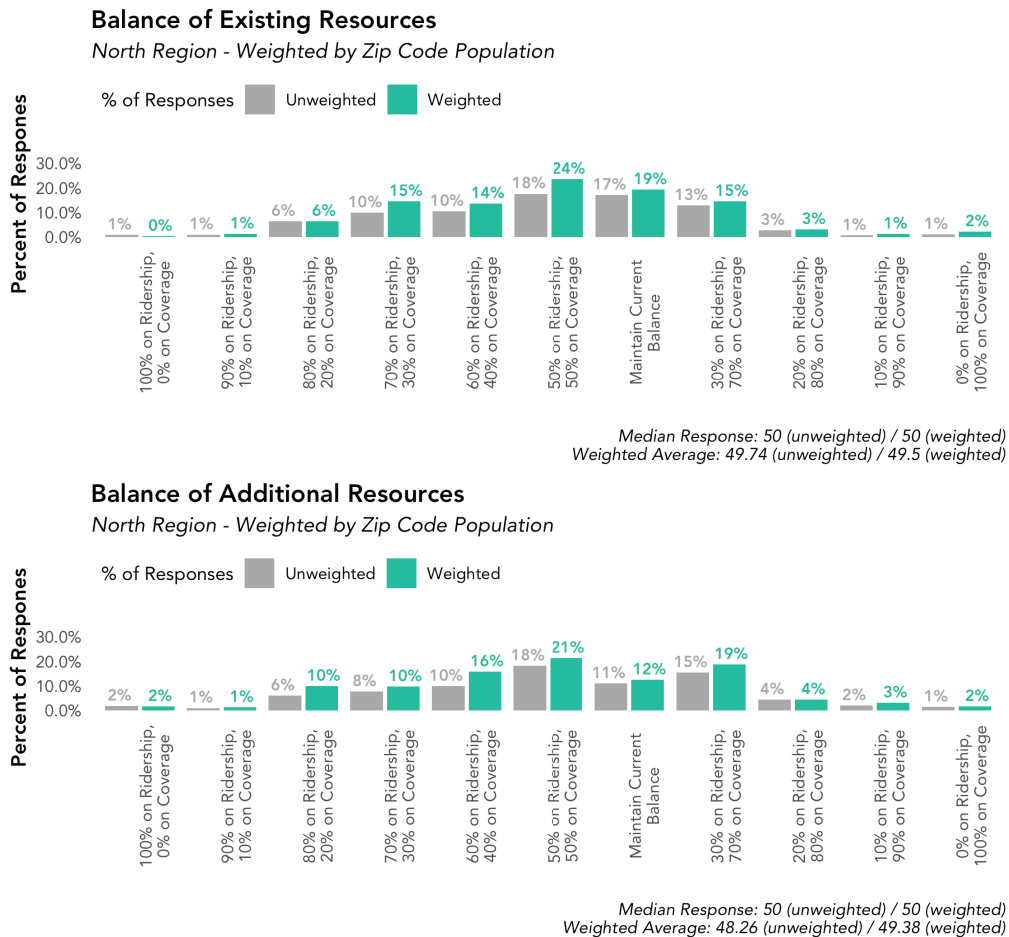
Figure 32: Survey Sampling Rates by Zip Code

North

In the North region, the number of responses and sampling rates were very consistent across the main developed areas. As a result, when the responses are normalized by zip code population, the distribution of responses to the questions of the balance of existing and (hypothetical) resources is very similar to that of the unweighted survey population.

Figure 33 compares the unweighted and weighted responses to the resources allocation questions for the North region.

Figure 33: Balance of Existing and Additional Resources, weighted by zip code population - North



Central

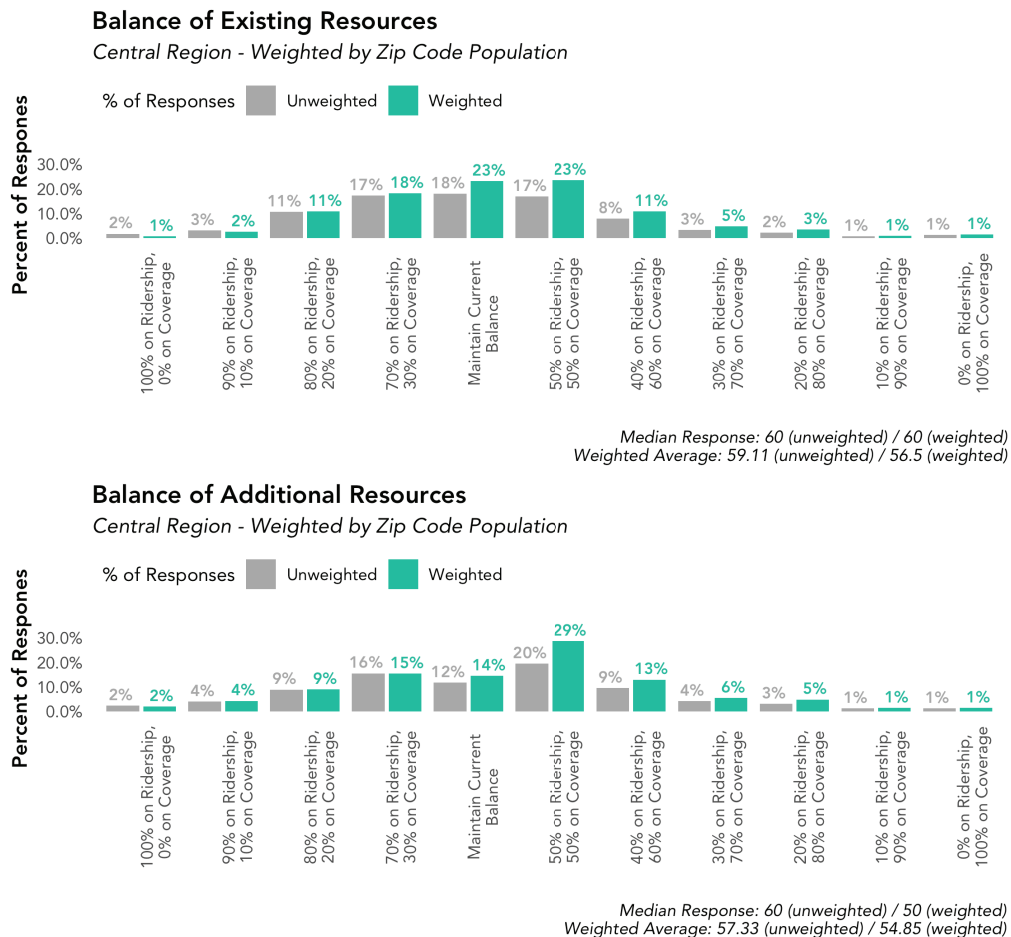
In the Central region, the most responses and the highest sampling rates were found in central Salt Lake City, around the University of Utah. It makes sense that these highly transit-oriented places would generate a lot of interest in the survey, since they are where transit is most useful, and makes up the greatest share of trips.

These are the places that benefit most strongly from a ridership-oriented change of resources, so it makes sense that responses from these places tended to favor a stronger emphasis on ridership. Figure 34 compares the unweighted and weighted responses to the resources allocation questions for the Central region.

When responses from the Central region are weighted by zip code population, the overall result is to tilt the scale further towards coverage:

- With existing resources, the median response for the Central region for both unweighted and weighted is to maintain the current balance of service, 60% ridership / 40% coverage. However, the weighted average response shifts from 59.1 % ridership to 56.5% ridership.
- With additional resources, the median response weighted by zip code population is 50% ridership / 50% coverage (versus 60% ridership / 40% coverage unweighted).

Figure 34: Balance of Existing and Additional Resources, weighted by zip code population - Central



South

In the South, many responses came from the zip codes covering the population centers of Provo and Orem, but there were also a very large (100+) number of responses received from the zip code on the western shore of Utah Lake including Saratoga Springs and other residential areas west of Lehi. This is actually the zip code with the single largest number of responses across the entire survey population.

When weighted by zip code population, the South responses are quite similar to the unweighted result, with a slightly higher focus on coverage. For the existing split (shown in Figure 35), median response is 60% ridership / 40% coverage (the existing split) in both cases.

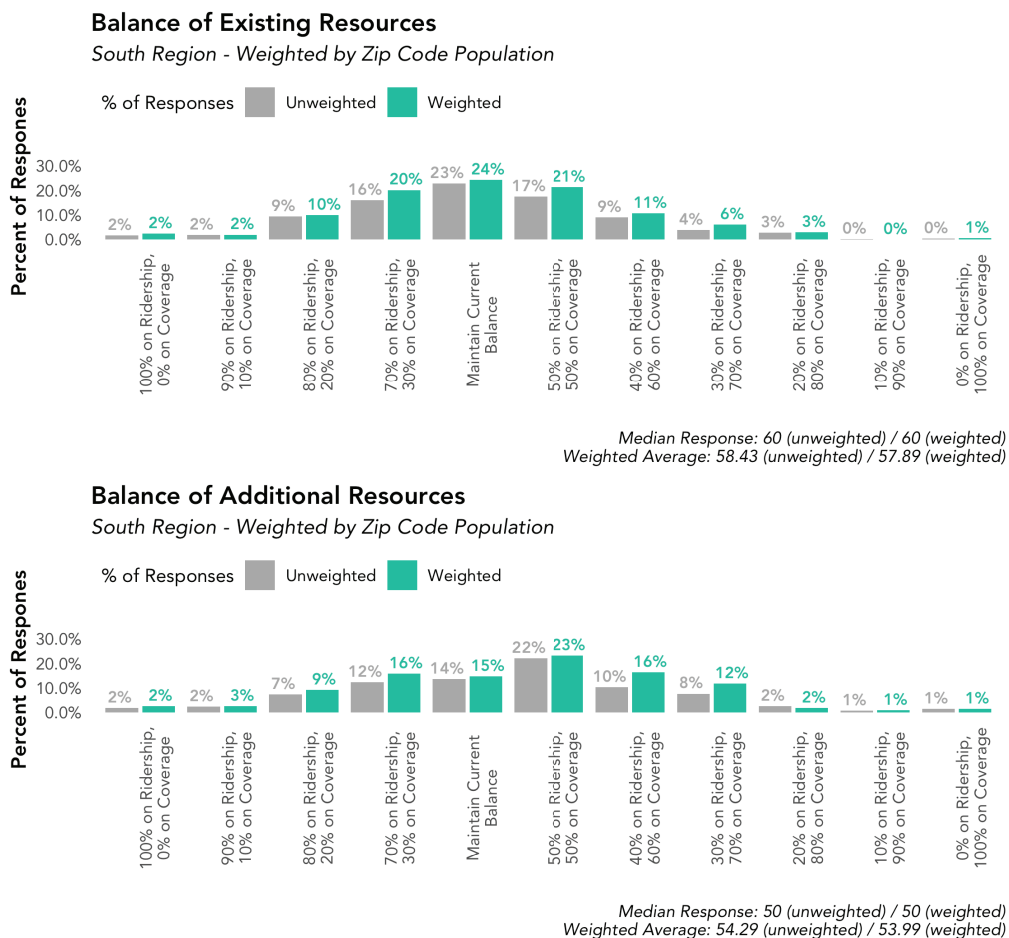
The same is true for (hypothetical) additional resources. When weighted by zip code population, the responses skew more towards coverage, but only slightly. The median response in both cases is 50% coverage / 50% ridership, a shift of 10% towards coverage from the current balance.

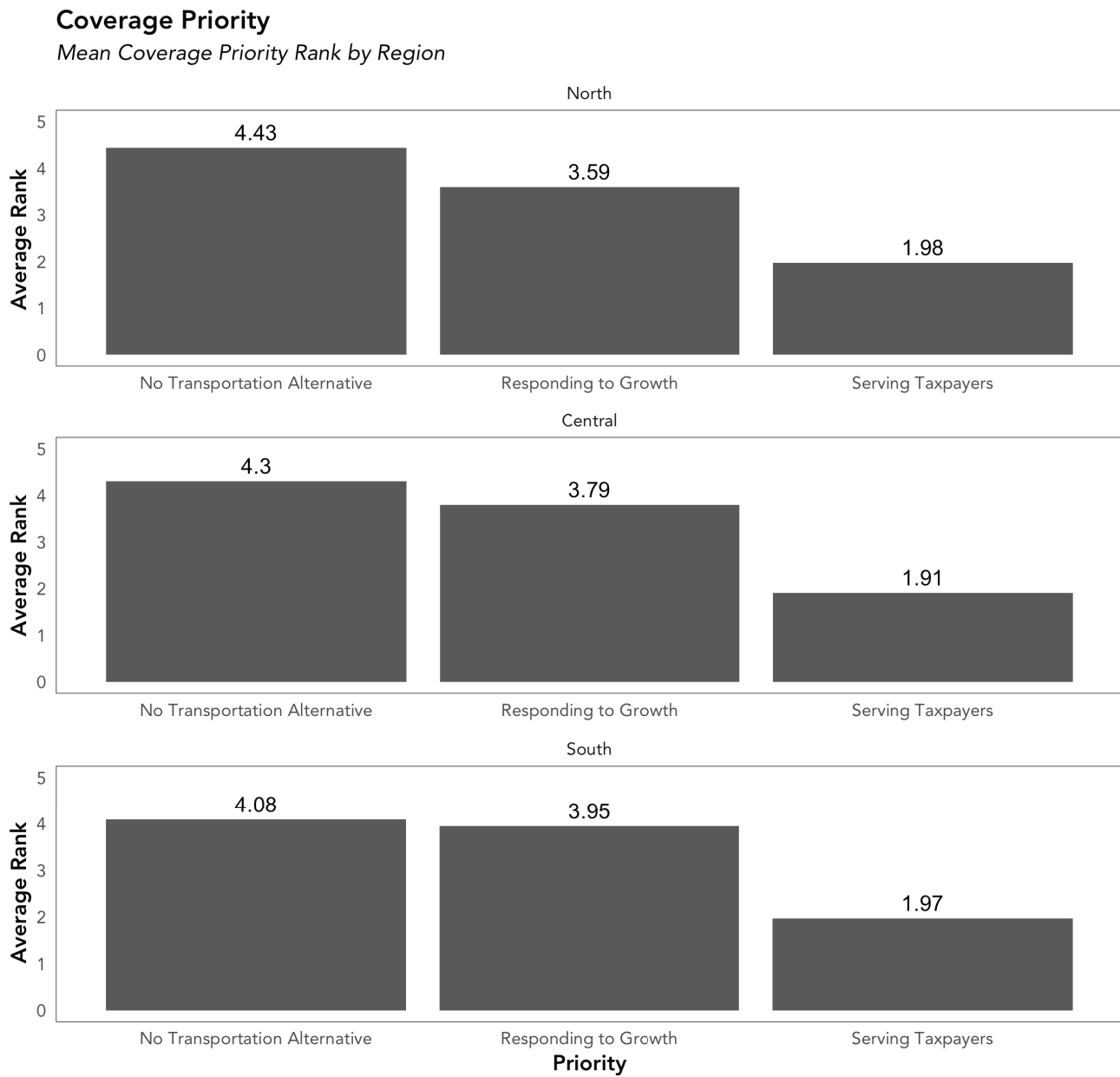
Coverage Priorities

When weighted by zip code population, the coverage rankings in the Central and North regions are unchanged from the unweighted value.

In the South, when weighted by population, the order of priorities changes. In the unweighted result, the top priority in the south was "Responding to Growth", and the second was "Service for People with No Transportation Alternative".

Figure 35: Balance of Existing and Additional Resources, weighted by zip code population - South





Proportionally weighted by zip code population. Includes only responses that provided a zip code within Utah.

Figure 36: Coverage priorities, weighted by zip code population