# TABLE OF CONTENTS

## 1 Introduction ................................................................. 4
- What is ABQ RIDE Forward? .................................................. 5
- Project Timeline ........................................................................ 5
- Summary .................................................................................. 6
  - Two Network Concepts ............................................................ 6
  - Different Purposes .................................................................... 6
  - Different Outcomes .................................................................. 7
- Key Choice Illustrated by the Concepts ..................................... 8
- The 2019 Existing Network ..................................................... 9
- 2019 Existing Network Downtown ........................................... 10
- 2019 Frequencies and Spans of Service .................................. 11
- Useful Terms ............................................................................. 12

## 2 Public Input in Phase 1 .................................................... 13
- About Phase 1 Public Engagement .......................................... 14
  - Outreach Activities ................................................................. 14
  - Outcomes ............................................................................... 14
- Priorities .................................................................................. 15
  - Highest Priorities ..................................................................... 15
  - Future Service Investments .................................................... 15
- Trade-Offs ............................................................................... 16
  - Short Walks vs. Short Waits .................................................. 16
  - Spreading Service Out vs. Focusing ..................................... 16
  - Purposes of Coverage ............................................................ 16
- Who Engaged? ........................................................................ 17
  - Demographics of Survey Respondents .................................. 17
  - Focus Group Discussions ..................................................... 17
  - Stakeholder Advisory Group ................................................ 17
  - More Detail ............................................................................ 17

## 3 Network Concepts ............................................................ 18
- Ridership and Coverage Concepts ......................................... 19
  - Concepts, Not Proposals ....................................................... 19
  - No Preferred Concept ........................................................... 19
- Assumptions ............................................................................. 20
  - Quantity of Service ............................................................... 20
  - Rio Metro .............................................................................. 20
  - Bernalillo County ................................................................... 20
  - All-Day, Two-Way Service .................................................... 20
  - The Big Picture Matters More than Details .......................... 20
- High Coverage Concept ......................................................... 21
  - Demand Response Zones ...................................................... 22
- High Coverage Concept Downtown ....................................... 23
- Frequency and Span in the High Coverage Concept ................ 24
- High Ridership Concept .......................................................... 25
- High Ridership Concept Downtown ....................................... 26
- Frequency and Span in the High Ridership Concept ................ 27
- Changes to ART and Route 66 in Both Concepts ...................... 28
  - Changes to Route 777 East of Louisiana Blvd. ..................... 28
  - Changes to Route 766 in the Southwest ................................. 28

## 4 Outcomes of the Concepts ............................................... 29
- Proximity to Existing Boardings .............................................. 30
- Proximity to Residents and Jobs ............................................. 30
- Isochrones .............................................................................. 30
- Access .................................................................................... 30
- Proximity to Service ............................................................... 31
  - Weekdays at Midday ............................................................. 31
  - Weekday Rush Hours ............................................................ 32
  - Weekday Evenings ................................................................. 33
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday Midday</td>
<td>34</td>
</tr>
<tr>
<td>Saturday Evenings</td>
<td>35</td>
</tr>
<tr>
<td>Sunday Midday</td>
<td>36</td>
</tr>
<tr>
<td>Example Isochrones</td>
<td>37</td>
</tr>
<tr>
<td>Access Changes Across the ABQ RIDE Service Area</td>
<td>39</td>
</tr>
<tr>
<td>Average Access Changes</td>
<td>40</td>
</tr>
<tr>
<td>Changes for Specific Populations</td>
<td>40</td>
</tr>
<tr>
<td>Access Changes by Area in the High Coverage Concept</td>
<td>42</td>
</tr>
<tr>
<td>Access Changes by Area in the High Ridership Concept</td>
<td>43</td>
</tr>
<tr>
<td>How Citywide Access was Calculated</td>
<td>44</td>
</tr>
<tr>
<td><strong>5 Next Steps</strong></td>
<td>45</td>
</tr>
<tr>
<td>Next Steps</td>
<td>46</td>
</tr>
<tr>
<td>Phase 2 Public Engagement (Spring 2023)</td>
<td>46</td>
</tr>
<tr>
<td>Draft Network Plan (anticipated Summer 2023)</td>
<td>46</td>
</tr>
<tr>
<td>Phase 3 Public Engagement (anticipated Fall 2023)</td>
<td>46</td>
</tr>
<tr>
<td>Final Network Plan</td>
<td>46</td>
</tr>
</tbody>
</table>
1 Introduction
What is ABQ RIDE Forward?

ABQ RIDE Forward is a review of the purpose and performance of Albuquerque’s bus network, to plan for improvements in the near future.

This is a collaborative effort among the City, Rio Metro, Bernalillo County, transit stakeholders and members of the community to decide the goals and purposes of the City’s investment in public transit. The resulting plan will inform future decisions about where bus routes go, at what times they run, and how frequently.

The ABQ RIDE Forward process includes:

- Consultation of residents, workers, transit riders and advocates about how the City should make choices and prioritize service in the future.
- Planning for potential future changes to the Albuquerque transit network.
- Guidance for the City and its partners about how development and street design decisions can make public transit less costly to provide and more successful.

Project Timeline

Existing Conditions
In 2022, the City and its consulting team published a report describing Transit Existing Conditions. That report, and other documents, are available at abqrideforward.com.

Phase 1 Public Engagement
During Autumn 2022, the public was consulted about key choices, purposes and priorities for transit. These were based on findings of the Existing Conditions Report.

Phase 2 Public Engagement
Public input is being gathered on these Network Concepts in this second phase of public engagement.

Draft Network Plan
After public responses to the Concepts have been gathered, the consulting team, City staff and City partners will design a draft network plan. This plan will specify routes, frequencies, hours and days of service, for a future ABQ RIDE network.

Phase 3 Public Engagement
In the last phase of public engagement, ABQ RIDE will ask the public and stakeholders to review the Draft Network Plan and respond to its specific recommendations.

Final Network Plan
The network plan will be revised based on feedback from the public and stakeholders, and it will then be finalized. Some elements of the final plan may be implemented right away, if they can be implemented within the limits imposed by funding and staff.

Other elements of the network may require more time or other preparation to be implemented. While this network plan is expected to be “budget neutral,” using the same amount of service as was provided in 2019, there are capital and operating costs associated with major changes to bus routes like the ones contemplated in ABQ RIDE Forward.
Summary

Two Network Concepts

This report introduces two Network Concepts that illustrate a range of possibilities for the future ABQ RIDE transit network: the network could be changed so that many people ride it, or it could provide wider coverage.

This illustration is taking place in a budget neutral context – the Concepts would cost the same amount to operate, and no more service than was offered in 2019.

During the phase of public engagement based on this report, the question for the public is, “Where on the spectrum between these two Concepts should the future ABQ RIDE network be?”

The maps at right are snapshots of the Concepts at three times of the week. Colors stand for frequencies, with red and pink lines offering short waits.

Different Purposes

The Concepts were designed to be very different from each other.

The High Ridership Concept is designed:
• So that the largest number of people, and especially vulnerable people, would find transit useful and would choose to ride.
• Focused on the areas with the most residents, the most jobs, and the most vulnerable people.
• Focused on areas that are efficient to serve due to their location and layout.

The High Ridership Concept is not designed:
• To continue historical or legacy patterns of service simply because they’ve always been that way.
• To avoid disrupting anyone’s existing trip.
• To meet political expectations or expectations that all new development should have transit.
• To get a little bit of service close to as many people as possible, which is a goal that conflicts with high ridership.
  - Routes in the High Ridership Concept would be within ½ mile of 96.4% of the boardings counted in Spring 2022.

The High Coverage Concept is designed:
• With at least minimal service in all areas that had service in 2019.
  - Routes in the High Coverage Concept would be within ½ mile of 99.8% of the boardings counted in Spring 2022.
• To put service close to as many people as possible, even if the service is infrequent and not very useful, and even if the number of people served is small.
• To meet most new development with some minimal service.
• To function as a connected network, despite offering mostly infrequent routes.

The High Coverage Concept is not designed:
• To attract high ridership relative to the City’s costs. High ridership isn’t a realistic expectation in many parts of the service area nor of this Concept.
• To reduce driving or congestion.
• To maintain existing routes’ frequencies, some of which must be cut if coverage is to be increased.
Different Outcomes

The two Concepts, designed for very different purposes, would have very different outcomes.

Job Access

The High Coverage Concept, by spreading service into fewer routes in fewer areas, would increase the average resident’s job access. It would provide even larger gains for non-white, low-income and vulnerable residents.

The High Ridership Concept, by concentrating service close to more areas and more people, would provide even larger gains for non-white, low-income and vulnerable residents.

The two charts at top right compare job access from the Concepts and the 2019 Network on a typical weekday at midday:

- Access to jobs within 45 minutes would fall by ~16% in Coverage and rise by +42% in Ridership.
- For residents of High Vulnerability Areas, access to jobs within 45 minutes would fall by ~11% in Coverage and rise by +48% in Ridership.

Access to jobs is a good predictor of transit ridership. Job locations tend to be destinations for other trips such as socializing, shopping, medical appointments and errands. And this access analysis answers the basic question people ask themselves about transit: “Can I get to the various places I want to go, in a reasonable amount of time?”

Proximity to Transit

The mere presence of transit serves a purpose, a sort of insurance policy against isolation, even if most people don’t use it or use it only rarely.

The High Coverage Concept would get at least minimal transit close to more residents than the High Ridership Concept – 68% compared to 42%.

The charts below provide more detail on the proximity of residents and jobs to any transit, and to transit of various frequencies.

The complete proximity chart data is available in an Excel spreadsheet.

How many jobs could the average resident reach, on weekdays at midday?

How many residents and jobs would be within ½ mile of transit, on weekdays at midday?

<table>
<thead>
<tr>
<th></th>
<th>Residents</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Coverage</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>High Ridership</td>
<td>18%</td>
<td>19%</td>
</tr>
</tbody>
</table>

How many residents and jobs would be within ½ mile of transit, on weekdays at midday?

<table>
<thead>
<tr>
<th></th>
<th>Residents</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Network</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>High Coverage</td>
<td>29%</td>
<td>30%</td>
</tr>
<tr>
<td>High Ridership</td>
<td>33%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Transit every:
- 15 minutes or better
- 20 minutes
- 30 minutes
- 40 minutes
- More than 60 minutes
- Demand Zone
- Not within 1/2 mile
Key Choice Illustrated by the Concepts

Certain questions arise in transit planning that are not technical questions, and do not have objectively correct answers. These can be thought of as choices more than questions.

Reasonable people can and will disagree about the best choices for Albuquerque.

One goal for this process is to facilitate a healthy debate about these choices, so that people understand what they can expect from the ABQ RIDE network in the future and why the network can’t be everything everyone wants.

More Ridership or More Coverage?

All transit agencies balance two competing goals for their system: high ridership and wide coverage. This trade-off is illustrated using a fictional neighborhood at right. The little dots are homes and workplaces. The lines are roads. As in many neighborhoods, most activity is concentrated around the main roads.

A transit agency pursuing only high ridership would concentrate its service on the main roads, which are linear and dense with residents and jobs. Routes would be frequent and direct, but only offered in the busiest areas, as in the network shown in red.

If the same agency were pursuing only coverage, it would spread its buses out into many routes, so that every street had some service, as in the network shown in blue. Everyone would have a route nearby, but none of the routes would be frequent or direct, not even in the busiest areas.

These two scenarios use the same number of buses and cost the same amount to operate, but they deliver very different outcomes.

The “right” balance of ridership and coverage goals is different in every community. It can also change over time as the values, needs and ambitions of a community change.

The choice between these goals is not one-or-the-other. Most transit providers spend some of their service budget pursuing high ridership, and the rest of their budget providing coverage. You don’t have to choose just one or the other goal to serve. But every transit provider strikes a particular balance between these two goals, somewhere on the spectrum between the extremes. ABQ RIDE can devote some service to each of these goals, but...

Within any limited budget, if an agency wants to do more of one of these, it must do less of the other. For example, if the City is asked to be more “efficient” by attracting more riders, it can increase frequencies (or lengthen hours of service) in the places where the most potential riders travel. This will likely attract more riders. But doing so would require cutting service in other places or at other times – which would reduce coverage.

This is not the only transit planning choice that was described in the Existing Conditions Report, but it is the biggest and most difficult. The purpose of the Concepts presented in this report is to help you imagine the range of possibilities for a future ABQ RIDE network.

Imagine you are the transit planner working in this fictional neighborhood.

The dots scattered around the map are people and jobs.

The 18 buses are the resources the town has to run transit.

Before you can plan transit routes, you must decide: What is the purpose of your transit system?

Maximum Ridership

Maximum Coverage

All 18 buses are focused on the busiest area. Waits for service are short but walks to service are longer for people in less populated areas. Frequency and ridership are high, but some places have no service.

The 18 buses are spread around so that there is a route on every street. Everyone lives near a stop, but every route is infrequent, so waits for service are long. Only a few people can bear to wait so long, so ridership is low.
The 2019 Existing Network

The two Concepts presented in this report are compared to the 2019 ABQ RIDE network.

In 2019, the City provided a few high frequency routes, with 15- and 20-minute frequencies on Central Ave, San Mateo Blvd., and Lomas Blvd. It provided lower frequency services on other streets, including some very infrequent one-way-only rush-hours-only routes.

As a reminder the colors on this and later maps stand for the frequency of the route, at midday on weekdays:

- **Dark Red** means every 8 minutes or better.
- **Red** means about every 15 minutes.
- **Pink** means about every 20 minutes.
- **Blue** means about every 30 minutes.
- **Light Blue** means about every 60 minutes.
- **Tan** means this route offers peak-only or otherwise limited service, and in some cases the service is one-way-only.

Changes Since 2019

Since 2019, a shortage of operators has forced the City to reduce frequencies and hours of service on many routes. ABQ RIDE has made an effort to maintain frequencies on the highest-ridership routes. Some major routes that were offering better frequency in 2019 than they are today are:

- ART (Routes 766/777).
- Route 790 on Coors Blvd.
- Route 157 between Uptown and the Northwest Transit Center.
- Route 10 on 4th Ave.
2019 Existing Network Downtown

In 2019, the ART and Route 66 provided very high frequency service on Central Avenue. In addition, routes offering 20-minute frequency provided service along Lomas Blvd. on the north side of the University of New Mexico (UNM) main campus.

All routes service downtown gathered at the Alvarado Transit Center (ATC), to allow people to make connections among those routes as well as with intercity transit like Rail Runner, Greyhound and Amtrak.

Notable characteristics of the 2019 network were:

- A high concentration of service on Central Avenue (with ART and Route 66 both offering frequent service).
- Many infrequent routes on nearby parallel streets (such as on 6th, 5th, 4th, 3rd and 2nd Streets, north of Lomas) making for very short walks to a bus stop but long waits for the bus.
- A generally complex pattern, with most routes doing something unique as they enter downtown, and few places (besides Central Avenue) where someone can wait at one stop for any bus heading their way.

As a reminder:

- **Dark Red** means service about every 8 minutes or better in the middle of the day.
- **Red** means about every 15 minutes.
- **Pink** means about every 20 minutes.
- **Blue** means about every 30 minutes.
- **Light Blue** means about every 60 minutes.
- **Tan** means this route offers peak-only or otherwise limited service, and in some cases the service is one-way-only.
This graphic summarizes each route’s frequency and span as it was operated in the 2019 Network.
Useful Terms

**Frequency**
For the ABQ RIDE network, we describe service coming every 20 minutes or better as “frequent.” Frequency has a big impact on peoples’ travel time. But frequency is invisible, and hard to imagine for those of us who mostly drive, cycle or walk.

More frequent service means people are able to travel when they want to, without arriving at their destination earlier than they wanted to. High frequency also makes transfers quick and reliable. Higher frequency service tends to attract higher ridership, even relative to its costs.

**Hours of service, or span**
The “span” of a transit service is the number of hours it operates during the day. For example, a service that runs from 6:00 am to 10:30 p.m. would have a 16.5 hour span. A service that runs Monday through Saturday would have a 6-day-a-week span.

Many transit systems focus service during rush hours when automobile travel peaks. This results in poorer frequencies at other times when many people still need to get around.

For riders who depend on transit service for all aspects of their life, it matters that the service span is long enough for their weekday and weekend travel. And, driver shifts for peak-only service are harder to fill than all-day shifts.

**Rush hour peaking**
ABQ RIDE runs some special routes only during weekday rush hours, also referred to as “peaks.” Some other routes have increased frequencies during rush hours.

In Albuquerque, as in most cities, rush-hour-only routes attract few riders.

Also, extra rush hour service comes with some extra costs to the City. Extra buses have to be purchased, maintained and stored just for rush hours, and then sit idle the rest of the day and week. Driver shifts for peak-only service are harder to fill than all-day shifts.

**Access**
In this report, the word “access” is used to describe the number of useful destinations someone can reach within a reasonable travel time. For example, someone living in a certain neighborhood can access a certain number of jobs within 45 minutes by transit.

(This is different from another use of the word “access,” describing whether and how people can get to and from a bus stop, for example by walking or wheeling a mobility device.)

Access can be described for a specific place (such as a neighborhood or apartment building), and it can also be described on average for the population of the whole city.

**One-way services**
Some of the routes in the existing ABQ RIDE network offer one-way service only. A route goes in only one direction in the morning, and the other direction in the evening.

This type of route is highly specialized around people who commute during rush hours, and people who are going to a particular place – in Albuquerque, to downtown, UNM, Kirtland Air Force Base, or the Rail Runner train.

Neither of the Concepts includes one-way service among City-funded routes. These routes do not attract high ridership. They also provide a particularly weak form of coverage because vulnerable people – those living on low incomes, seniors or those with disabilities, young people, service industry workers – can hardly make use of them for the types of trips they need to make.

**Demand Response**
Demand Response transit is a transit service which varies the route depending on who requests it. In contrast, fixed routes serve fixed stops, in a certain sequence, at scheduled times.

Demand Response service is appealing because it responds to people’s desire to travel when they want (rather than only when service is scheduled) and to avoid walking to and waiting at bus stops. It can be used to provide “last mile” connections between hard-to-reach locations and a fixed route stop or station.

However, Demand Response service nearly always has a high cost per rider. In times when there is no additional funding for transit, Demand Response can generally only be added as a replacement for very low-ridership fixed routes, or by cutting frequency or coverage elsewhere.

**Connective transit networks**
In a well-designed transit network, individual routes connect to allow people to travel between many different places, using a combination of routes.

In a network, transferring is a crucial part of creating efficient trips for residents to access many different opportunities. However, if riders have to wait a long time to make a transfer, it greatly increases their total travel time. Transfers between frequent routes allow for reliably short waits. In some cases, a network can be designed so that many infrequent routes converge in a central location, and a timed connection can be made with a relatively short wait.

In these ways, well-connected networks can be built out of either frequent or infrequent lines. Both of the Concepts presented in this report are designed with connections in mind.
2 Public Input in Phase 1
About Phase 1 Public Engagement

To inform the ABQ RIDE Forward Network Plan, the Project Team led an initial round of public engagement from September to November 2022.

The Phase 1 engagement process began with asking the public and stakeholders to consider choices and priorities for the future ABQ RIDE network. The Existing Conditions Report was published, describing the 2019 and 2022 networks, and introducing choices that will arise in any planning for a future bus network.

In this first phase of engagement, the project team sought feedback from the public about those choices. The main objectives for the first phase of outreach for the ABQ RIDE Forward Network Plan were to:

- Gain an understanding from riders and the public of how they think the City should make certain choices, and their own priorities.
- Set expectations among community members about the types of improvements that could be considered.
- Build understanding among stakeholders of how transit works, and the limitations faced by the City in providing transit.
- Share information about the planning process and what changes might result from it.

The feedback that the project team received informed the development of the two Concepts shared in this report. It will also be used to inform development of the Draft and Final Network Plans, later in this process.

While a wide diversity of people were reached during Phase 1, extra effort was made to engage with:

- Current transit riders.
- Students, staff and leadership at the major educational institutions: UNM, College of New Mexico (CNM), schools and hospitals.
- Community groups and social service providers.
- Business owners and major employers.
- Transit, active transportation and environmental justice advocates.

The project team presented to the following organizations to share information about ABQ RIDE Forward and promote the survey in their communities:

<table>
<thead>
<tr>
<th>Community Organizations</th>
<th>Public Sector Advisory Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban to Wild Coalition</td>
<td>Transit Advisory Board</td>
</tr>
<tr>
<td>Albuquerque Bus Riders</td>
<td>MRCOG Active Transportation</td>
</tr>
<tr>
<td>Union</td>
<td>Committee</td>
</tr>
<tr>
<td>Urban Land Institute</td>
<td>Greater Albuquerque Active</td>
</tr>
<tr>
<td>NM Chapter</td>
<td>Transportation Committee</td>
</tr>
</tbody>
</table>

Outreach Activities

A survey was created to gather input on choices and priorities. The survey was available in-person and online, in English and Spanish.

Information about ABQ RIDE Forward and participation opportunities were shared on a website, www.abquirideforward.com, through newsletters, social media, and at various public libraries and community centers.

The Project Team also surveyed riders at transit centers and stops; tabled at community events; hosted public community meetings; and presented to community organizations. There was a workshop with a Stakeholder Advisory Group and six facilitated focus group discussions which anyone could join.

Outcomes

- There were 1,682 total survey submissions, including 601 surveys completed in-person. In-person survey respondents were disproportionately regular transit users and from households with lower incomes.
- Most survey respondents who ride transit regularly use both ART and local routes. Online respondents were less likely to have ridden ABQ RIDE transit routes regularly, but they were more likely to have ridden the Rail Runner over the last year than were in-person respondents (30% compared to 21%).
- One-half of respondents who indicated they ride public transit less frequently than before the pandemic cited personal safety concerns as a reason. Other common responses included concerns for personal health (37%), service being unavailable at desired times (35%), and changes in travel behavior.
- When asked whether they would prefer a long walk to a more frequent service, or a shorter walk to an infrequent service, about 50% respondents indicated they preferred the longer walk to the more frequent service. Only 21% said they preferred the shorter walk to an infrequent service. (The remainder were unsure.)
- Respondents expressed a slight preference for the City spreading service widely across many areas (46%) rather than focusing it into fewer high-frequency routes (39%). This is not consistent with the group’s responses to the previous question, though the previous question was about people’s personal preferences rather than a City-level policy choice.
- People who ride transit often were more likely to prefer that service be spread widely across many areas (51%) rather than focused on high ridership routes (33%).
- Respondents chose meeting the needs of low-income and disadvantaged groups as the top reason why coverage service should be provided, in places where ridership alone does not justify the service.
- More than half (53%) of focus group participants indicated they would be willing to walk more than 10 minutes to access frequent transit. When asked more specific questions about how far they were willing to walk to access transit stops near their residence, many participants indicated shorter distances in practice than in theory.
- Through Phase 1 outreach, the City has built an email list of 353 interested people who can be directly contacted about this and subsequent phases of planning.
Priorities

Highest Priorities

In response to a multiple-choice question about possible transit priorities, the most commonly cited priorities were benefiting people with lower incomes (47%) and maximizing ridership (42%), as shown in the graph at right.

Among sub-groups of survey respondents:

- All categories of transit users (frequent, occasional, and non-users) cited benefiting people with lower incomes as their highest priority.
- Responses from non-transit users were split across nearly all transit priority categories.
- Respondents from lower income households were somewhat more likely to cite benefiting certain population groups (lower income households; seniors, youths, and people with disabilities) as a high priority.
- Respondents with higher household incomes were far more likely to cite maximizing ridership and reducing the growth of traffic congestion as high priorities than were respondents from lower-income households.

Future Service Investments

In response to multiple-choice question offering seven types of transit investments, the investments respondents said they most wished could be made were better frequencies (53%), keeping the fare free (50%), and more routes in more places (40%).

The most frequently cited priorities were generally consistent among respondents with different transit usage patterns, though the order of priority varied:

- Among frequent transit riders, the most popular investment was “keeping the fare free” (55% of respondents), with “better frequencies” and “more weekend service” the next most popular priorities (about 49% and 38% respectively).
- Both occasional- and non-transit riders selected “better frequencies” most often (57% and 54% respectively).
- The second most popular investment among occasional transit riders was “keeping the fare free” (52%), while non-transit users cited “more routes in more places” (48%).

When split by income:

- Respondents with the lowest household incomes were more likely to choose weekend and night service as priorities compared to higher-income respondents.
- Higher income respondents were more likely to choose better frequencies as a priority compared to lower-income respondents.
- More early morning service was consistently the least cited investment priority.

Highest Priorities: Survey respondents indicated the highest priorities for transit were benefiting people with lower incomes (47%) and maximizing ridership (42%).

Future Service Investments: Respondents said the investments they most wished for were better frequencies (53%), keeping the fare free (50%), and more routes in more places (40%).
Trade-Offs

Short Walks vs. Short Waits

Respondents were asked whether they would prefer a route that is close by but requires a long wait, or a route that is a farther walk away but is coming soon.

Among all respondents, 50% indicated they prefer routes that are far away but with more frequent service, and only 21% indicated that they would prefer a nearby, infrequent route. Among online respondents, the preference for shorter waits was slightly stronger, and among in-person respondents there was only a small preference for shorter waits.

Among all income groups and regardless of how much respondents use transit, there was a consistent preference – for some groups modest, for some groups major – for frequent routes even if they require a longer walk.

Spreading Service Out vs. Focusing

The survey presented the Ridership / Coverage trade-off choice (summarized on page 8) to the public.

Asked whether ABQ RIDE should spread service out into minimal routes for everyone, or focus it into frequent routes where large numbers of people will use it, respondents indicated a slight preference for spreading it out (46%) compared to focusing it (39%).

Frequent transit riders were more likely to prefer that service be spread out (51%) rather than focused (33%). Responses from occasional transit riders were nearly evenly split between spreading service out and focusing it.

The sum of responses to this choice contrasts with the responses to the last choice. These two choices are related: A network that focuses service into fewer, more frequent routes will require people to walk further but will give them a shorter wait; a network that spreads minimal service out to get close to everyone will offer short walks, but long waits.

People’s preference for short waits does not seem to have caused them to advocate for frequent routes.

What to make of this seeming conflict?

The first question was framed as someone’s individual preference, whereas the second question was about what they think ABQ RIDE should do. Perhaps when people were thinking at the level of policy, citywide, they were more inclined towards coverage. But when they were thinking about what kind of transit would work for them, they were inclined towards the higher ridership design, which is a high-frequency network. A reasonable person could hold both opinions at the same time.

Purposes of Coverage

In a third question related to trade-offs, the survey asked what purposes justify providing transit in areas where ridership is very low or there are not very many people. (The chart showing results for this question is not shown, but is included in the Phase 1 public engagement summary on the project website.)

Respondents consistently identified “meeting the needs of low-income and disadvantaged groups” as the top reason for providing such coverage service.

Frequent transit riders were much more likely to identify “putting service close to everyone in the city” than others as a reason to provide

---

Short Walks vs. Short Waits: Respondents indicated they prefer routes that are farther away but more frequent.

Purposes of Coverage

In a third question related to trade-offs, the survey asked what purposes justify providing transit in areas where ridership is very low or there are not very many people. (The chart showing results for this question is not shown, but is included in the Phase 1 public engagement summary on the project website.)

Respondents consistently identified “meeting the needs of low-income and disadvantaged groups” as the top reason for providing such coverage service.

Frequent transit riders were much more likely to identify “putting service close to everyone in the city” than others as a reason to provide
Who Engaged?

Demographics of Survey Respondents

The tables below describe the respondents to the Phase 1 survey by race/ethnicity and household income.

- 14% of respondents had annual household incomes of less than $10,000. 21% of respondents had household incomes of more than $100,000.
- 55% of respondents identified as White, and 31% identified as Hispanic (multiple race/ethnicity categories could be selected).

<table>
<thead>
<tr>
<th>Household Income</th>
<th>Total</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$10,000</td>
<td>148</td>
<td>14%</td>
</tr>
<tr>
<td>$10,000-14,999</td>
<td>86</td>
<td>8%</td>
</tr>
<tr>
<td>$15,000-24,999</td>
<td>93</td>
<td>9%</td>
</tr>
<tr>
<td>$25,000-34,999</td>
<td>105</td>
<td>10%</td>
</tr>
<tr>
<td>$35,000-49,999</td>
<td>116</td>
<td>11%</td>
</tr>
<tr>
<td>$50,000-74,999</td>
<td>186</td>
<td>18%</td>
</tr>
<tr>
<td>$75,000-99,999</td>
<td>84</td>
<td>8%</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>218</td>
<td>21%</td>
</tr>
</tbody>
</table>

Household Incomes of Survey Respondents.

Focus Group Discussions

The Project Team facilitated six focus groups to gather in-depth feedback from participants on transit service priorities.

Focus group participants were recruited from among key demographic groups and populations that are particularly likely to use public transit. They were recruited at community and stakeholder meetings, through social media, with advertising flyers, and through follow-up emails to survey respondents who indicated they were interested in further engagement.

Focus group meetings featured a combination of discussion questions, interactive polling and facilitated discussion. Spanish interpretation was available at two of the focus group meetings.

In these discussions, the vast majority of people indicated a preference for routes that are farther away but come more frequently. More than half (53%) of the participants indicated they would be willing to walk over 10 minutes to access frequent service. Only about 21% of participants were willing to walk that far to a route that comes infrequently (every 45-60 minutes).

Common reasons for preferring routes that are farther away but come more frequently included less of a need to refer to a schedule when trip planning and greater control over one’s schedule since there is less of a consequence in travel time if one misses a bus.

When asked about the purposes of transit, the most people chose providing access to destinations for low-income residents (68%) and connecting to major job centers and services (63%). When asked to identify the top investment priorities for ABQ RIDE, better frequencies (73%) and more routes in more places (59%) were both chosen by a majority of participants (though within a limited budget it is impossible to improve both of those). Keeping the fare free (43%) was marked as an important somewhat less frequently by focus group participants than survey respondents.

A common suggestion among focus group participants was for a form of shuttle service or neighborhood circulator that serves a lower density area.

Numerous participants stressed that many current and potential riders work non-traditional hours and would be more likely to use transit if weekend service were more comprehensive.

Stakeholder Advisory Group

Phase 1 of the engagement process also featured a workshop with a Stakeholder Advisory Group comprised of community members, riders, representatives of social service agencies, transportation advocates and public agency staff.

This workshop included an introduction to the project and a training on bus network design. The Advisory Group was also polled about the choices and trade-offs identified in the Existing Conditions Report.

In their responses to polling, a majority of the Stakeholder Advisory Group members indicated that ABQ RIDE should focus on shifting the existing network and future additional service towards higher ridership. Like respondents to the survey, most members of the Advisory Group indicated that the most important reason for providing coverage in a low-ridership area would be to meet the needs of low-income and disadvantaged groups.

More Detail

For more detailed information about Phase 1 public engagement and the results of surveys, polls and discussions, a summary is available in the Reports/Documents section of abqrideforward.com.
3  Network Concepts
Ridership and Coverage Concepts

This chapter describes two Concepts illustrating a range of possibilities for a redesigned transit network in Albuquerque. They specifically illustrate two ends of a spectrum between prioritizing high ridership or prioritizing wide coverage.

The two Concepts are intentionally very different from one another, so that people can see clearly how a move in one direction or the other would affect bus services they care about.

Note that these Concepts include many new route numbers! Routes that are similar to existing routes retain their existing number, but new and different routes are given new numbers.

The **High Ridership Concept**:
- Concentrates frequent service in areas with the largest number of people and jobs.
- Some neighborhoods would be slightly farther from service than they are right now, requiring longer walks.
- Some outlying areas, with land use or street patterns that aren’t conducive to transit, wouldn’t have service within walking distance at all.
- This Concept would get service within ½ mile of 96.4% of the bus boardings made in Spring 2022.

The **High Coverage Concept**:
- Spreads service out thinly.
- Some areas that have never been served would gain minimal service.
- Other areas that are currently served would see their frequency or span worsened.
- This Concept would get service within ½ mile of 99.8% of the bus boardings made in Spring 2022.

**Concepts, Not Proposals**

At this stage, neither the City nor the consulting team are recommending either Concept. The purpose of these two Concepts is to help people develop their own opinions, and have a conversation, about how the City should balance ridership and coverage goals. The result of that public conversation will guide development of an actual network proposal, in the next phase of planning.

**No Preferred Concept**

Neither the consultant nor local staff have any desire to steer the debate to a particular result. A very important word in this report is “if.” The High Coverage Concept shows what could happen if ABQ RIDE chose to prioritize providing high average access in order to attract high ridership.

The City may decide that the right balance of these conflicting goals is actually somewhere in between these two Concepts, not going as far to the ends of the spectrum as either of these Concepts illustrates.
Assumptions

In designing these Concepts, a few key assumptions have been made regarding the future of transit in Albuquerque.

Quantity of Service

First, these first two Concepts assume the same total quantity of bus service as in 2019. The "quantity of service" describes how many buses and bus drivers can be out on the road, providing service to the public; for how many hours per day and how many days per week; and how many total miles those buses drive.

Currently, in 2023, while ABQ RIDE has not lost any operating budget compared to 2019, the quantity of service ABQ RIDE can offer is lower than it was in 2019 due to a driver shortage. These Concepts assume that there would be sufficient budget and a large enough crew of drivers to operate as much service as was offered in 2019.

The quantity of service included in each Concept would cost approximately $47 million to deliver today (if enough drivers were available to provide all of it). This does not include the cost of operating routes funded by Rio Metro.

Rio Metro

Rio Metro contributes funding to ABQ RIDE, which is partly in support of the overall city network and partly for the operation of specific routes. The specific routes are those that connect to the NW Rail Runner train (which is operated by Rio Metro) and those serving Rio Rancho (which is outside of the City): Routes 222, 250, 251 and 551 in their entirety, and the Rio Rancho portions of Routes 96 and 155.

In designing these two Concepts, the routes funded by Rio Metro were kept as close to their existing form as possible, while the City network was changed around them.

Rio Metro may lead a separate process for designing any updates to these routes, and gathering public feedback about them, once the City-of-Albuquerque-specific network planning process is complete. Rio Metro staff were consulted about the design of these two Concepts.

Bernalillo County

Bernalillo County, within which the City of Albuquerque is located, contributes funding to ABQ RIDE for bus routes. The amount contributed is based on how much bus service operates in unincorporated County areas outside of City boundaries. The County funds existing Routes 51 and 53 in their entirety, and portions of existing Routes 10 and 54.

There are places where the City and County boundary is very wiggly, and many routes cross it. County staff were consulted in the design of the Concepts, and participated especially in designing routes that are largely serving unincorporated County areas.

All-Day, Two-Way Service

The two Concepts have in common a minimum standard for several reasons:

- Most people who engaged in Phase 1 said that the major purpose of providing coverage service, in places where high ridership is not reasonable to expect, is to meet the needs of lower-income people and others facing disadvantage. Rush-hour-only service is nearly impossible for people to use for anything other than an 8-to-5 commute, and is therefore nearly useless for most people in a situation of disadvantage. Thus even in the Coverage Concept some midday service and Saturday service is offered on all City routes.

- When asked about the importance of adding service at four different times of the week (rush hours, early mornings, nights or weekends) nights and weekends were ranked highest by respondents to the Phase 1 survey. They were given even greater importance by lower-income respondents and people who took the paper intercept survey at transit centers and stops.

- The rush hour commute is less common than it has ever been, due to a long term shift in the U.S. economy towards service work, and most recently due to the higher levels of work-from-home that many 8-to-5 jobs now allow.

- Rush-hour-only routes and extra rush-hour frequency is extra costly for the City to provide, for reasons explained in the Existing Conditions report.

The Big Picture Matters

More than Details

These Concepts have not been refined to the point that they would be ready to implement, because their purpose is to illustrate a choice at a higher altitude. A later stage of planning will result in a proposed Draft Network Plan, and at that point more details will need to be decided.

In general, these Concepts are intended to describe the recurring pattern of services ABQ RIDE could offer. Route schedules are described not down to the minute, but in terms of what frequencies are offered throughout the day and week.

These Concepts do not show all detail regarding:

- How Rio-Metro-funded services (such as Rio Rancho routes and Rail Runner shuttles) would be adapted to any changes to the City network.
- Any specialized trips (school trippers, special event routes) that might be offered on special days only.
- Exact start and end times for buses.
- Minor deviations made by a few buses a day on a route.

All of this detail would be added later in the Draft Network Plan, but doing so would be premature when comparing these at this conceptual stage.
High Coverage Concept

In the High Coverage Concept, all areas served in 2019 would still be served, and some new areas would be added to the network as well – but this means service is spread thinly. It would not be possible to increase frequencies or spans on the highest-ridership routes as the High Ridership Concept would do, and some routes would be less frequent.

Key differences from the 2019 network include:

- **Reduction of midday frequency on the streets served in 2019 by Routes 5, 8, 10, 11, 66, and 157.**
- **More connections at places where numerous routes come together (VA Medical Center and Montaño Rail Runner Station as well as Transit Centers).**
- **New, infrequent routes west of Coors Blvd., in South Valley and to Mesa del Sol.**
- **Extension of ART buses westward to serve 98th Street and Unser Blvd.**
- **Changes to Route 66 and ART on Central Ave. (as explained on page 28).**

As a reminder:

- **Dark Red** means a frequency of **8 minutes** or better in the middle of the day.
- **Red** means about every **15 minutes.**
- **Blue** means about every **30 minutes.**
- **Light Blue** means about every **60 minutes.**
- **Tan** means this route operates at rush-hours-only or otherwise limited, very infrequent service.
- **Light brown zones** are areas that would be served by Demand Response (see next page).

Note that this Concept includes many new route numbers! Routes that are similar to existing routes retain their existing number, while new and different routes are given new numbers.
Demand Response Zones

The High Coverage Concept employs “Demand Response Zones.” Demand Response (DR) is also sometimes referred to as “dial-a-ride”, “on-demand”, “flexible” or “microtransit” service.

The graphic at right shows how on-demand transit differs from fixed route transit. For fixed routes, people walk to bus stops and buses arrive based on a predetermined schedule. In contrast, on-demand service can pick up riders where and when they request it, within some limits.

Demand Response service can be very convenient for riders because it usually doesn’t ask them to walk to a bus stop. It may let them travel at the times they prefer, perhaps even with a short notice close to that of calling a taxi or an Uber.

But DR services can only handle a few riders per hour, which means that growth in ridership causes its costs to increase rapidly. For this reason it should only be used in areas where ridership is and will remain low, unless there is additional funding available to cover its higher costs.

DR zones are included in the High Coverage Concept because they cover a wide area without asking people to make very long walks to a bus stop or bear very long waits for service. DR service is not a high-ridership tool, because it can only handle a few riders per hour, per bus. But the Coverage Concept is not designed to achieve high ridership, and DR is a very useful tool for providing wide coverage in low-density, unwalkable areas.

Limitations

The Demand Response Zones shown on the Coverage Concept map on the previous page would offer people rides from anywhere in the zone to a few “anchor” points such as a shopping center, Transit Center, Rail Runner station or fixed route bus stop. Rides would not be offered from these zones to anywhere else in the city, as that would be prohibitively expensive.

The service offered within these zones would not be as responsive as a taxi or Uber. To manage the high per-rider cost of DR, people might be asked to walk to a main street or intersection to be picked up, or might be asked to travel at a slightly different time than they would prefer. They might be taken along as their driver picks up or drops off another passenger, rather than being driven directly to where they want to go. These limitations make the service less expensive to provide per rider – more like public transit, and less like a City-subsidized private taxi ride.
High Coverage Concept Downtown

The High Coverage Concept, similar to the Existing Network, would offer some frequent service in the busiest parts of the City, around downtown and UNM/CNM. It would also use the downtown Alvarado Transit Center to bring many routes together for connections.

Key differences from today’s network include:

- Timed connections downtown would allow for faster transfers between most 30- and 60 minute routes.
- Routes 5 and 11 would be timed to provide 15-minute frequency on Lomas as far east as Carlisle. This creates frequent service between downtown, UNM’s main campus and the UNM Hospital.
- Local service on Central Ave. would be provided by Routes 3 and 15 instead of Route 66. (See page 28 for more details.)

As a reminder, the colors on this map stand for weekday frequencies:

- **Dark Red** means a frequency of 8 minutes or better in the middle of the day.
- **Red** means about every 15 minutes.
- **Pink** means about every 20 minutes.
- **Blue** means about every 30 minutes.
- **Light Blue** means about every 60 minutes.
- **Tan** means this route operates at rush-hours-only or otherwise limited, very infrequent service.
Frequency and Span in the High Coverage Concept

The graphic on this page summarizes each route’s frequency and span in the High Coverage Concept.

Aside from ART on Central Ave. and Route 14 on San Mateo Blvd., the network would be composed mostly of routes with 30- and 60-minute frequencies, with a few routes requiring even longer waits. Unlike in the 2019 network, all routes would offer two-way service and nearly all routes (besides Rio Metro-funded routes) would operate all day, Monday-through-Saturday.

Most routes would have the same frequency all week long, but with a shorter span on Sundays when they would start service later in the morning and end earlier in the evening.

NOTE: Routes or portions of routes funded by Rio Metro are assumed to remain in the same as in the 2019 network.
High Ridership Concept

The High Ridership Concept would concentrate frequent service:

- Where there are more residents and jobs.
- Especially where there are more lower-income residents and lower-wage jobs.
- Where many people use the bus today.

This would dramatically increase the average resident’s access to jobs and important destinations by transit. More frequent service would reduce the amount of time people spend waiting for a bus, or to transfer, and increase the number of places they could reach within a reasonable amount of time.

Key differences from the 2019 network include:

- A frequent grid of routes made up of the red and pink lines on the map at right, offering short waits all week long.
- No service in areas with low population densities, few jobs, and few or no existing transit riders.
- Service along Coors Blvd. directly to downtown.
- Frequent service on University Blvd., and direct service between University Blvd. and the Northwest Transit Center.
- More frequent service in the International District, South Valley, on Bridge Blvd., Jefferson Blvd., University Blvd., and many eastside streets.
- Like in the Coverage Concept:
  - Extension of ART buses westward to serve 98th St. and Unser Blvd.
  - Changes to Route 66 and ART on Central Ave. (as explained on page 28).

Note that this Concept includes many new route numbers! Routes that are similar to existing routes retain their existing number, while new and different routes are given new numbers.
High Ridership Concept Downtown

The High Ridership Concept would offer more high frequency routes, in a simpler pattern, downtown.

Key differences from today’s network include:

• The frequent grid of routes means that easy connections can be made anywhere two frequent routes cross, and riders don’t need to ride to the Alvarado Transit Center to make their connections.

• With shorter waits to use most routes, transit would be competitive for quick trips around downtown.

• Routes with 15-minute frequency would connect CNM, UNM, the UNM Hospital and (off the map) Carlisle, San Mateo, Jefferson and Bridge Blvds.

• Route 17 would provide an all-day connection between downtown and the VA Medical Center.

• Frequent service on 4th St. would continue onto Bridge Blvd. to the west.

• As in the High Coverage Concept, Route 3 would serve local stops on Central Ave. instead of Route 66.

Colors on this map show weekday frequencies:

• Dark Red means every 8 minutes or better in the middle of the day.

• Red means about every 15 minutes.

• Pink means about every 20 minutes.

• Blue means about every 30 minutes.

• Light Blue means about every 60 minutes.

• Tan means this route operates at rush-hours-only or otherwise limited, very infrequent service.
Frequency and Span in the High Ridership Concept

The graphic on this page summarizes each route’s frequency and span in the High Ridership Concept.

Weekday service would be composed of routes providing 15, 20, and 30 minute frequencies. No City-funded route would offer frequency worse than every 30 minutes on weekdays. Most routes would start by 6 am and end after 9 p.m.. Saturday and Sunday frequencies would be the same as weekdays on most routes, though routes would start a little later and end a little earlier.

The span of service demonstrated by the High Ridership Concept is considerably longer than what is offered by the existing network, both in terms of later service into the night and more routes operating on weekends. Frequencies on all local (non-ART) routes would be consistent all week long, resulting in much higher frequencies on weekends than in the existing network.
Changes to ART and Route 66 in Both Concepts

Changes to Route 777 East of Louisiana Blvd.

In both Concepts, Route 777 east of Louisiana Blvd. would stop at all local bus stops, which are currently served by Route 66. This would allow people to walk to any stop and catch ART, rather than having to choose between waiting for Route 66 or ART.

This would make ART slightly slower between Louisiana and Tramway, because the ART vehicle would stop more times per mile. However, for riders who currently have to walk to an ART stop, an extra minute or two on a slower ride should be offset by a few minutes’ walking saved.

West of Louisiana Blvd., ART buses would maintain their rapid stopping pattern, with roughly 1/2 mile between stations. In each Concept, a local route (not shown in the diagram at right) would serve the stops in between ART stations.

Making Route 777 the “local” bus east of Louisiana, and serving local stops west of Louisiana using other routes, would allow the City to stop running two frequent routes on Central Ave (ART and Route 66) that partly duplicate one another.

Nearly 30% of the service on the entire ABQ RIDE network is devoted to Routes 66, 766, 777. And while all three are highly-productive in terms of ridership and serving lower-income, vulnerable communities, they are duplicating one another on some parts of Central Ave. Some of that service would be made more useful by reallocating it:

- In the High Coverage Concept, it would be used to cover more areas that don’t have service today.
- In the High Ridership Concept, it would be used to improve frequencies in highly-disadvantaged neighborhoods, including along Central Ave. itself where today people have good service on Central Ave.

but poor service on every other street.

Changes to Route 766 in the Southwest

Route 766 would not end at the Central & Unser Transit Center as it does today, but instead would keep going into southwest neighborhoods.

Every-other 766 bus would take alternating paths on 98th Street or Unser/Coors Blvds.

These two “branches” of the 766 would end together at the South Valley Walmart (as shown in the diagram above).

People living or working along the new Routes 766A and 766B could wait for an ART vehicle coming every 30 minutes, and ride it all the way to downtown or Uptown without changing buses.

This would improve access and reduce travel time for people in the Westgate/SW Mesa areas by eliminating a transfer for many trips.
4 Outcomes of the Concepts
This chapter reports on multiple ways of measuring the potential outcomes of the High Coverage and High Ridership Concepts.

Proximity to Existing Boardings
A basic measure of proximity is the percent of existing boardings that would be near service, in either Concept:

- The High Coverage Concept would offer service within ½ mile of 99.8% of existing boardings.
- The High Ridership Concept would offer service within ½ mile of 96.4% of existing boardings.

Also note that the small number of residents and jobs inside Demand Response zones, in the High Coverage Concept, are not included in this measure. Including them would slightly increase the total number of residents and jobs near some kind of service.

Isochrones
The benefit of a transit proposal to a particular person could be the answer to their question: Where could I get to, in a reasonable amount of time, from where I live?

Wherever you live, there is a certain area you can reach each day in a reasonable amount of time. You could draw a map of this area, and it would appear as a blob, with you at the center, as illustrated below.

Beyond this area are things you won’t be able to do on most days because it takes you too long to get to them. The size of this area affects your options in life: for work, school, shopping, and everything else you might want to do.

The technical planning term for this blob is an “isochrone.” It’s fair to call it a drawing of someone’s physical freedom to reach opportunities. If you can go to more places, you have more choices about how to live your life, and you are more free.

Isochrones for a few example locations are included in this report, starting on page 37. Additional isochrones for more locations are included among the access maps provided on abqrideforward.com.

Access
Isochrones display the change in access that a person would experience traveling to or from one particular place. By summing the isochrones across the entire city, we can describe how access would change, on average, for all residents and to all jobs.

For comparing transit Network Concepts, an access analysis is better than a ridership forecast, because it describes the part of ridership forecasting that is basic math and geometry and therefore highly predictable.

Access analysis can also be performed for populations of interest – in this report, average access is reported for lower-income residents, residents of color, minority residents and residents of High Social Vulnerability neighborhoods.
Proximity to Service

Weekdays at Midday

In 2019, the existing network offered a grid of 15- and 20-minute-frequency routes serving Central Ave., downtown, east Albuquerque, and the northwest. The High Coverage concept would offer less frequency than the 2019 network. The High Ridership Concept would offer more frequency, though in somewhat different places than the 2019 network.

The High Coverage Concept would put more residents and jobs near any service at 12 p.m.:

- 68% of all residents (up from 51%)
- 75% of low-income residents (up from 62%)
- 69% of residents of color (up from 52%)
- 74% of jobs (up from 62%)

The High Ridership Concept would increase proximity to frequent service (buses every 15 minutes or less) to:

- 18% for all residents (up from 13%)
- 26% for low-income residents (up from 19%)
- 19% for residents of color (up from 13%)
- 37% for jobs (up from 25%)

But the High Ridership Concept increases frequencies (and spans) by serving fewer streets. As a result, the number of residents who aren’t within ½ mile of even minimal, infrequent service would be higher in the Ridership Concept (58%) than in the Coverage Concept (32%).

The complete proximity chart data is also available in an Excel spreadsheet.

The maps and graphs on this page describe proximity to transit of various frequencies on weekdays, at midday. Middays are an important time for many non-office commutes as well as for shopping, medical and school trips. Middays are also when ABQ RIDE ridership peaks each day.
Weekday Rush Hours

In 2019, the existing network provided the most service during rush hours, with some rush-hour-only routes and other routes offering better frequencies then. Albuquerque bus ridership in 2019, pre-pandemic, was actually highest in the early afternoon, not during rush hours.

The High Coverage Concept would put more residents and jobs near any service at rush hours:
- 70% of all residents (up from 59%)
- 76% of low-income residents’ (up from 66%)
- 71% of residents of color (up from 59%)
- 76% of jobs (up from 66%)

The High Ridership Concept would increase proximity to frequent service (buses every 15 minutes or less) to:
- 18% for all residents (up from 15%)
- 26% for low-income residents (up from 22%)
- 19% for residents of color (up from 16%)
- 37% for jobs (up from 28%)

Just as in the midday measures on the previous page, improving the number of people near frequent service in the High Ridership Concept trades-off against getting at least minimal service close to more people, which is better-done by the High Coverage Concept.

The maps and graphs on this page describe proximity to transit of various frequencies on weekdays, during rush hours. In the past, frequencies were often best at rush hours, to make transit an attractive option for office commuters and to prevent crowding on popular lines.
Weekday Evenings

In 2019, only a few routes continued service as late as 9 p.m. in the existing network. The amount of service provided actually fell of faster than ridership, with the result that buses running around 10 p.m. might have been slightly more full, on average, than the buses running at 6 p.m.. This suggests a serious under-supply of service in the evening.

The High Coverage Concept would put more residents and jobs near any service on weekdays at 9 p.m., compared to the 2019 existing network:

- 37% of all residents (up from 25%)
- 47% of low-income residents (up from 33%)
- 38% of residents of color (up from 27%)
- 53% of jobs (up from 35%)

The High Ridership Concept would:

- Not change people’s proximity to frequent service (since the only frequent line, during the evenings, in all three networks, would be on Central Ave. and Louisiana Blvd.).
- Change the number of residents whose bus route would continue into the evening, from 25% (in the existing network) to 39% (in the High Ridership Concept). This would actually be better night-time coverage than the High Coverage Concept offers, especially for residents in poverty.

The maps and graphs on this page describe proximity to transit of various frequencies on weekday evenings. Night service normally doesn’t attract as many riders as daytime service, but it is an important part of a high-ridership network because it makes transit reliable enough for people to build their lives around.
Saturday Midday

In 2019, the existing network kept most routes running but at much reduced frequencies on Saturdays, and some weekday routes didn’t run on the weekends at all. While many weekday trips were still possible by bus on Saturdays, they would have taken much longer, especially if they involved a transfer. In both Concepts, all City routes operate on Saturdays.

The High Coverage Concept would put more residents and jobs near any service on Saturdays at 12 p.m.:

• 68% of all residents (up from 49%)  
• 75% of low-income residents (up from 60%)  
• 69% of residents of color (up from 51%)  
• 74% of jobs (up from 55%)

The High Ridership Concept would increase proximity to frequent service (buses every 15 minutes or less) to:

• 15% for all residents (up from 7%)  
• 21% for low-income residents (up from 13%)  
• 15% for residents of color (up from 8%)  
• 35% for jobs (up from 15%)

The High Ridership Concept would make a huge investment in high frequencies on weekends, as shown by the size of red and purple bars in the chart at far right. But the trade-off ends, as shown by the size of red and purple bars in the chart at far right. But the trade-off should not be the loss of coverage – only 42% of residents would be near at least minimal Saturday service, down from 48% in 2019 and compared to 63% in the High Coverage Concept.

The maps and graphs on this page describe access to transit at various frequencies on Saturdays, at midday. Most retail and service workers are required to take at least one weekend shift, so weekend transit service is essential for their commutes.
Saturday Evenings

In 2019, the existing network was extremely thin on Saturday evenings at 9 p.m. Only a handful of routes were still running on the highest-ridership corridors, but very few trips that could be made during the day would still be possible. This means that a worker commuting to a restaurant job who could get there on Saturdays at midday, probably could not get home after their shift ended in the evening. The High Coverage Concept would put more residents and jobs near any service on Saturdays at 9 p.m.:

- 36% for all residents (up from 24%)
- 46% for low-income residents\(^1\) (up from 33%)
- 37% for residents of color (up from 27%)
- 51% for jobs (up from 32%)

The High Ridership Concept would:

- Not change people’s proximity to frequent service (since the only frequent line, during the evening, in all three networks, would be on Central Ave. and Louisiana Blvd.).
- Change the number of residents whose bus route would continue into the evening, from 24% (in the existing network) to 39% (in the High Ridership Concept). This would actually be better night-time coverage than the High Coverage Concept offers, especially for residents in poverty.

The maps and graphs on this page describe proximity to transit of various frequencies on Saturday evenings. Weekend night service is critical for the commutes of bar, restaurant and retail workers, and allows all kinds of people to use transit for cultural and social outings.
Sunday Midday

In 2019, daytime service levels were at their lowest on Sundays in the existing network, with some weekday and Saturday routes not running at all. More routes are continued on the weekend in both Concepts: in the Coverage Concept, just a few routes cease operation on Sunday, but in the Ridership Concept, all routes operate 7 days a week.

The High Coverage Concept would put more residents and jobs near any service on Sundays at midday:

- 59% for all residents (up from 40%)
- 67% for low-income residents (up from 49%)
- 60% for residents of color (up from 40%)
- 65% for jobs (up from 50%)

The High Ridership Concept would increase proximity to frequent service (buses every 15 minutes or less) on Sundays to:

- 15% for all residents (up from 7%)
- 21% for low-income residents (up from 13%)
- 15% for residents of color (up from 8%)
- 35% for jobs (up from 15%)

The High Ridership Concept would cover more residents and jobs near the Coverage Concept, just a few routes not running at all. More routes are continued with some weekday and Saturday routes over 60 minutes.

The maps and graphs on this page describe proximity to transit of various frequencies on Sundays at midday. Historically, most cities operated very little service on Sundays because so many people simply stayed home on Sundays. Over the last 50 years, as the economy has shifted towards consumption and services, Sunday travel demand has increased.

1 For analysis of impacts and benefits to low-income residents in this chapter, any household living at 150% of the Federal Poverty Level or below was considered "low-income."
Example Isochrones

The isochrones on this page show places that are within 45 minutes of travel of downtown (measured from the Alvarado Transit Center), at midday on a weekday. It compares the High Coverage and High Ridership Concepts to the 2019 network, and allows us to compare the Concepts to each other.

These isochrones include all the different parts of a transit trip that take time:
- Your average wait to use a bus, since its rarely scheduled to pick you up and drop you off exactly when you want to travel.
- Your time riding in the bus.
- Any time needed to make a transfer.
- Your time walking to the bus stop where you start your trip, and walking away from the stop where you get off.

In the isochrones at right:
- The areas that would be within 45 minutes of transit travel time from downtown are shown in light blue.
- Areas that were within 45 minutes of downtown on the 2019 network, but would not be in the Concept, are shown in gray.
- Areas were reachable within 45 minutes in 2019 and would also be reachable in the Concept are shown in dark blue.

Places in light blue would be newly-reachable from downtown within an hour, in the Concept. Places in dark blue would continue to have access to downtown within 45 minutes. And places in gray would lose access to downtown within 45 minutes.

The balance of these gains and losses in access is reflected by the change in the number of residents and jobs accessible. For this example, 9,400 (or 5.8%) fewer residents would be within 45 minutes of downtown in the High Coverage Concept. In contrast, 40,000 (or 24.6%) more residents would be within 45 minutes of downtown in the High Ridership Concept.

Additional example isochrones are shown on the next page, and even more isochrones are available with the set of “access maps” at abqrideforward.com.
Compared to the 2019 Network, how far could I travel in 45 minutes from Louisiana and Kathryn on weekdays at noon using the:

High Coverage Concept?

High Ridership Concept?

Compared to the 2019 Network, how far could I travel in 45 minutes from University of New Mexico on weekdays at noon using the:

High Coverage Concept?

High Ridership Concept?

Compared to the 2019 Network, how far could I travel in 45 minutes from Northwest Transit Center on weekdays at noon using the:

High Coverage Concept?

High Ridership Concept?

Compared to the 2019 Network, how far could I travel in 45 minutes from 98th and Gibson on weekdays at noon using the:

High Coverage Concept?

High Ridership Concept?
Access Changes Across the ABQ RIDE Service Area

The maps on the previous pages show access to jobs and residents from specific single locations. The maps at right show access to jobs for residents all over the city, within transit commutes of 30, 45, and 60 minutes, based on the network and its frequencies at midday on weekdays.

In the map at right, each dot represents 25 residents. The color of the dot indicates whether residents in a particular area would experience an increase or a decrease in job access.

- **Green** shows residents whose job access would increase, at midday on weekdays, compared to the Existing Network.
- **Light Gray** shows residents whose job access would change little or none.
- **Brown** shows residents whose job access would decrease.

These travel times may sound long, but that is because they are door-to-door and include waiting. Average waiting time can be very high: for example, the average wait to use a route with 60-minute frequency will be 30 minutes! You might not spend this time waiting at the bus stop, but if the bus schedule doesn’t line up perfectly with your work start time (and it rarely does), you’ll spend a lot of time waiting at your destination.

The High Coverage Concept would decrease average job access compared to the 2019 Existing Network, as shown by the brown and yellow dots in the top row of maps.

The High Ridership Concept would increase average job access, as shown by the mostly green bottom row of maps. For longer trips (of 60 minutes) some areas would have access to fewer jobs, though the average effect across all residents would still be an increase in job access.
Average Access Changes

By adding up all the increases and decreases in access across the city, we can describe how each Concept would change the average resident’s access to jobs, for all residents of the ABQ RIDE service area.

Access changes shown on the maps on the previous page are summarized in the bar chart at right, top.

The High Coverage Concept would decrease the average resident’s access to jobs within 30 minutes of travel by -6%, within 45 minutes by -16%, and within 60 minutes by -9%.

The High Ridership Concept would increase the average resident’s access to jobs by +24% in 30 minutes, +42% in 45 minutes, and +37% in 60 minutes.

Changes for Specific Populations

Just as important as overall access increasing, it is vital that we understand who would benefit from access increases.

The second chart from the top, at right, shows how each Concept would change job access for residents of neighborhoods the City has identified as having High Vulnerability, compared to the job access they were provided by the 2019 Existing Network.

With the High Ridership Concept, job access would be improved to a greater degree for residents of High Vulnerability Areas than for other residents. This is because frequency would be cut on existing routes in order to be spread onto more streets and into new development areas. The newly-covered areas have higher average incomes, lower densities, and lower social vulnerability than other parts of the city.

The result would be longer waits and therefore longer travel times for residents of High Vulnerability Areas.

The table at right reports how the Concepts would impact job access for different demographic groups.

Access gains in the High Coverage Concept are at some travel times better for minority residents than white (non-Hispanic) residents, and at other travel times not better or similar. The same is true for residents in poverty.

Access gains in the High Ridership Concept are in more cases (compared to the High Coverage Concept) better for minority residents, and better for residents in poverty, than for others.

Access gains in the High Ridership Concept are in more cases (compared to the High Coverage Concept) better for minority residents, and better for residents in poverty, than for others.

2 Except in one of the six cases, for 30-minute commutes in the High Coverage Concept, for which it would be improved by roughly the same amount.

1 A map of these neighborhoods is available online at abqrideforward.com under Reports/Documents, Demographic Maps.
The set of bar charts to the right on this page display some of the data from the table on the previous page: changes in access for residents in poverty, minority residents, Hispanic residents and African American residents.

The bar chart at bottom is repeated from the previous page, showing the average gains in job access for all residents, no matter their race/ethnicity or income.

All four demographic groups would gain job access, on average, in either Concept, measuring at any of the three commute time limits (30, 45 or 60 minutes).

By comparing the four charts at right to the chart for the entire population, below, we can see that at some travel times the benefits for one of these population groups would be greater than for the population as a whole, and in other cases the gains would be smaller (but still positive) than gains for the population as a whole.

When the City of Albuquerque makes a major change to transit service, it measures the benefits (or burdens) of the change for different demographic groups. Federal rules (based on Title VI of the Civil Rights Act of 1964) and City policies require that the benefits for minority and lower-income groups be similar to (if not better than) the benefits for white and higher-income groups.

The charts shown at right, and the table on the previous page, would be used in such an analysis, as well as the proximity measures shown starting on page 31.
**Access Changes by Area in the High Coverage Concept**

In the map at right, each dot represents 25 residents. The color of the dot indicates whether residents in a particular area would experience an increase or a decrease in job access.

- **Green** shows residents whose job access would increase, at midday on weekdays, compared to the Existing Network.
- **Light Gray** shows residents whose job access would change little or none.
- **Brown** shows residents whose job access would decrease.

The High Coverage Concept would decrease the average resident’s access to jobs, including lower-income and non-white residents.

The map at right shows the change in job access within 45 minutes of travel, for a trip made at midday on a weekday, compared to the 2019 Existing Network. More residents would have longer travel times to jobs and therefore lose access to jobs within a 45 minute trip (shown in brown) than would have shorter travel times and gain job access (shown in green).

For residents in the areas showing up in brown and yellow on the map at right, their longer travel times to jobs would mostly be caused by reductions in frequency, especially on:

- Montgomery and Louisiana Blvds. (served by existing Route 157),
- Montaño and Golf Course Rds. (served by existing Route 157)
- 4th St. (served by existing Route 10)
- Lomas Blvd. (served by existing Route 11)
- Central Ave. between San Mateo Blvd. and Broadway (served by existing Route 66).

However, regarding job access along Central Ave., the eastern portion (east of Louisiana Blvd.) would have improved job access thanks to the local stops made by ART, which offer nearby residents both a shorter walk to service and a faster ride to and through the center of the city.

Other areas with improved access would be Wyoming Blvd. (with an improved frequency compared to the 2019 network, and an extension to the north); part of the International District; parts of Westgate; and the Sawmill District.

Note that areas that show white space in between dots are areas with a smaller number of residents per square mile. This means that some very dense areas with job access loss (such as along Carlisle Blvd. and in the International District) have a greater effect on the average result than large, low-density areas with job access gains (such as along Wyoming Blvd. north of Academy Road).

The net effect of these gains and losses across the city would be ~16% fewer jobs reachable, on average, within 45 minutes of travel on a weekday at midday.
Access Changes by Area in the High Ridership Concept

With more frequent routes across more of the city, the High Ridership Concept would cause major increases in job access. Access gains would be greater for lower-income, non-white and more vulnerable residents than for others.

The map at right shows how residents’ job access would change on weekdays at midday, compared to the 2019 Existing Network.

- **Green** shows residents whose job access would increase, at midday on weekdays, compared to the Existing Network.
- **Light Gray** shows residents whose job access would change little or none.
- **Brown** shows residents whose job access would decrease.

These access gains would result from higher frequencies, concentrated on the streets where the most residents and jobs are within a reasonable walking distance of a bus stop. Higher frequencies mean less time spent waiting, which allows people to get further in a limited travel time, reaching more jobs.

There are areas of the city that would lose all service in the High Ridership Concept, that do not show up on this map as having a loss of job access within 45 minutes. This is because, from those areas on the 2019 network, there are hardly any jobs reachable within 45 minutes of travel time. That is not enough time to reach very many jobs. The routes serving those areas are so infrequent, and the distances people would have to travel are so long, that few or no jobs are accessible from there on the Existing Network unless someone has more than 45 minutes they can spend traveling.

By measuring longer travel times (like 60, 75 or 90 minutes of travel) those losses of job access would become visible. For example, they can be seen in the “60 minutes” maps on page 39. But many more people are willing to travel for 45 minutes than are willing to travel for 60 or 75 minutes, especially in a relatively small city like Albuquerque.

Not all access gains and loss on this map have an equal effect on the average citywide outcome, because the number of people affected in each area is different. For example, on 10th St. north of Montaño Rd., the dots are dark brown indicating that the job loss would be severe (because the area that would become more than 45 minutes away is downtown, dense with jobs). However, the dots are sparse indicating that there would be few residents in that situation. Dots in other areas (such as along Montgomery Blvd. or in the International District) are very close together, indicating a large number of residents, and those are areas that would experience the greatest job access gains.

The net effect of these gains and losses across the city would be +42% more jobs reachable, on average, within 45 minutes of travel on a weekday at midday. For residents of High Vulnerability Areas, job access within 45 minutes of travel would increase by +48%.
How Citywide Access was Calculated

The two Network Concepts were designed with people in mind, not just geographic space. Service was concentrated in places with many people, and especially many vulnerable people. Route and network patterns were drawn to facilitate the trips that lots of people need to make.

Access calculations don’t just measure how useful transit is across geographic space – they take into account the number of people living near each transit route, and benefiting from each isochrone. Improving service for a highly populated neighborhood is more impactful than improving service for farmland or low density neighborhoods where few people live. This page explains how that distinction is made in the analysis.

The diagram at right shows how access was calculated across the entire ABQ RIDE service area, and how the maps on the previous pages were made.

Isochrones for every point across the city were calculated, and then weighted by the number of residents living near that point.

One product of this analysis is a map showing population density as dots, with the dots colored based on the change in job access that population would experience. Another product of this analysis is the summary charts and tables shown on previous pages.

**Step 1:** Count the jobs that can be reached from a specific location, in a certain amount of time, using transit. In this example, from Isleta & Goff in South Valley.

**Step 2:** Apply the number of residents in that location.

**Step 3:** Repeat for every location in the city. This results in a map showing how many jobs can be reached (by color) and how many residents are in that location (with dots).
Next Steps
Next Steps

Phase 2 Public Engagement (Spring 2023)
Phase 2 Public Engagement begins with the publication of this report. The question the public can help the City answer during this phase is, “Where on the spectrum between the two Concepts should the ABQ RIDE network be?”

There are many ways for you to get involved and share your opinion about this question:

• An online survey
• In-person events at the ATC
• Focus groups
• Virtual open house events
• Submit an official letter
• Request a presentation to your organization

A calendar of events and options to sign-up are posted on abqrideforward.com during Phase 2, and contact information is available there as well.

Draft Network Plan (anticipated Summer 2023)
Public input about how the City should balance ridership and coverage goals will inform the design of the Draft Network Plan.

City staff will work across multiple departments (and with partners like Bernalillo County, Rio Metro, and MRCOG) to design the Draft Network Plan.

It is expected to be a budget neutral plan, using no more service than was in the 2019 network. This means that it won’t be possible to make things better in some places without making them worse in others.

Budget-neutral transit network redesigns are always controversial, in proportion to how much they change. It is likely that the Draft Network Plan will inspire some heated debate and controversy during Phase 3 public engagement.

Phase 3 Public Engagement (anticipated Fall 2023)
In the last phase of public engagement, people will be asked to review the Draft Network Plan and respond to its specific recommendations.

Even though the Draft Plan will almost certainly improve access across the service area population (otherwise City staff would not propose it) we can anticipate that it will be controversial. The controversy would arise because it would change transit trips that people are making today – people would have to take a different bus, or walk further, or walk to a different stop, or make a transfer that they don’t make today.

It will also be controversial because it will impact some people negatively – such impacts are impossible to avoid in a network redesign, especially a budget-neutral network redesign.

Changes that impact people positively tend to elicit little public or media reaction, but changes that impact negatively even a small number of people tend to elicit passionate and vocal reactions. For this reason, a moving forward with a new Network Plan always involves some controversy.

Final Network Plan
Once public input on the Draft Plan is understood, the City will revise and finalize it.

Any major service changes resulting from this Plan would go through a Title VI Equity Analysis and go before City Council for approval.

Some elements of the Final Network Plan may be implemented right away, if they can be implemented within the limits of funding and current staffing. Other elements of the Plan may require more time or preparation before they can be implemented.