

TECHNICAL MEMORANDUM

DATE: February 17, 2023
TO: Karl Otterstrom, Hamid Hajjafari, Spokane Transit Authority (STA)
FROM: Emily Mannisto, Alicia McIntire (Parametrix)
SUBJECT: Title VI Analysis

INTRODUCTION

This memorandum evaluates the proposed Division Street Bus Rapid Transit (BRT) alignment options for the Division Street corridor on the basis of compliance with Title VI requirements. Title VI under the Civil Rights Act of 1964 prohibits discrimination in any program or activity that receives Federal funds or other Federal financial assistance. Programs that receive federal funds must provide equal access to program services, aids, or benefits to all individuals, regardless of race, color, or national origin (42 USC §2000 et seq.) The purpose of this analysis is to take an early look at the potential alignment options and determine whether any of the options could create a disparate impact or a disproportionate burden when compared to the existing service in the corridor on Division Route 25. This information is being gathered in the conceptual phase of the project to provide important context for alignment options and station location decisions. For the purposes of this early, high-level look, the project team expanded the analysis to include low-income populations, low-income populations with low food access, populations with a disability, populations under 16, and populations over 55.

TITLE VI ANALYSIS

Methodology

As part of this high-level Title VI analysis, for all options and stops/stations, the project team evaluated census demographics data to assess if any BRT options would pose access barriers for Title VI populations based on significant routing divergence from the existing Route 25. For the north terminus, south terminus, and mainline route, the project team developed maps for six population types: minority populations,¹ low-income populations,² low-income populations with low food access,³ populations with disabilities, populations under 16, and populations over 55. All map data were sourced from 2020 American Community Survey (ACS) 5-Year Estimates. Each layer was generated with imported spreadsheets from ACS and then symbolized with a graduated color ramp using five geometric intervals. Census block groups are further subdivisions of a census tract and contain a cluster of blocks. Because of the relatively small study area in this analysis, the project team used census block groups instead of larger tracts; block groups can provide a more granular dataset and are more useful when comparing route options that are relatively close together. Census block group data were available for minority populations, populations under 16, and populations over 55; block group data were not available for populations with a disability, and low-income/low food access populations, so data from the census-tract level were used.

¹ In this report "minority" refers to people who identify as non-white.

² In this report, "low-income" refers to people who are below the federal poverty threshold.

³ In this report, "low food access" refers to people who live far from a supermarket, supercenter, or large grocery store. This definition is detailed further in the Food Access section.

Division Street BRT | **North Terminus Routing Options**



Figure 1. North Terminus Routing Options

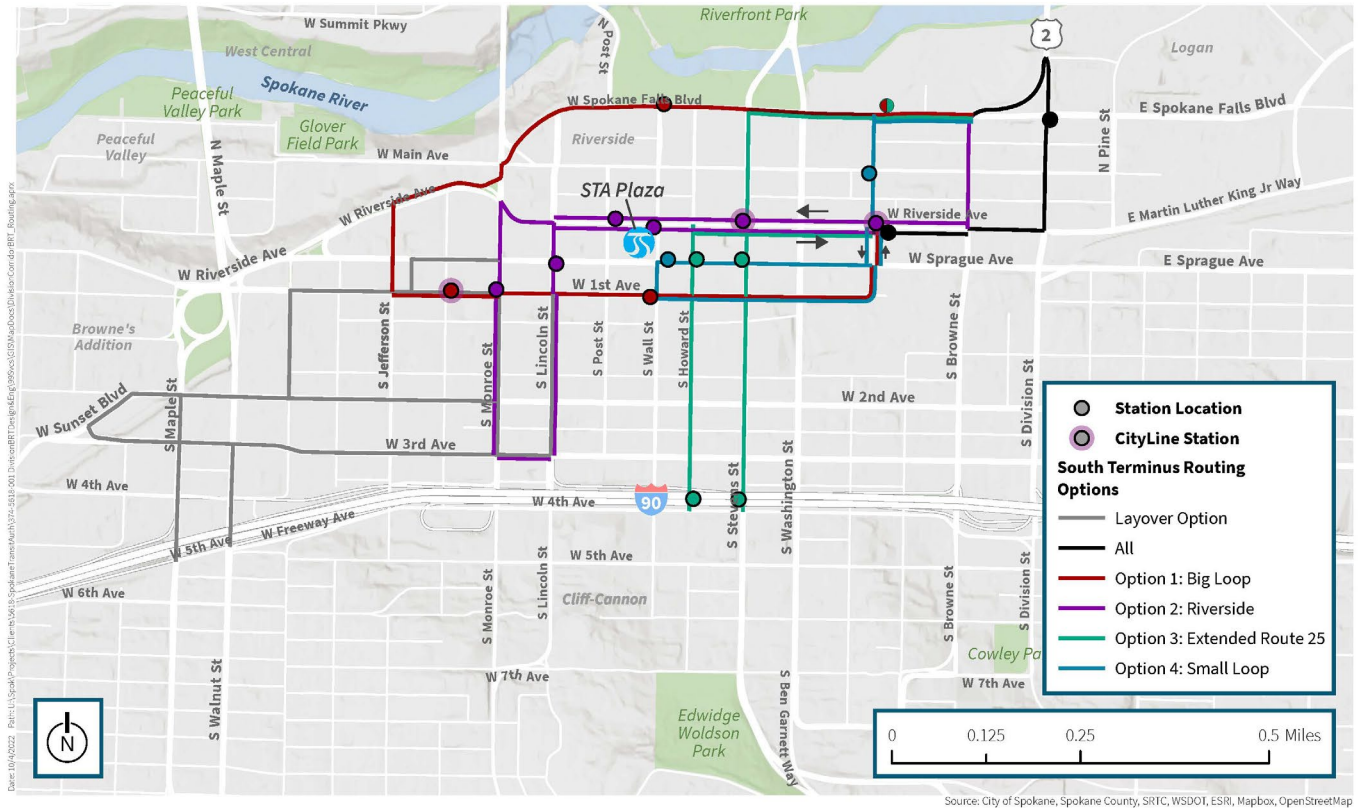
North Terminus Routing

Route Description: There were two options evaluated for the north terminus. Option 2 follows the same alignment as the existing Route 25 to the Hastings Park and Ride. Option 1 would terminate at a new transit center; the specific location has not been determined. Option 1 was developed to assess the potential to serve different populations/markets and provide access to different destinations (including a large, vacant area that is planned for future development), evaluate options to respond to safety issues, and consider different operating environments. Both options are still under consideration. North terminus routing options are shown in Figure 1.

Analysis Methodology: The northern terminus options diverge where N Division Street splits into a “Y” and becomes US 395 (a continuation of N Division Street) and US 2 (N Newport Highway). The most commonly cited walking distance to transit is a quarter mile; however, people are willing to walk further for faster and more frequent service.⁴ This Title VI analysis considers potential impacts to populations with a disability and populations over 55; both populations may have a lower tolerance for traveling farther distances to access transit. As such, the project team created a quarter-mile buffer around the two routing options to assess whether either route poses an undue access burden on all Title VI populations compared to the existing route and stop locations.

⁴ <https://humantransit.org/2011/04/basics-walking-distance-to-transit.html>

Division Street BRT | **South Terminus Routing Options**



Source: City of Spokane, Spokane County, SRFC, WSDOT, ESRI, Mapbox, OpenStreetMap

Spokane Transit | **Division Street BRT**

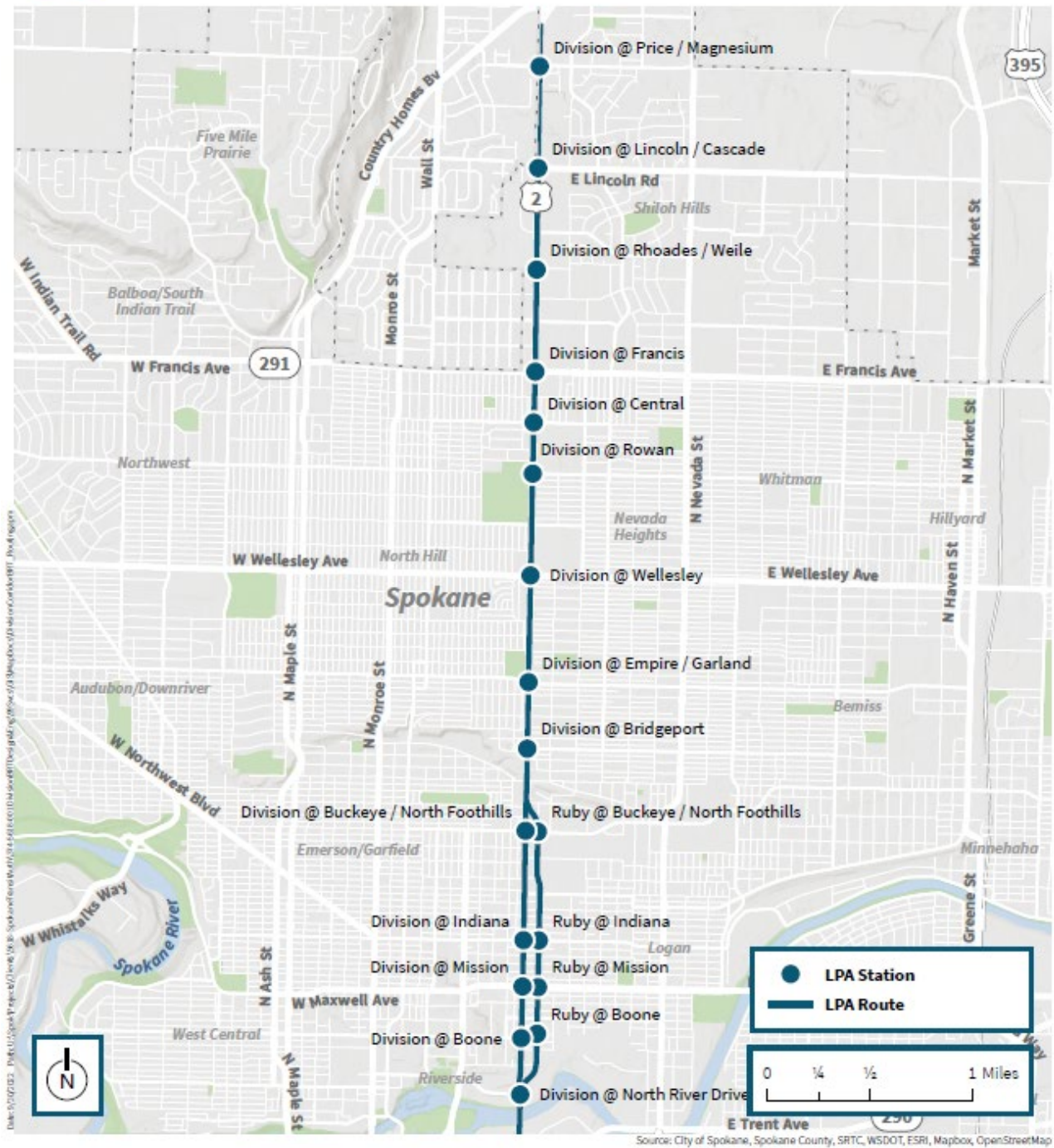
Figure 2. South Terminus Routing Options

South Terminus Routing

Route Description: At the time of this writing, the routing options for the southern terminus in downtown Spokane are still in development. There were four options with varying degrees of divergence from the existing Route 25 analyzed as part of this memo. These four options were developed through conversations with STA and the City of Spokane. South terminus routing options are shown in Figure 2.

Analysis Methodology: South terminus options diverge shortly after Division Street crosses the Spokane River into downtown. Options for the southern terminus of the Division BRT route are clustered together more closely than the north “Y” options, making a quarter-mile buffer around each option less relevant for assessing Title VI populations’ proximity to proposed routing options. To analyze the south terminus routing options, the project team created a merged quarter-mile buffer around *all* options, resulting in a quarter-mile study area around the “universe of options” in downtown Spokane. Places of interest, including social services, low-income housing, transitional housing, assisted living/senior centers, low-income medical clinics, and sites that provide shelter and/or free meals, were incorporated into the map to assess any changes in access from the proposed routing options.

Division Street BRT | **Locally Preferred Alternative Route and Station Locations**



Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap

Spokane Transit | **Division Street BRT**

Figure 3. LPA "Mainline" Routing

Mainline Routing

Route Description: The Division BRT routing between the Spokane River (south terminus) and “the Y” (north terminus) follows the alignment of the existing Route 25. This segment of the route, along with the couplet through Division/Ruby, is referred to as the Mainline, or the Locally Preferred Alternative (LPA). This segment maintains the existing bus route alignment but proposes consolidating several bus stops into BRT stations. The Division BRT Mainline routing is shown in Figure 3.

Analysis Methodology: Fourteen pairs of BRT stations are proposed along the mainline route, between the split at N Country Home Boulevard on the north end and N River Drive on the south end. These stations along the mainline route were consolidated from 19 existing stops along the existing Route 25. It is assumed that because the new BRT route will provide more direct, frequent, fast, and reliable service than the existing route, riders would be more willing to walk a longer distance to access stations.⁵ The project team created quarter-mile buffers around the proposed BRT stations to assess whether any areas with Title VI populations would require a longer walk to stations with the proposed stop consolidation.

⁵ <https://humantransit.org/2011/04/basics-walking-distance-to-transit.html>

Analysis

North Terminus Routing

Minority Populations: Several block groups with the second-highest interval of minority population percentages (21.2 to 37.6 percent) are located southwest of the northern terminus routing options, west of Division Street. However, station locations for both options are within a quarter mile of these census block groups. The southernmost Option 2 station on N Newport Highway is located 0.2 miles farther east than the southernmost Option 1 station on Division Street, potentially affecting residents within these block groups. However, *Option 2 maintains the same alignment as the existing Route 25, so there would be no change compared to the existing service.* The northern terminus of Option 1 is adjacent to a census block group with a higher percentage of minority populations (12.8 to 21.1 percent) as opposed to the northern terminus of Option 2, serving a census block group with 8.5 to 12.7 percent minority populations. Figure 4 displays the percentage of minority populations by census block group for the northern routing options.

Low-Income Populations: The northern terminus of Option 1 is adjacent to a census block group with the highest percentage of low-income populations (greater than 38.3 percent) as opposed to the northern terminus of Option 2, which would serve a census block group with 14.3 to 38.3 percent low-income populations. However, *Option 2 maintains the same alignment as the existing Route 25, so there would be no change compared to the existing service.* Figure 5 displays the percentage of minority populations by census block group for the northern routing options.

Populations with a Disability: Before diverging after Hawthorne Road, the quarter-mile buffers around Options 1 and 2 show a similar level of access for adjacent census tracts that have a high percentage of populations with a disability (16.1 to 24.7 percent). The north terminus of Option 1 would serve a census tract with a higher percentage of populations with a disability (16.1 to 24.7 percent) than the north terminus of Option 2 (11.3 to 16.0 percent). However, *Option 2 maintains the same alignment as the existing Route 25, so there would be no change for populations with a disability compared to the existing service.* Figure 6 displays the percentage of populations with a disability by census tract for the northern routing options.

Populations Under 16: On the southern end of the “Y,” Option 2 would provide service to a census block group with a higher percentage of populations under 16 (19.8 to 22.3 percent) than Option 1 (13.8 to 19.8 percent). However, the northern terminus of Option 1 would be adjacent to a census block group with the second-highest interval (22.3 to 28.2 percent), while Option 2’s northern terminus borders a block group with the second-lowest interval (13.8 to 19.8 percent). Option 2 would operate adjacent to a census block group with the highest interval of populations under 16 (28.2 to 42.1 percent), but there are no planned stations that would access this area. Therefore, *Option 1 may provide more access to populations under 16 than Option 2.* However, *Option 2 maintains the same alignment as the existing Route 25, so there would be no change for populations under 16 compared to the existing service.* Figure 7 displays the percentage of populations under 16 by census tract for the northern routing options.

Populations Over 55: On the southern end of the “Y,” there is no clear benefit or detriment to populations over 55 with either routing option. The north terminus for Option 2 is directly adjacent to a census block group with the highest interval of populations over 55 (51.7 to 73.9 percent), suggesting that *Option 1 may result in some loss of access for these populations compared to the existing level of service.* Figure 8 displays the percentage of populations over 55 by census block group for the northern routing options.



Title VI Analysis North Terminus Routing Options Minority Populations

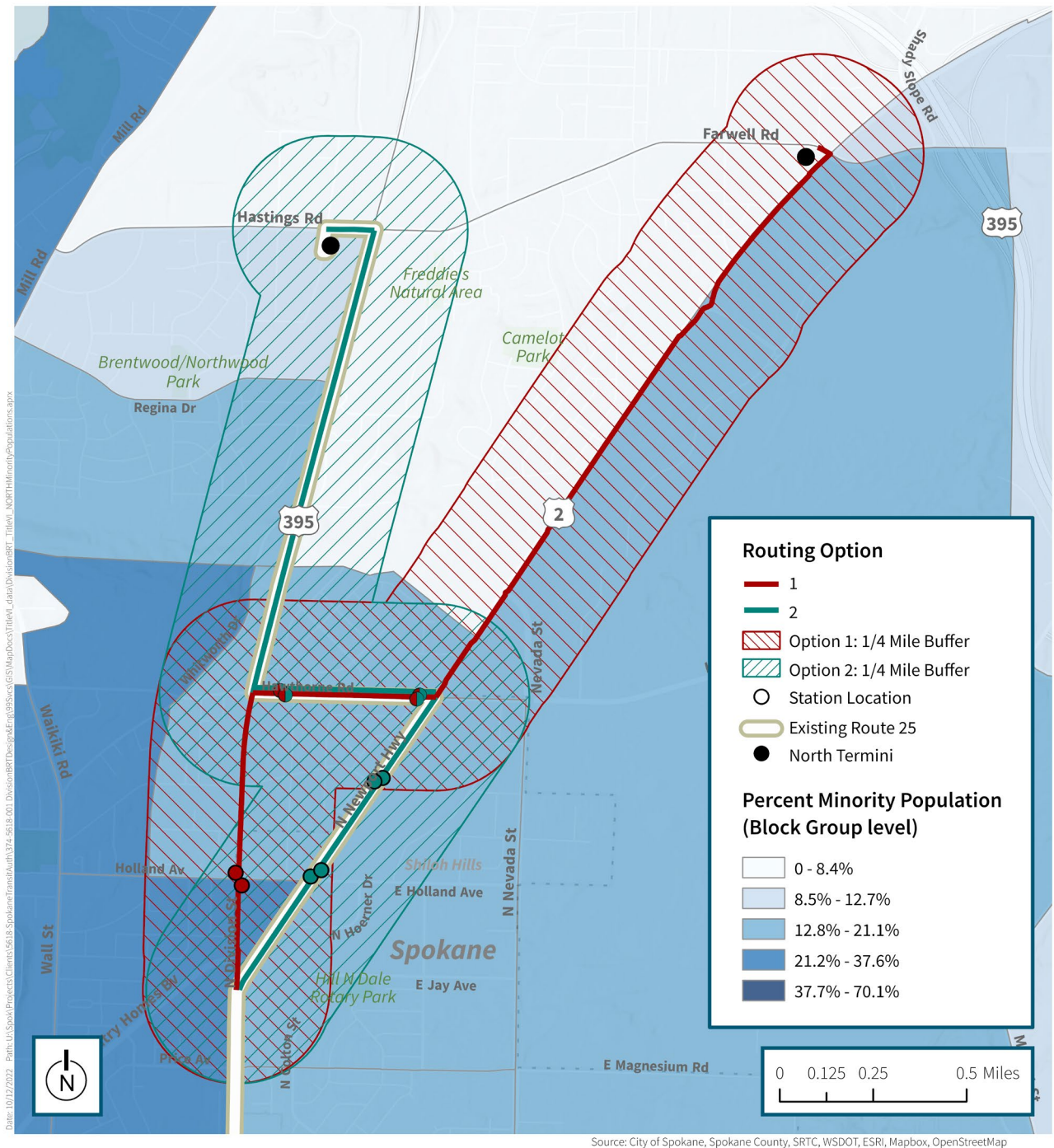
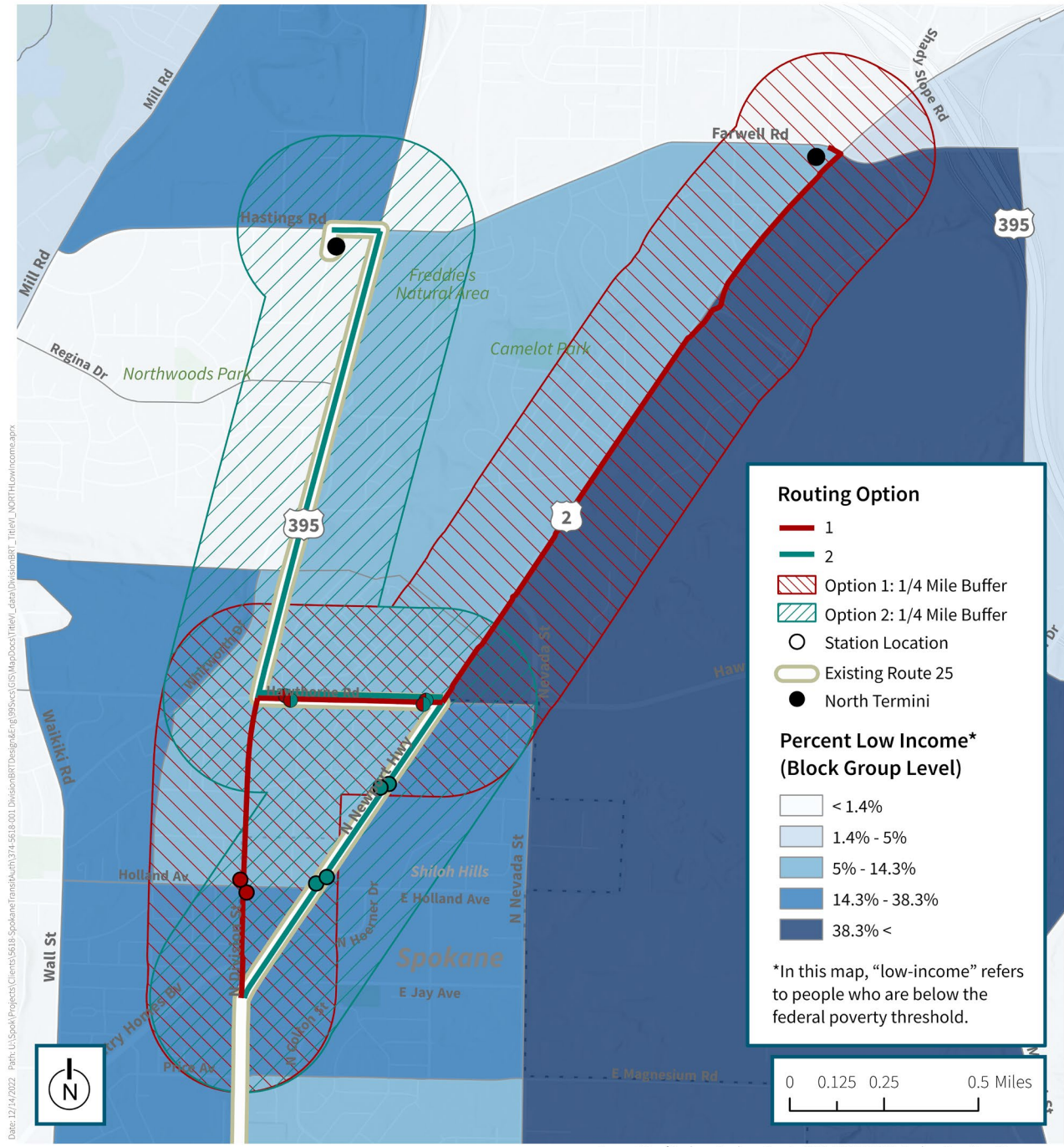


Figure 4. North Terminus Routing Options – Minority Populations



Title VI Analysis North Terminus Routing Options Low-Income Populations



Division BRT

Figure 5. North Terminus Routing Options – Low-Income Populations



Title VI Analysis North Terminus Routing Options Populations With a Disability

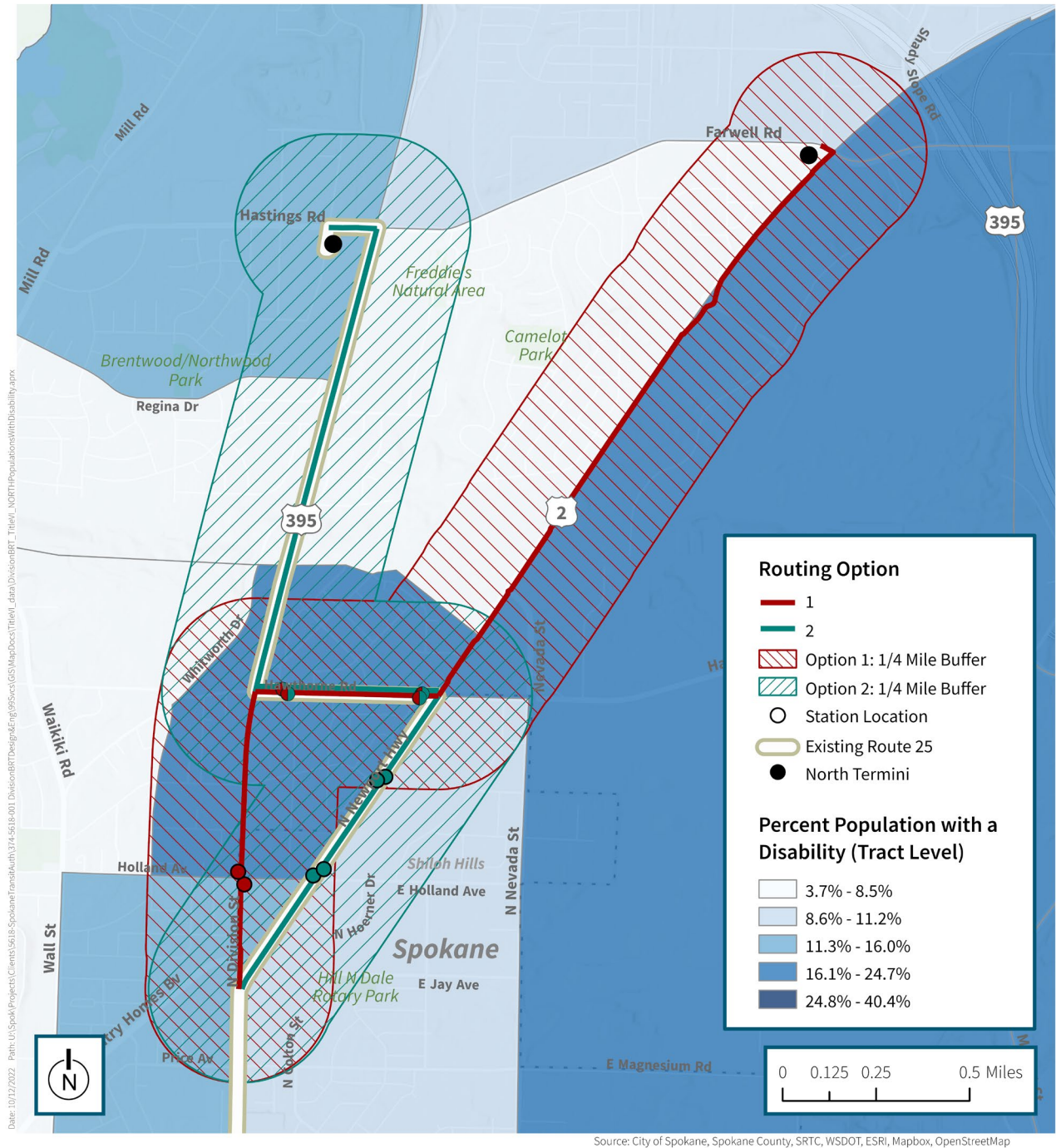
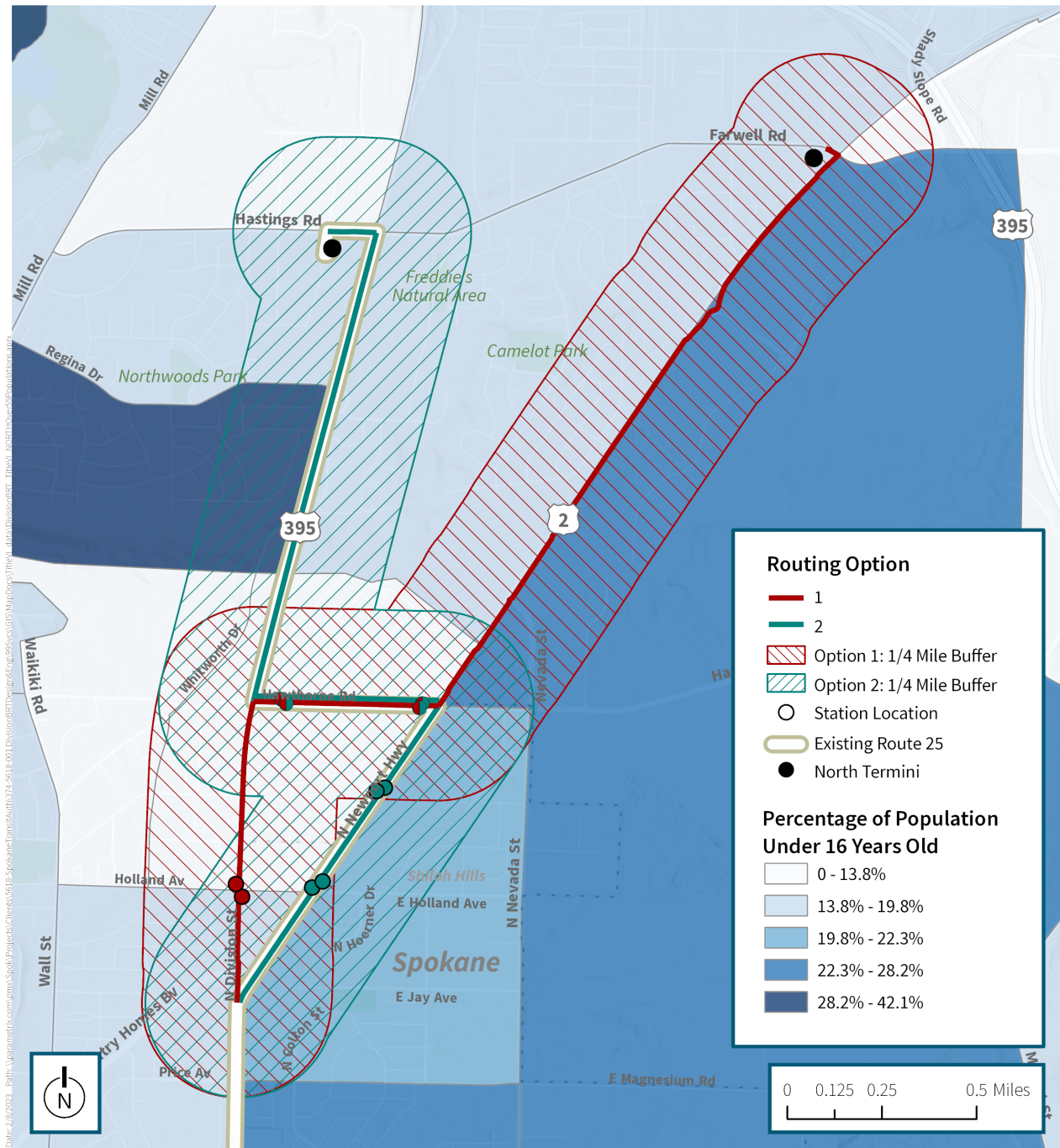


Figure 6. North Terminus Routing Options – Populations with a Disability



Division Street
BRT

Title VI Analysis
North Terminus Routing Options
Populations 16 Years and Under



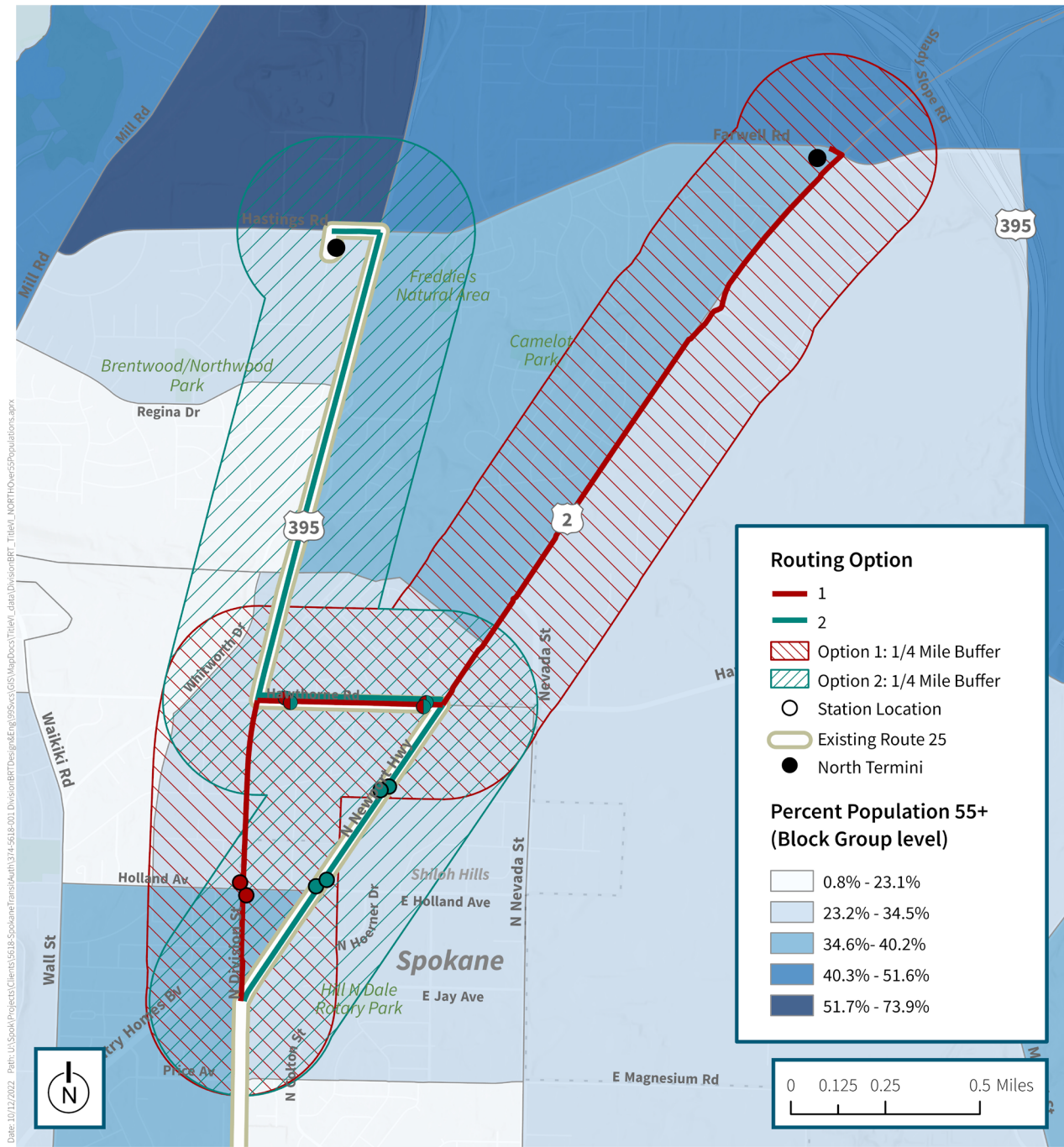
Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap

 Spokane Transit **Division BRT**

Figure 7. North Terminus Routing Options – Populations Under 16



Title VI Analysis North Terminus Routing Options Populations 55 Years and Over



Division BRT

Figure 8. North Terminus Routing Options – Populations Over 55

South Terminus Routing

Minority Populations: On the eastern end of downtown, all options route through block groups with a 21.2 to 37.6 percent minority population interval. Options 1 and 2 extend to the western end of the southern terminus study area, where the census block groups have a minority population of 0 to 8.4 percent (the lowest interval). *Compared to the existing Route 25, no option would decrease access for minority populations.* Figure 9 displays the percentage of minority populations by census block group for the southern routing options.

Low-Income Populations: Census block groups in the central downtown routing area generally contain low percentages of low-income populations. However, one block group on the southeast side of downtown falls into the highest interval (greater than 38.3 percent) of low-income populations and one block group on the south side falls into the second-highest interval (14.3-38.3 percent). The two proposed stations closest to the highest-interval block group would be served by all routing options. Option 3 provides two additional stations at the south end of downtown that would serve both high-percentage block groups mentioned. *Option 3 would likely add some additional access for low-income populations, compared to the other routing options. Compared to the existing Route 25, no option would decrease access for low-income populations.* Figure 10 displays the percentage of low-income populations by census block group for the southern routing options.

Populations with a Disability: The existing route and all route options fall within block groups with 25.8 to 40.4 percent of populations with a disability (the highest interval). *Therefore, there is no clear benefit or detriment to populations with a disability for any routing option.* Figure 11 displays the percentage of populations with a disability by census tract for the southern routing options.

Populations under 16: The existing route and all route options fall within block groups with 0 to 13.8 percent of populations under 16. *Therefore, there is no clear benefit or detriment to populations under 16 for any routing option.* Figure 12 displays the percentage of populations under 16 by census block group for the southern routing options.

Populations over 55: The existing route and all route options fall within block groups with 40.3 to 51.6 percent of populations over 55. *Therefore, there is no clear benefit or detriment to populations over 55 for any routing option.* Figure 13 displays the percentage of populations over 55 by census block group for the southern routing options.

Division BRT | Title VI Analysis
South Terminus Routing Options
Minority Populations

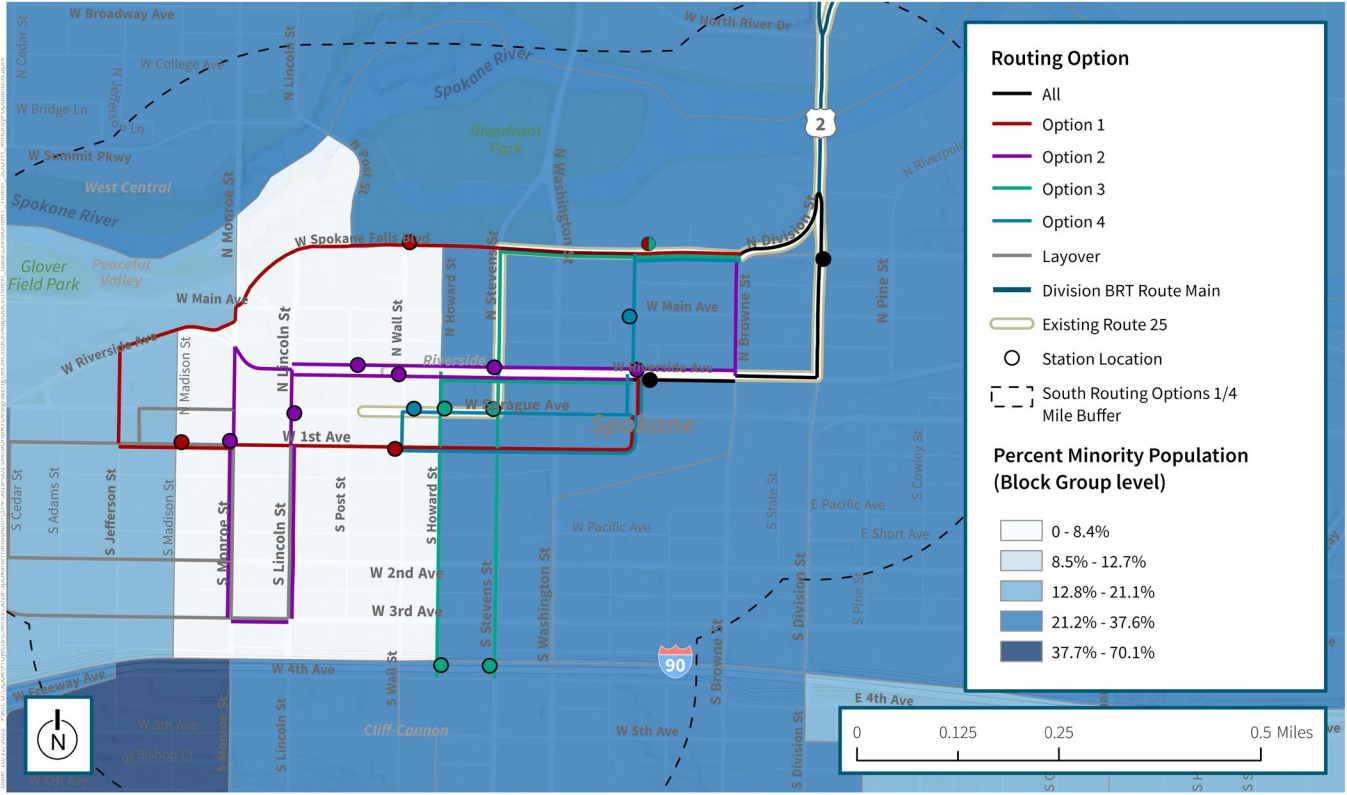


Figure 9. South Terminus Routing Options – Minority Populations



Title VI Analysis South Terminus Routing Options Low Income Populations

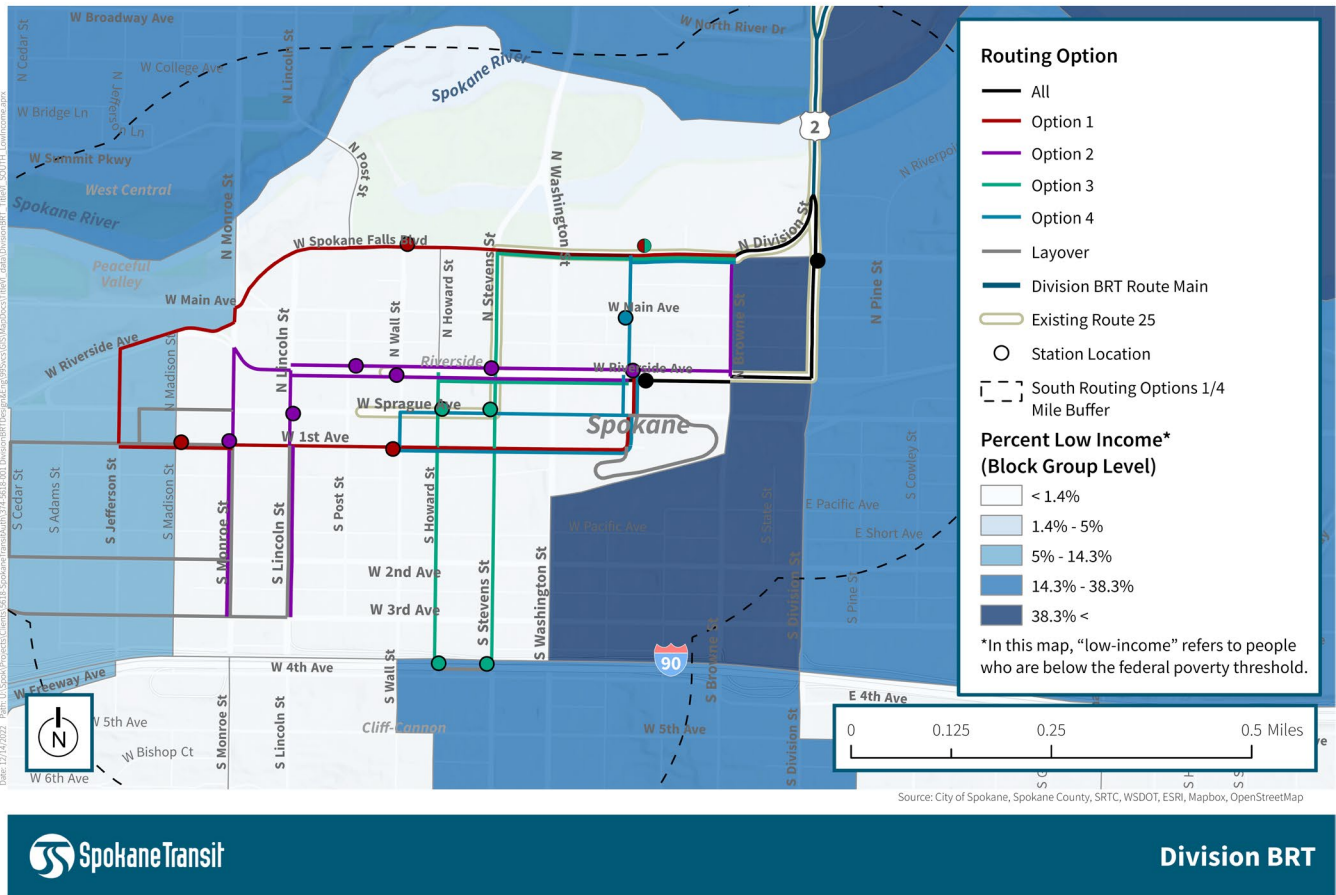
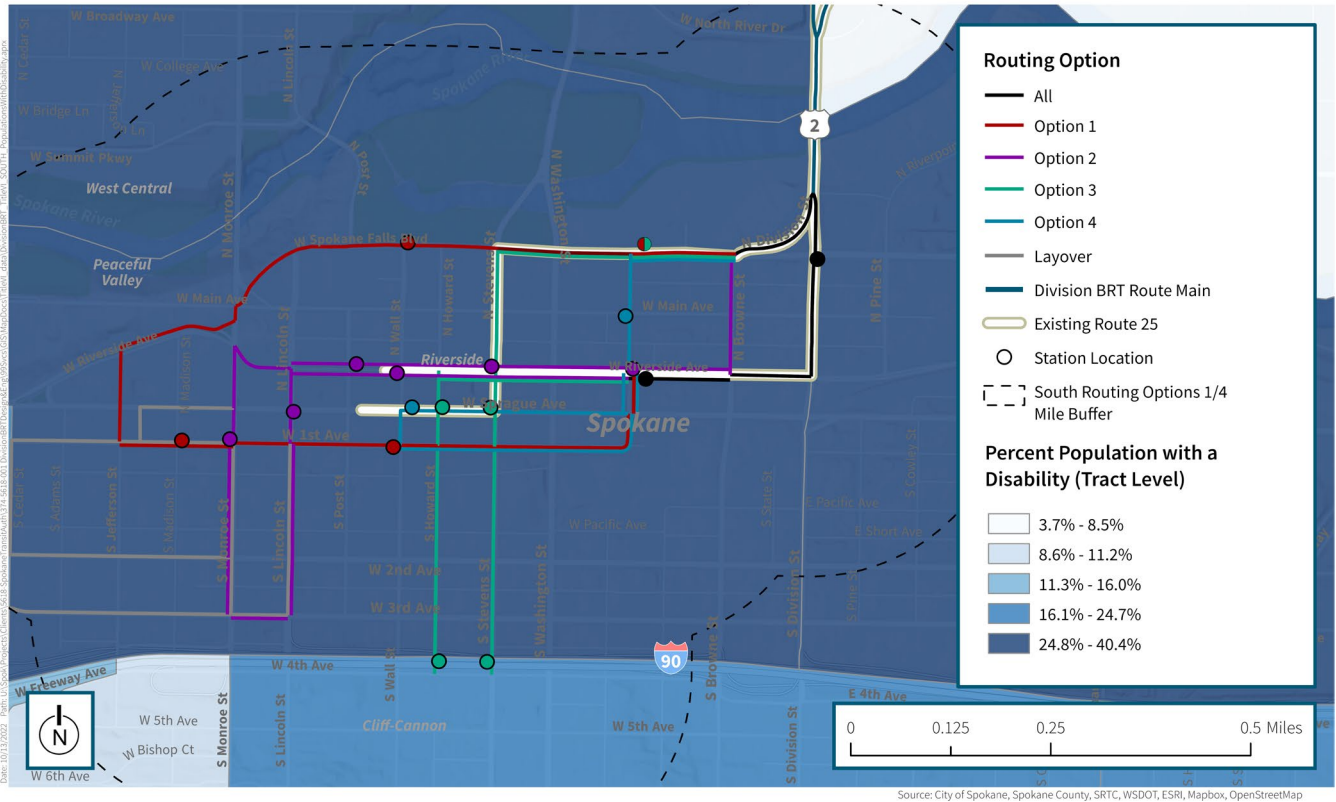


Figure 10. South Terminus Routing Options – Low-Income Populations



Title VI Analysis
South Terminus Routing Options
Populations With a Disability



Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap

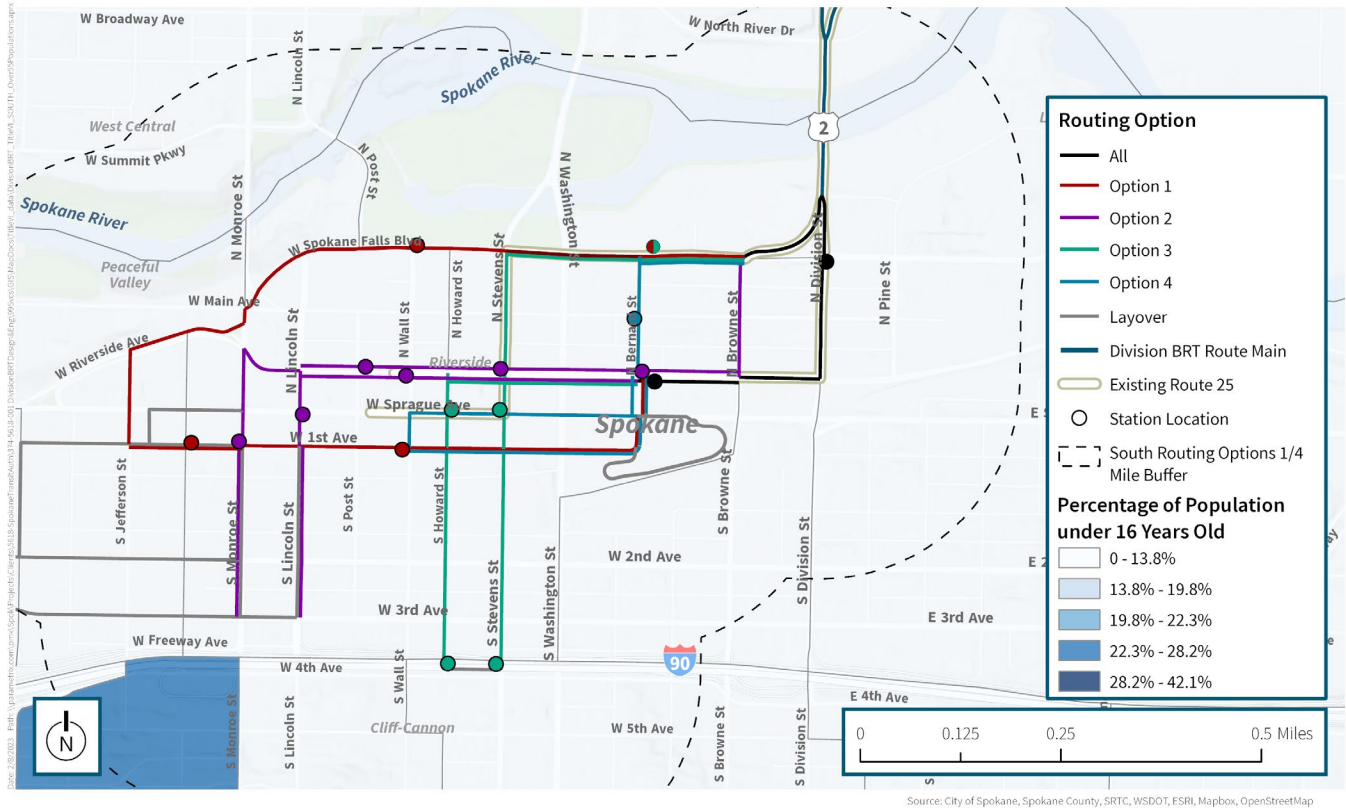


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Figure 11. South Terminus Routing Options – Populations with a Disability



Title VI Analysis South Terminus Routing Options Populations 16 and Under



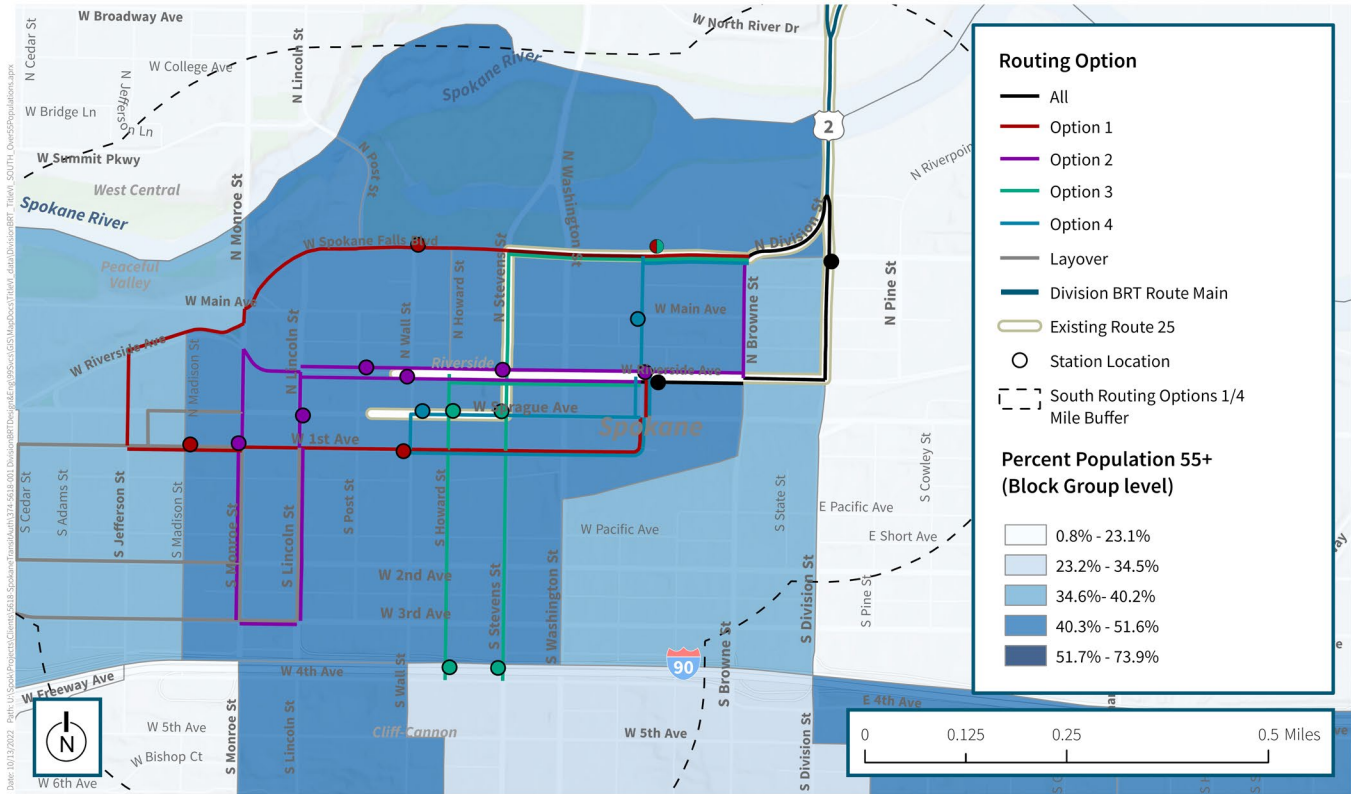
Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap



Figure 12. South Terminus Routing Options – Populations Under 16



Title VI Analysis
South Terminus Routing Options
Populations 55+



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Figure 13. South Terminus Routing Options – Populations Over 55

South Terminus Points of Interest

Due to the close proximity of routing options, the project team used an additional method of analysis to assess areas of downtown Spokane where Title VI populations may rely on access to and from transit. Because this memo’s analysis relies on Census data, the proximity analysis looks at the demographics of those who reside near transit (riders’ *origin*), but the analysis should also consider access to important *destinations* for Title VI populations. Points of interest, including social services, senior services, medical clinics, low-income and transitional housing, and free meal and shelter sites were added to the routing options map to assess if a clustering of services exists near route options.

Based on the map shown in Figure 14, the clustering of points of interest occurs on the southern end of downtown, along 2nd Avenue. A clustering of social services, transitional housing, and sites with free meals and shelter occurs in this area. Low-income housing clustering occurs on the western end of downtown and in the northeastern end of the study area. There does not appear to be significant clustering of senior services. Due to an increased service area for all routing option scenarios, it appears that *access to places of interest would increase for every option, compared to the existing routing*. Of note, Options 1 and 2 would extend further west than the existing Route 25, increasing access to low-income housing, senior services, and social services. Of the four options, Option 4 appears to increase access to these services the least. Additionally, as clustering of housing and services occurs along 2nd Avenue, routing options that extend further south may provide greater benefit to disadvantaged populations that use these services.

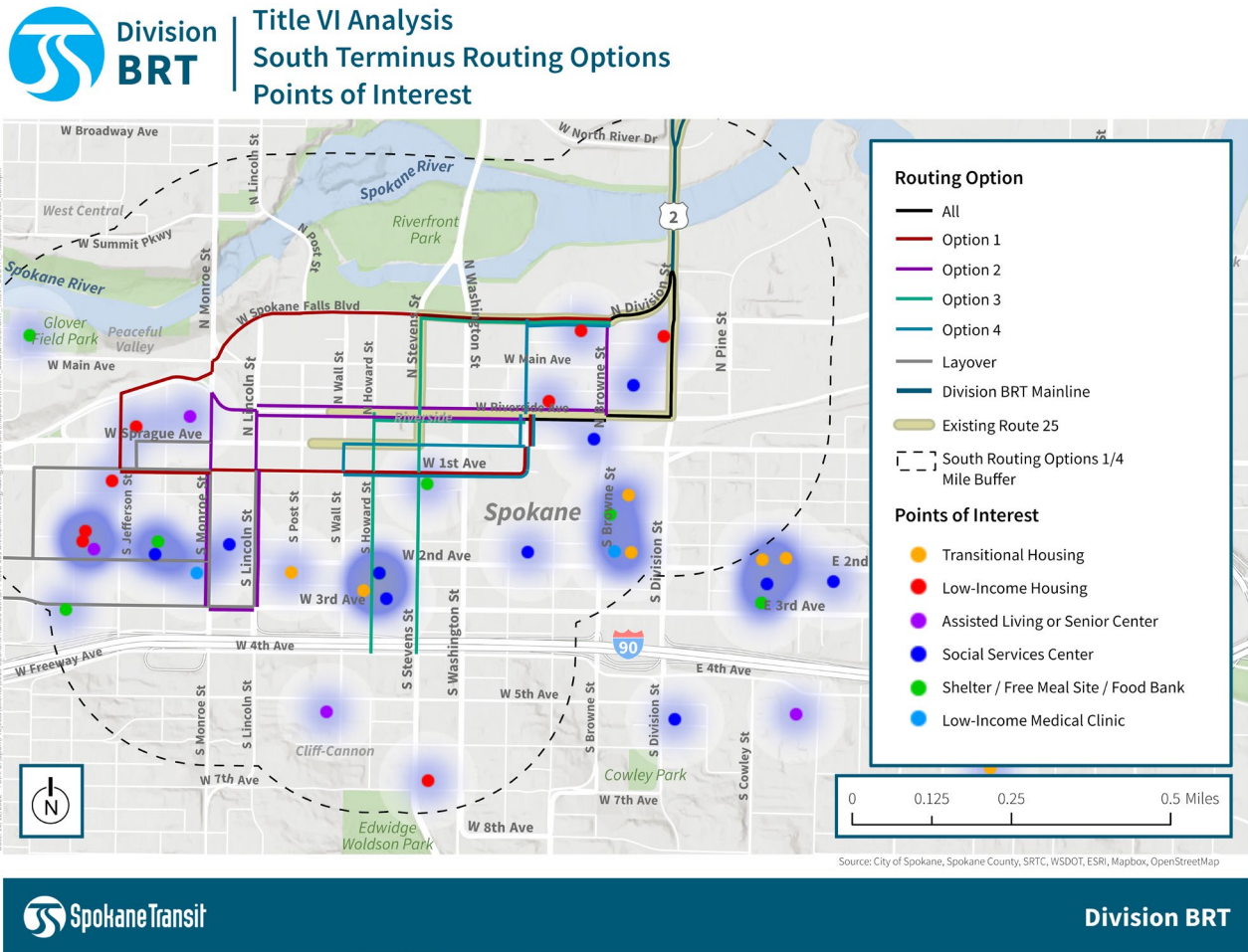


Figure 14. South Terminus Routing Options – Title VI Points of Interest (as of 2022)

Food Access

The project team also conducted a high-level consideration of how proposed changes to routing or station location may affect low-income populations with low food access. According to the USDA Food Access Research Atlas, “low access to healthy food is defined as being far from a supermarket, supercenter, or large grocery store. A census tract is considered to have low access if a significant number or share of individuals in the tract is far from a supermarket.”⁶ Figure 15, Figure 16, and Figure 17 show census tracts adjacent to the northern terminus, mainline stations, and southern terminus respectively, where a significant number (at least 500 people) or share (at least 33 percent) of individuals in the population is greater than 1 mile (shown in green) or ½ mile (shown in orange) from the nearest supermarket for an urban area or greater than 10 miles for a rural area.

North Terminus: Option 1’s northern terminus is adjacent to a census tract with low-income/low access populations at 1 and 10 miles, while Option 2’s northern terminus does not border any census tract with significant numbers of low-income/low access populations. *Option 1 would likely increase access for low-income/low food access populations.* However, *Option 2 maintains the same alignment as the existing Route 25, so there would be no change compared to the existing service.*

Mainline Existing Stops and Proposed Stations: Five existing bus stop pairs are being considered for removal: Cozza Drive, Lyons Avenue, Queen Avenue, Longfellow Avenue, and Montgomery Avenue. All five of these existing stops border a census tract with low-income and low access populations at ½ and 10 miles. In particular, Cozza Drive, Queen Avenue, and Montgomery Avenue border census tracts on both sides with low-income and low access populations at ½ and 10 miles. Of these five stop pairs, none border a census tract with low-income and low access populations at 1 and 10 miles.

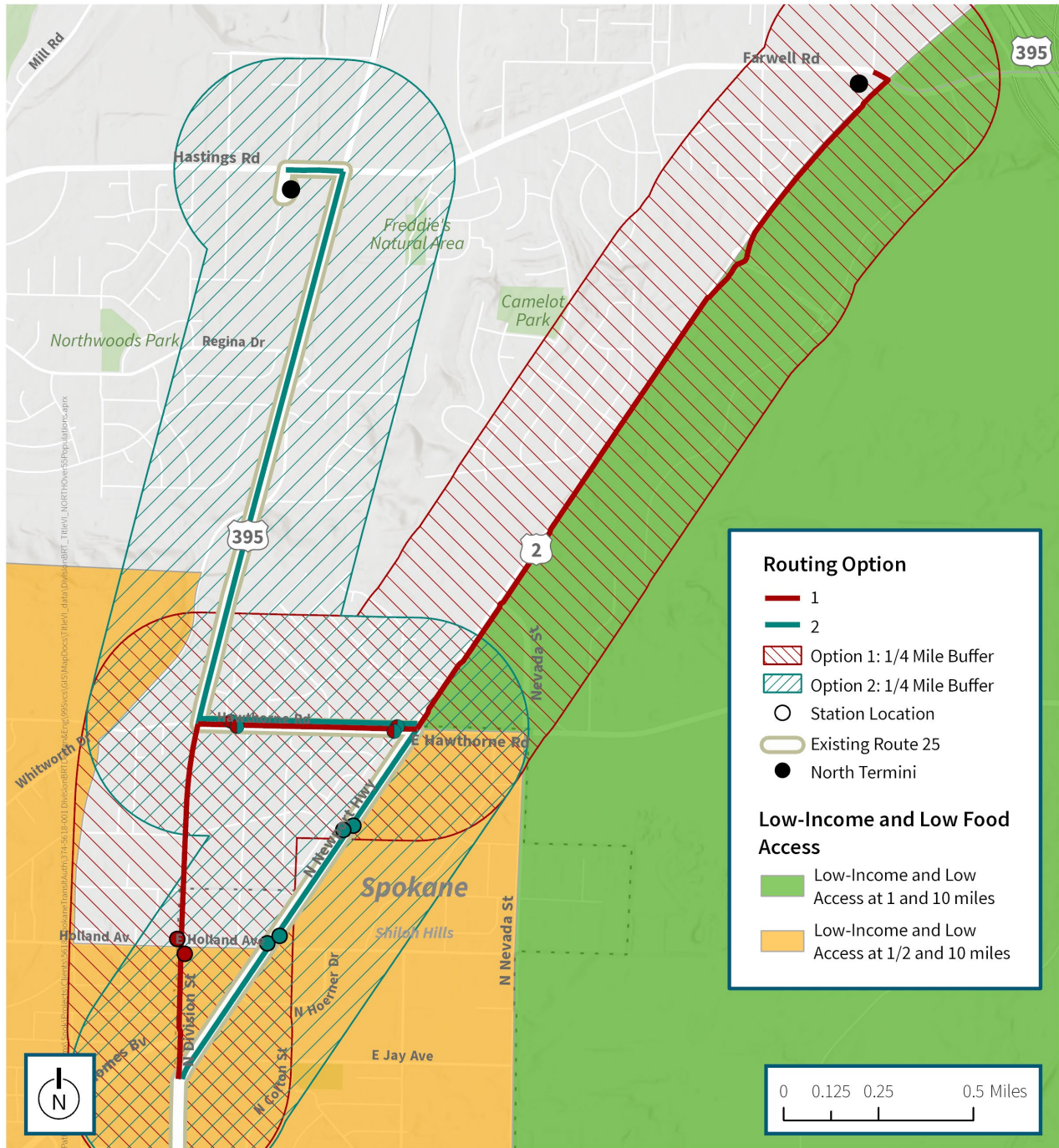
South Terminus: No census tracts in the immediate central downtown routing area are highlighted as having significant low-income/low food access populations at 1 and 10 miles. One census tract that has low-income/low food access populations at ½ and 10 miles on the east end of downtown would be served by all routing options. Option 3 provides two additional stations at the south end of downtown that would serve a census tract with low-income/low access populations at ½ and 10 miles. *Option 3 would likely increase access for low-income/low food access populations, compared to the other routing options. Compared to the existing Route 25, no option would decrease access for low-income/low access populations.* Figure 17 displays census tracts with low-income/low access populations for the southern routing options.

⁶ <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation>



Division Street
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Title VI Analysis
North Terminus Routing Options
Low-Income and Low Food Access



Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap

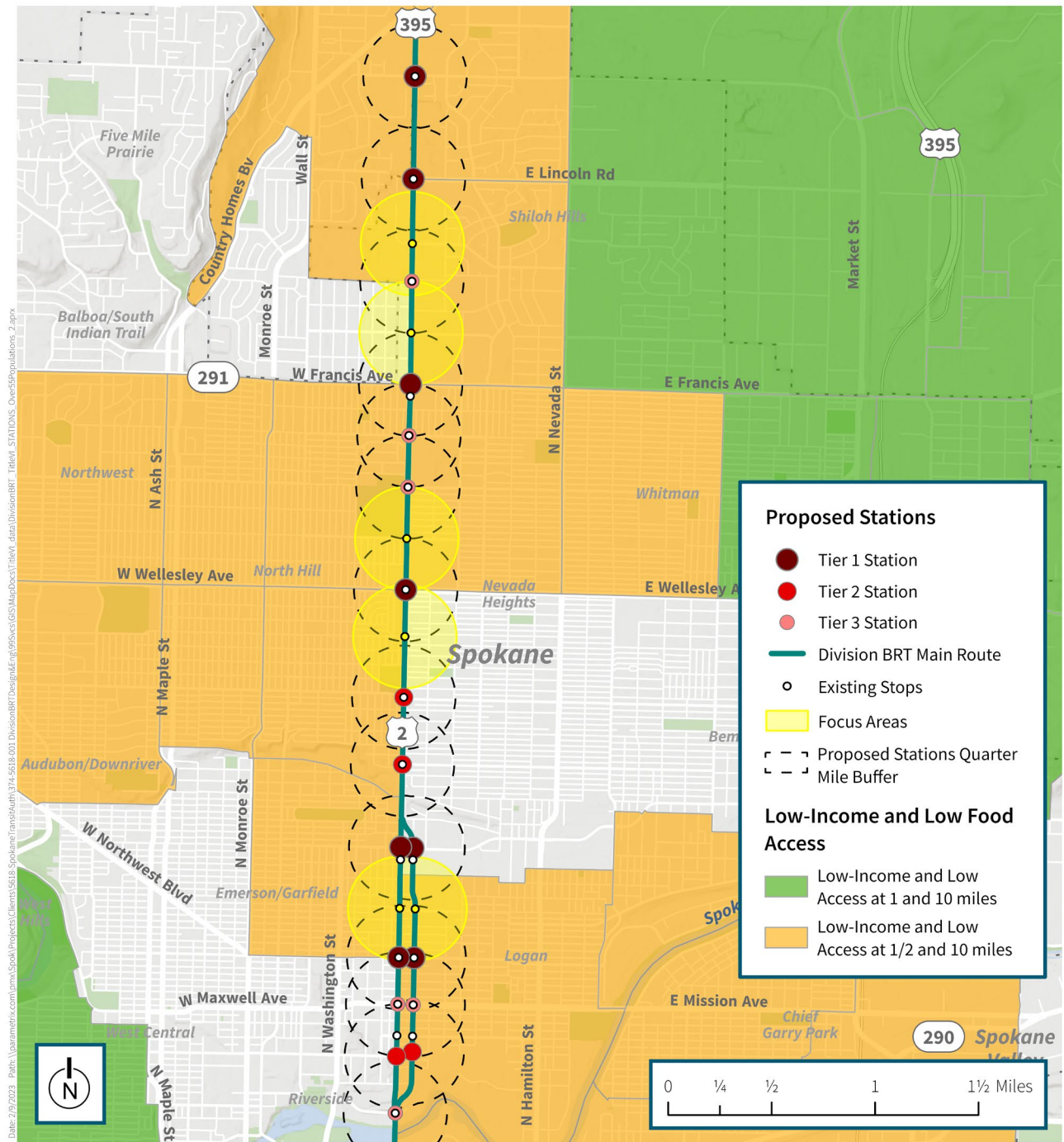
 **Division BRT**

Figure 15. North Terminus Routing Options – Low Income and Low Food Access



Division Street
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Title VI Analysis
Division BRT Route: Proposed Stations and Existing Stops
Low-Income and Low Food Access

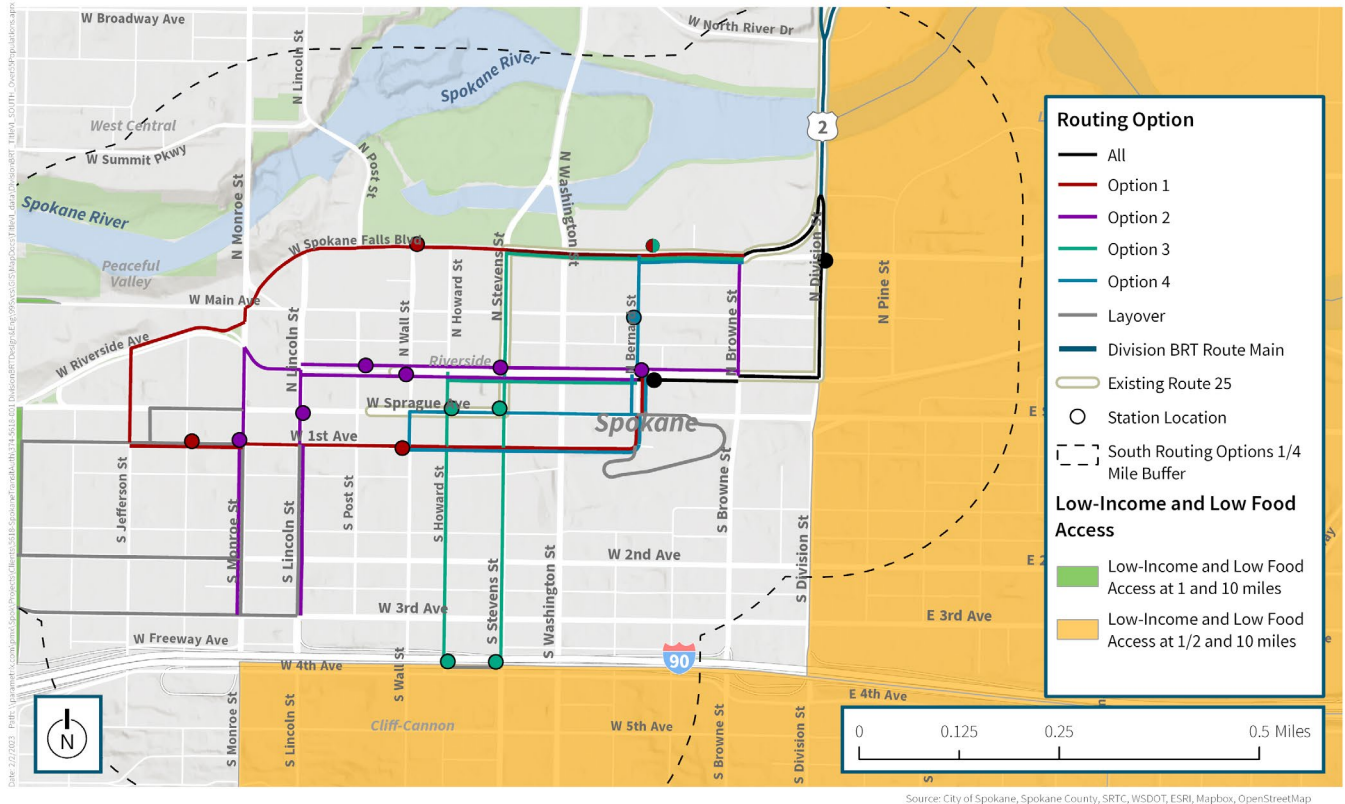


Division BRT

Figure 16. Proposed Stations and Existing Stops - Low Income and Low Food Access



**Title VI Analysis
South Terminus Routing Options
Low-Income and Low Food Access**



Source: City of Spokane, Spokane County, SRTC, WSDOT, ESRI, Mapbox, OpenStreetMap



Figure 17. South Terminus Routing Options – Low Income and Low Food Access

Mainline Existing Stops and Proposed Stations

As shown in Figure 18, Figure 19, Figure 20, Figure 23, and Figure 23 all proposed stations on the Mainline are within a quarter-mile buffer of existing bus stops. Because of the proposed stop consolidation that would take place as part of the project, five existing bus stops are at the outer limits of the proposed station quarter-mile buffers: Cozza Drive, Lyons Avenue, Queen Avenue, Longfellow Avenue, and Montgomery Avenue. The project team reviewed whether any significant percentages of Title VI populations within the quarter-mile buffers of the existing stop would have diminished access to proposed stations.

With the assumption that most people are willing to walk approximately a quarter mile to access transit but up to a half mile for improved service, there does not appear to be any existing stop that would not be served within a half mile of a proposed station. However, *the stops detailed in Table 1, which are proposed to be removed during consolidation, may pose an important access issue.* While exact station locations may still change as the project progresses, several areas should be monitored throughout the project to ensure that populations within these census block groups or tracts retain an appropriate level of access without undue burden.

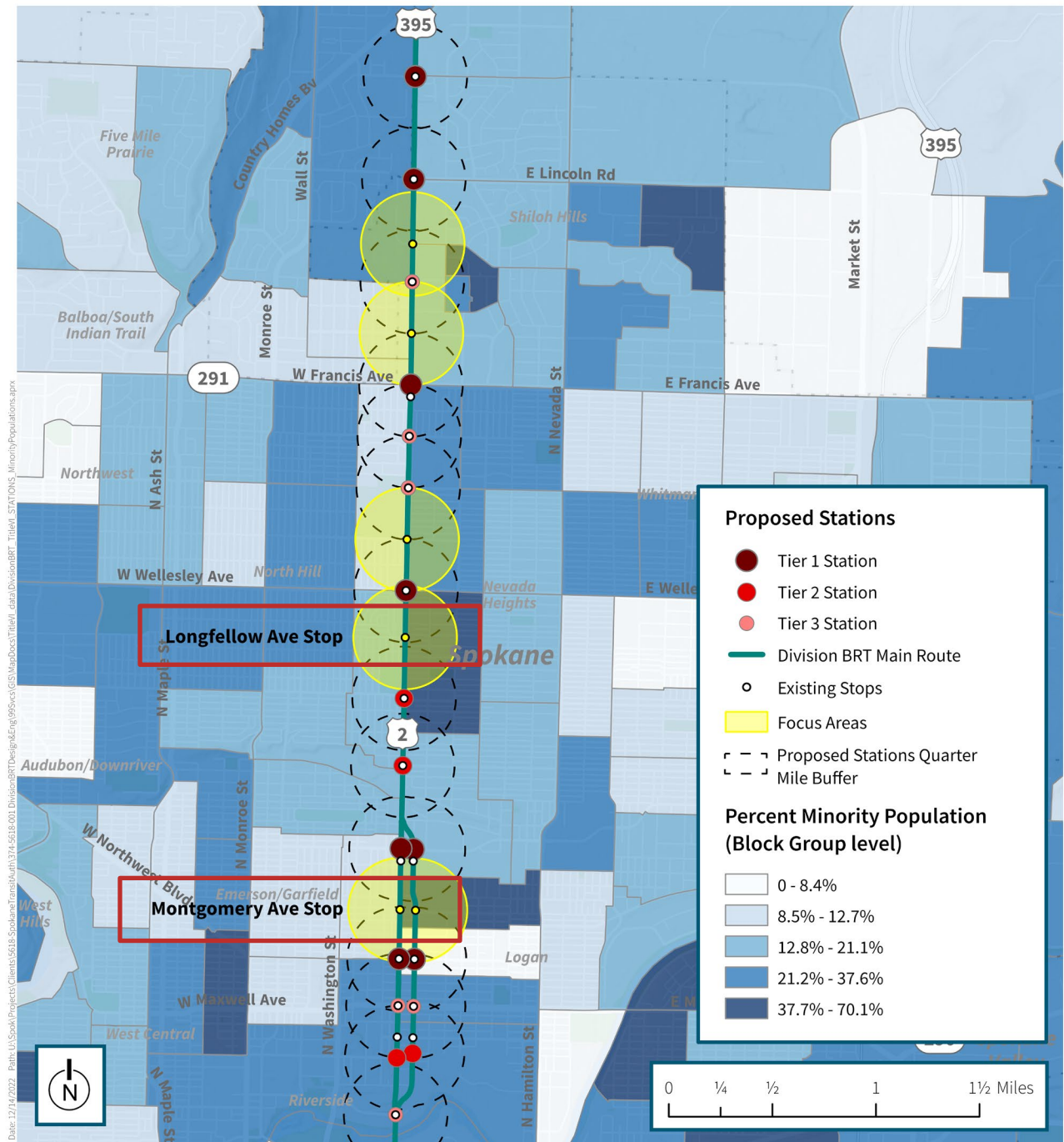
Table 1. Existing Stop Removal – Focus Areas

Population Group	Existing Stop Location(s) to Be Removed (Proposed)	Adjacent Census Block Group or Census Tract Percentage Interval
Minority Populations	Division @ Longfellow Avenue Division/Ruby @ Montgomery Avenue	37.7 – 70.1% (highest interval)
Low-Income Populations	Division @ Cozza Drive Division/Ruby @ Montgomery Avenue	>38.3% (highest interval)
Populations with a Disability	Division @ Cozza Drive Division @ Lyons Avenue	51.7 – 73.9% (highest interval)
Populations under 16	Division @ Longfellow Avenue Division @ Montgomery Avenue	28.2 – 42.1% (highest interval)
Populations over 55	Division @ Cozza Drive Division @ Lyons Avenue	24.8 – 40.4% (highest interval)



Division Street
BRT

Title VI Analysis
Division BRT Route: Proposed Stations and Existing Stops
Minority Populations



Division BRT

Figure 18. Proposed Stations and Existing Stops – Minority Populations



Title VI Analysis Division BRT Route: Proposed Stations and Existing Stops Low-Income Populations

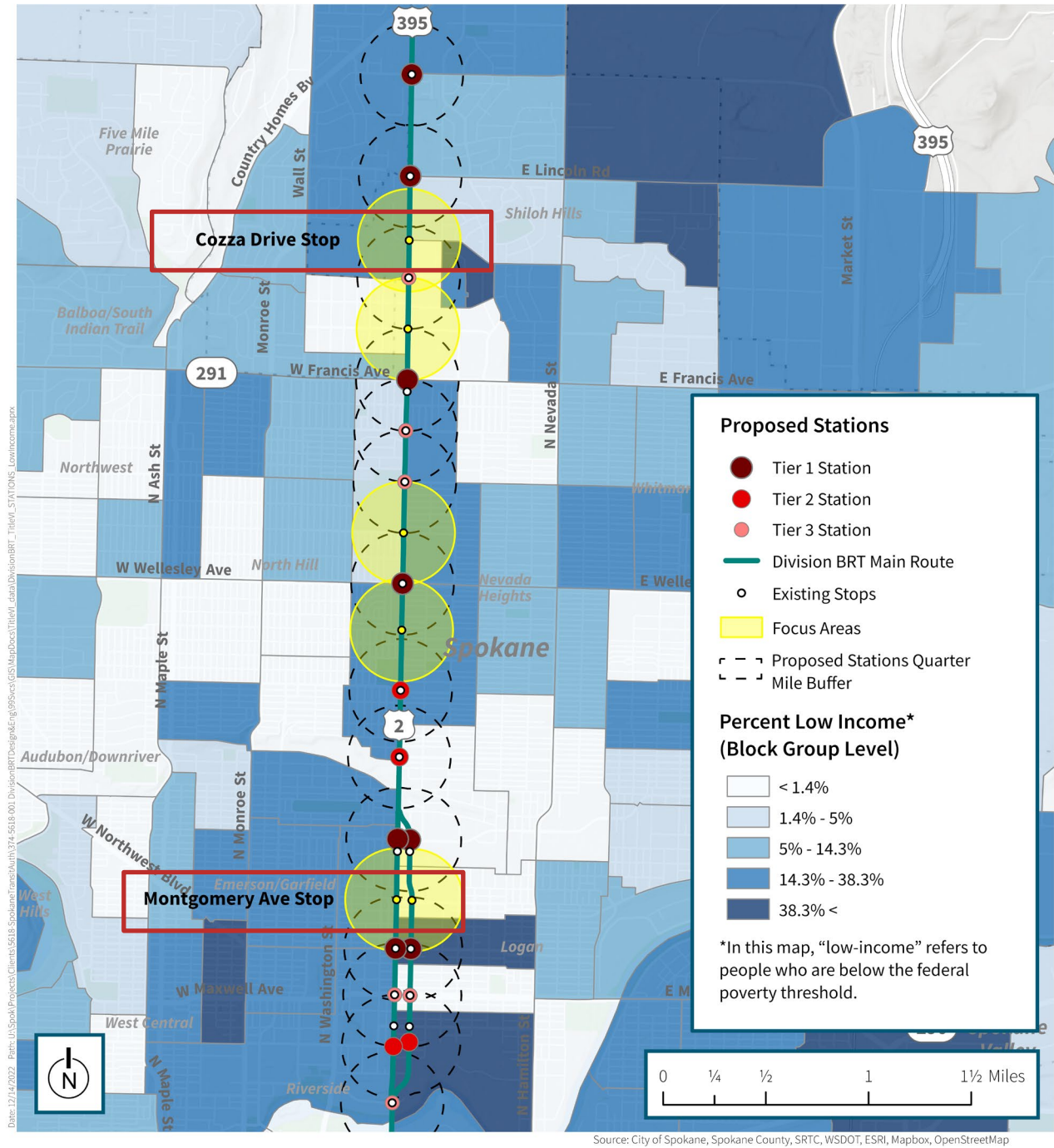
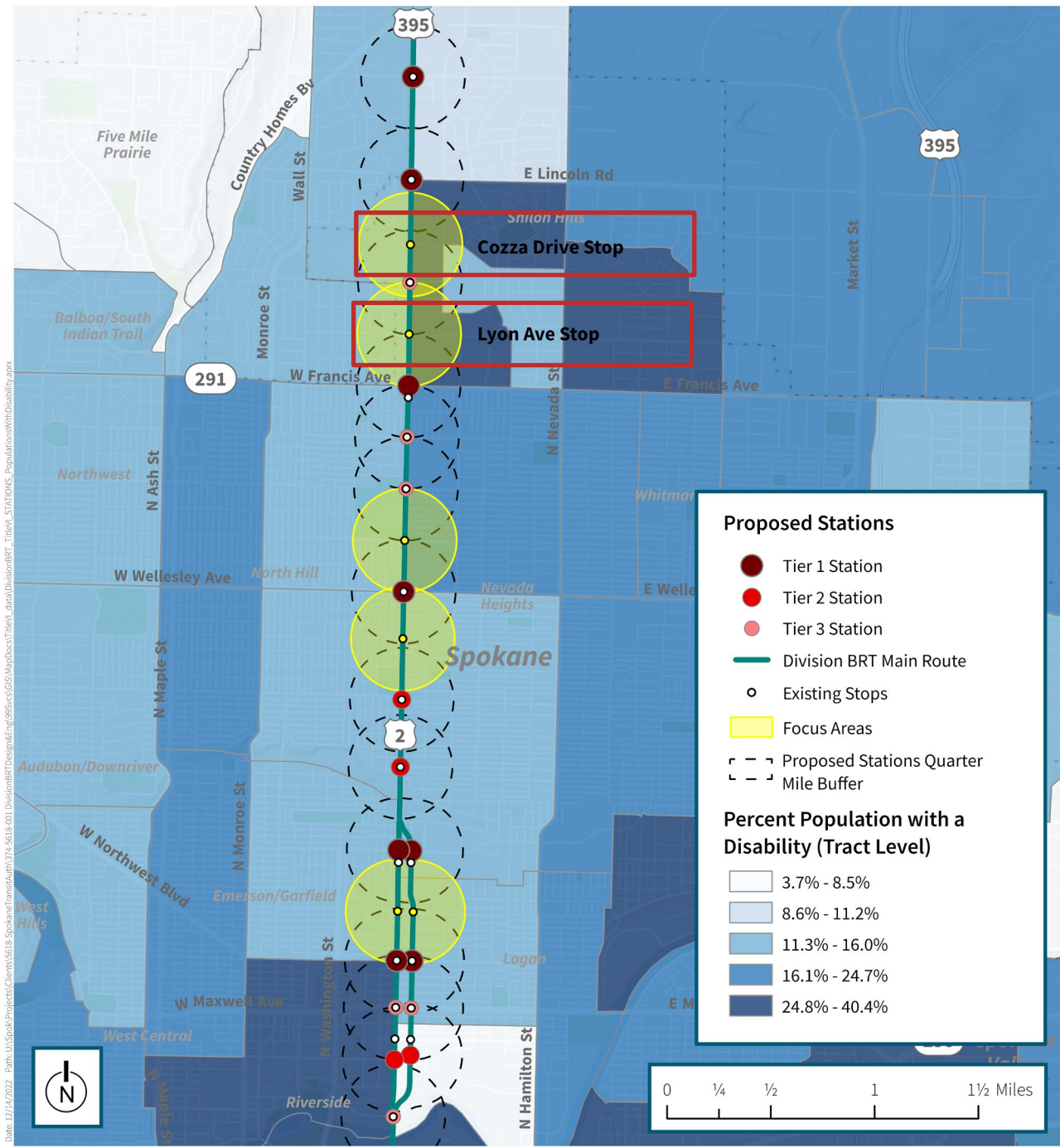


Figure 19. Proposed Stations and Existing Stops – Low-Income Populations



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Title VI Analysis
Division BRT Route: Proposed Stations and Existing Stops
Populations With a Disability

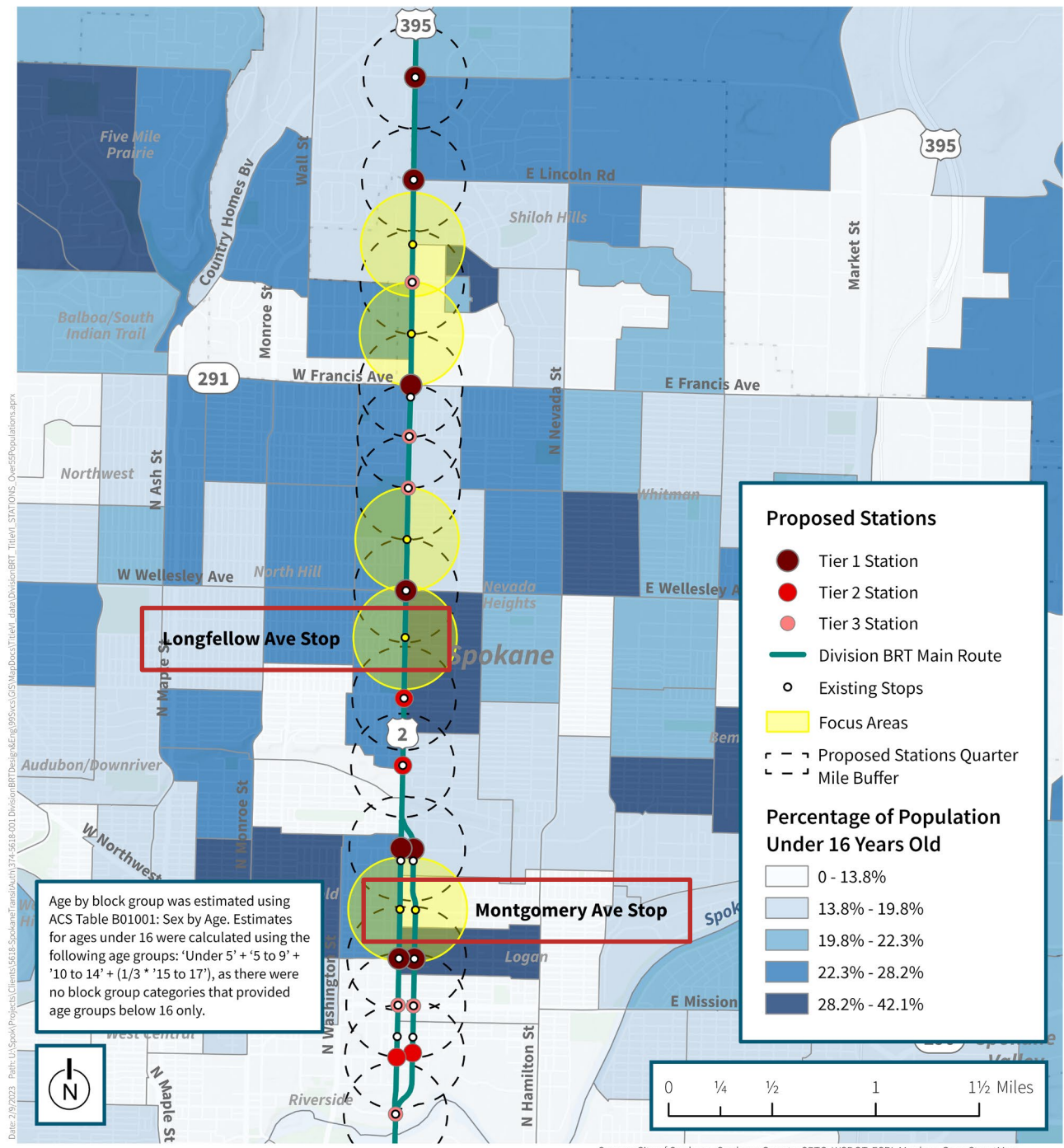


 **Spokane Transit** **Division BRT**

Figure 20. Proposed Stations and Existing Stops – Populations with a Disability



Title VI Analysis Division BRT Route: Proposed Stations and Existing Stops Populations 16 Years and Under



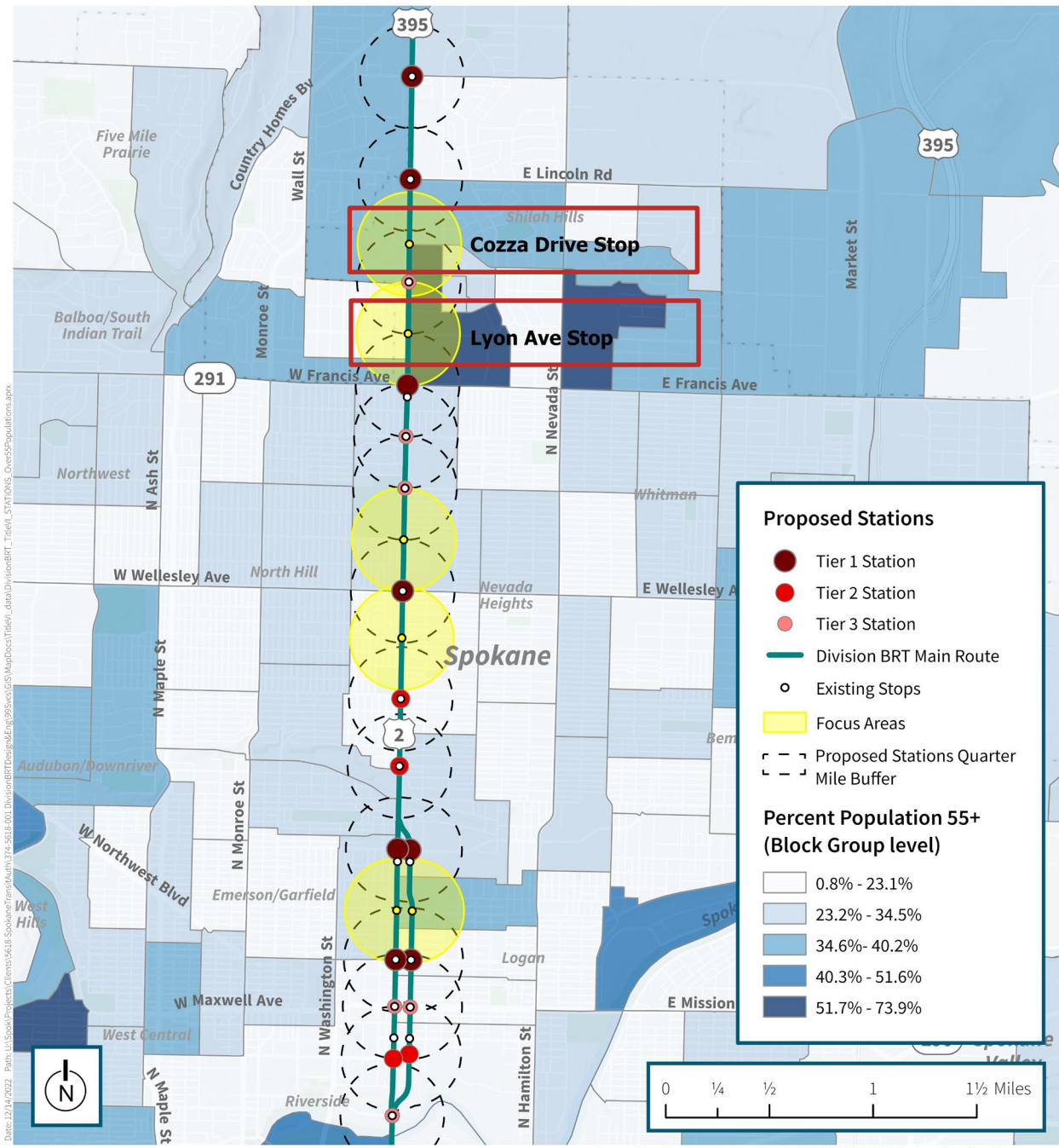
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Figure 21. Proposed Stations and Existing Stops – Populations Under 16 Years



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Title VI Analysis
Division BRT Route: Proposed Stations and Existing Stops
Populations 55 Years and Over



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Figure 23. Proposed Stations and Existing Stops – Populations Over 55 Years

CONCLUSION

While options at the northern and southern termini are still undergoing development, the following high-level takeaways should be considered. As the project progresses and routing options and station locations are selected, these areas should continue to be evaluated to ensure there is not any undue burden on Title VI populations. Populations under 16, populations over 55, populations with a disability, and low-income populations with low food access are not included under Title VI, but for planning purposes, these populations were included during this early, high-level analysis.

North Terminus Routing Options – Minority populations would not be significantly affected by service changes to the northern routing option. *Populations over 55 may be adversely affected by changes to service if North Option 1 is selected;* the northern terminus for Option 2 (which maintains the same alignment as the existing route) currently serves a census block group with the highest interval percentage of populations over 55. Access for populations with a disability, populations under 16, low-income populations, and low-income/low food access populations may be improved if Option 1 is recommended.

South Terminus Routing Options - Compared to the existing Route 25, no option would decrease access for minority populations, low-income populations, populations over 55, populations under 16, or populations with a disability. Due to an increased service area for all routing option scenarios, it appears that *access to points of interest would increase for every routing option, compared to the existing routing. Option 3 would likely add additional access for census block groups with high percentages of low-income populations and low-income/low food access populations, compared to the other routing options.*

Proposed Stations – *Existing stops that are proposed to be removed at Cozza Drive, Lyons Avenue, Queen Avenue, Longfellow Avenue, and Montgomery Avenue are adjacent to census block groups or tracts with high percentages of Title VI and other vulnerable populations.* While proposed stations remain within a quarter mile of these existing stops, these areas should be monitored throughout the project to ensure that populations within these census block groups or tracts retain an appropriate level of access without undue burden.