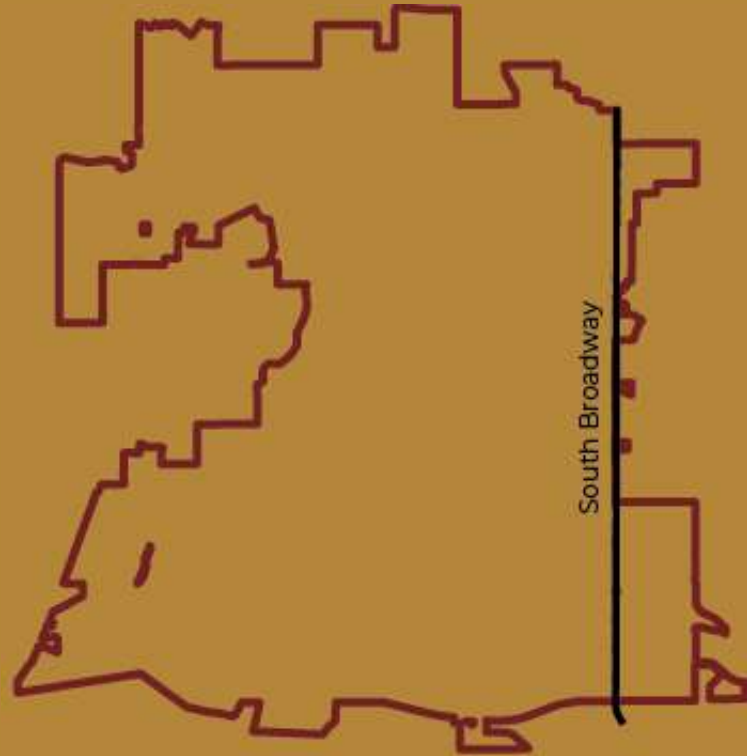


CITY OF LITTLETON SOUTH BROADWAY CORRIDOR BRT STUDY

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EXECUTIVE SUMMARY

STATION AREA PLANNING

The introduction of a BRT line along the South Broadway corridor provides enormous opportunity for the City of Littleton (City). Mainly, the City can benefit by increasing the housing and job density of the station areas at the Littleton Boulevard and Mineral Avenue intersections of South Broadway. Currently, these two intersections are disconnected and lack safe, multimodal connections. The current land uses at each intersection are spread out and promote an auto-dominated urban form which decreases the overall connectivity.

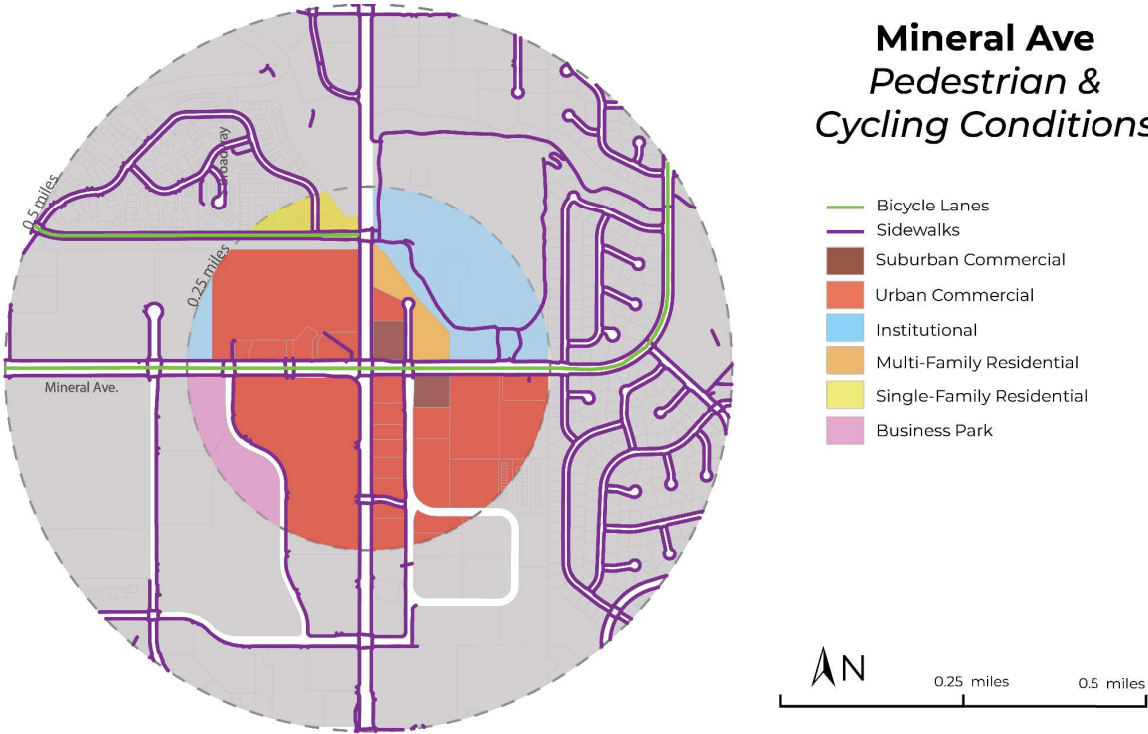


Figure 19: Mineral Ave Station Area Existing Pedestrian and Cycling

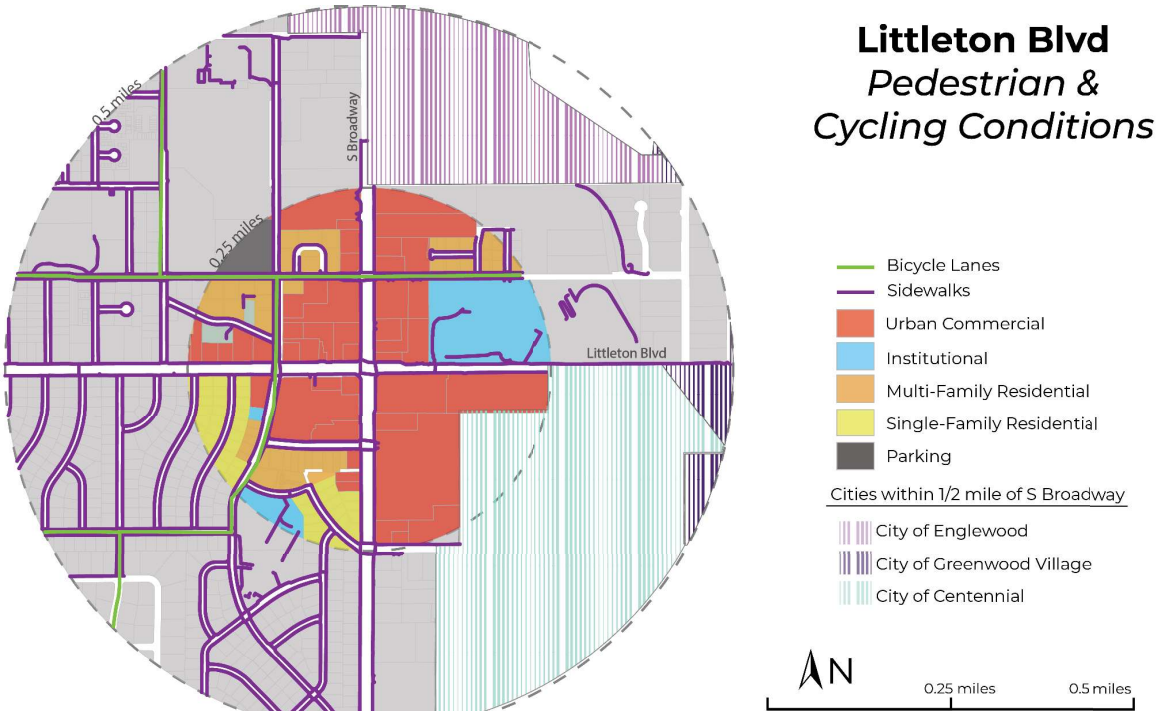


Figure 23: Littleton Blvd Station Area Existing Pedestrian and Cycling

Station area planning provides city officials a chance to lead the growth and development prior to the implementation of the BRT line. Also, station area planning gives an indicator to the private market to build higher and denser in support of the future mass transit line. This report starts to understand the station area at a higher level. Through a GIS analysis of the mobility, land uses, zoning, and population change, the station areas of Littleton Boulevard and Mineral Avenue can be understood at greater length. This analysis provides our team with the understanding of how to create a denser and more connected station that supports the City of Littleton.

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Ultimately, these existing conditions analyses led our team to develop four key maps for each station area to welcome the new BRT line. Our team learned that there are three key areas for both of the station areas to improve: job and housing density, connectivity, and transit-supportive land uses. This report builds upon past station area plans that have been developed by the City and County of Denver, the City of Raleigh, and Allegheny County. Our teams utilized those reports to build out four key maps to enhance the station areas of the Littleton Boulevard and Mineral Avenue intersections of South Broadway. The maps developed are:

- 1. Land Use. Our team, where necessary, updated the layout and types of land uses around the station area and left alone important residential and commercial components. This creates an updated station area that affects as few people as possible.
- 2. Building Heights. This map serves as a starting point for the City to understand where to increase building density. However, there will need to be a market study done to determine specific heights necessary.
- 3. Street Connections. This map highlights where the new street connections will be made with the new land uses.
- 4. Mobility. This map shows the new street types to be created. These new street types, enhanced and slow, are thought out to create better mobility connections and support people walking, biking, and rolling, first and the automobile, second.

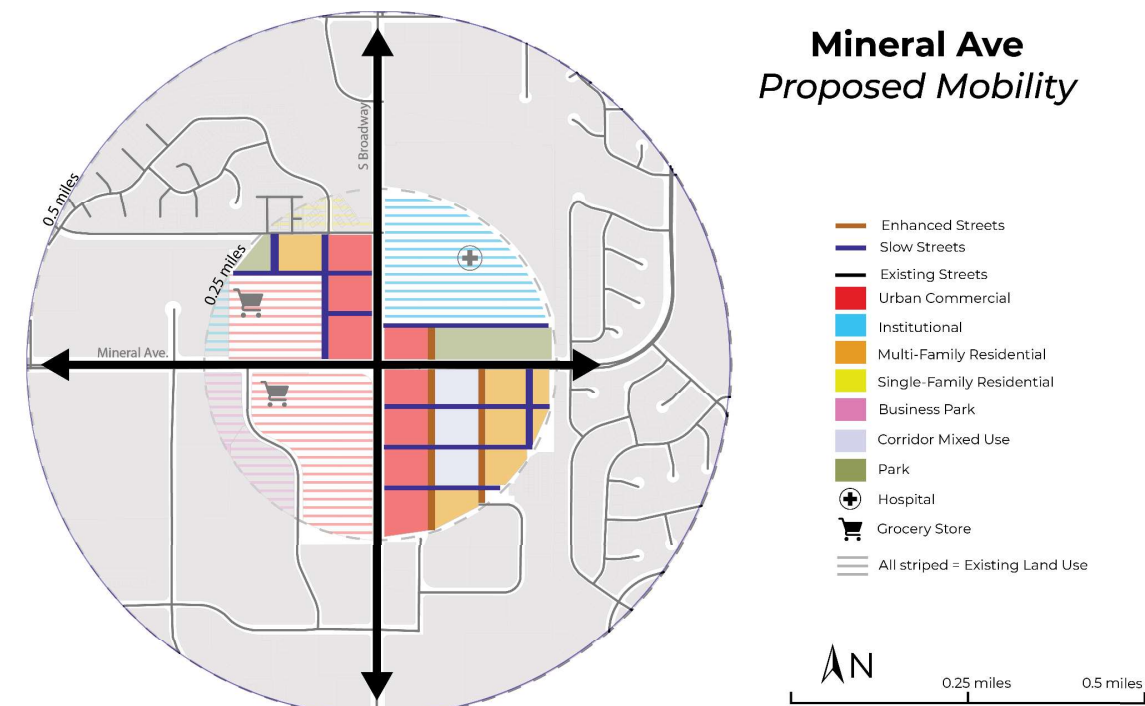


Figure 27: Mineral Ave Station Area Proposed Mobility

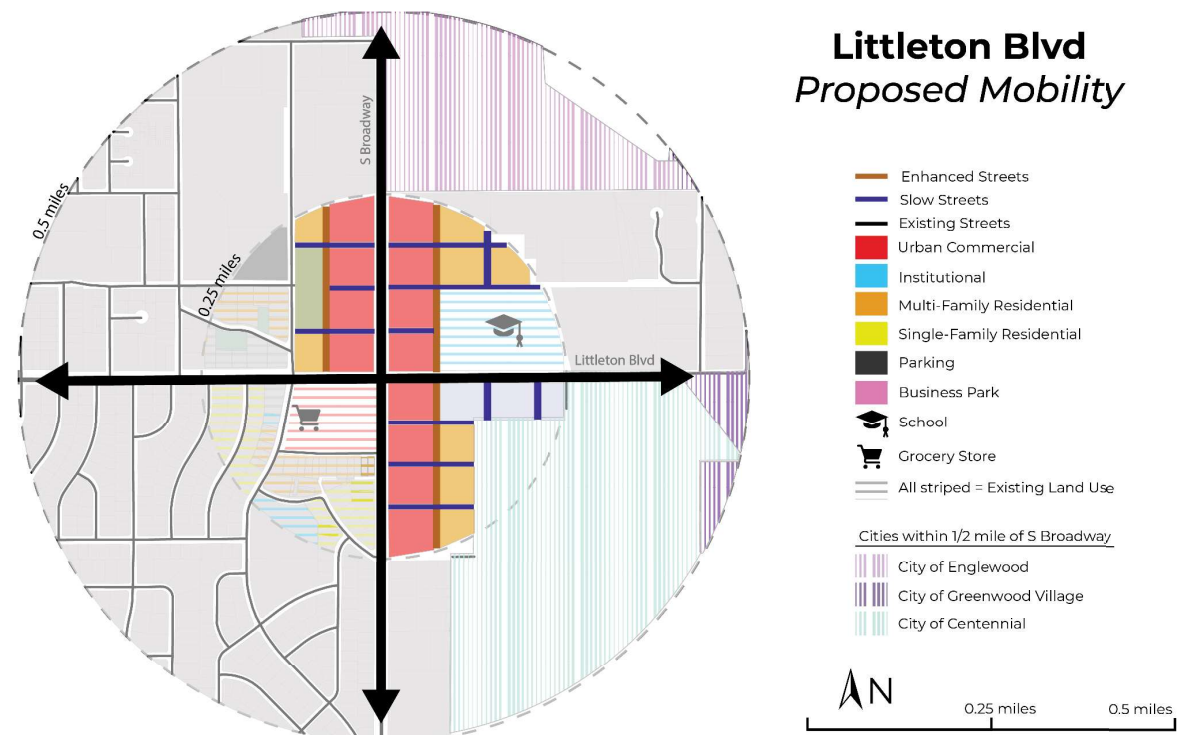


Figure 31: Littleton Blvd Station Area Proposed Mobility

Overall, this report will be useful to City officials to begin to think about how to grow these station areas with equity in mind. This report will be a valuable resource to the City as they begin to develop a station area for people and not cars. Officials will want to ensure that by the time the BRT line is implemented, the station areas are set up to create walkable and dense connections that bring economic prosperity and urban vibrancy to the City and its residents.

BUS STOP TYPOLOGIES AND AMENITIES

The second part of this report was completed in order to provide the client with finalized bus stop typologies and amenities that they can work toward before BRT is implemented along the South Broadway corridor. Bus stop typologies and amenities can be used to increase rider satisfaction and safety while decreasing inconsistencies across the transit system. Four typologies have been developed based on land use density, headway times, geographic context, and number of routes at each stop. Bus stop typologies can serve as a sort of “end goal” for current stops and routes, and also as a guide for when new stops and routes are created.

Table 3: Bus Stop Typologies

	Level 1	Level 2	Level 3	Level 4
Land use density 1/4 Mile around stop	low	medium-low	medium-high	high
Headway times	high > 45 minutes	medium-high > 30 minutes	medium-low 15 - 30 minutes	low <15 minutes
Geographic context (From RTD FLM plan)	Rural Suburban Res.	Suburban Res. Suburban Mixed	Suburban Mixed Urban Urban Core	Suburban Mixed Urban Urban Core
Ridership Current and Projected	low	medium-low	medium-high	high
Potential area for residential or employment density increase			Within 1/8 mile of development	
Located near vulnerable populations	Within 1/8 mile of vulnerable populations			

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Table 4: Bus Stop Amenity Chart

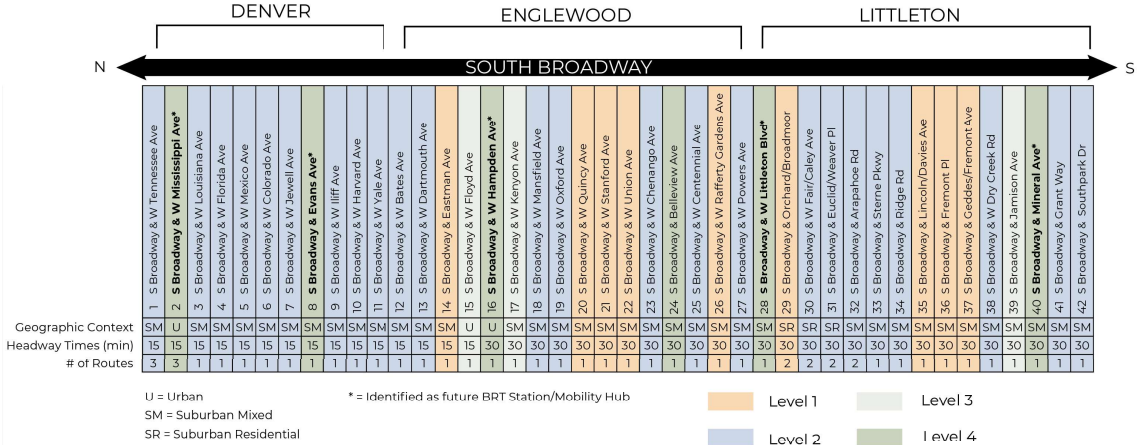
Amenity	Bus Stop Typology Level			
	Level 1	Level 2	Level 3	Level 4
Sign	•	•	•	•
Bench	•	•	•	•
Shelter(s)		•	•	•
Trash/Recycling	•	•	•	•
Lighting	•	•	•	•
Bike Racks			•	•
Dockless Bike/Scooter Parking			•	•
Schedule			•	•
Route Maps				•
Real-time Information				•
Ticket Vending				•



Figure 32: Bus Stop Typology Levels

Ultimately the report will end with an analysis and categorization of the existing bus stops along South Broadway, from I-25 in Denver to Southpark Drive in Littleton. The 84 bus stops studied in this analysis have been coupled into pairs of north and southbound stops, resulting in 42 bus stop pairs. Each of these bus stops have been categorized into the four different bus stop typology levels. Overall, this chapter will help inform planners in Denver, Englewood and Littleton as to what bus stop amenity investments need to be made along South Broadway in order for BRT to be successful.

Figure 40: Bus Stop Categorization Chart



This portion of the project will be helpful to the client as development of a BRT system along the South Broadway corridor begins. The client should use the bus stop categorization to help inform where investment will be needed, and to help predict bus ridership demand. In addition to the metrics used in this project to categorize bus stops along South Broadway, planners should look into current and future predicted ridership along the route to help determine the quantity of amenities needed at each individual stop.