Boulder County Mobility for All Program: Low-Income Assessment Nate Silverstein Boulder County Transportation May 11, 2017

Capstone Project submitted in partial satisfaction of the requirements for the degree of Master of Urban and Regional Planning, College of Architecture and Planning, University of Colorado Denver.



Master of Urban and Regional Planning COLLEGE OF ARCHITECTURE AND PLANNING UNIVERSITY OF COLORADO **DENVER** 



# **EXECUTIVE SUMMARY**

# **PROJECT BACKGROUND**

The Mobility for All Program, run by the Boulder County Transportation Multi-Modal Division, works to promote affordable multi-modal transportation options (transit, bike, etc.) and raise awareness that transportation is a basic social and economic need. The program provides transportation resources to vulnerable populations such as older adults, people with disabilities, and households with low-income. In 2015, the County completed the Mobility For All Needs Assessment to provide a clear and strategic vision for addressing some of the current gaps in Boulder County's transportation system. In particular, the Needs Assessment identified a need for Boulder County to continue its investment in affordable transportation programs to low-income individuals. This capstone project addresses the need to better tailor affordable transportation options to low-income communities in Boulder County in order to reduce rising transportation cost burdens and enhance economic resiliency.

In particular this project will address the following research questions:

1). What low-income areas within Boulder County are the least connected to alternative transportation options? And

2). Which areas should be prioritized first for improvement?

### CONTEXT

For most households, transportation is the second highest expense after housing. According to the Center for Neighborhood Technology (CNT) afford-ability index no more than 45% of a household's income should be spent on housing and transportation combined (2017). In Boulder County, rising housing costs have hindered the ability of many residents to meet this threshold, and the average household spends 49% (CNT, 2017) with low-income populations spending an even greater amount. Transportation costs disproportionately affect low-income households and can "account for 55 percent of the budget of an average very-low income household, compared with less than 9 percent of a high-income household's budget" (Center for Transit Oriented Development, 2014, p. 12).

This project helps the Mobility for All program address this challenge by locating the low-income areas most in need of mode diversification and the cost saving benefits that come with it. Subsequent transportation improvements to these priority areas should take into account the 3D's of transportation – density, diversity, and design – in order to encourage and create opportunities and communities that can best reap the transportation cost saving benefits, and health benefits that increased access to alternative transportation options provide.

#### **METHODS**

The method for this project can be broken down into four different phases:

1). Identify Low-Income Areas

Low-income areas were identified at two different scales: block group and housing site.

- Low-income block groups were identified as block groups with a collective median income of 30, 60, or 80 percent that of Boulder County's median income. In total there were 91 block groups within this classification
- Housing sites were identified through contacts with Boulder County Housing Authority (BCHA), Boulder Housing Partners (BHP), and Longmont Housing Authority (LHA). In total there were 108 identified subsidized housing sites from the housing authorities.

2). Locate Alternative Transportation Options Transportation options included:

- RTD Bus Routes/Stops local and regional routes
- FLEX Bus routes/Stops
- RTD Call-n-Ride services
- Bicycle Paths includes striped, buffered, and protected bike lane
- Pedestrian Paths includes multi-use paths, trails, and sidewalks
- Boulder B-Cycle stations
- eGo Car share locations

#### 3). GIS Network Analysis

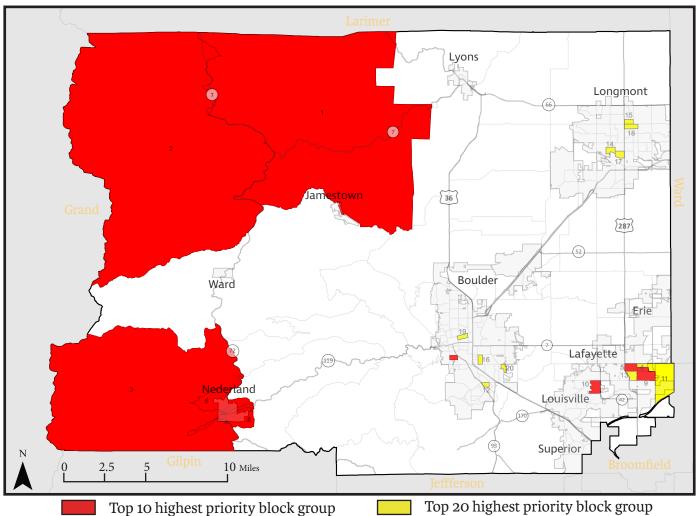
Service areas were created for subsidized housing sites to represent actual street network distances from transportation options. In addition, a closest facility analysis was conducted in order to provide a ore detailed understanding of the transportation gaps for the highest priority sites.

#### 4). Collect Results

Based on a low-income area's access to alternative transportation options, it was assigned points and ranked. From this ranking, block groups and housing sites were identified that should be first priority for transportation improvements due to lack of available options.

# FINDINGS: HIGHEST PRIORITY BLOCK GROUPS

## These areas should be targeted for transportation improvements and programming

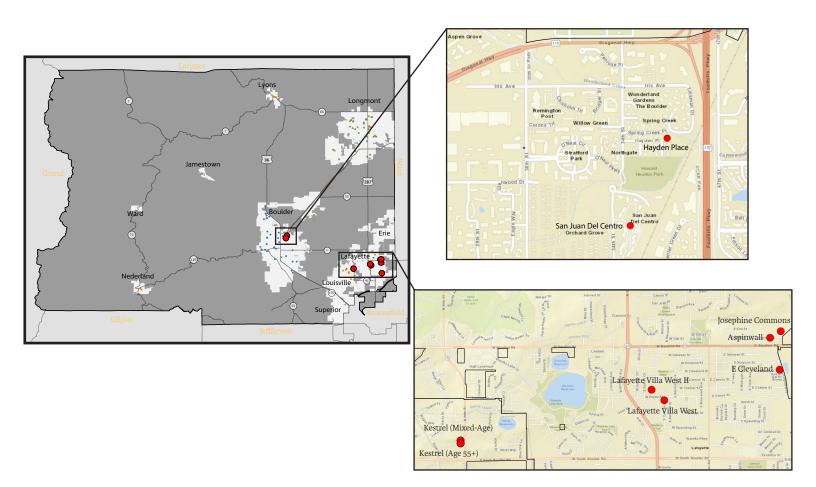


## Highest Priority Block Groups

|      |                             |       | Block |     |       |
|------|-----------------------------|-------|-------|-----|-------|
| Rank | Location                    | Tract | Group | AMI | Score |
| 1    | Unincorporated NW/Jamestown | 13602 | 1     | 80  | 6     |
| 2    | Unincorporated NW           | 13602 | 2     | 80  | 7     |
| 3    | Nederland/Unincorporated    | 13702 | 7     | 30  | 10    |
| 4    | Lafayette                   | 60800 | 4     | 60  | 12    |
| 5    | Lafayette                   | 12905 | 1     | 80  | 12    |
| 6    | Nederland/Unincorporated    | 13702 | 6     | 80  | 12.5  |
| 7    | Boulder                     | 12401 | 4     | 30  | 13    |
| 8    | Nederland/Unincorporated    | 13702 | 5     | 80  | 13    |
| 9    | Lafayette                   | 60800 | 5     | 60  | 18    |
| 10   | Louisville                  | 13005 | 1     | 80  | 19    |

# FINDINGS: HIGHEST PRIORITY SUBSIDIZED HOUSING SITES

These sites should be targeted for transportation improvements and programming



## Highest Priority Housing Sites

| Rank | Name                    | Authority | Location   | Units | Туре                       | Score |
|------|-------------------------|-----------|------------|-------|----------------------------|-------|
| 1    | Josephine Commons       | BCHA      | Lafayette  | 74    | Age 55+                    | 6     |
| 2    | Aspinwall               | BCHA      | Lafayette  | 72    | Mixed-Age                  | 7     |
| 3    | E Cleveland             | BCHA      | Lafayette  | 4     | Mixed Age                  | 9     |
| 4    | Hayden Place            | BHP       | Boulder    | 30    | Affordable Rental          | 9.5   |
| 5    | Lafayette Villa West    | BCHA      | Lafayette  | 28    | Mixed-Age                  | 10    |
| 6    | Lafayette Villa West II | BCHA      | Lafayette  | 10    | Mixed-Age                  | 11    |
| 7    | Sagrimore               | BCHA      | Lafayette  | 1     | Mixed-Age                  | 11    |
| 8    | San Juan Del Centro     | LHA       | Boulder    | 150   | Privately Owned Subsidized | 12    |
| 9    | Kestrel (Mixed-Age)     | BCHA      | Louisville | 129   | Mixed-Age                  | 13    |
| 10   | Kestrel (Age 55+)       | BCHA      | Louisville | 71    | Age 55+                    | 13    |

\*In event of a tie, the housing site with the most units was placed ahead.

## CONCLUSION

Providing transportation improvements to the identified priority areas can help reduce transportation cost burdens and improve economic resiliency for low-income populations in Boulder County.

The analysis and maps in this report reveal a need for additional outreach and study of the low-income populations living in the smaller mountainous communities of western Boulder County as well as the low-income housing sites in the southeast of the County—Lafayette & Louisville area. These areas were the least accessible to alternative modes of transportation and are recommended for priority implementation of transportation improvements and programming.