

Micro-Mobility Recommendations

Overview

Micro-Mobility refers to a range of lightweight, small vehicles that travel below fifteen miles per hour (15 MPH). For the purposes of this recommendation, the Next Generation Advisory Committee (NGAC) will focus comments on electric scooters (e-scooter). The NGAC is providing recommendations due to the approaching of an e-scooter company to the City of Littleton.

Inclusion

The NGAC recommends e-scooters be available to the greatest number of peoples possible. Considerations to affordability should be a part of discussions when cities partner with e-scooter companies. In research, the NGAC found that after start-up in a new area, prices are increased drastically over time for companies to turn a profit. Discussing pricing policy prior to partnership would allow for necessary increases in pricing, but at a controlled rate.

The city of Littleton would be remised if they did not also consider accessibility factors in determining their micro-mobility policy. Many services require internet access and debit/credit cards for payment, which can be a barrier for the un and under-banked community members and those who are digitally impoverished. Cities such as Washington D.C. have enacted policies that require the services to offer a cash payment option and that their equipment be able to be accessed without a smartphone (Distract Department of Transportation).

A city may also encourage e-scooter companies to place a greater number of scooters in specific, high need, regions in exchange for an increased fleet size.

E-scooters may also bring up questions regarding homelessness that should be addressed prior to entering partnerships. For example, the homeless population is often asked to relocate away from premises when resting, but e-scooters will be allowed to park in excess.

Attraction & Retention

The NGAC finds that micro-mobility options will allow peoples who live further from downtown to travel more efficiently into the area. Younger peoples like that they do not have to drive short distances and will rather take micro-mobility options to travel over distances deemed too far to walk, but too short to drive. Studies in Santa Monica, CA, Chicago, IL, Portland, OR, and Arlington, VA found that thirty to thirty-five percent (30%-35%) of e-scooter trips would have otherwise been taken by automobile.

Micro-mobility will allow students attending Arapahoe Community College to access the downtown corridor in a faster, more efficient manner. Which may then encourage them to seek housing within the city as well as remain after the conclusion of their studies.

Geo-Fencing

Service area limitations allow for devices to be used in geographic access zones using geo-fencing. This had been popular in large cities such as Austin and San Francisco. In addition to designating areas as permissible or prohibited, geo-fencing can allow for speed restrictions. Designated parking areas help to encourage positive public behavior by simply considering these devices have a "home." By designating a specific area for scooters or bikes, users not only know where to reliably find a device, but also can encourage the devices to be returned there. Designating parking areas will also help alleviate fleet vehicles being left in hazardous places. E-scooters can clog sidewalks

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and limit mobility of the disabled community. To identify appropriate parking areas, a study would need to be completed.

Geo-Fencing will allow the City of Littleton to designate specific no-drive zones, or specific parking zones throughout the city. Some members of NGAC recommend downtown Main Street and Alamo Street as no-drive zones due to the narrow sidewalks.

This technology can also track duration of trips, starting and ending points, and provide demographic data of the riders to the city to use.

Policy

The major policy point that will need consideration is safety, including the safety of riders, pedestrians, and other vehicle operations. The number one reason for cities banning the use of micro-mobility is due to citizen deaths. Multiple injury reports from Denver include head injuries, broken bones, scratches, and lacerations. Pedestrian and rider safety need to be paramount when considering micro-mobility policies. The NGAC recommends the consideration of helmet requirements for individuals under the age of eighteen (18). This would be required by the city and implemented by the e-scooter company. City-wide speed limits and geo-fencing have been successful in limiting rider related injuries in cities such as Washington DC and San Francisco.

Another policy consideration is equipment requirements (such as operational speed limits) and permissible areas of operation, such as prohibitions from operating devices on sidewalks, bicycle lanes, or pedestrian malls. City infrastructure will need to meet the needs of micro-mobility and should address if vehicles may operate on sidewalks or only in bike lanes or streets. This may be an opportunity to implement bike/scooter lanes along Littleton Blvd. or Main Street.

One policy consideration that helps to address many concerns is device caps. Device caps are designed to limit the number of bicycles, scooters, or other devices that can be used for micro-mobility. This can be done by limiting the number in a category or by a particular operator. This type of policy can be difficult to establish early on because it will often require a study to be conducted first to determine the appropriate number. Caps could also have unintended consequences of constraining demand or the size of service areas.

The City of Littleton can require micro-mobility companies to submit a proposal and business plan that will consider the safety of its citizens and visitors, disabled access, equitable access, community outreach, labor, sustainability, experience, and qualifications.

“Curb space management is a term used to describe a transportation design and policy approach that requires curb access to be planned, designed, operated, and maintained to enable safe, convenient, and multimodal access for all transportation users.”

The NGAC also supports council looking to research concerning the interactions between integrated motorists. I.e., scooters, bicyclists, motorists, pedestrians, etc.

Conclusion

The NGAC finds that micro-mobility will continue to make strides in cities and the shift to e-scooters is highly likely. The City of Littleton should be proactive in addressing common concerns and creating policies to address these prior to the start of any operations in the City of Littleton. Regardless of opinions on micro-mobility, it is important to have clear and decisive policies in place to ensure the needs of the community are being met.