# Transportation

Transportation refers to the form and function of transportation systems, including private vehicles, public transportation, and walking and biking infrastructure. Transportation activities made up 27% of Columbia's GHG inventory in 2015. Local, on-road transportation of passengers in privately-owned vehicles account for the majority of these emissions in Columbia.

Climate change may lead to more intense rain events and flooding, affecting road conditions in Columbia. Floods could temporarily block roadways and trails. Warmer temperatures and extreme heat may weaken pavement and require more maintenance. On the other hand, warmer winters may mean fewer instances of freezing and thawing and therefore less demand for other types of maintenance. Columbia residents who rely on walking or biking may be more exposed to extreme heat and poor air quality.

## Strategies and Actions

Expanding public transit and building bicycle and pedestrian infrastructure will help reduce GHG emissions by reducing reliance on personal vehicles for transportation. This includes funding public transit expansion and prioritizing walking and biking infrastructure. Implementing the City's Vision Zero plan will be important for success.

Building sidewalks, bike lanes, crosswalks and other infrastructure can fill-in connectivity gaps identified in City plans. Additionally, creating walkable communities through mixed-use development and infill can connect neighborhoods to schools, community centers and local businesses. This will help reduce the distance people need to travel to meet basic needs.

When people do need to travel in vehicles, Columbia can help encourage low emissions options. Within the City's own operations, Go COMO, Columbia's public transit system, uses nine electric buses. City fleets can add electric and hybrid vehicles and the City can encourage private adoption of zero-emission vehicles by increasing the number of electric charging stations in public parking areas.

All transportation strategies and actions require the City to increase advocacy for the use of multi-modal transportation in Columbia. Efforts to change the public perception of non-personal vehicle transportation is necessary to achieve success in reducing transportation emissions.

Many actions below focus on adjusting the share of different modes of transportation to reduce transportation related emissions. The following mode shares provide a path for us to meet our transportation emission reduction targets:

| | Baseline* | 2035 | 2050 |
|---|---|---|---|
| Single Occupancy Vehicle | 78% | 40% | 10% |
| Carpool | 9% | 20% | 5% |
| Transit | 1% | 17% | 40% |
| Walking | 5% | 13% | 25% |
| Biking | 1% | 10% | 20% |

*From 2012-2016 ACS values do not total to 100% due to some ineligible responses.

## M Goal T-1. Reduce travel by car.

| | | |
|---|---|---|
| **Strategy T-1.1: Prioritize safety and convenience of walking, biking and riding transit.** | | |
| T-1.1.1 | Prioritize transportation funding for Vision Zero engineering improvement projects to create safe streets for people walking, biking and riding transit. | Priority |
| T-1.1.2 | Revise street design standards to prioritize people walking, biking and riding transit while also accommodating vehicles. | Priority |
| T-1.1.3 | Prioritize transportation funding to achieve mode share goals. | Priority |
| **Strategy T-1.2: Build a thriving public transit system.** | | |
| T-1.2.1 | Improve efficiency, convenience and reliability of bus service and infrastructure (e.g., increase frequency, shorten wait times, construct bus stop shelters). | Priority |
| **Strategy T-1.3: Create a bikeable community.** | | |
| T-1.3.1 | Build and maintain a network of on-street protected bike lanes on streets with speed limits above 30 mph. Build other bike facilities (e.g., bike boulevards, etc.) on streets with lower traffic/speed. | Priority |
| T-1.3.2 | Establish a bike share program. | Other |
| **Strategy T-1.4: Create a walkable community.** | | |
| T-1.4.1 | Accelerate building sidewalks, crosswalks, and other walking infrastructure in high-need areas and fill connectivity gaps as identified in the Sidewalk Master Plan. | Priority |
| T-1.4.2 | Install universal design accessibility features at crossing locations to ensure the crossing is accessible for everyone (e.g., pedestrian traffic signals, audible signals). | Priority |
| **Strategy T-1.5: Shift land use patterns to shorten trips and reduce the need to drive.** | | |
| T-1.5.1 | Revise zoning codes to favor walkable, connected neighborhoods in the existing built environment, near schools and new development. | Priority |
| T-1.5.2 | Incentivize infill and mixed-use development (e.g., through alternative code compliance, fee waivers, density bonuses, investment prioritization, development impact fees, tax benefits). | Priority |
| T-1.5.3 | Revise zoning codes to encourage Accessory Dwelling Units (i.e., mother-in-law units). | Priority |
| T-1.5.4 | Preserve and enhance affordable housing, especially near bus service, to prevent displacement of vulnerable populations. | Priority |
| T-1.5.5 | Partner with Columbia Public Schools to adjust school siting requirements to prioritize building schools in walkable and bikeable areas. | Other |
| T-1.5.6 | Eliminate parking minimums and reduce surface parking. | Other |

## M Goal T-2. Reduce GHG emissions from vehicles.

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|---|---|---|
| **Strategy T-2.1: Encourage use of low- to zero-emission vehicles.** | | |
| T-2.1.1 | Introduce a policy to replace City fleet vehicles and buses with electric and hybrid options at the time of replacement, and require emissions standards, testing and biofuel preference for any combustion vehicles remaining in the fleet. | Priority |
| T-2.1.2 | Create an electric vehicle roadmap to increase number of electric charging stations in public parking areas (e.g., schools, parks, libraries, City-owned parking garages, near City Hall) and in commercial and high-density residential areas. | Priority |
| T-2.1.3 | Encourage installation of electric vehicle charging capacity in single family and multifamily residences (e.g., how to address residences that lack garage access). | Priority |
| T-2.1.4 | Incentivize the purchase of electric vehicles through rebates on vehicles and/or residential chargers. | Other |
| **Strategy T-2.2: Reduce use of and reliance on personal vehicles.** | | |
| T-2.2.1 | Solicit a car share program, such as Zipcar or Get Around, to provide cars in a central location. | Other |
| T-2.2.2 | Identify locations and partners to facilitate carpooling, telecommuting options, and parking buyback programs for municipal and other employers in the region. | Other |
| **Strategy T-2.3: Improve efficiency of vehicle traffic.** | | |
| T-2.3.1 | Implement street design to improve road and vehicle efficiency (e.g., roundabouts, synchronize traffic signals, road diets). | Other |