

**7**

**transportation**





## INTRODUCTION

Whether working toward developing better transportation infrastructure, new bicycle facilities, improved trails, cleaner vehicles, or better transit services, Boulder County places a high priority on a sustainable transportation system. The fundamental goals and policies in the Boulder County Comprehensive Plan call for a compact development pattern that supports a smaller transportation footprint.

In December of 2009, the Board of County Commissioners adopted an update to the Transportation Element for the Comprehensive Plan to provide new direction for transportation projects, programs, and spending. This plan recognizes the need to develop policies and practices that create a sustainable transportation system that relies on the three pillars of sustainability: environment, social equity, and economy. The Transportation Element translates these three components of sustainability into action and helps the county achieve its vision to provide high-quality, safe,

sustainable, and environmentally responsible transportation to meet the mobility and access needs of all users.

In 2012, the Boulder County Transportation Department adopted a Transportation Master Plan, which identifies strategies for specific transportation corridors and transportation demand management programs such as the EcoPass. Moving forward, Boulder County will continue to focus on projects that reduce reliance on high-carbon energy sources, while maintaining or expanding affordable and convenient mobility for county

residents, employees, and visitors.

Boulder County plans to electrify its own vehicle fleet and encourage electric vehicle (EV) adoption by its own employees, the general public transit agencies, residents, and businesses. Vehicle electrification offers one of the best opportunities to significantly reduce the greenhouse gas (GHG) emissions from transportation. Transportation electrification is also important to reducing local air pollution. Analysis by the National Center for Atmospheric Research has found that vehicles and oil and gas development are the two major sources of emissions of ozone precursors. Boulder County, as part of the North Front Range Denver Metropolitan Nonattainment Area, currently exceeds national air quality standards for ozone.

All in all, Boulder County's policies and programs support the use of multimodal transportation and fuel-efficient vehicles or EVs, in order to decrease countywide GHG emissions. The results are cleaner air, reduced traffic congestion, decreased reliance on fossil fuels, and improved public health.



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## **transportation goal**

Provide environmentally sustainable transportation choices and support healthy, active lifestyles for all Boulder County residents.



**COUNTY OPERATION STRATEGIES**

## Reduce the GHG emissions from the county fleet

- Evaluate the usage of county vehicles in order to make informed decisions about which vehicles to electrify first and the necessary infrastructure to support those vehicles.
- Actively promote the adoption of hybrid, plug-in hybrid electric vehicle (PHEV), and battery electric vehicles (BEV) for Boulder County's fleet as appropriate technology develops.
- Promote the use of renewable diesel in the near term for the county's diesel-powered vehicles and other equipment to provide a substantial reduction in carbon emissions.
- Purchase PHEVs or BEVs for any new, light-duty replacement vehicles in the general fleet, starting in 2019, with exceptions for sheriff's office vehicles.
- Develop EV charging stations for fleet PHEVs in strategic county locations.
- As the technology matures, transition to EVs for medium and heavy duty fleet vehicles.

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## Encourage employee adoption of EVs and support employees who want to commute using zero emission vehicles

- Provide EV charging stations at key work locations across the county. Explore installing EV charging stations in each county parking lot, with a goal of providing charging in 10% of parking spaces.
- Incorporate EV infrastructure in any new construction and/or major remodels of county-owned buildings to ensure employee EV charging stations are integrated into county planning and buildings.
- Offer employees ways to participate in EV pooled purchase discounts.

**COUNTY OPERATION STRATEGIES**

## Ensure all Boulder County employees have access to multimodal means of commute travel, to reduce single-occupancy vehicle (SOV) commute trips, and explore creative ways to incentivize employees to reduce the carbon footprint of their commutes

- Continue to offer transportation incentives to all employees, such as Regional Transportation District (RTD) EcoPasses, Vanpool subsidies, B-Cycle membership, Bike to Work Day incentives, secure bike parking, e-bike charging stations, and employee showers within each building.
- Create new programs to mitigate vehicle miles traveled (VMT) such as parking cash-out programs, car-share opportunities, commute challenges with prizes, restricted employee parking, paid parking, and increased access to pool vehicles.
- Develop multimodal means of transportation for employees traveling while at work to reduce the use of fleet vehicles.

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## Develop a complete understanding of the environmental and economic impacts of Boulder County employee commuting behaviors

- Estimate current energy use, GHG emissions, and the cost impact of employee daily commutes and communicate this information to Boulder County employees, to encourage use of carbon-free commutes.



### COMMUNITY STRATEGIES

## Incorporate smart growth principles into land-use decisions, such as transit-oriented development, convenient access to transportation options, and walkable communities

- Encourage Boulder County communities to locate and design new development in a manner that helps achieve regional sustainability goals. A key element is encouraging communities to add housing to allow in-commuters the ability to live in the communities where they work.
- Create building and Land-Use Codes that encourage the installation of EV charging stations.
- Locate county buildings and Boulder County Housing Authority (BCHA) housing facilities in areas that have convenient access to services and the multimodal transportation system, including regional transit.
- Continue to work with Denver Regional Council of Governments (DRCOG) to ensure the continuation of growth management strategies in the growing Denver Metro Region, such as urban growth boundaries and areas, to minimize sprawl.



**COMMUNITY STRATEGIES**

## Support the public adoption of EVs and assist in the installation of public charging stations

- Coordinate with the major cities across the county to set countywide goals for EV adoption.
- Promote the local public health benefits of EVs.
- Strengthen public outreach efforts to residential and commercial customers through Partners for a Clean Environment (PACE) and EnergySmart around EVs and charging.
- Partner with the chambers of commerce to encourage businesses to install charging stations at workplaces and to provide support for commercial entities interested in providing charging stations for their employees.
- Help businesses, nonprofits, other organizations, and individuals apply for Charge Ahead funds, which support EV charging stations, from the Regional Air Quality Council.
- Pursue opportunities for pooled purchasing programs for EVs and electric bikes.
- Coordinate efforts to approach local dealerships and vehicle manufacturers to advocate for more EV models to be made available at vehicle dealerships in the county.
- Review utilization and other data from the publicly available charging stations owned by Boulder County and EV registrations, to inform decisions about additional infrastructure locations or upgrades to current infrastructure.
- Urge RTD and Via to electrify transit routes in the county and region as soon as possible. Pursue partnerships with RTD, Via, the University of Colorado, utilities, municipalities, and the private sector to achieve complete transit electrification over a 12-year bus replacement cycle.
- Encourage utilities operating in Boulder County to develop transportation electrification plans that support widespread transportation electrification of both light duty and heavy duty vehicles.
- Explore the option to use “feebates” to incentivize the purchase of high-efficiency vehicles.
- Encourage electrification goals among Transportation Network Company vehicles (such as Uber and Lyft), carshare vehicles, taxis, and autonomous vehicles operating in Boulder County. Partner with utilities, municipalities, and the private sector to develop appropriate charging hubs.





COMMUNITY STRATEGIES

## Increase modal choice and decrease the SOV share of local and regional trips

- Continue to develop Boulder County's multimodal transportation system, including developing transit infrastructure, increasing transit service frequencies and geographic span of service, and expanding vehicle-sharing opportunities and travel demand management programs.
- Develop Boulder County's on- and off-street bike and pedestrian infrastructure and facilities with a focus on user safety and comfort.
- Establish partnerships and develop joint projects with Boulder County Public Health and other agencies to promote active transportation and improve public health outcomes through transportation improvements and services.
- Update transportation policies, plans, and standards to incorporate new travel systems and technologies into the design of transportation infrastructure to ensure low-carbon travel.
- Continue to offer transportation advising to the business sector to increase modal choice and decrease SOV use through Boulder County's PACE service.
- Work with Boulder County communities to establish multimodal connections to regional transit.
- Explore road usage fees.

**COMMUNITY STRATEGIES**

## Support EV adoption and charging station access for low-income and multifamily residences

- Provide incentives for charging stations at charging hubs located near areas with high concentrations of low-income/multifamily residents.
- Support EV DC fast charging throughout strategic locations in Boulder County.
- Develop an understanding of the current availability of charging in the multifamily and low-income housing sectors.
- Develop a pilot program that pairs access to charging at low-income and multifamily properties with a program to encourage purchase of new and used EVs.
- Work with city governments to adopt EV Ready building codes so that new or remodeled multifamily buildings are set up for easy and inexpensive charging station installation.
- Partner with utilities, including Xcel and Longmont Power and Communications, to develop pilot programs for utility owned and operated chargers in multifamily housing and electric carsharing in low-income neighborhoods.
- Consider providing rebates toward the purchase of new and used EVs by low-income residents.



COMMUNITY STRATEGIES

## Increase multimodal transportation options and incentives with schools to reduce GHG emissions

- Create, develop, and support policies, plans, and programs that reduce single-family vehicle trips to and from schools.
- Work with school districts to ensure that school property renovations support walking, biking, carpooling, and busing to schools.
- Continue to develop county transportation infrastructure that supports walking, biking, and busing to schools.
- Work with school districts to ensure new schools are constructed in areas already well served by the multimodal transportation network.
- Encourage school districts to replace fossil-fuel-powered school buses with electric buses.



**COMMUNITY STRATEGIES****Reduce barriers to using the transportation system and expand transportation programs and services that serve the needs of all members of our community, including low-income individuals and families, youth, seniors, and people with disabilities**

- Continue active partnerships with U.S. 36 Mayors and Commissioners Coalition, Commuting Solutions, CDOT, RTD, and other local partners to implement bus rapid transit and other multimodal improvements on State Highways (SH) 119, SH 7, SH 287, and other key corridors to complete high-performance, efficient, low-carbon, and convenient transportation options to all major destination communities.
- Continue to establish partnerships among Community Services, Boulder County Public Health, Housing & Human Services, and other agencies to coordinate programs to address transportation needs, as identified in agency programs and plans.
- Expand ways to fund and implement transit options for those who live, work, and recreate in Boulder County.

**SEE THE AIR QUALITY (PAGE 16) AND CLIMATE (PAGE 32) CHAPTERS FOR ADDITIONAL EMISSIONS REDUCTIONS STRATEGIES AND VEHICLE EFFICIENCY STRATEGIES.**



## Trip Tracker

Trip Tracker is a program that rewards staff and students (with help from their parents) for making green trips to and from school instead of traveling only by car. When participants walk, bike, bus, or carpool, they can earn Tracker Bucks to spend at participating locally owned businesses. Boulder County implements the program within the St. Vrain Valley School District (SVVSD) and Boulder Valley School District (BVSD) implements Trip Tracker in Boulder Valley Schools.

During the 2016-2017 school year, SVVSD Trip Tracker's actions resulted in:

99,824

Total "Green" Trips to Schools

70%

of those Green Trips were Active Modes (walk, bike, skate, etc.)





### LOCAL PUBLIC TRANSIT

Boulder County has created and increased many of our current transit options, including

- Ride Free Longmont
- L Route connecting Longmont to Denver
- FLEX Route connecting Ft. Collins to Longmont and Boulder
- JUMP Route extension connecting Boulder and Lafayette to Erie
- CLIMB bus connection to Gold Hill
- Hessie Trailhead Shuttle
- Implementation of the U.S. 36 BRT and bikeway
- Implementation of the Bike-n-Ride system

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**EcoPass holders are seven times more likely to take public transit.**



### MOBILITY FOR ALL

Mobility for All has helped hundreds of low-income persons maintain access to employment, education, and medical services as a result of multimodal transportation assistance. Boulder County also helped form a Local Coordinating Council with participation from more than a dozen local, nonprofit human service agencies, several transportation providers, and community advocates. Mobility for All is a county initiative designed to help meet the needs of transportation-disadvantaged persons, including

- low-income individuals and families
- seniors
- people who do not drive or have access to a personal motor vehicle
- people with disabilities

Mobility for All provides

- subsidized transit for low-income persons in select county case-managed programs
- EcoPasses to two Boulder County Housing Authority sites
- improved transportation service coordination with human service agencies and transportation providers
- improved ability to serve more people with existing resources
- support for regional efforts to increase access to transportation services for low-income households, people with disabilities, and seniors

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**Boulder County is raising awareness that transportation is a basic social and economic need.**



## Mobility for All



Human-centered mobility and access strategies



300 B-Cycle annual memberships for low-income Individuals



Free RTD EcoPasses for 227 housing authority households



\$15,350 in RTD MyRide cards in partnership with financial counseling



Free Lyft rides for 182 housing authority residents in Lafayette

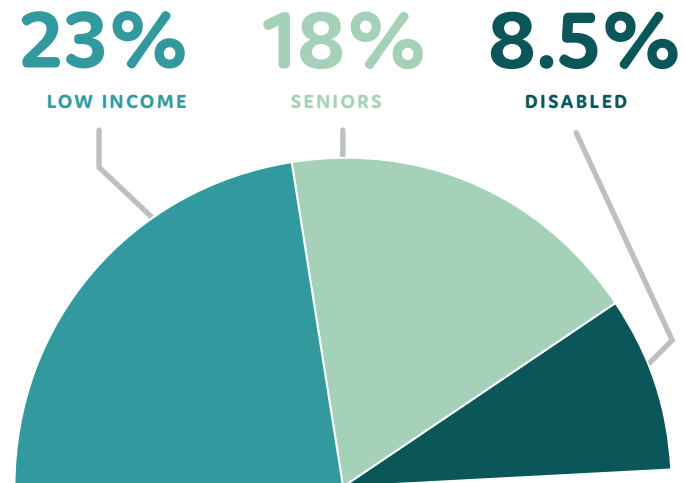
## True Cost of Owning a Vehicle

EXPENSES	COST PER MONTH*
Fuel	\$120-\$135
Maintenance	\$40-\$110
Repairs	\$30-\$55
Taxes and Fees	\$10-\$60
Insurance	\$140-\$160
Parking	\$10-\$100
Depreciation	\$50-\$80
<b>Total Per Month</b>	<b>\$400-700</b>
<b>RTD Unlimited Regional Pass</b>	<b>\$171**</b>

\* Based on Edmunds.com True Cost to Own tool

\*\* Full fare price. Assistance programs may offer free or up to 50% off passes.

## People We Serve







## Electric Vehicle Leadership in Colorado

Colorado has a unique opportunity to lead on reducing transportation emissions, making significant air quality impacts, and helping pave the way for other states to set more ambitious climate and electrification goals. Colorado counties and cities are leading the way by setting bold targets and policies for adoption of EVs. Expanding transportation electrification in local communities can increase the benefit of this new technology for residents, reduce GHG emissions, save the city and residents money, and help lead the way for greater EV adoption nationwide.

Colorado has taken many steps toward advancing transportation electrification in the last few years. We have a \$5,000 state EV tax credit, paired with a federal tax credit and a growing network of EV charging infrastructure, making Colorado one of the best places in the nation to buy an EV. The state of Colorado also recently released “Colorado’s Electric Vehicle

Plan,” which sets the goal of nearly a million EVs on the road by 2030. Achieving this goal is key to meeting state targets for carbon pollution and improving our air quality.

Colorado is also receiving a \$70 million settlement from the Volkswagen emissions scandal and plans to invest much of it in EVs, including charging infrastructure and support for electric buses and trucks. Colorado is part of the Regional Electric Vehicle Plan for the West, an agreement among seven states to build fast charging stations along 7,000 miles of highway corridors to support seamless regionwide travel. These are all good starts, but it will take local leadership to ensure that infrastructure and technology are expanded throughout the state. This is the moment for local governments to step out front and secure the benefits of transportation electrification for their communities and the state.





## POLICY PRIORITIES

The following are environmental sustainability policy priorities adopted through Boulder County's legislative agenda:

## POLICY

## WHAT YOU NEED TO KNOW

**Support the development of sustainable, multimodal transportation systems and alternative modes of transportation**

Boulder County understands that investment in a regional transportation system reduces reliance on fossil fuels. Thus the county supports transportation planning and funding with a strong multimodal focus. Goals include timely completion of a transit system that connects the entire Denver metropolitan region (such

as FasTracks, approved by voters in 2004), development of multimodal infrastructure through safe bikeways and walkways, managed HOV/transit lanes, transportation demand management, and other transit services and alternative modes programs that provide people with modal choice.

**Link land-use, housing, and transportation planning and investment**

Consistency between land-use planning and transportation investment will result in decreases in GHG emissions, fossil fuel consumption, and transportation

infrastructure costs, while optimizing the use of existing infrastructure and amenities that require land-use planning and transportation investment.

**Support adoption of Advanced Clean Car emission standards**

The federal Clean Air Act gives California the authority to adopt its own emission standards for new motor vehicles, if they are at least as stringent as federal standards, and for other states to

adopt the advanced standards. Boulder County supports Colorado adopting the advanced vehicle standards, including those for zero-emission vehicles.



### POLICY

### WHAT YOU NEED TO KNOW

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#### **Support increased funding for transit, bike, and pedestrian infrastructure**

Boulder County supports an increase in new and innovative funding for transportation improvements in Colorado. Specifically, Boulder County supports funds committed to multimodal and alternative modes of transportation. Priorities for new funding should include completion of high-caliber Bus Rapid Transit on SH 119, completion of FasTracks and build-out of transit improvements in the Northwest Corridor, and local and regional multimodal and alternative modes infrastructure, including final-mile connections. Boulder County believes that any new road-capacity

funding should be invested in managed lanes that place prioritization on maximizing the travel of people (not just vehicles). The county also believes that managed lane projects must provide equitable travel choices in order to ensure that lower-income residents benefit from the public investment in a toll road. Boulder County supports funding sources that are tied to transportation use, including approaches based on vehicle miles traveled and distribution of federal and state transportation funds through regional planning organizations.



## POLICY

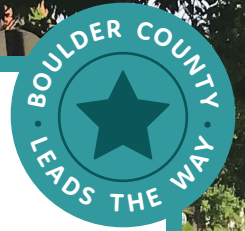
## WHAT YOU NEED TO KNOW

**Promote the purchase and use of zero-emission vehicles and investment in related technology and infrastructure**

Expanding the use of electric and fuel-efficient vehicles and the necessary infrastructure to support them will play an important role in achieving GHG emissions reductions from the transportation sector, advancing Colorado's statewide carbon reduction goals, and reducing dependence on foreign oil. Policy approaches that support the use of electric and fuel-efficient vehicles include investing in

electric and plug-in hybrid EV charging infrastructure, supporting "feebate" and other incentives for the purchase of electric and highly fuel-efficient vehicles, and promoting vehicle-to-grid technology, which enables electric and hybrid-electric vehicles to "plug" into the electric grid and provide power during the many hours that those vehicles sit idle.





## Benefits Boulder County helps bring EVs to Boulder

In August 2015, Boulder County, along with regional partners, ran the first-ever “bulk purchase program” for EVs. This program, now known as Benefits Boulder County, negotiated with the EV industry to give Boulder County residents and commuters huge discounts on select EVs in exchange for spreading the word about the deal. Two hundred forty-eight discounted EVs were sold during the initial program, and since then, a total of 392 EVs and 250 electric bikes have been sold to Colorado residents through this seasonal program. These technologies are enabling Boulder County residents in all communities to reduce their transportation costs while reducing GHG emissions. Benefits Boulder County has become a model used by grassroots organizations, local governments, utilities, and institutions across the country, due to its successes in increasing both education and adoption of emission-reducing technologies.

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**For decades, I used a bicycle to commute [between] my home [in] Fourmile Canyon [and Boulder]. It helped me maintain fitness and flexibility, and feel more connected with the natural world around me. When I turned 45, I decided to help my commute by getting an e-bike. I am 60 now, and it has helped me continue riding, since my strength is not what it used to be. In 2017, I moved to Boulder, [but] my e-bike still helps with longer rides and errands with heavier purchases.**

—Evan, Boulder resident

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Zero Emission



EV ONLY  
ChargePoint

LEAF

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TAKE ACTION

## Call to Action

To reach these goals, we need collective community action to reduce community-wide reliance on fossil fuels and to improve our air quality.

- ❑ If you drive to work, consider biking or taking the bus one day per week. The RTD<sup>21</sup> has a helpful trip planner. Small steps can lead to big strides!
- ❑ Invite friends and colleagues to split commute costs and reduce your carbon footprint by vanpooling and carpooling. WayToGo,<sup>22</sup> VanGo,<sup>23</sup> and Commuting Solutions<sup>24</sup> help commuters identify sustainable commute options.
- ❑ Move from a two-car household to a one-car household and save between \$4,800 and \$8,300 annually. Joining a carshare, such as eGo Carshare or zipcar, or on-demand transportation, such as Lyft or Uber, can help with this transition.
- ❑ If you have to purchase a vehicle, consider an EV. Go fossil fuel free at home and power your vehicle with rooftop solar photovoltaic, or purchase a subscription to a community solar garden.
- ❑ Consider using a remote conferencing service for a work-related trip to reduce your contribution to carbon emissions associated with air travel.
- ❑ Next time you move homes, consider a location that allows you to walk or bike to work and for errands. You can walk to work with fresh air and no congestion!



## RESOURCES

## More Information

**21 RTD**

[rtd-denver.com](http://rtd-denver.com)

**22 WayToGo**

[waytogo.org/getting-around/vanpool](http://waytogo.org/getting-around/vanpool)

**23 VanGo**

[vangovanpools.org/rp2/Home/Home](http://vangovanpools.org/rp2/Home/Home)

**24 Commuting Solutions**

[commutingsolutions.org](http://commutingsolutions.org)

**Boulder County  
Comprehensive Plan**

[bouldercounty.org/property-and-land-land-use/planning/boulder-county-comprehensive-plan](http://bouldercounty.org/property-and-land-land-use/planning/boulder-county-comprehensive-plan)

**Transportation  
Master Plan**

[bouldercounty.org/transportation/plans-and-projects/transportation-master-plan](http://bouldercounty.org/transportation/plans-and-projects/transportation-master-plan)

**Colorado Electric  
Vehicle Plan**

[colorado.gov/governor/sites/default/files/colorado\\_electric\\_vehicle\\_plan\\_-\\_january\\_2018.pdf](http://colorado.gov/governor/sites/default/files/colorado_electric_vehicle_plan_-_january_2018.pdf)

**Mobility for All**

[bouldercounty.org/transportation/multi-modal/transportation-assistance](http://bouldercounty.org/transportation/multi-modal/transportation-assistance)

**Resource for Businesses**

[PACEpartners.com](http://PACEpartners.com)