

To: Columbia City Council

From: Columbia Climate and Environment Commission (CEC)

Date: December 20, 2021

Subject: CEC input report on alignment of CAAP and CATSO Long Range Transportation Plan (LRTP)

As requested in a motion at the September 7, 2021 City Council meeting, the CEC has evaluated the CATSO Long Range Transportation Plan (LRTP) and the Climate Action and Adaptation Plan (CAAP) for greater opportunities for alignment between the two plans. Following the council request, the CEC met with the Brad Kelly and Tim Teddy of the planning department to discuss the current CATSO LRTP. The transportation working sub-team of the CEC prepared recommendations for the CEC to consider and these were discussed and modified at both the October and November commission meetings. The CEC approved the attached input report for council on November 30, 2021.

The recommendations focus on the following areas and offer both short term and long term changes to increase the alignment between the two plans.

1. Identification of alignment and misalignment of goals and projects
2. Implementing key performance metrics
3. Developing and implementing a project scoring tool to drive ongoing alignment of projects with a draft version of the tool provided
4. Greater engagement with the public for input and changes to reports for easier public consumption
5. Including climate change adaptation requirements in planning
6. Developing a long range transit master plan

Sincerely,

Carolyn Amparan

Chair

Climate and Environment Commission

City of Columbia Climate & Environment Commission Statement on CATSO 2050 Long-Range Transportation Plan

Coordination Across Jurisdictions

The CATSO 2050 Long-Range Transportation Plan (LRTP) is a multi-jurisdictional transportation planning document, applying to the City of Columbia, Boone County, and MoDOT.

The LRTP calls for improved coordination between these partners on transportation planning and land use (Goal 4). It specifically identifies the need for the partners to collaboratively address the “multimodal system” (walking, biking, and transit, in addition to driving) and safety in all transportation projects (Objective 4.3), and to capitalize on common goals among the partners (Objective 4.4).

Alignment of Goals

The City of Columbia adopted the Climate Action & Adaptation Plan (CAAP) in 2019. The CAAP transportation sector goals and strategies are highly aligned with the LRTP goals and objectives.

The CAAP transportation sector goals focus on shifting trips away from personal vehicles and towards walking, biking, and transit, and limiting emissions when vehicles are used. The CAAP also specifies the mode share shift necessary in order to reach the CAAP greenhouse gas emission reduction goals.

CAAP Mode Share Goals

2015 Baseline	2050 Goals
<ul style="list-style-type: none">● 1% transit● 5% walking● 1% biking● 87% personal vehicles	<ul style="list-style-type: none">● 40% transit● 25% walking● 20% biking● 15% personal vehicles

40x increase in transit
5x increase in walking
20x increase in biking
83% reduction in personal vehicles

The LRTP goals similarly emphasize reducing reliance on personal vehicle travel and reducing emissions.

Alignment of CAAP Goals and Strategies with LRTP Goals and Objectives

CAAP Transportation Sector	CATSO LRTP
Goal 1. Reduce travel by car.	Goal 2. The MPA transportation system will integrate and connect all travel modes.
<p>1.3 Create a bikeable community.</p> <p>1.4 Create a walkable community.</p>	<p>2.1 Encourage convenient intermodal transfers to maximize travel efficiency.</p> <p>2.2 Encourage the use of the most efficient mode based upon the distance and characteristic of a particular trip.</p> <p>2.3 Reduce reliance on automobile travel and better serve those who do not or cannot own and drive an automobile.</p> <p>2.4 Improve and expand infrastructure for pedestrians, bicyclists, and people with disabilities</p> <p>4.3 All planning partners will address multimodal system and safety needs in all planning, design, and construction of transportation improvements.</p>
1.1 Prioritize safety and convenience of walking, biking and riding transit.	<p>7.2 Reduce injuries, fatalities, and property damage for all modes of transportation with the Vision Zero plan as the model.</p> <p>7.3 Minimize security risks on roadways and bikeways, and on public transportation facilities throughout the Metro planning area.</p>
1.2 Build a thriving public transit system.	Goal 3. The public transportation system will be a viable transportation option throughout the MPA.
	<p>3.1 Promote a mobility management public transportation system whereby all providers of public transportation work together to maximize efficiency and resources.</p> <p>3.1 Support and promote the public transportation (bus) system.</p> <p>3.3 Expand and redesign the existing transit system to meet ridership needs.</p>

<p>1.5 Shift land use patterns to shorten trips and reduce the need to drive.</p>	<p>Goal 4. Long-range land use and transportation planning will be coordinated on a regional and local basis. Goal 5. Encourage compact and infill development and redevelopment in under-invested areas. Goal 6. Integrate land use planning with infrastructure development.</p>
	<p>4.1 Establish policies and programs to reduce motor vehicle travel demand. 5.1 Focus on improvements for all modes in areas of desired future growth and development that supports the public's vision for the MPA. 6.2 Land use planning will utilize the Pedestrian & Bicycle Network Plan to create a bikeway/sidewalk/greenbelt trail network that provides an alternative and complementary means of transportation to the overall street system. 6.3 Ensure that future development and related transportation improvements address transportation safety needs in planning and design. 6.4 Increase the geographic area in which people have convenient access to non-automobile forms of transportation.</p>
<p>Goal 2. Reduce greenhouse gas emissions from vehicles.</p>	<p>Goal 8. Reduce motor vehicle pollution/emissions by allowing opportunities for alternatives to internal combustion engine motor vehicle usage, both vehicular and non-motorized.</p>
<p>2.1 Encourage use of low- to zero-emission vehicles.</p>	<p>8.1 Provide for use of low to zero emission (electric/hybrid) vehicles.</p>
<p>2.2 Reduce use of and reliance on personal vehicles.</p>	<p>4.1 Develop a long-range plan for the establishment of commuter transportation systems serving the MPA. 8.2 Provide for non-motorized travel and commuting opportunities.</p>
<p>2.3 Improve efficiency of vehicle traffic.</p>	<p>1.1 Design streets and highways safe and efficient to move vehicular traffic and accommodate transit, pedestrians, and bicyclists with minimal environmental impacts.</p>

	5.3 Develop and modify the transportation system so that it respects and enhances the natural and built environment.
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Misalignment of Goals and Projects

While the goals of the CAAP and LRTP are highly aligned, there is strong misalignment between these goals and the LRTP project list.

Bicycle and pedestrian facilities account for only 5% of the LRTP recommended projects, and transit accounts for 21%.

The LRTP project list is inconsistent with the LRTP goals and the CAAP goals, as well as the goals of many other plans in the CATSO region (e.g., Columbia Imagined, Strategic Plan, Vision Zero, Columbia/Boone County Community Health Improvement Plan).

The infrastructure allocations in the LRTP project list are insufficient to meet the LRTP goals of reducing reliance on automobile travel, and insufficient to meet the CAAP transportation sector goals, mode share goals, and overall emission reduction goals.

LRTP Performance Measures

The LRTP includes suggested performance measures for each of its goals, but it does not establish a baseline or target quantity for any performance measure.

Further, to our knowledge, few, if any, of the performance measures included are actually measured. This means that the LRTP goals, objectives, and performance measures are effectively meaningless and there is no accountability process to ensure the LRTP project list meets the LRTP goals.

CAAP, LRTP, and Transportation Equity

The CAAP goals, strategies, and actions were developed with equity as a primary assessment criterion. Transportation has an outsized impact on equity, as transportation options determine community members' 1) access to jobs, education, healthcare, grocery stores, etc., 2) risk exposure from traffic crashes, and 3) ability to participate in community engagement opportunities and democracy. In stark contrast to the CAAP's focus on equity, the LRTP does not address equity at all. Instead, the LRTP recommends investing primarily in high-speed roads, which largely serve wealthier community members in positions of privilege, at the expense of populations whom the current auto-centric transportation system places at high risk (i.e., low-income families, people of color, children, older adults, people with disabilities).

The LRTP does not address climate change adaptation.

The LRTP does not appear to take climate change into account, and instead proceeds with business as usual. Climate change will influence the types of transportation projects community members need, as well as the materials used in project construction. Missouri is expected to experience more heavy rainfall events as well as increased and sustained summer temperatures. Heavy rain events will increase the risk of flooding and may result in blocked streets, sidewalks, and trails. Streets, sidewalks,

and trails will be more likely to buckle under extreme temperatures, and asphalt roads may soften and become oily.

Warmer temperatures may also have negative health impacts on people who walk, bike, or ride transit, influencing demand for transportation options. Columbia residents who do not have a personal vehicle, who are unable to drive, or choose not to drive may be more exposed to extreme heat and poor air quality from smog or airborne allergens. People with respiratory or cardiac conditions, older adults, pregnant women, and children may be especially sensitive to these conditions. Weather conditions may make it more difficult for residents to get around and may increase the need for reliable public transportation, including fixed bus routes and paratransit. During severe rain events, especially when transportation infrastructure is damaged or service is interrupted, people with limited mobility, including older adults and people with disabilities, may need additional paratransit services to get to places of shelter and address basic needs. The sparse nature of the current transit system could be a significant liability during such events. Many neighborhoods currently have no sidewalks or access to transit, possibly inhibiting mobility and raising potential safety concerns during flooding events.

The LRTP is very difficult to read or understand.

The LRTP is a long, opaque document that is largely inaccessible to the general public. Few community members have the time, ability, or endurance to sift through 138 pages of engineering and planning terminology. And even those that do will find no maps of recommended projects, details on the purpose of projects, their cost/benefit analysis, why they are included in the plan, or how they will help the community achieve its goals. The layout of the current plan makes it difficult for the general population to understand, and further limits the involvement of underrepresented groups.

CEC Recommendations

Short-term

The CEC recommends that Columbia City Council request that CATSO develop a Major Amendment to the 2050 Long-Range Transportation Plan that includes:

1. Public input on transportation needs.
 - Prioritize groups traditionally underrepresented in transportation planning (e.g., people of color, low-income families, people with disabilities, people who rely on walking, biking, and transit)
 - Draw on public input gathered in the development of existing community plans (e.g., CAAP, Vision Zero, Community Health Improvement Plan)
2. Mode share goals consistent with those adopted in the Climate Action & Adaptation Plan.
3. Development and use of a project scoring tool to assess and prioritize projects.
 - The CEC has developed a first draft Transportation Infrastructure Scorecard tool to assist with this recommendation. This tool is still in an early draft stage and will benefit from additional input from topic experts (e.g., accessibility, air pollution, etc.), but will provide a starting point for testing, adjustment, and use.
 - A scoring tool such as the Transportation Infrastructure Scorecard will allow CATSO to assess and prioritize transportation projects to align with LRTP and CAAP goals, such as:
 - Emissions and air pollution
 - Safety (Vision Zero)
 - Equity
 - Project type
4. Project list based on project scores that prioritizes walking, biking, and transit infrastructure, and will:
 - Achieve the mode share goals
 - Align with the goals of the LRTP
 - Align with the goals of the CAAP
 - Align with the goals of other CATSO-region community plans
5. Implementation accountability strategy.
 - Determine what relevant performance metrics are already tracked among the planning partners (e.g., VMT, mode share, etc.)
 - Determine what additional performance metrics are possible to be tracked
 - Assemble a subset list of performance metrics that can be measured and reported on during the 2050 LRTP implementation period, **prioritizing**:
 - Vehicle miles traveled
 - Mode share
 - Transit ridership
 - Set a baseline for each **selected** performance metric
 - Set a target quantity for each **selected** performance metric
 - Determine the lead department responsible for measuring each performance metric

- Establish a reporting schedule (annually at minimum) and lead department responsible
- Report on progress towards the LRTP goals to the decision-making body of each planning partner (e.g., Columbia City Council, Boone County Commission, MoDOT Central Region)

The CEC recommends that Columbia City Council:

1. Direct the City of Columbia CATSO representative to not approve projects that would work against City goals and plans, including the CAAP.
2. Not approve funding and construction of transportation projects that would work against City goals and plans, including the CAAP.
 - Exceptions to this recommendation may be made if a project was part of a voter-approved ballot measure, such as the CIP.

Long-term

In addition to these short-term recommendations, the CEC recommends that Columbia City Council request that, in the next revision of the Long-Range Transportation Plan, CATSO create a new and fundamentally different LRTP that includes:

1. Extensive public engagement process that emphasizes input from groups traditionally underrepresented in transportation planning (e.g., people of color, low-income families, people with disabilities, people who rely on walking, biking, and transit).
 - This process should meet the LRTP goals of supporting “an open, inclusive and participatory transportation planning process” (Objective 1-3), “identify and address the needs of minority and low-income populations” (Objective 1-4), and “focus on improvements... that support the public’s vision” (Objective 5-1).
 - We recommend that CATSO partner with the CEC Communications Working Group on outreach, and Local Motion to assist with designing an anti-racist community engagement process.
2. Long-range transit master plan.
3. Climate change adaptation planning, including anticipating changing travel modes and the need for adjustments to street design, materials, and maintenance.
 - Plan for future weather events based on scientifically validated climate model forecasts of expected high temperatures and heavier precipitation events for Columbia
 - Potential for increased demand for transit due to weather impacts
 - Address stormwater drainage, erosion control, and maintenance in response to weather events
 - Shifting to using permeable materials, heat-resistant materials, and cool pavements
4. Design and layout that is easy to read and understandable for the general public.
 - Missoula, Montana has an excellent, comparable plan.