Community-wide Eco Pass Feasibility Study – Frequently Asked Questions

What was the purpose of Feasibility Study?

A Community-wide EcoPass Feasibility Study was conducted for Boulder County and the City of Boulder in coordination with the Regional Transportation District (RTD). The main purpose of this study was to:

- Formulate strategic objectives for a community-wide EcoPass;
- Develop demographic and geographic implementation scenarios;
- Estimate induced demand and program costs under each scenario;
- Analyze program benefits; and
- Address implementation opportunities and challenges.

What was the scope of Feasibility Study?

Three scenarios and two geographic areas were included in the study to examine various ways a community-wide Eco Pass could be designed:

- Scenarios include:
  - All residents, employees, university students;
  - Residents only; and
  - Employees only
- Each scenario was studied in two geographic contexts:
  - City of Boulder only; and
  - All of Boulder County (including the City of Boulder).

Why did the City and the County conduct this study?

The city and the county jointly conducted this study to examine the induced demand and program costs of increasing access to the Eco Pass, which is proven to be one of the most effective tools to encourage residents, employees and students to use transit. A county- or city-wide Eco Pass program would assist in meeting transportation and sustainability goals of reducing single-occupant vehicle trips, increasing transit mode share and improving air quality. Two community-wide programs already exist within Boulder County in Lyons and Nederland.
What were the key findings of the Feasibility Study?

**Transit ridership:**

Based on the study, it is estimated that transit ridership (for all scenarios) would increase significantly with the implementation of a community-wide pass. For Boulder County, the transit ridership increase would range from 26 percent for the employee only scenario to 62 percent for a program that provides an Eco Pass to all resident, employees and students. For the City of Boulder, which already has high transit use, the range of transit ridership increases is from 21 percent for the employee only scenario to 38 percent for a program that provides Eco Pass to all residents, employees and students.

Induced transit ridership from a community-wide EcoPass in Boulder County was estimated based on national and international research on fare elasticity, using examples of transit systems that have converted from cash-fare to fare-free systems.

### Estimated increase in Transit Ridership Based on Induced Demand

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Boulder County</th>
<th>City of Boulder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1 (All)</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Scenario 2 (Residents only)</td>
<td>57%</td>
<td>27%</td>
</tr>
<tr>
<td>Scenario 3 (Employees only)</td>
<td>26%</td>
<td>21%</td>
</tr>
</tbody>
</table>

**Program Cost:**

The cost to implement the various community-wide Eco Pass scenarios for Boulder County ranges from $7 million for the first year for an employee only program to $21.5 million for the first year for a program that covers all residents, employees and students. For the City of Boulder, the scenario costs for the first year of the program ranges from $5.8 million for employees only to $15 million to provide Eco Passes to all community members.

Under the current business, college and neighborhood Eco Pass program, RTD receives approximately $8.5 million per year from participants in the city and county. The majority of the total Eco Pass contracts are paid by the University of Colorado through its student and faculty/staff Eco Pass programs.

For the feasibility study, scenario program costs were estimated by adding the cost of replacing existing revenue (generated by each scenario group) with the fully allocated cost of providing additional transit service in order to prevent overcrowding from induced demand. Fully allocated costs include operations, maintenance, capital and administrative costs that would be needed as part of any transit service increase. This cost methodology would protect RTD from unfunded service cost increases during the first year of implementation.
<table>
<thead>
<tr>
<th>Scenario</th>
<th>2011 RTD Revenue</th>
<th>Induced Demand Cost</th>
<th>Estimated Total Program Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulder County</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 1 (All)</td>
<td>$18,217,059</td>
<td>$3,265,178</td>
<td>$21,482,237</td>
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<tr>
<td>Scenario 2 (Residents)</td>
<td>$15,131,422</td>
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<td>$17,656,551</td>
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<tr>
<td>Scenarios 3 (Employees)</td>
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<tr>
<td>City of Boulder</td>
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<tr>
<td>Scenario 1 (All)</td>
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<td>$956,246</td>
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<tr>
<td>Scenario 2 (Residents)</td>
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<td>$9,175,055</td>
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<tr>
<td>Scenarios 3 (Employees)</td>
<td>$5,388,194</td>
<td>$476,758</td>
<td>$5,864,952</td>
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**Program Benefits:**

A core benefit of implementing a community-wide EcoPass would be an increase in transit ridership. Depending on the scenario, a county-wide program would result in an annual ridership increase of between 2.2 million (26 percent increase) and 5.2 million (62 percent increase). For comparison, in 2011 annual transit ridership on all Boulder County bus routes was 8.45 million.

The increase in transit ridership would mean fewer trips by automobile in Boulder County. Depending on the scenario, this would equate to a reduction of Vehicle Miles Traveled (VMT) between 13 and 40 million per year under a County-wide program. The reduced VMT would also mean a reduction of Green House Gas (GHG) emissions. Depending on the scenario, the approximate reduction in GHG emissions from a County-wide EcoPass would be between 5 million and 15 million kilograms per year.

A community-wide EcoPass program in Boulder County would increase the number of people eligible for an EcoPass by between 130,000 and 270,000 depending on the scenario. The cost of the bus fare can be a significant barrier to using transit for many people.

A community-wide EcoPass would improve access to jobs by reducing the cost of commuting. The cost of commuting can be a barrier to low-wage earners. For those who can use transit to get to work, the cost of commuting would essentially become free.

The average cost of housing plus transportation per household consumes about 47 percent of the median household income in the Boulder County. The average household in Boulder County spends about $13,800 annually on transportation ($12,600 in the City of Boulder). A community-wide EcoPass program could significantly reduce these household transportation costs.

**Implementation Options:**

Depending on the scenario and the geographical boundaries, there are a variety of ways that a community Eco Pass could be implemented with potential funding options including property taxes, sales taxes, occupational privilege tax (head tax), university student fees, and transportation system user fees (such as parking fees or other funding mechanisms).
What are the next steps with the Feasibility Study?

For the City of Boulder, the feasibility study will be used to inform the City’s Transportation Master Plan update as staff identifies future transit scenarios and investment strategies. As city staff and consultants analyze different future transit scenarios, the different ways a community-wide Eco Pass program can be implemented will be considered within a range of investment strategies.

For more information:

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