EL DORADO COUNTY TRANSPORTATION COMMISSION

Active Transportation Connections Study
Process to identify active transportation projects that might be competitive in grant applications.
PROCESS

Survey & Counts
Review Grant Criteria
Identify Criteria
Conduct Analysis
Rank Projects
Identify overlapping **quantitative** requirements
PURPOSE

PROCESS

CRITERIA

TOOL
7 EVALUATION CRITERIA

- Health
- Environment
- Demand
- Connectivity
- Safety
- Equity
- Costs
Origins-Destinations
Estimated number of existing trips that begin or end near a proposed project

Other measures considered:

- Activity Centers
- Connections to Other Facilities
CONNECTIVITY OPTIONS

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>PROCESS</th>
<th>CRITERIA</th>
<th>TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ACTIVITY CENTERS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONNECTIONS TO OTHER FACILITIES</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ORIGINS-DESTINATIONS</td>
<td></td>
</tr>
</tbody>
</table>

- Activity Centers
- Connections to other facilities
- Origins-destinations

CONNECTIVITY OPTIONS

- 1 mi
- 3 mi
CONNECTIVITY OPTIONS

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>PROCESS</th>
<th>CRITERIA</th>
<th>TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY CENTERS</td>
<td>CONNECTIONS TO OTHER FACILITIES</td>
<td>ORIGINS-DESTINATIONS</td>
<td></td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>• Intuitive</td>
<td>• Intuitive</td>
<td>• Easy data</td>
<td>• Easy data</td>
</tr>
<tr>
<td>• Directly relevant</td>
<td>• Easy calc.</td>
<td>• Highlights small projects with big impact</td>
<td>• Good distribution</td>
</tr>
<tr>
<td>• Easy data</td>
<td>• Highlights small projects with big impact</td>
<td>• Answers the “right” question</td>
<td></td>
</tr>
<tr>
<td>• Easy calc.</td>
<td>• Easy data</td>
<td>• Answers the “right” question</td>
<td></td>
</tr>
<tr>
<td>• Not directly relevant</td>
<td>• Not as intuitive</td>
<td>• Needs ped. data</td>
<td>• Requires “expert” to calculate</td>
</tr>
<tr>
<td>• Does not highlight small projects with big impacts</td>
<td>• Requires “expert” to calculate</td>
<td>• Less applicable to areas without a strong network</td>
<td></td>
</tr>
</tbody>
</table>
SAFETY

Safety Barriers
The number of pedestrian- and bicycle-related safety hazards removed if implemented

Other measures considered:

- Total Collisions
- Collision Severity
<table>
<thead>
<tr>
<th>TOTAL COLLISIONS</th>
<th>COLLISION SEVERITY</th>
<th>SAFETY BARRIERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Intuitive</td>
<td>+ Intuitive</td>
<td>+ Directly relevant</td>
</tr>
<tr>
<td>+ Directly relevant</td>
<td>+ Directly relevant</td>
<td>+ Easy data</td>
</tr>
<tr>
<td>+ Easy data</td>
<td>+ Easy data</td>
<td>+ Easy calc.</td>
</tr>
<tr>
<td>+ Easy calc.</td>
<td>+ Easy calc.</td>
<td>+ Magnitude</td>
</tr>
<tr>
<td>- Not great in rural areas</td>
<td>- Not great in rural areas</td>
<td>- Time intensive</td>
</tr>
<tr>
<td>- Reactive</td>
<td>- Reactive</td>
<td>- Subjective</td>
</tr>
</tbody>
</table>
Physical Activity
Number of adults within 2 miles of a proposed project that *walk at least 150 minutes* per week

Other measures considered:
- Diabetes
- Mental Health
- Asthma
ENVIRONMENT

GHG Reduced
Estimated reduction of greenhouse gas emissions per year following implementation

Other measures considered:

VMT Reduced
Ozone Burden
DEMAND

Forecasted Demand
Estimated number of walking and bicycling trips per day if a proposed project is implemented

Combines multiple data sources:

Counts + Demographics + Socioeconomic + Environment
EQUITY

Youths & Seniors
Number of people **under 18 and over 64** within 2 miles of a proposed project

Other measures considered:
- Income
- Free/Reduced Lunch
- No Vehicle Access
COSTS

Capital Costs
Estimated cost to build a proposed project

Other measures considered:

Benefit-Cost Ratio

PURPOSE

PROCESS

CRITERIA

TOOL
# EDCTC Active Transportation Prioritization Tool

Last Updated: May 10, 2017

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>CRITERIA</th>
<th>BUFFER</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>PHYSICAL_ACTIVITY</td>
<td>2.00 MI</td>
<td>1</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>GHG_REDUCE</td>
<td>LOCATION</td>
<td>1</td>
</tr>
<tr>
<td>DEMAND</td>
<td>BIKE_PED</td>
<td>LOCATION</td>
<td>1</td>
</tr>
<tr>
<td>CONNECTIVITY</td>
<td>ORIGINS_DESTINATIONS</td>
<td>LOCATION</td>
<td>1</td>
</tr>
<tr>
<td>SAFETY</td>
<td>CONCERNS</td>
<td>LOCATION</td>
<td>1</td>
</tr>
<tr>
<td>EQUITY</td>
<td>YOUNGS_SENIORS</td>
<td>2.00 MI</td>
<td>1</td>
</tr>
<tr>
<td>COSTS</td>
<td>BC_RATIO</td>
<td>LOCATION</td>
<td>1</td>
</tr>
</tbody>
</table>
WEIGHTING SCHEMES

Workshop

ATP

HSIP

CMAQ

PURPOSE
PROCESS
CRITERIA
TOOL
STUDY WEBSITE

All memos available at:
http://www.edctc.org/3/ATP.html