COMMUTER CHOICE AWARDS: DATA-DRIVEN RECOGNITION OF EMPLOYERS

Ohio Transportation Engineers Conference (OTEC)
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Northeast Ohio Areawide Coordinating Agency (NOACA)
Bev Burtzlaff, Tim Kovach, Joe MacDonald
OVERVIEW

• History of Commuter Choice Awards Program
• Conceptual Framework: Dimensions of Commuter Choice
• Commuter Choice Scoring Methodology
HISTORY OF COMMUTER CHOICE AWARDS

• Idea first voiced in 2014 by Greater Cleveland Regional Transit Authority’s (GCRTA’s) general manager at NOACA Transit Council meeting
• Partially based on GCRTA’s Commuter Advantage program
• Growing evidence of employers’ role in commuter behavior
NOACA’s Vision Statement

NOACA will STRENGTHEN regional cohesion, PRESERVE existing infrastructure, and BUILD a sustainable multimodal transportation system to SUPPORT economic development and ENHANCE quality of life in Northeast Ohio.
SCORING: EARLY YEARS (2014 & 2015)

• Based on employer survey: What policies and infrastructure do you provide to encourage alternative commutes?

• Points for policies and infrastructure, like subsidized transit passes and bike racks

• Bonus points:
  • Location density
  • Participation in GCRTA’s Commuter Advantage Program
CHANGES IN 2016

• Commuter Choice Awards moved to NOACA’s Air Quality Division (reflect link between modal choice and clean air)
• City of Cleveland became co-sponsor to celebrate Year of Sustainable Transportation
• Scoring still based on employer surveys and location data
• Started to focus on the missing data piece of the puzzle: commuter behavior
In April 2017, NOACA and other Ohio Metropolitan Planning Organizations (MPOs) launched Gohio Commute so users could log trips and generate commuter behavior data.
HOW DOES GOHIO COMMUTE MEASURE COMMUTER BEHAVIOR?

• Gohio Commute facilitates trip planning and ridesharing
• Employers utilize Gohio Commute to encourage alternative commutes through dedicated subsites
• Employees log commutes by mode each day; makes it possible to assess employer’s rate of alternative commutes
GOHIO COMMUTE CONTESTS

• The platform allows NOACA to create contests, or “challenges,” with live leaderboards (enhance competition among employers)
• Results are normalized for number of employees
• Employee commute behavior at each organization now measured and compared
## 2018 Clean Air Challenge Statistics

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Participants</td>
<td>212</td>
<td>227</td>
</tr>
<tr>
<td>Total Alternative Trips</td>
<td>3,695</td>
<td>4,373</td>
</tr>
<tr>
<td>Total Distance (VMT Avoided)</td>
<td>34,162</td>
<td>42,443</td>
</tr>
<tr>
<td>( \text{CO}_2 ) Saved (tons)</td>
<td>9.3</td>
<td>12.0</td>
</tr>
<tr>
<td>Money Saved ($)</td>
<td>10,034</td>
<td>12,499</td>
</tr>
<tr>
<td>Calories Burned</td>
<td>263,253</td>
<td>432,243</td>
</tr>
</tbody>
</table>
COMMUTER CHOICE AWARDS: EMPLOYER PARTICIPATION OVER TIME

- 2014: 29
- 2015: 18
- 2016: 33
- 2017: 24
- 2018: 29
CONCEPTUAL FRAMEWORK
## EMPLOYER SUPPORT

<table>
<thead>
<tr>
<th>SUB-DIMENSION</th>
<th>DEFINITION</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNAL POLICIES</td>
<td>Policies and practices by the employer</td>
<td>Parking, telecommuting, flexible schedules, Bike-to-Work</td>
</tr>
<tr>
<td>FACILITIES</td>
<td>Worksite physical amenities and improvements</td>
<td>Company bicycles, bike racks, showers, charging stations</td>
</tr>
<tr>
<td>INCENTIVES</td>
<td>Financial awards or reimbursements</td>
<td>Parking cash-out, vanpools, bikeshare, transit passes</td>
</tr>
<tr>
<td>EDUCATION &amp; OUTREACH</td>
<td>Programs inform employees &amp; visitors about benefits of alternative commutes</td>
<td>Alternative travel to off-site meetings; transportation options to guests; Gohio Commute</td>
</tr>
</tbody>
</table>
### EMPLOYER LOCATION

<table>
<thead>
<tr>
<th>SUB-DIMENSION</th>
<th>DEFINITION</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENSITY</td>
<td>Total number of employees or residents in specified area</td>
<td>Higher values support more alternative mode trips</td>
</tr>
<tr>
<td>LAND-USE MIX</td>
<td>Ratio of total employees to residents in specified area</td>
<td>Ratios closer to 1:1 support more alternative mode trips</td>
</tr>
<tr>
<td>CONNECTIVITY</td>
<td>Total number of intersections in specified area</td>
<td>Higher values support more alternative mode trips</td>
</tr>
<tr>
<td>PROXIMITY TO TRANSIT</td>
<td>Total number of transit stops/stations in specified area</td>
<td>Higher values support more alternative mode trips</td>
</tr>
</tbody>
</table>
• Multi-modal trip planning and logging platform provides a way to capture employee commute behavior

• Individuals log trips once completed (enter origin and destination for each trip). Trip count and total mileage compiled by platform.
SCORING METHODOLOGY
COMMUTER CHOICE SCORING BREAKDOWN

- Weight of different factors has changed
  - 2014-2015: 100% Employer Support, bonus points for Employer Location
  - 2016: 60% Employer Support, 30% Employer Location, 10% Commuter Behavior
- More emphasis on Commuter Behavior since 2017
  - 2017: 40% Support, 40% Location, 20% Behavior
  - 2018: 40% Support, 30% Location, 30% Behavior
EMPLOYER SUPPORT

• Developed survey instrument to measure employer support for commuter choice
  • Developed sub-dimensions of employer support based on transportation demand management (TDM) literature
  • Capture what employers are doing, educate them on TDM best practices
• Survey content, length has varied by year
• 2018 survey contained 52 total questions
# Employer Support

## Internal Policies

<table>
<thead>
<tr>
<th>ITEM</th>
<th>POLICY</th>
<th>ACTION COMPLETED?</th>
<th>DETAILS/COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does your organization participate in a pre-tax transit pass purchasing program (e.g. Greater Cleveland Regional Transit Authority (GCRTA) Commuter Advantage, Laketran Transit Benefits, etc.)?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Does your organization promote Guaranteed Ride Home programs (including programs through Cohio Commute or GCRTA)?</td>
<td>Yes</td>
<td>NOACA manages the Guaranteed Ride Home program through Cohio Commute</td>
</tr>
<tr>
<td>3</td>
<td>Does your organization charge employees for parking, rather than provide free parking?</td>
<td>Yes</td>
<td>Monthly basis</td>
</tr>
<tr>
<td>4</td>
<td>If your organization charges for parking, does it charge employees on a daily or weekly basis (rather than monthly, quarterly, or annual basis)?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>If your organization validates/reimburses parking, does it also reimburse for transit expenses?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Does your organization host or participate in Bike-to-Work days?</td>
<td>Yes</td>
<td>Multiple NOACA employees take part in and staff Bike to Work Days</td>
</tr>
<tr>
<td>7</td>
<td>Does your organization sponsor a bikeshare station (UHBikes or other)?</td>
<td>Yes</td>
<td>NOACA does not sponsor a station, but we did provide startup funding for UHBikes</td>
</tr>
</tbody>
</table>
EMPLOYER LOCATION

• Data sources vary by sub-dimension measure:
  • Density, land-use mix: 2015 NOACA travel forecast model
  • Connectivity: Census TIGER road network
  • Proximity to Transit: 2015 NOACA transit stop data

• Scores for each employer’s location based on NOACA’s transportation analysis zones (TAZ)
  • TAZ a geographic unit of analysis for travel modeling
  • Ranked all TAZs by sub-dimension value (four ranked lists) and separated into quintiles (highest = 10 points; lowest = 0 points)
  • Organizations assigned score of their TAZ for each sub-dimension; total score equals sum of sub-dimension scores (maximum = 40 points)
Commuter Choice: Employer Location

Land-Use Mix

Land-Use Mix Score
- 0
- 2.5
- 5
- 7.5
- 10
COMMUTER BEHAVIOR

- NEO Clean Air Challenge (June, 2018)
- Participating organizations earn points for employees who log alternative commutes
- Score calculated from number of potential alternative commutes, based on number of employees
COMMUTER BEHAVIOR

• Maximum number of alternative trips:
  \[ \text{Number of trips per day (2) } \times \text{Number of commuting days in June (21) } \times \text{Total employees} \]

• Percent of potential alternative commutes:
  \[ \frac{\text{Total alternative trips logged}}{\text{Maximum number of alternative trips}} \]

• Participating organizations earn 5 base points
• Organizations ranked by percent of alternative commutes and separated into quintiles to earn additional points
  (highest = 25 points, lowest = 0 points)
<table>
<thead>
<tr>
<th>Factor</th>
<th>Outcome</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employer Support</td>
<td>21 Completed Actions</td>
<td>16.2 Points</td>
</tr>
<tr>
<td>2. Employer Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Density</td>
<td>Top Quintile (10 points)</td>
<td>22.5 Points</td>
</tr>
<tr>
<td>• Employment-Population Ratio</td>
<td>Bottom Quintile (0 points)</td>
<td></td>
</tr>
<tr>
<td>• Connectivity/Intersections</td>
<td>Top Quintile (10 points)</td>
<td></td>
</tr>
<tr>
<td>• Proximity to Transit</td>
<td>Top Quintile (10 points)</td>
<td></td>
</tr>
<tr>
<td>3. Commuter Behavior</td>
<td>5 points</td>
<td>25 Points</td>
</tr>
<tr>
<td>• Participation Bonus</td>
<td>19.15% (2nd Quintile)</td>
<td></td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td></td>
<td>63.7 POINTS</td>
</tr>
</tbody>
</table>
2018 COMMUTER CHOICE AWARDS WINNERS

- Gold, Silver, and Bronze awards issued based on total score
- Also award prizes for category winners:
  - Large Business Winner
  - Small Business Winner
  - Large Non-Profit Winner
  - Small Non-Profit Winner
FOR MORE INFORMATION:

www.noaca.org
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