Positive Peer Pressure

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What is a Peer

• Someone who shares similar characteristics

Why Use Peer Groups?

• To compare performance among transit systems
How to Use Peer Groups

1. Develop a well-thought out peer grouping methodology
2. Define data/statistics that will be used to measure performance
3. Decide how to determine which transit systems are peer group leaders based on these statistics
Controllable vs. Uncontrollable

• **Controllable**- factors directly or indirectly under the control of the organization. Examples include number of vehicles, organization type, service hours, etc.

• **Uncontrollable**- factors out of the control of the organization. Examples include service area population, geography, transit-dependent population, etc.
Excercise

• Divide into peer groups
• Record factors that create differences among your peers

| Controllable | Uncontrollable |
ITRE Peer Groups

• Base peer groups on uncontrollable factors only
• Assign values to transportation systems using 4 factors
• Combine the values to create 5 groups of systems that share similar challenges in providing service
Range of Elevation

*Range of Elevation* is a geographic factor that indicates the potential difficulty in operating transportation service due to lower operating speeds resulting from long driveways, steep inclines, curvy roads, etc.
Highway Density

*Highway Density* is a geographic factor that indicates the potential mobility network constraints, as highways tend to increase mobility options by offering a greater number of routes.
Population Density

*Population Density* indicates the relative proximity of trip origins. Transportation systems with lower *Population Density* will be more likely to have longer trip lengths, which will be more difficult to serve.

**Population per Square Mile**

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Value Range</th>
<th>Group</th>
<th>n</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>5</td>
<td>3669-5596</td>
<td>Blue</td>
<td>2</td>
<td>356-793</td>
</tr>
<tr>
<td>Yellow</td>
<td>4</td>
<td>1594-3668</td>
<td>Blue</td>
<td>1</td>
<td>0-355</td>
</tr>
<tr>
<td>Green</td>
<td>3</td>
<td>794-1593</td>
<td>Blue</td>
<td>5</td>
<td>0-355</td>
</tr>
</tbody>
</table>
Rural Population Ratio

*Rural Population Ratio* indicates the demand for trips outside of the service area, as rural areas will have less services available within the area. Leaving the service area to provide trips can be costly, time consuming, and inefficient for transportation systems.
Peer Groups Results

The resulting peer groups consist of transportation systems that share similar combined geographic and demographic profiles. Members of each peer group are considered to experience a similar degree of difficulty in providing transportation service in their service area.
Benchmark

- **Passengers per Service Hour** - measures efficiency
- **Subsidy per Trip** - measures effectiveness
- **Non-Agency Trips per Non-Urbanized Population** - measures mobility provided to the general population
Exercise

• Divide into peer groups
• Discuss ways to achieve high scores for each measure
Peer Group Results

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<tr>
<th>Group</th>
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<tbody>
<tr>
<td>5</td>
<td>14</td>
<td>85-100%</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>61-84%</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>41-60%</td>
</tr>
</tbody>
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<thead>
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<tbody>
<tr>
<td>2</td>
<td>14</td>
<td>22-40%</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>0-21%</td>
</tr>
</tbody>
</table>

Miles

North Carolina Map with counties color-coded based on peer group results.
Group 1

**Passengers Per Service Hour**

- Cape Fear
- Durham
- Guilford
- Mecklenburg
- Wake

<table>
<thead>
<tr>
<th>Location</th>
<th>Median</th>
<th>85th Percentile (ABOVE)</th>
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<tbody>
<tr>
<td>Cape Fear</td>
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<td></td>
</tr>
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<td></td>
</tr>
<tr>
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**Subsidy Per Trip**

- Cape Fear
- Guilford
- Wake

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**Non Agency Trips Per Non Urbanized Pop.**

- Cape Fear
- Durham
- Guilford
- Mecklenburg
- Wake

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<td>Wake</td>
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- Group 1

- Acceptable (ABOVE)
Group 2

Subsidy Per Trip

Passengers Per Service Hour

Non Agency Trips Per Non Urbanized Pop.
Group 3

Subsidy Per Trip

Non Agency Trips Per Non Urbanized Pop.
Group 4

Subsidy Per Trip

Non Agency Trips Per Non Urbanized Pop.
Group 5

Subsidy Per Trip

- Alleghany
- Ashe
- Avery
- Cherokee
- Clay
- Graham
- Jackson
- Madison
- McDowell
- Mitchell
- Polk
- Swain
- Transylvania
- Yancey

- $0.00
- $2.00
- $4.00
- $6.00
- $8.00
- $10.00
- $12.00
- $14.00

- Subsidy per Trip
- 85th Percentile (ABOVE)
- Median

Non Agency Trips Per Non Urbanized Pop.

- Alleghany
- Ashe
- Avery
- Cherokee
- Clay
- Graham
- Jackson
- Madison
- McDowell
- Mitchell
- Polk
- Swain
- Transylvania
- Yancey

- 3.00
- 3.20
- 3.40
- 3.60
- 3.80
- 4.00
- 4.20
- 4.40
- 4.60
- 4.80
- 5.00
- 5.20
- 5.40
- 5.60

- Non Agency Trips per Non Urbanized Area Population
- 85th Percentile (ABOVE)
- Median

Passengers Per Service Hour

- Alleghany
- Ashe
- Avery
- Cherokee
- Clay
- Graham
- Jackson
- Madison
- McDowell
- Mitchell
- Polk
- Swain
- Transylvania
- Yancey

- 8.00
- 7.00
- 6.00
- 5.00
- 4.00
- 3.00
- 2.00
- 1.00

- Passengers per Service Hour
- 85th Percentile (ABOVE)
- Median
- Acceptable (ABOVE)
Positive Peer Pressure

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Exercise 1

• Fairly urban, rural, very rural
• Mountain, Piedmont, Coastal
• Automated Scheduling Software, TrIP/CTS, Other
• 40+ Vehicles, 20-39 Vehicles, <20 vehicles
• No In-County Destinations, Some-In/Some-out, Most In-County
Past Peer Methods

• # of Vehicles
• # of Trips
• Service Area Size
• Service Area Population
• Organization Types
• Contractor / Non-Contractor
• Type of Service (Fixed Route, Deviated, etc.)
• Technology
• Door-to-Door or Curb-to-Curb
• Tenure of staff
• Many more ways