Identifying Problem Areas in Barcelona’s Bike Lanes

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Data Sources

• Bike Accidents (2017)
• Complaints (2018)
• Bike Paths
• Neighborhood Age and Income (2016)
• Bike usage omnibus (2015-2017)
The graph shows the evolution of complaints from 2014 to 2018. The total number of complaints increased significantly from 2014 to 2016, reaching its peak in 2016. By 2018, the total number of complaints had decreased compared to 2016.

The table below summarizes the percentage of complaints for different categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>New bicycle lane (change of location)</td>
<td>10%</td>
<td>11%</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>New bicycle parking (change of location)</td>
<td>21%</td>
<td>23%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Discipline problems with bikes</td>
<td>21%</td>
<td>17%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Abandoned Bicycles</td>
<td>20%</td>
<td>16%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Incidents in Bicing services</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Marking Bicycle lane</td>
<td>NA</td>
<td>NA</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>Incidents Bibycle lane</td>
<td>12%</td>
<td>13%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>
Bike Usage in Barcelona

Source: City Council of Barcelona
Open Data BCN, Dataset: Bikeuse_2015-2017
Negative effect of Age
"Hot Spots"

**Accidents**

**Complaints**
Further Directions

• Prioritize expansion of bike lanes based on customer suggestions
• Prioritize repair/improvement of signage based on intersections with high accidents rates
• Predict Spending on future bike lines based on changes in demand
• Further review of equitable access to biking- are certain populations not being served correctly (perhaps parents with children, or older adults)
• Analyze Text of Complaints to discover patterns and more specific details