Vehicle 4 Change: Health Implications of the Capital Bikeshare Program

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Client: Capital Bikeshare

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Project Objectives:
• Explore health benefits of Capital Bikeshare membership
• Create a profile of current members’ health
• Consider avenues for attracting members in currently underrepresented communities

Research Questions:
• What are the potential health implications of the Capital Bikeshare program?
• What are the actual health benefits (as reported by members) of Capital Bikeshare and how can our data be used to grow the membership base to include greater numbers of people in underrepresented communities?
• What are other programs doing to improve the health of their members and are there any practices used by other programs that could improve the Capital Bikeshare program?

Challenges:
• Selection Bias
• Survey Fatigue
• Time Limitations
• Data Compromise

Basic Methodology:
• Analyzed U.S. Census data and past survey data from the 2011 Capital Bikeshare Annual Membership survey.
• Distributed electronic survey to Capital Bikeshare membership on the health benefits derived from the program.

Major Findings:
• Capital Bikeshare membership is unrepresentative of the Washington, D.C. metropolitan area and regional demographics (76% Caucasian, 60% male, highly educated, and high income)
• Capital Bikeshare members are very healthy in general, but there are some statistics that indicate that members have become even more healthy (and have become more physically active) now that they’ve joined Bikeshare (Please see graphs/statistics on the following page)
• Number of days members biked to work increased by 76% after joining Capital Bikeshare
• 63% of people now report that they exercise at least 1-5 hours per week, and of that amount 48% say that they utilize Capital Bikeshare for exercise
• Many bikeshare programs in other U.S. cities are receiving funding from health care providers
• Members reported reduced stress (31.5%), improved stamina (26.7%), increased energy (21.8%), and increased aerobic capacity (20.6%)

**Health Improvements Since Joining**

<table>
<thead>
<tr>
<th>Health Improvements Since Joining</th>
<th>Health Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Stamina</td>
<td>26.7%</td>
</tr>
<tr>
<td>Weight Loss</td>
<td>18.4%</td>
</tr>
<tr>
<td>Improved Overall Health</td>
<td>19.4%</td>
</tr>
<tr>
<td>Reduced Stress</td>
<td>31.5%</td>
</tr>
<tr>
<td>Increased Energy</td>
<td>21.8%</td>
</tr>
<tr>
<td>Increased Aerobic Capacity</td>
<td>20.6%</td>
</tr>
<tr>
<td>Improved Muscle Tone</td>
<td>18.8%</td>
</tr>
<tr>
<td>None of These Changes</td>
<td>42.5%</td>
</tr>
</tbody>
</table>

**Health at Time of Joining Capital Bikeshare**

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8%</td>
<td>6.7%</td>
<td>3.6%</td>
<td>30.4%</td>
<td>49.7%</td>
</tr>
</tbody>
</table>

**Current Health (After Joining Capital Bikeshare)**

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2%</td>
<td>14.8%</td>
<td>16.1%</td>
<td>44.3%</td>
<td>33.4%</td>
</tr>
</tbody>
</table>

**Recommendations:**

- Recommendation 1: Health Related Grants
- Recommendation 2: Health Impact Assessment Tool
- Recommendation 3: Surveys of Non-Members
- Recommendation 4: Annual Health Survey

• Members additionally reported improvements in overall health with the numbers reporting very good and excellent health increasing.

• The time members spent exercising has increased since joining Capital Bikeshare with 43.2% of members reporting that their amount of physical activity has somewhat increased and 5% saying it has greatly increased.

**Weekly exercise before and after Joining Capital Bikeshare**

- Less than 1 hour per week: Before 15%, After 10%
- 1 hour to less than 3 hours per week: Before 32%, After 33%
- 3 hours to less than 5 hours per week: Before 49%, After 10%
- 5 or more hours per week: Before 1%, After 44%