ACCESS + EQUITY: Mapping SFUSD’s Transportation Infrastructure for Students with Disabilities

Key Question
How can we analyze San Francisco Unified School District’s (SFUSD) special education current transportation infrastructure and develop a deeper understanding of the current state so that we strategically explore ways to maximize use of and access to resources for students with disabilities?

Methods
1. Transportation and enrollment data on special education (SpEd) students was obtained through coordination with SFUSD’s transportation department, special education services, and enrollment placement center.
2. Analyzed data for patterns and processes that inform and comprise the SpEd transportation infrastructure.
3. Created project visualization maps with ArcGIS to understand the location of students, where they are being transported to and the SpEd services being utilized in the district.

Findings
Profile of SpEd Services

<table>
<thead>
<tr>
<th>Profile of SpEd Services</th>
<th># of students</th>
<th># of bus routes</th>
<th># of schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT (17-22 year olds)</td>
<td>88</td>
<td>79</td>
<td>8</td>
</tr>
<tr>
<td>SOAR</td>
<td>29</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>Deaf/Hard of Hearing</td>
<td>50</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Mild/Moderate</td>
<td>369</td>
<td>268</td>
<td>55</td>
</tr>
<tr>
<td>Moderate/Severe</td>
<td>332</td>
<td>246</td>
<td>41</td>
</tr>
<tr>
<td>Moderate/Severe - Autism</td>
<td>73</td>
<td>46</td>
<td>5</td>
</tr>
<tr>
<td>Gen Ed -50% (RSP)</td>
<td>432</td>
<td>357</td>
<td>104</td>
</tr>
<tr>
<td>Language/Pathway</td>
<td>17</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Non Public School</td>
<td>46</td>
<td>33</td>
<td>15</td>
</tr>
</tbody>
</table>

Students are primarily being transported to moderate/severe, mild/moderate and general education (RSP) SpEd services.

Visualization Maps
The larger circles represent schools and the smaller circles represent student stop locations. The lines indicate distance traveled. (Data Source: SFUSD transportation and enrollment data (2013-2014)).

Areas for Further Strategic Exploration

Student Assignment:
- Explore the program capacity of the current program services in schools.
- How important is proximity to school a factor in SpEd student assignment?

Data Set Management:
- Consolidate the transportation and enrollment information into one database system to reduce error and improve inter-department collaboration.

Other Modes of Transportation:
- What is the feasibility of collaborating with San Francisco Metropolitan Transportation Authority to provide youth and other student transit passes that are cost effective and safe for SpEd students?
- What is the feasibility of utilizing non-motorized transportation alternatives to school, such as Safe Routes to School and bike sharing programs?

Transportation Infrastructure
For the 2013-2014 school year, there are 1,455 SpEd students utilizing the current SpEd transportation system. A total of 177 buses with 1,138 distinct routes transport these students to 114 different locations.

Profile of Riders

Census Track Integration Preference (CTIP) are census tracts combined with standardized test score data and divided into quintiles. CTIP 1 tracts are quintiles with the lowest average test scores and CTIP 5 are the quintiles with the highest test scores.

Each student is picked up and dropped at a specific address. The majority of students have two routes assigned, a morning pickup, and an afternoon drop-off. However, 259 students have 3 or more routes assigned to them. The differing number of routes is due to students who need occupational, physical, or mental health therapy, which require mid-day and after school service where the student is picked up from school and taken to therapy and returned to school or home. A school’s early release and bell schedule also influences the number of routes.

Ethnicity

Declines to White

Other Asian

Asian

Chinese

Black

Hispanic

0.8% 8% 9% 10% 18% 19% 31% 32% 30% 14.7% 18.5% 21% 15.5% 14.7% 18.5% 21%

Center for Cities + Schools ▪ University of California, Berkeley
(510) 642-7155 ▪ Institute of Urban and Regional Development
316 Wurster Hall ▪ citiesandschools.berkeley.edu