

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

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## 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

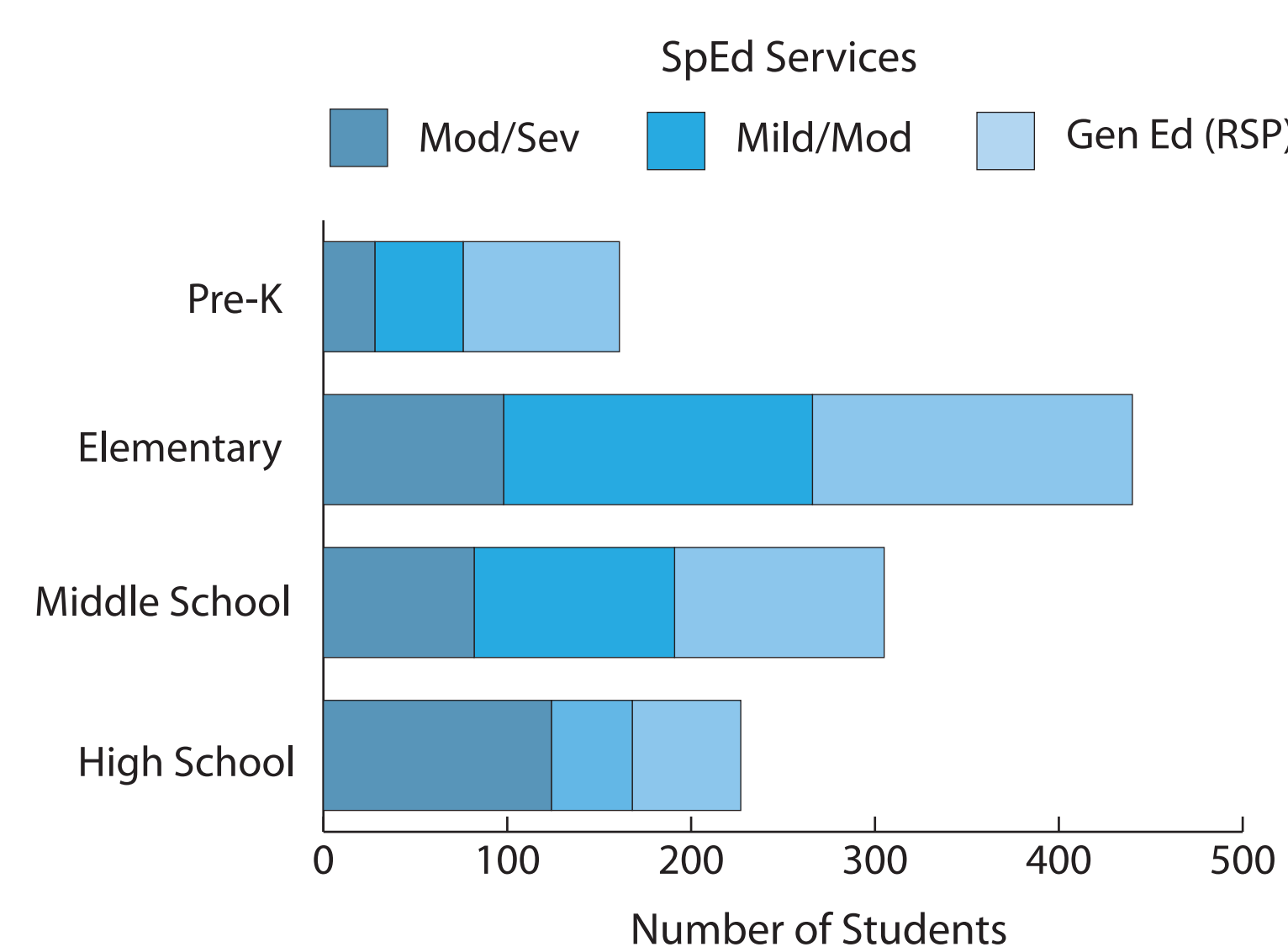
1. Transportation and enrollment data on special education (SpEd) students was obtained through coordination with SFUSD's transportation department, special education services, and enrollment placement center.
2. Analyzed data for patterns and processes that inform and comprise the SpEd transportation 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

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

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



### Transportation Infrastructure

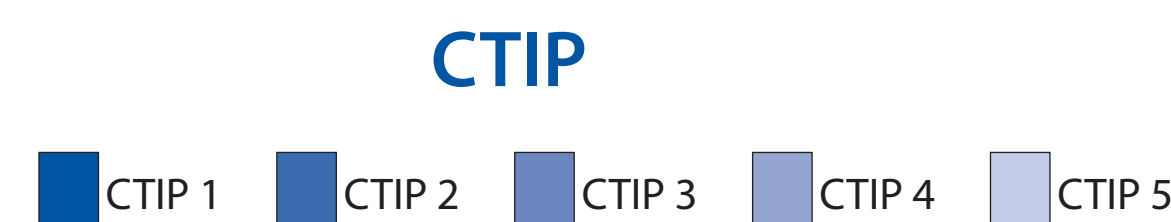
For the 2013-2014 school year, there are **1,455 SpEd students** utilizing the current SpEd transportation system. A total of **177 buses**, with **1,138 distinct routes** transport these students to **114 different locations**.

# of students	# of routes serving each student*
2	9
2	8
3	7
16	6
14	5
58	4
164	3
1028	2
167	1

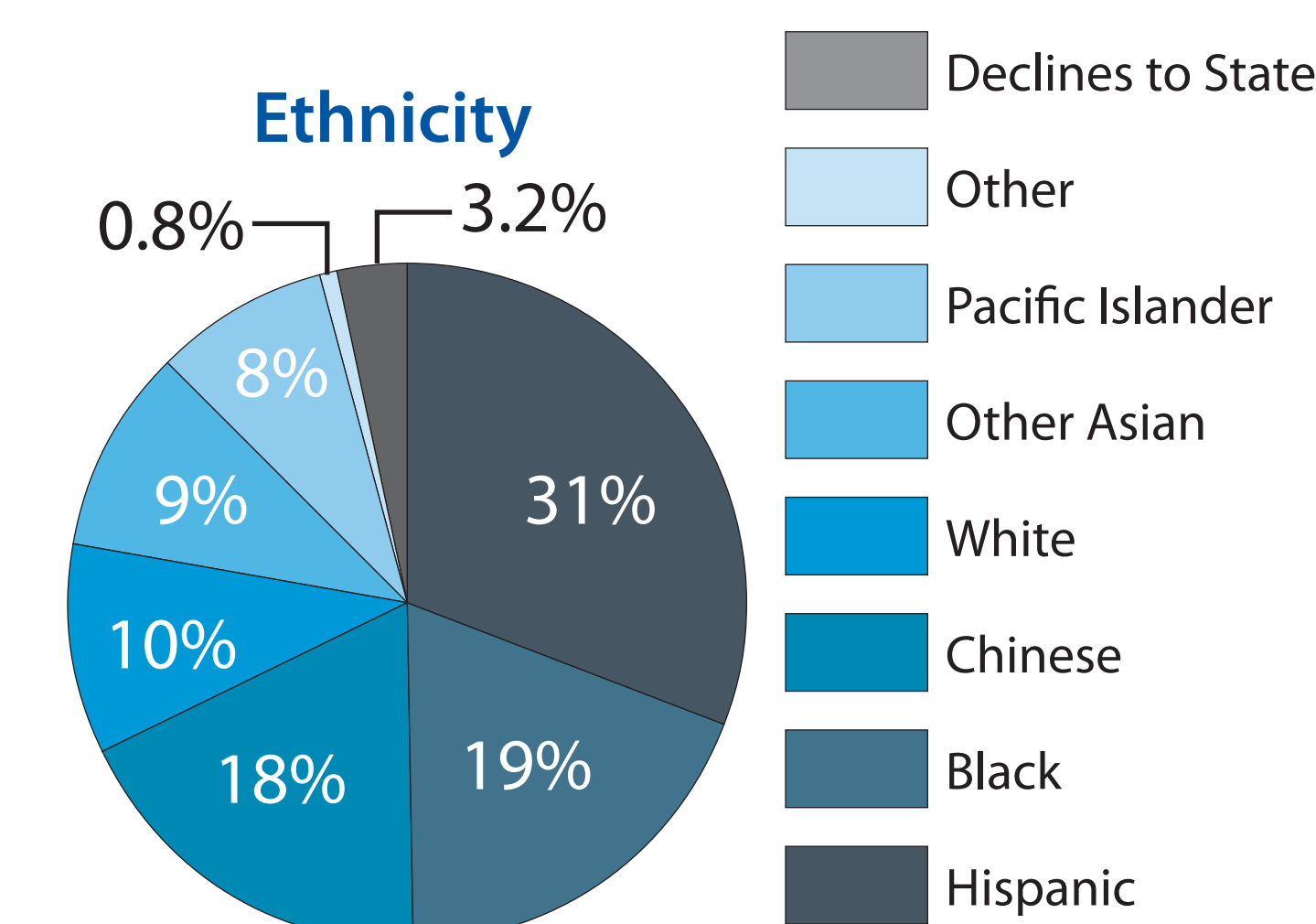
Each student is picked up and dropped at a specific address. The majority of students have two routes assigned, a morning pickup, and an afternoon drop-off. However, 259 students have 3 or more routes assigned to them. The differing number of routes is due to students who need occupational, physical, 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.

\* # of distinct routes per student over one week period

### Profile of Riders

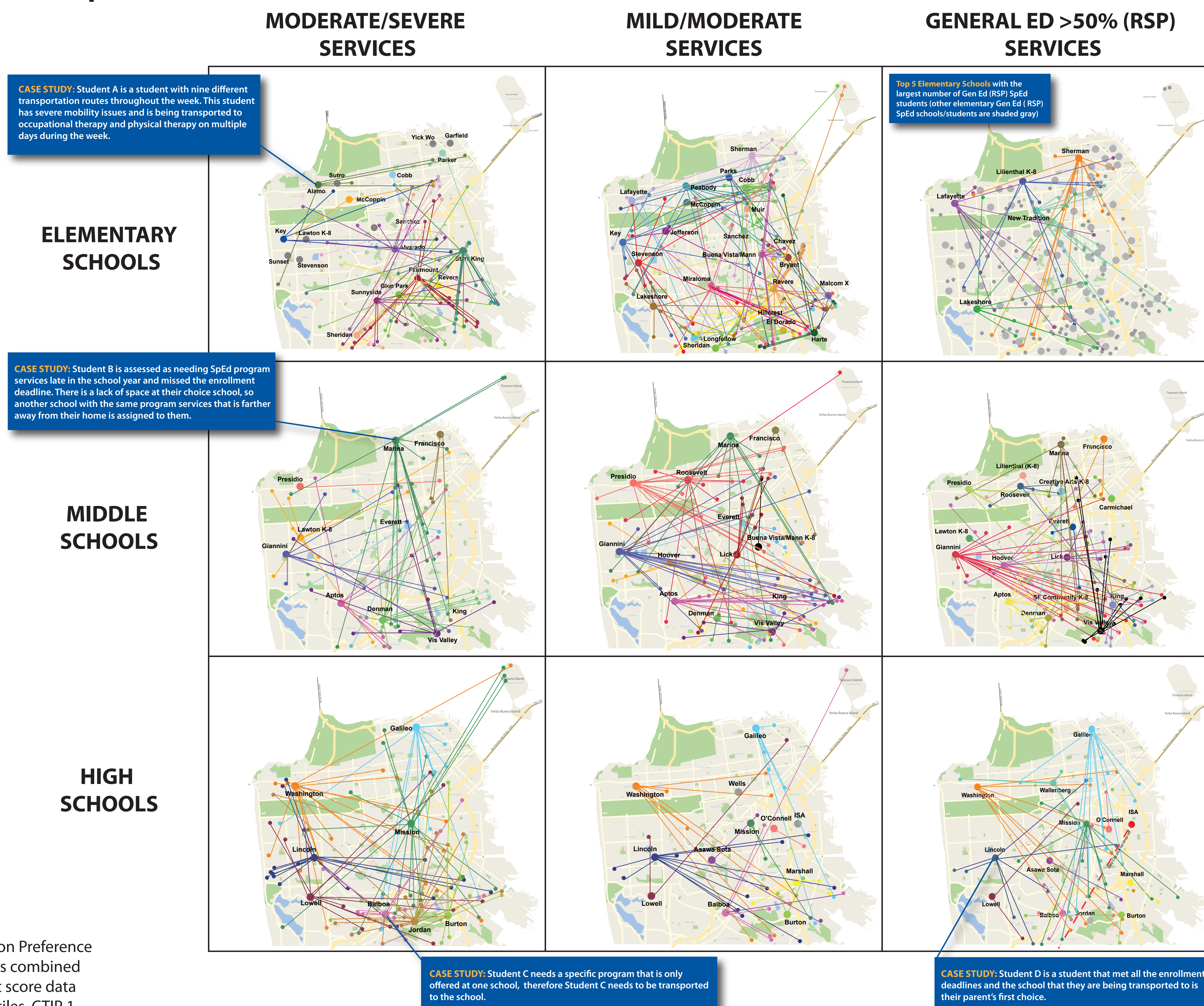


Census Tract Integration Preference (CTIP) are census tracts combined with standardized test score data and divided into quintiles. CTIP 1 tracts are quintiles with the lowest average test scores and CTIP 5 are the quintiles with the highest test scores.



## 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?