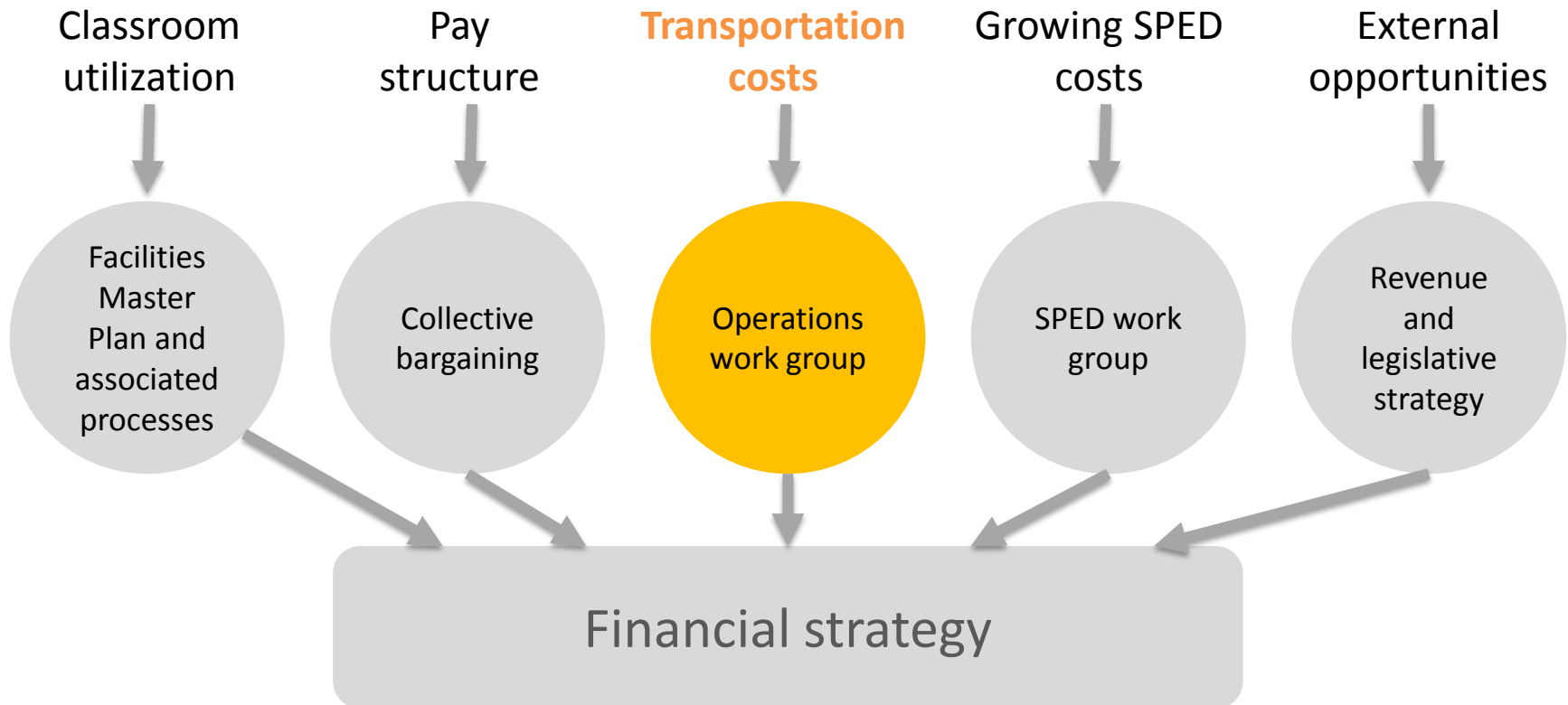




# Long term transportation costs and tap card pilot

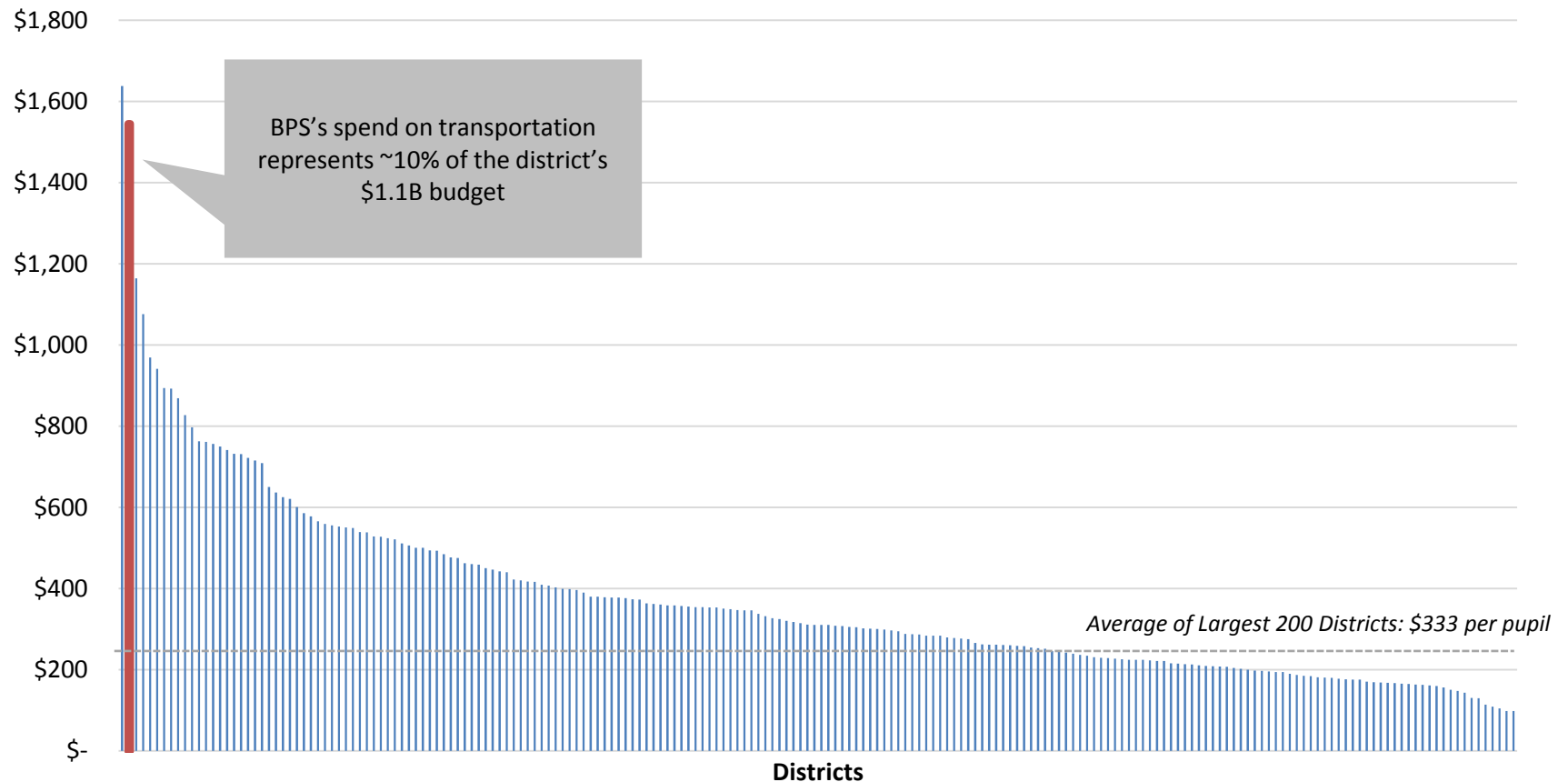
June 8, 2016

## Transportation is one of five focus areas of the long term financial plan



Of the largest 200 districts, BPS spends the 2<sup>nd</sup> highest amount per pupil transportation, which is over ~\$1.2K higher than the average

Per Pupil Transportation Spend,  
200 Largest Public School Districts, 2013

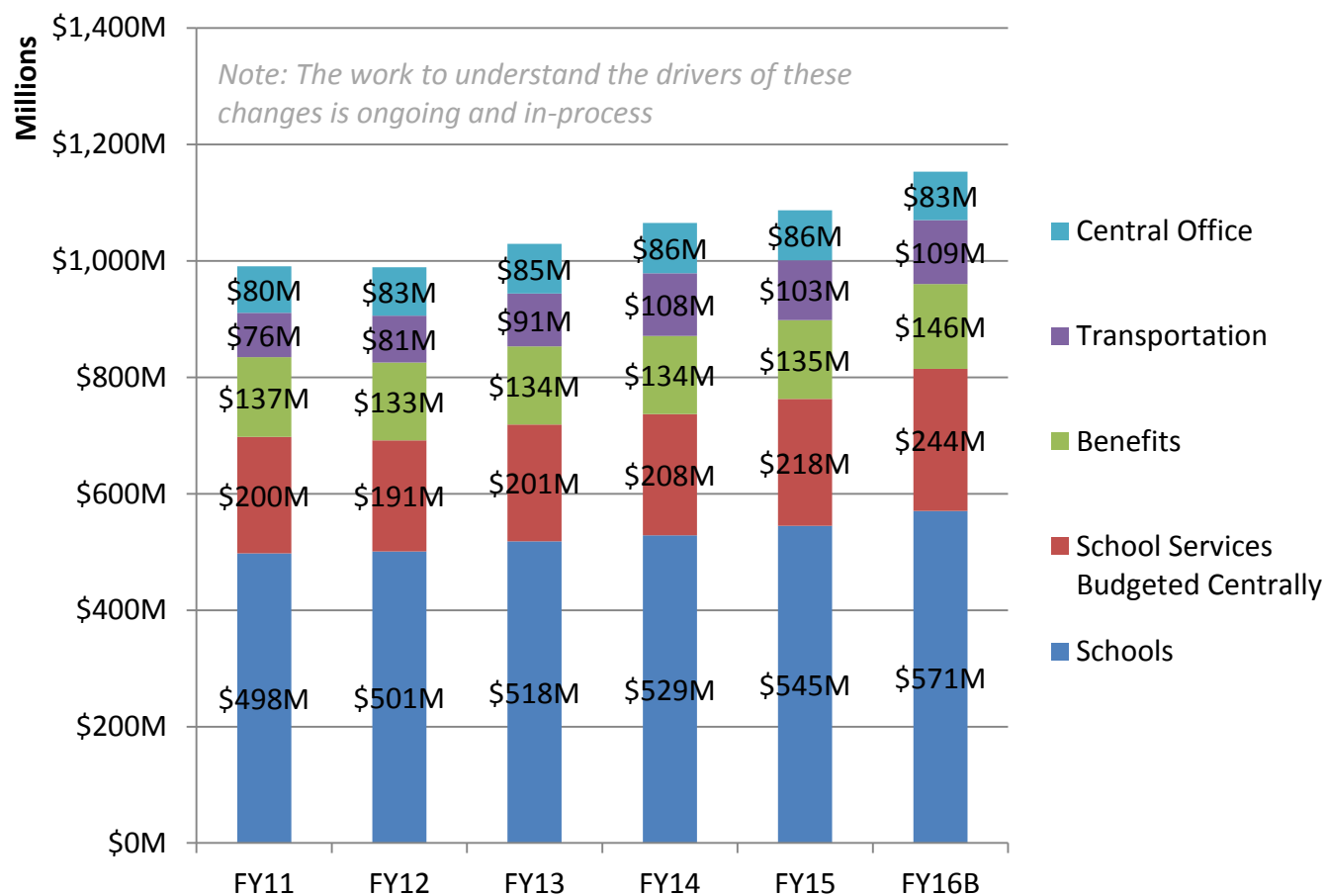


Note: Largest 200 indicate the districts with the largest fall enrollment. The 200<sup>th</sup> district for reference had an enrollment of 31.4K

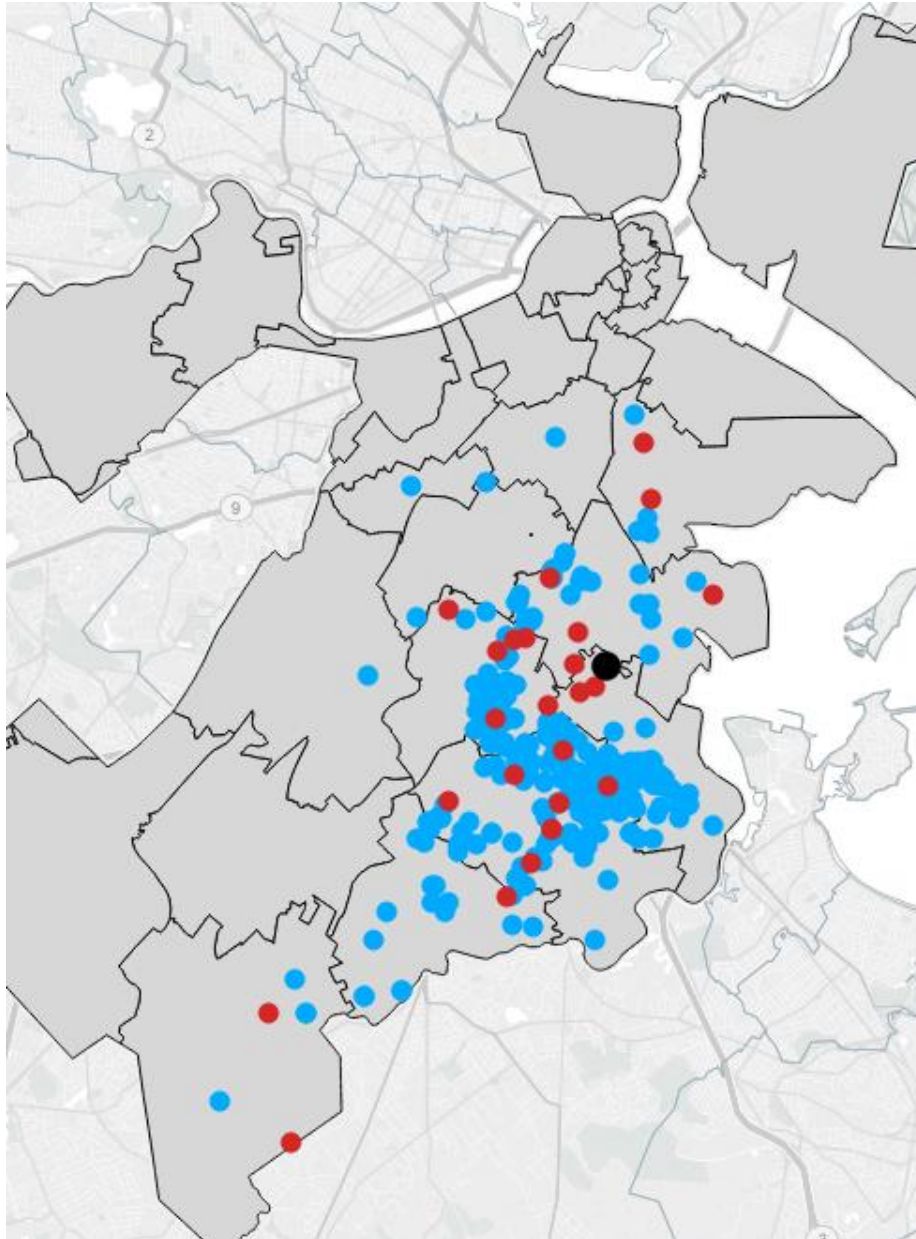
Source: US Census 2013 Survey of School System Finances

## Total expenditures have been increasing 3.1% annually, with the highest growth seen in transportation, school services, and schools

**Expenditures by Service Area, FY11-FY16B  
(All Funds)**



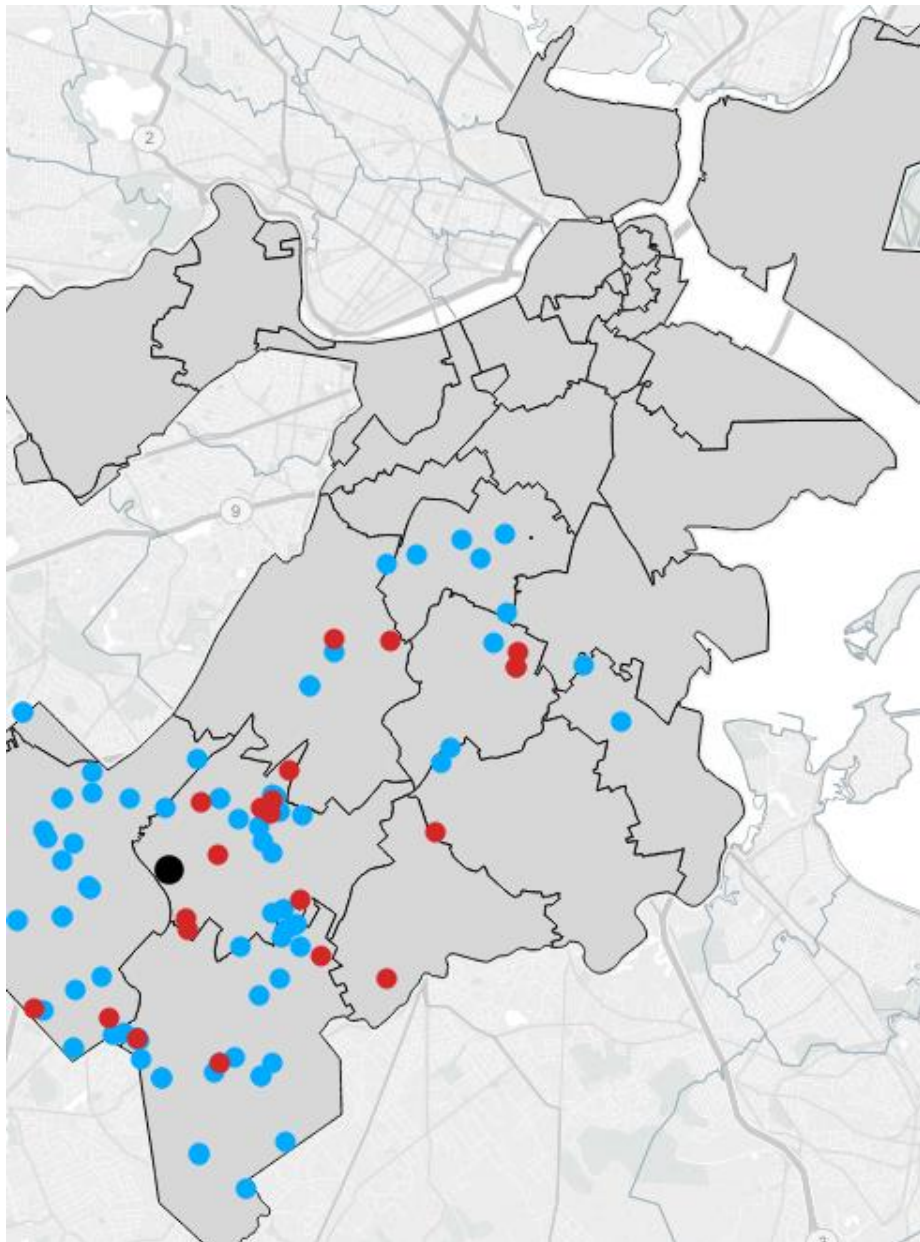
| % Annual Growth | % Change FY11-16 | \$ Change FY11-16 |
|-----------------|------------------|-------------------|
| 0.8%            | 4%               | \$3.1M            |
| 7.5%            | 44%              | \$33.4M           |
| 1.3%            | 7%               | \$9.0M            |
| 4.0%            | 22%              | \$43.7M           |
| 2.8%            | 15%              | \$73.1M           |
| Total:          |                  |                   |
| 3.1%            | 16%              | \$162.4M          |



## A Tale of 3 Schools

### School A

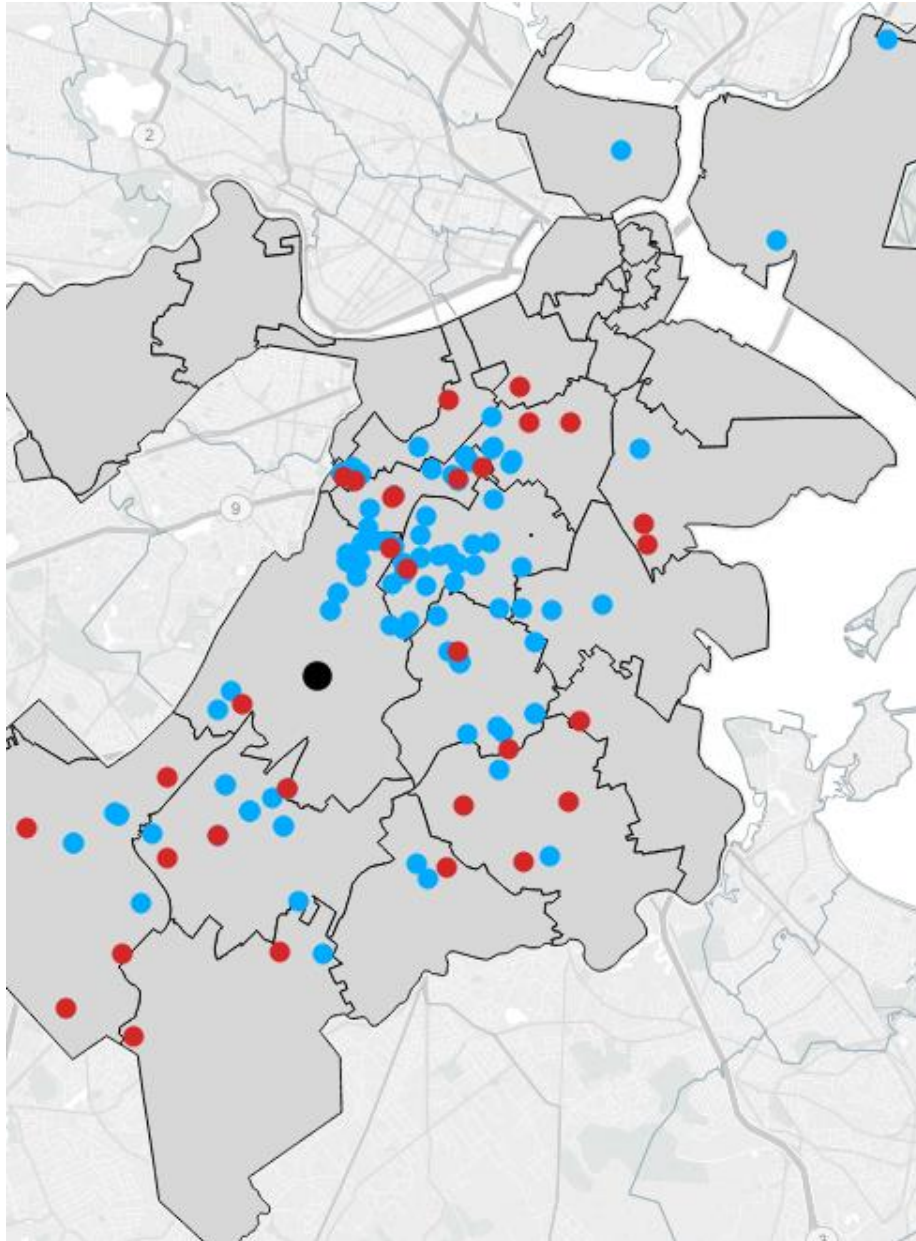
- **Students** 330 **high**
- **% D2D** 8% **low**
- **Zip Count** 12 **low**
- Estimated average cost per student transported: **~\$2300**
- Ratio of estimated transportation costs to total school allocation: **~14%**



## A Tale of 3 Schools

### School B

- **Students** 107 low
- **% D2D** 21% high
- **Zip Count** 11 low
- Estimated average cost per student transported: **~\$4700**
- Ratio of estimated transportation costs to total school allocation: **~27%**



## A Tale of 3 Schools

### School C

- **Students** 145 low
- **% D2D** 24% high
- **Zip Count** 17 high
- Estimated average cost per student transported: **~\$5400**
- Ratio of estimated transportation costs to total school allocation: **~30%**

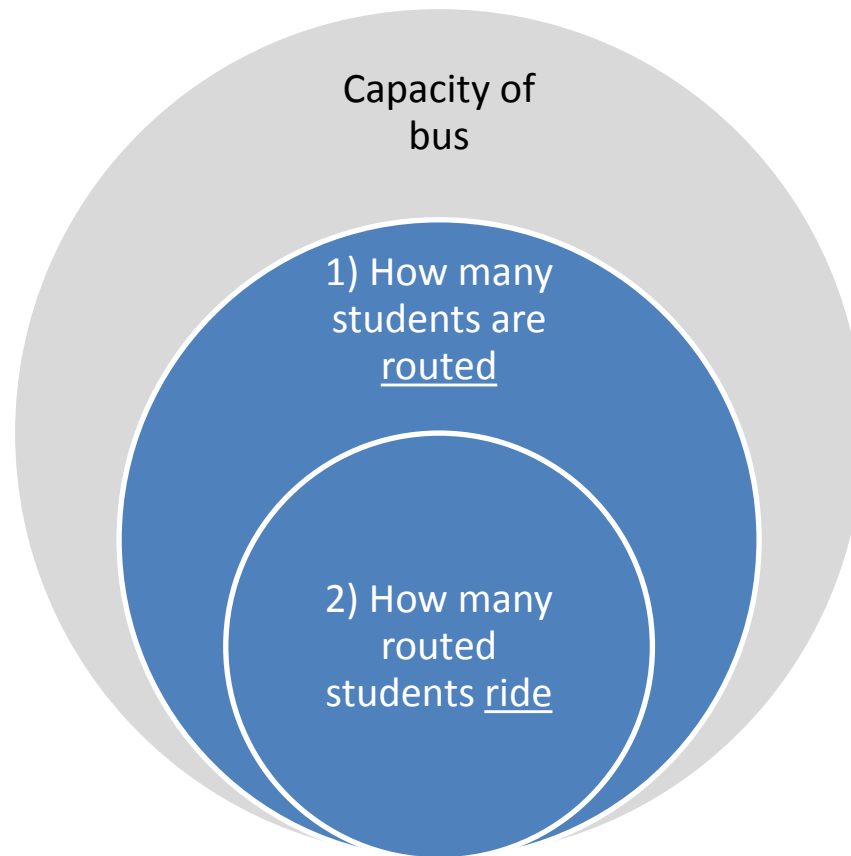


## There are three key areas of consideration for reducing transportation costs

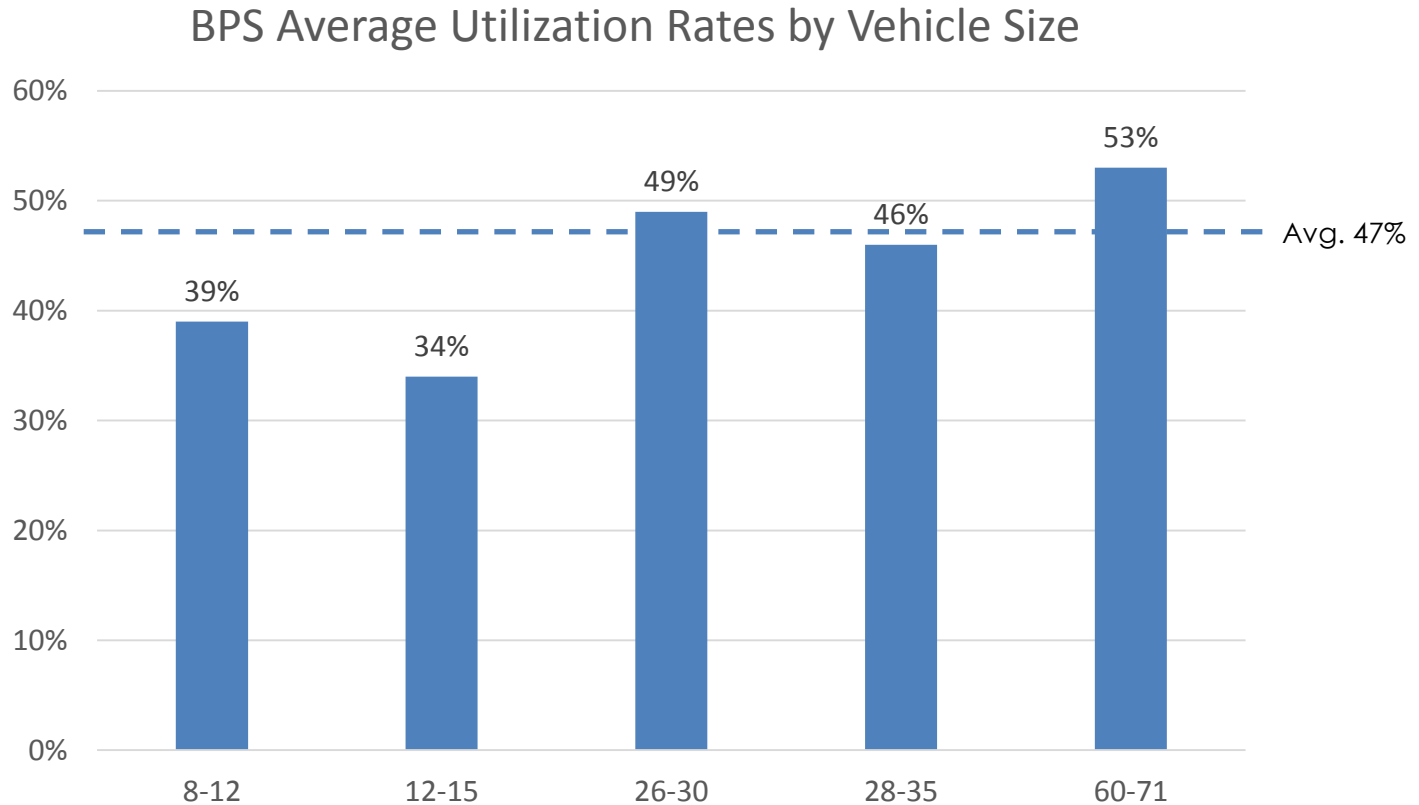
| Efficiency  | Contract and regulations   | Policy   |
|---|--|--|
| How cost-effective we are in providing services (e.g. how well we fill buses) | The rates and rules that govern our cost structure (e.g. our contract with bus drivers, our contract with Veolia, state regulations) | The choices we make on how much and what type of transportation to offer (e.g. our home-based student assignment system) |



## There are two ways to think about efficiency

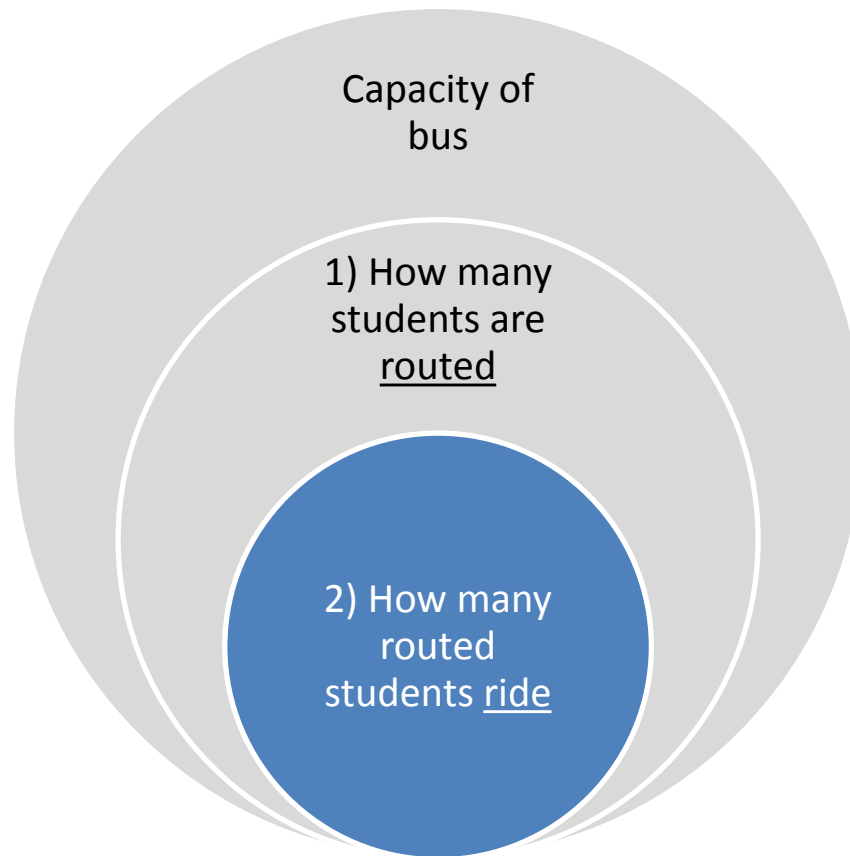


## Buses are routed to be <50% full, regardless of bus size



Source: BPS Operations Management team, data for 15-16 school year

## The tap card pilot will provide data on how many routed students ride the bus





# SafeBoard:

An early look into  
the tap card pilot data





The  
**Manning**

The  
**Ohrenberger**

The  
**Harvard/Kent**

The  
**Beethoven**

What are the current factors in our transportation system that limit overall flexibility?

①

We route once for the beginning of the year and then adjust routes once in October.

②

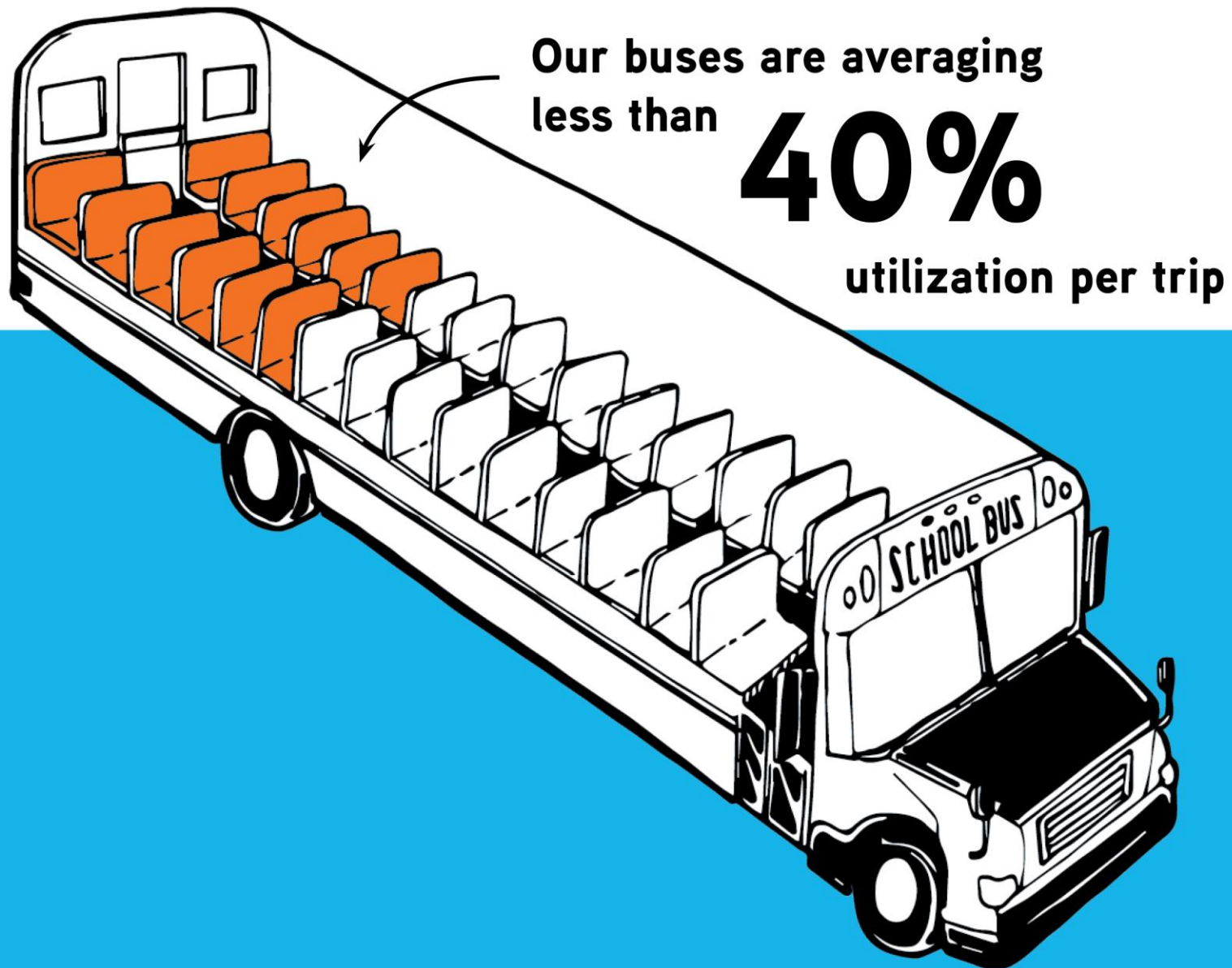
We have multiple school start times, and those times are not evenly distributed among bus trip 'tiers'.

③

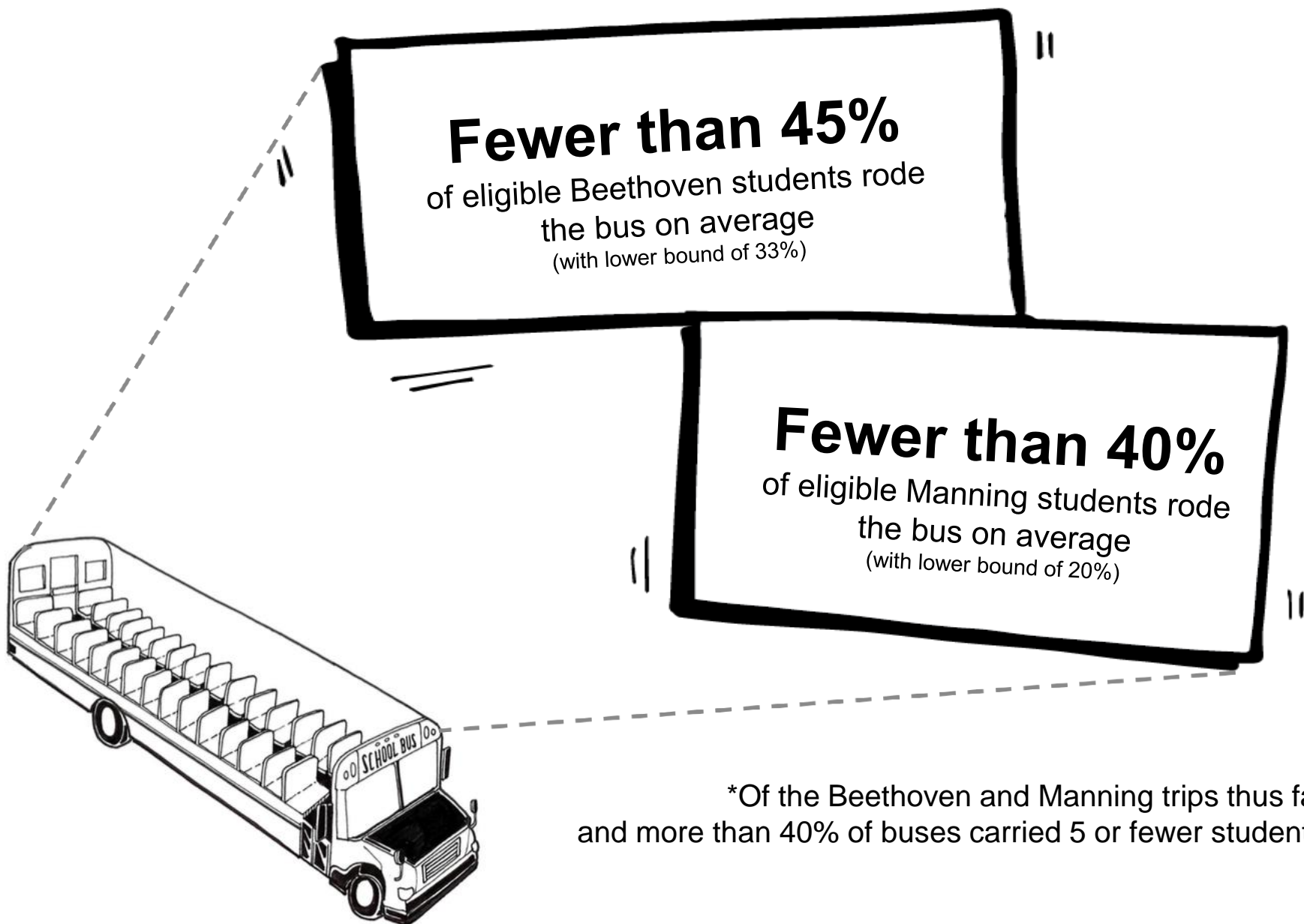
We own our buses, which limits our ability to experiment with vehicle type and size.

④

Our transportation opt-out timeline and process does not match with our routing timeline and process (*see above*).









Average time spent  
on the bus is

**21 minutes**

The most common rides  
last about

**12 minutes**

**"I am eager to see the data in terms of ridership. I'm looking forward to seeing what we can learn from this pilot."**

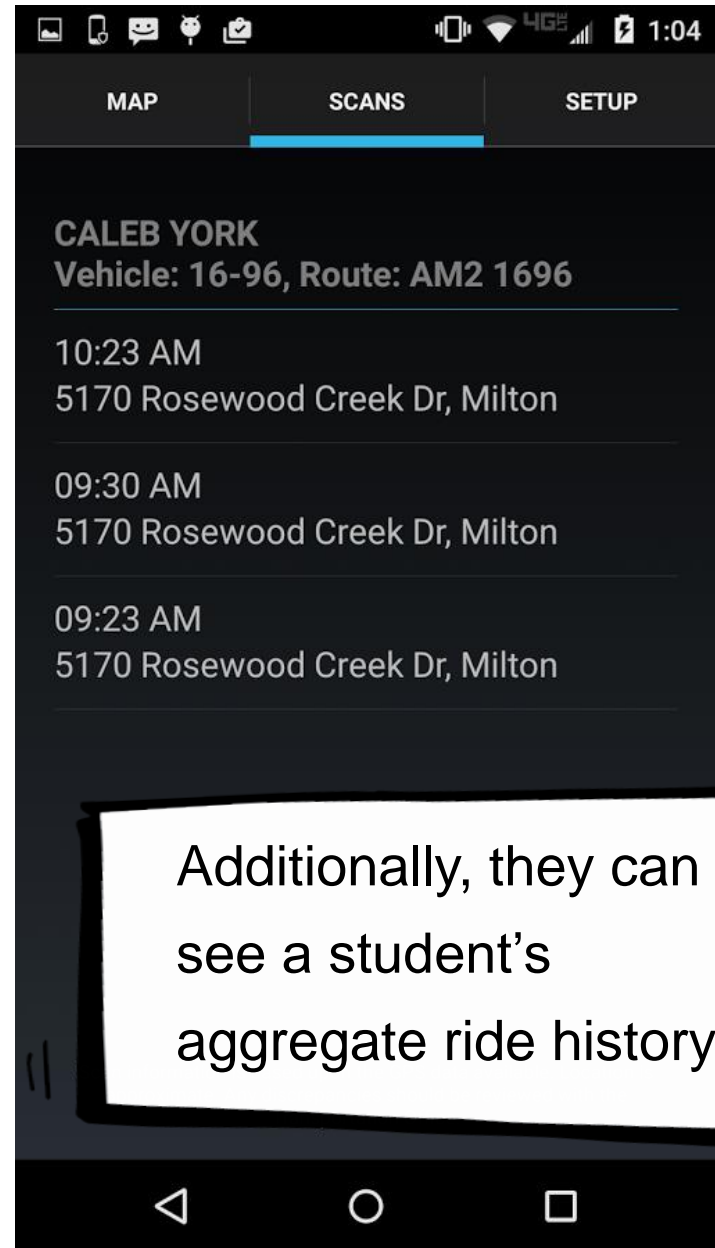
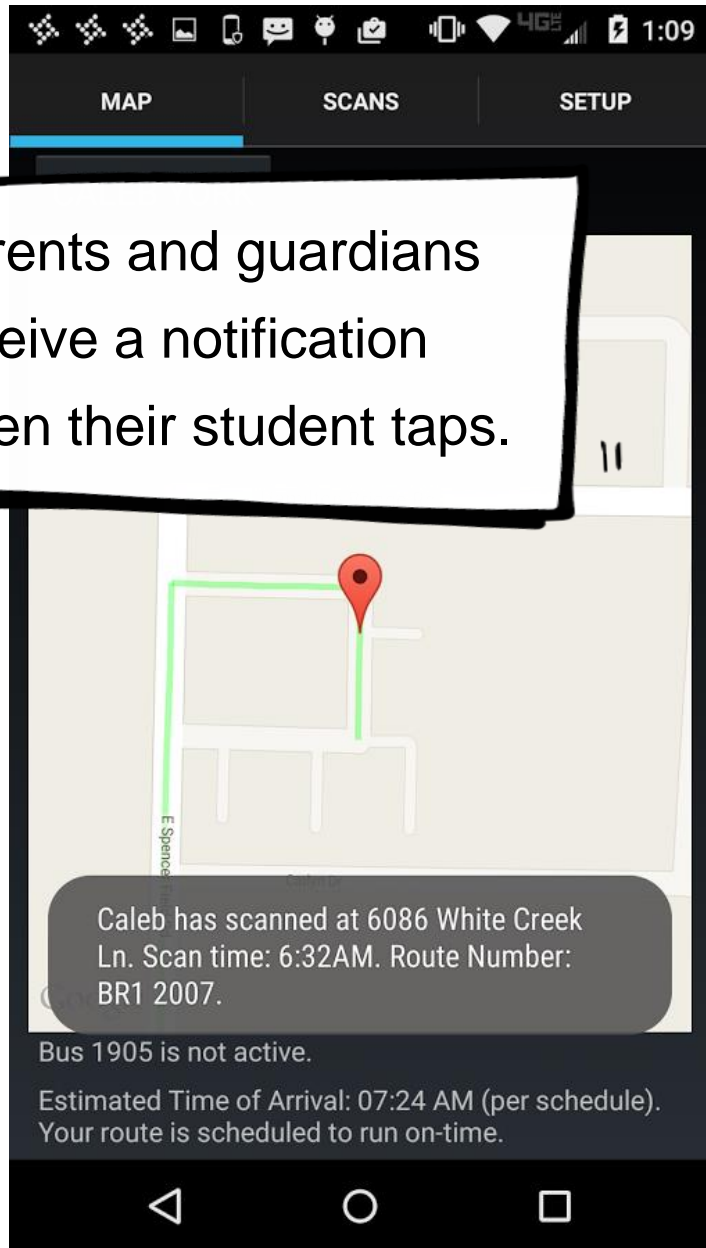
**"Kids love the responsibility of having the cards."**

**"The kids love that they are participating in the pilot. They know they are some of the only kids in BPS testing this out."**



The parent / guardian notification app will keep everyone who is concerned about a student's safety informed and up-to-date.







**The Future!**

CITY 30-13" SEATS  
ER: BOSTON PUBLIC SCHOOLS

D.E.F.  
ONLY

HS191