Bell Times and our Transportation System

Jefferson County Board of Education February 1, 2022

Current Start (Bell) Times

JCPS transports approximately 70% of students --nationwide average is closer to 50%

- > 7:40 start time for Middle and High Schools
 - 770 bus routes = 961 Runs
- > 9:05 start time for Elementary Schools
 - 770 bus routes = 887 Runs
- > 9:45 start time for Early Childhood
 - 225 bus routes = 225 Runs (all direct)

Our Transportation System is a Complex System of Interdependent Processes





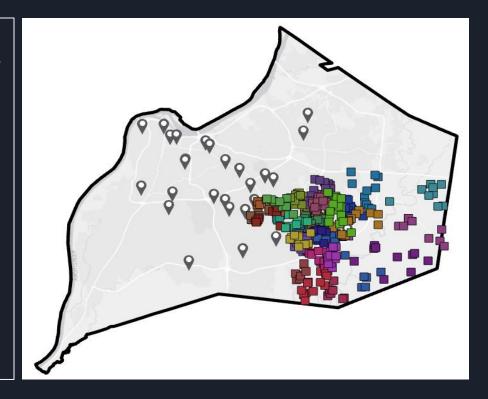
Example: A bus driver picks up middle/high students, drops them off at school, then picks up elementary students drops them at school, then goes and picks up early childhood students and drops them off at school. In the afternoon, the cycle is repeated.

How do Depots Work?

A bus goes into a neighborhood and picks up all the students from that neighborhood.

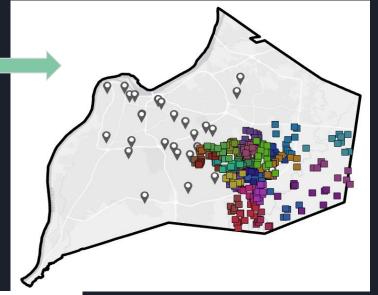
Between 9-49 of these buses meet at a centralized location in that area--for example, at Burks Compound and students disembark from the neighborhood bus and get on a bus headed to their school.

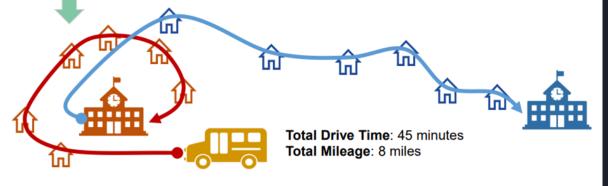
This system is efficient because one bus goes into the neighborhood to get students instead of 20 buses going into each neighborhood.



Our System!

Doesn't look like this example for the most part





Challenges

- Large district with both urban, suburban, and rural characteristics
- Jefferson County is large area (~400 square miles) [for example: double the size of Boston]
- Complex school choice system with service throughout county
 - 84 schools average 5 or less students per square mile
 - 10% of schools have 20 or fewer students within 2 miles (mostly county-wide)
 - Short walk zones have resulted in more bus stops
- Driver shortage

Strategies to Offset Driver Shortage

- 920 Routes were consolidated into 770
- To cover the 770 Routes we have approximately 775 drivers:
 - o 740 full time drivers
 - Substitute drivers
 - Part time drivers
 - Activity bus drivers (from schools)
- Added shift differential for bus drivers made a difference
- Increased to hourly rate to all JCPS Employees willing to drive made a difference
- Helped offset much of the overcrowding issues we experienced in August

Comparison

	2019-2020 Pre-COVID			2021-2022 Current Year		
Bell Time	1st Run	2nd Run	Total	1st Run	2nd Run	Total
7:40-2:20	920	171	1091	770	191	961
9:05-3:45	920	75	995	770	117	887
9:45-4:25	214	0	214	250	0	250
Drivers Needed	920			770		

Current State

- JCPS has not cancelled school due to driver shortage
- JCPS has not denied service to students
- Byproducts:
 - Combined runs resulting in longer rides
 - More students on buses
 - Increased workload on drivers
 - 308 Double Runs; 10 Triple Runs
 - Early/Late Pick-ups-> Supervision Needed at School
 - Daily on-the-fly problem solving to cover call-ins

National Models Suggest

- Optimize # Riders on Buses (up to Capacity = 66 passengers)
- ✓ Implement Early Drop-Off Allowances
- Employ Double-Runs (and Triple Runs in some cases)
- Centralize Pick-up/Distribution of Students Through Bus Depots
- Increase Ride Times
 - ☐ Balance Elementary Clusters Across Bell Times
 - ☐ Maximize Walking Distance to Bus Stops When Safety Permits
 - ☐ Maximize Walk-to-School Distance When Safety Permits
 - ☐ Limit Transportation to Geographic "Zones"
 - ☐ (Un)Mirror a.m./p.m. Routing
 - ☐ Create Additional Bell Times
 - ☐ Prioritize Allocation of Resource for Students with Greatest Needs

Bell Time Changes and Transportation are Interrelated

With the availability of fewer drivers, we need a balanced approach to transporting students to school across multiple start times (bell times). This will provide students a better experience: shorter rides, fewer students on buses, fewer double runs, and less waiting at school.

Challenges to Changes

- Some students will have to start early (7:40)
- Some students will have to start later
- Often older students are caretakers of younger siblings.
- Clarity of start times
- New Student Assignment Plan proposed
- We provide more transportation to more school options than almost any district

Questions and Feedback