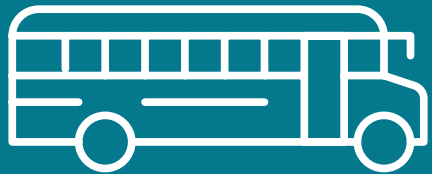


START SMART



Start Times Proposal

JEFFERSON COUNTY PUBLIC SCHOOLS

MARCH 28, 2023

PURPOSE

After the Jefferson County Board of Education (JCBE) passed the School Choice Plan on June 1, 2022, it became necessary to review our transportation system, ensuring that the Jefferson County Public Schools (JCPS) Transportation Services Department could effectively and efficiently transport students throughout the implementation of the new School Choice Plan. Like several large urban school districts across the nation, JCPS is facing a challenge of labor shortages, particularly in the transportation department.

Although JCPS has remained creative, focused, and nimble for a number of years as the number of bus drivers dwindled, we are now facing the reality that there will not be enough drivers to transport students under two uniquely challenging transportation plans throughout the next several years as we begin phasing in the new School Choice Plan (e.g., current students at our schools will return to their school next year, while new students will begin attending a new school under the School Choice Plan). It is important that we allow current students to remain at their school because they have important relationships and routines established that contribute to their success.

This document outlines a proposal to alter school start times that will create a balanced transportation system, provide better service to all students and a more manageable work environment for our transportation and school employees. The major tenets of the new School Choice Plan are summarized and will help provide a better understanding of the interlocking systems.

Additionally, there are numerous studies that explain that a later start time aligns with the natural sleep schedule of adolescents. When exploring how to create the plan, one of the goals was to create a plan that would allow as many adolescents as possible to have either a later start time or at least a later bus pickup time to facilitate the natural sleep cycle and improve attendance.

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RELATIONSHIPS



ROUTINES

SUCCESS

BALANCE



BETTER SERVICE

**SUPPORTIVE
ENVIRONMENT**



Numerous studies explain that later start times align with the natural sleep schedule of adolescents.

Information on JCPS Transportation System



The JCPS Transportation Services Department is committed to providing safe, timely, efficient, and courteous service to all eligible students. Transportation Services is led by the Executive Administrator of Transportation Services and is one of the departments within the Operations Services Division that falls under the purview of the Chief Operations Officer. The Executive Administrator of Transportation Services manages three Transportation Specialists. Each Specialist is responsible for a set of four to five bus compounds. A bus compound is a regional center that serves the local area. Buses are parked at the compound overnight, and bus drivers report to the bus compound each morning to pick up their bus before they begin their bus route(s). Having bus compounds spread throughout the county increases the operational efficiency of the Transportation Services Department. The compounds are listed below.

BUS COMPOUNDS

Blankenbaker

13071 Middletown Industrial Park Boulevard
(502) 485-3162

Blue Lick

10705 Blue Lick Road
(502) 485-3145

Burks

6401 Gellhaus Lane
(502) 485-6690

Detrick

3686 Parthenia Avenue
(502) 485-3169

Hoke

4601 Valley Station Road
(502) 485-3147

Jacob

3700 Georgetown Place
(502) 485-7660

Jeffersontown

9600 Old Six Mile Lane
(502) 485-3153

Lees Lane

3320 Lees Lane
(502) 485-7055

Moore

6415 Outer Loop
(502) 485-3163

Nichols

3686 Parthenia Avenue
(502) 485-3057

Special Needs East

10705 Blue Lick Road
(502) 485-6099

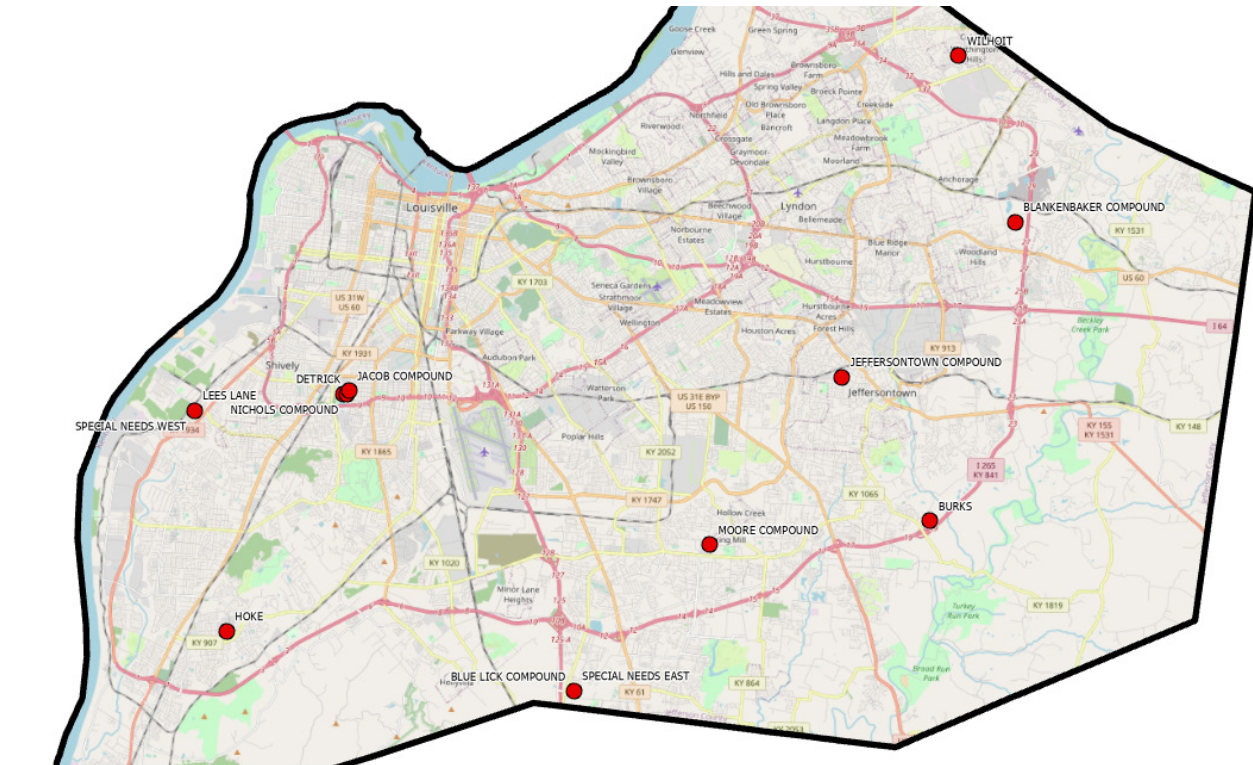
Special Needs West

3320 Lees Lane
(502) 485-6088

Wilhoit

4305 Murphy Lane
(502) 485-8595

Below is a map showing locations of the compounds throughout the county.



Each Bus Compound is led by a Coordinator, who is supported by an Assistant Coordinator and a Compound Assistant. Together, they manage a team of Bus Drivers, Monitors, and other personnel. Each compound serves as a home base to a set of buses that park on-site. The Transportation Specialists and Coordinators work closely together to ensure that bus routes are covered, solve logistical problems, and manage the day-to-day business.

The Executive Administrator also oversees a training group that on-boards and trains our Bus Drivers once they are hired, ensuring that all certifications/licenses are obtained and that required training is completed. The Training Group also trains our school Bus Monitors.

Additionally, the Transportation Services Department has a Supervisor of Vehicle Maintenance, who oversees two garages and body shops with a full contingency of Foremen, Inspectors, Mechanics, and Workers to maintain both the fleet of buses and other district fleet vehicles.

The Executive Administrator of Transportation Services reports directly to the Chief Operations Officer, who works closely with the Transportation team members to provide transportation services to the students of JCPS.

HISTORICAL CONTEXT

Over the past decade, we have worked with several outside entities to review and analyze our transportation services (along with other aspects of the district) and give feedback.

- In April 2011, Transportation Advisory Services performed an analysis of the student transportation system and provided feedback. One of the considerations was to consider bell/start times in order to have a sustainable system.
- The 2017, the Department of Education Management Audit/Corrective Action Plan had a section on transportation, and most of the items focused on student behavior, monitoring the loading and unloading of buses, and other technical functions.

FLEET

The district has just under 1,200 buses in its fleet and 550 non-student-transport vehicles. Of the approximate 1,200 buses, 896 are used for bus routes, 76 are spares, 56 are used as activity buses housed at schools, 3 are used as training buses, and 145 are in reserve. Included in these numbers are 80 buses with a lift for students with special needs. Spare buses are used when a bus is in the shop for maintenance or as a supplemental vehicle when necessary. The oldest vehicle is 21 years old, and the newest is less than a year old.

The district replaces buses regularly and has recently purchased buses with 78 seats. This is larger than the currently used buses, which have 66 seats.

The following chart shows a fleet profile.

JCPS Fleet Information

The last two columns show the JCPS Lift Bus Fleet. These lift buses are included in the fleet numbers on the left side of the chart.

Year	Route	Spare	Activity	Training	Total	Year	Other/Lift
2002			56		56		
2004		11			11		
2005	17	16			33	2005	1
2006	35	10			45		
2007	37	18			55	2007	3
2008	44	4			48	2008	8
2009	41	6			47	2009	8
2010	74	7			81	2010	4
2011	71	4		3	78	2011	4
2012	82				82	2012	6
2013	47				47	2013	3
2014	40				40	2014	15
2015	44				44	2015	5
2016	35				35		
2017	72				72	2017	5
2018	80				80	2018	5
2019	82				82	2019	6
2020	80				80	2020	7
2021	15				15		
Total	896	76	56	3	1031 + 145 (in reserve)= 1176	Total	80

Garages

The JCPS Transportation Services garages are full-service vehicle maintenance shops that service, inspect, maintain, and repair our fleet vehicles. There are 17 diesel tanks for refueling. Nine of the 17 are underground, and 8 are above ground. There are four gasoline tanks, with three underground and one above ground.

- The Nichols Garage has 84 work bays and 56 lifts.
- The Blankenbaker Garage has ten work bays and eight lifts.

CUSTOMER SERVICE

The Transportation Services Department is committed to customer service and works with families and schools on a regular basis. Transportation Services, in collaboration with Geographic Information Systems (GIS), provides an online tool called Bus Stop Finder, which allows families and school personnel to enter an address and immediately see available bus stops for their student(s). This tool has been in place for more than a decade and is widely used by both families and schools.

Special education students who receive special transportation services as part of their Individual Education Plan (IEP) are a priority for the district. Buses that are designated for students with special needs have a Monitor on the bus to assist students and the Driver. Students are delivered hand-to-hand, either to their home or to the appropriate after-school care facility.

Similarly, students in the JCPS Early Childhood Program are delivered hand-to-hand; there is a Monitor on these buses as well. This allows special care to be provided to our youngest students.

According to the McKinney-Vento Law, children and youth experiencing homelessness have the right to:

- Continue in their school of origin if that is the parent's or youth's choice and is feasible.
- Enroll in school immediately even if they are missing records and documents required for enrollment.
- Receive transportation to and from the school of origin.

When a dispute arises under the McKinney-Vento Act, the law requires the following minimum procedures: The child or youth "shall be immediately admitted to the school in which enrollment is sought, pending resolution of the dispute" [42 U.S.C. § 11432(g)(3)(E)(i)].

Students who are protected by the McKinney-Vento Law are transported by a variety of means, including buses, vans, and the provision of gas cards to families.

ROUTING

In a typical year, JCPS transports about 70 percent of our students. This is a very high percentage when compared to comparable school districts across the country that serve an average of 50 percent of their students. JCPS currently has two main start times—7:40 and 9:05 a.m.—with a relatively small percentage of students who attend Early Childhood Programs with a start time of 9:45 a.m.

Scenario 1:

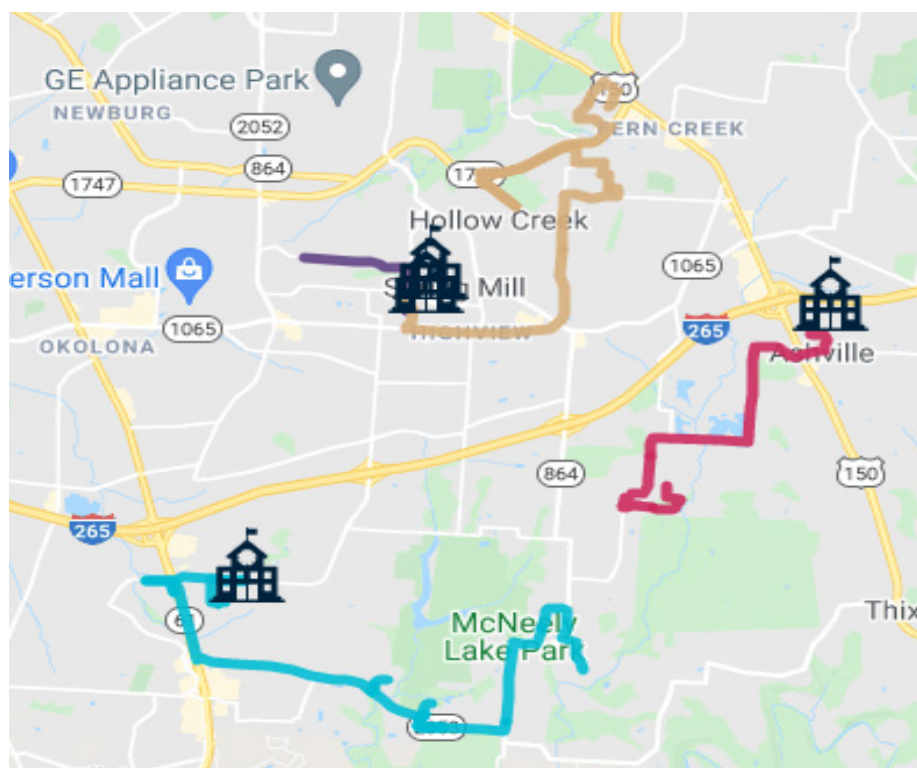


The map above shows what a morning looks like for one bus:

- Once the bus leaves its bus compound, it begins picking up students at the far end of the green line, which represents its high school route.
- The bus picks up all the students along the green route and drops them off at their high school.
- Then the bus drives to the beginning of the blue line and begins picking up students to drop off at the elementary school.
- Then the bus goes to the beginning of the black line and picks up Early Childhood students to drop them off at their classrooms.
- At the end of the final run, the bus goes back to the compound (near the top end of the map) and will retrace these same routes in the afternoons as it takes the students home.

One of the challenges when building our system is to minimize the time between the student dropoff at the high school at the end of the green line and when the first student is picked up for elementary school at the beginning of the blue line. A bus is driving empty between the high school dropoff and the first elementary pickup. This time is called *deadheading*. Our goal is to minimize the time that buses are deadheading, as this is not capitalizing on the availability of our resources (the empty bus).

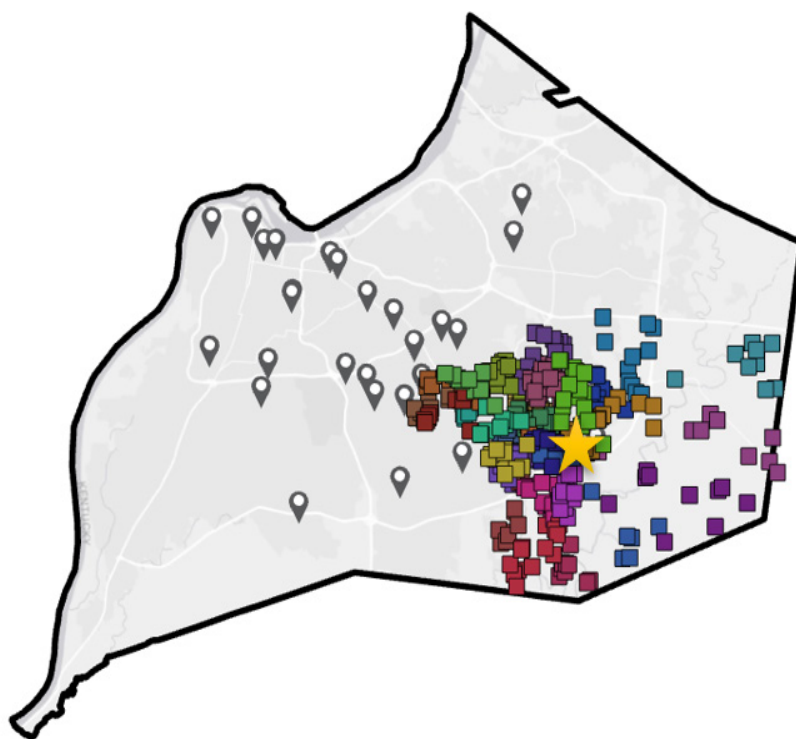
Scenario 2:



Now let's look at the map in the figure above. This is a day for another bus:

- The bus starts in the morning at the beginning of the brown line and picks up students and takes them to the high school.
- Because this bus has time before it needs to start its elementary run, it does a second run in the neighborhood close to the school and brings students back to the high school. This is the dark purple line on the map.
- Then the bus deadheads over to the elementary school run (beginning of the red line) and drops students off at the elementary school.
- Then the same bus deadheads to the beginning of the blue line and picks up Early Childhood students and drops them off at their school.
- At the end of the final run, the bus goes back to the compound and will repeat this, taking the students home in the afternoon.

The above explanations demonstrate how we run buses for students who live relatively close to the school that they attend. As you know, JCPS has a vibrant choice system that allows students many options across the county. In order to efficiently provide students transportation to schools throughout the city, we use a system called *depots*. A depot is similar to an airport hub. An example is when an airline uses Charlotte, North Carolina's airport, as a hub. In other words, people from all over the country fly to Charlotte and then catch a flight to their final destination. This is similar to a bus depot. Students from all over the neighborhood go to the depot, and they catch a new bus that takes them to their final destination.



The map above illustrates how depot buses work. The map depicts one general neighborhood. Each color represents one bus. So there is a green bus, a red bus, a blue bus, and so on. Each of these buses runs the route you see depicted. So let's consider the red bus for a moment. The red bus makes all of the stops marked with a red pin. The students who get on that bus attend schools all across the city. In this case, students may come from Louisville Male High, Noe Middle, Barret Traditional Middle, Western Middle, and Newcomer Academy. Meanwhile, the blue bus is picking up students on their route. The blue bus has students from the same schools that the red bus does, plus they have Butler Traditional High and DuBois Academy. Each of these buses is picking up students who attend a variety of schools. Each run is timed carefully so that they all end at about the same time, and the buses meet at a central location depicted by the star. In this particular example, all of these buses meet at the Burks Depot, near Ramsey Middle.

When each bus arrives at the depot, it parks in an assigned spot and waits for all of the other buses to arrive. When the final bus arrives, there is a transportation employee who serves as the depot Captain. When the Captain gives a signal, each bus opens its door and the students all change buses.

Each bus has a destination listed in its window. One is going to Louisville Male High and Liberty High, one is going to duPont Manual High and Noe Middle, one is headed to DuBois Academy, etc. Students leave the bus that they arrived at the depot on and switch to the bus that will deliver them to their school. This system is very efficient because as each bus goes into the neighborhood, they can pick up students from a variety of schools. This strategy that we call *depot-ing* is used in other places in the country and is also called *hub and spoke*.

Because we gather and distribute students from all neighborhoods and to all schools, it takes 1 hour and 25 minutes to complete a *depot cycle*. Each different colored square represents one stop for a bus (like the red bus, the green bus, the blue bus, etc.). On the map on the previous page, this set of buses is from this south-eastern part of the county, and the Burks Depot delivers students to 29 different schools. There are eight middle/high school depots and nine elementary depots, and all work similarly to this one and deliver students throughout the county.

Our system uses a combination of direct runs as was depicted in the first two maps and the depot system that is in the third. They work concurrently.

In our efforts to provide access and opportunity across the district to families and students, we have attempted to accommodate a multifaceted approach to provide transportation from any area of town to designated schools in our 400-square-mile county. By committing to providing access, we have in turn created a complex series of interdependent challenges.

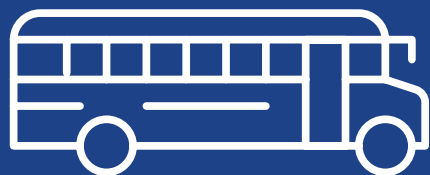
Let's look at some of these challenges. JCPS is a district of large geographic areas. Some parts of the county are relatively dense, and buses can move quickly from stop to stop. Other areas resemble rural districts, where stops are farther apart and there are narrow, windy roads that we do not allow students to walk on to get to their stops for safety reasons.

We also have schools in our choice system that have students spread throughout the county. In other words, they have very few walkers because the students come from all over the city.

We have studied other large districts, and there are two key differences between them and JCPS. Most large urban districts have their Central Business District or city core as their school system, and the surrounding suburbs have incorporated as separate school systems. Boston is a good example of this. Our ~400 square miles of area is eight times the size that the Boston Public school district has to cover for transportation.

Another difference is that our public transit system predominantly services the downtown area and the major arterial roadways. Many big cities have public transit systems that can support the school district transportation.

Background



JCPS has been experiencing a shortage of bus drivers for several years and has put multiple measures in place to offset this challenge. This section will explain this recent history. The chart below shows how many drivers and routed buses there have been since 2010.

Year	Bus Riders	Routed Buses	Drivers
2010	68,000	879	979
2015	67,000	977 (Routes were added to improve services.)	1,077
2019	70,000	909	920
2020	COVID	COVID	COVID
2021	65,000	770 (With doubled/tripled runs)	785
2022	65,000	731 (With additional doubled/tripled runs)	660
2023 estimate	~65,000	~831	~660

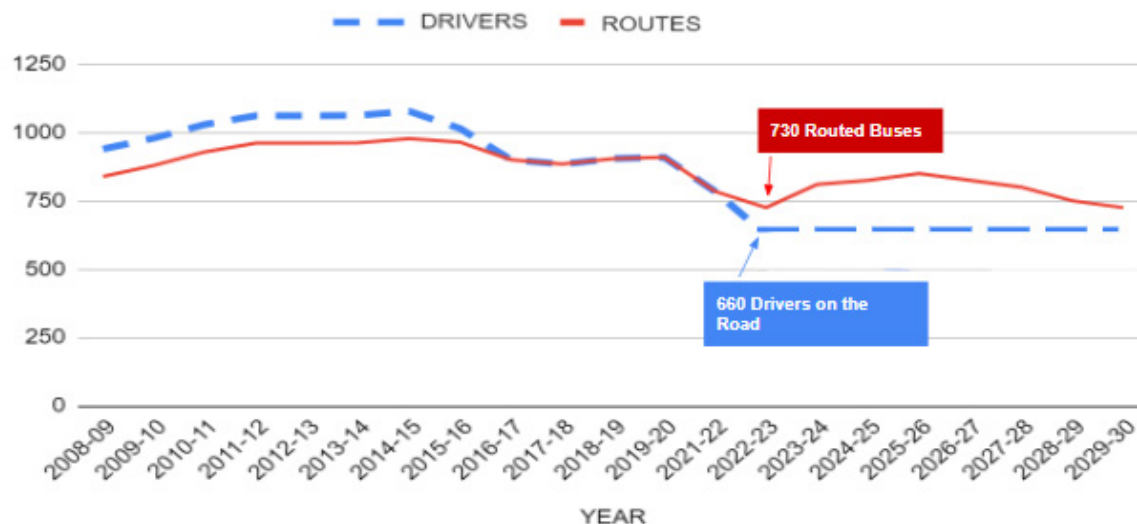
The number of bus riders has remained relatively steady over the past 12 years, while the number of both routed buses and drivers has decreased.

Focusing on 2021 and 2022 in the chart, the numbers of drivers represent the pool of available staff. However, on any given day, there are drivers on leaves (medical, child-rearing, etc.), and then there are daily call-ins of absences for drivers who are sick, have doctor's appointments, etc.

The last line on the table shows projections for the 2023-24 school year. We anticipate adding about 100 routes for the new School Choice Plan. If the same number of students continue to use our buses and we keep the same number of drivers, we will experience even greater gaps between the number of drivers needed and how many drivers we have.

The graph below shows the same data from the table above in a different format. The yellow fill lines indicate that in previous years, there was a buffer of drivers who could be used to sub or fill in on any given day. The red fill lines indicate that, currently, there are fewer drivers than routes.

DRIVERS VS. ROUTES

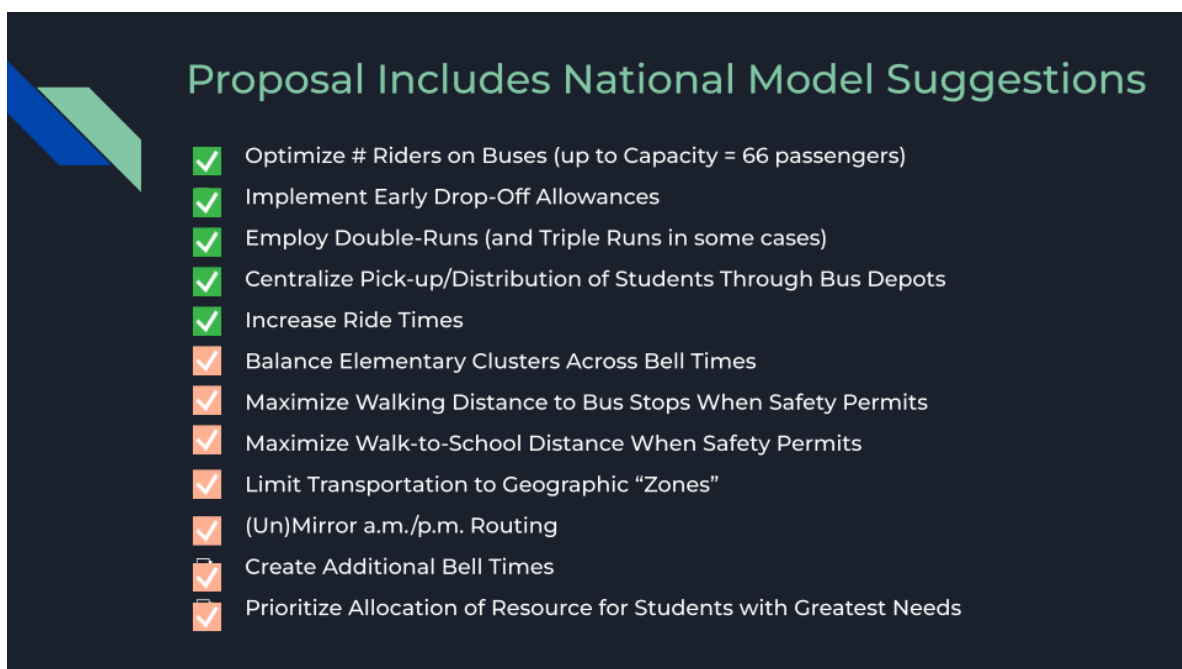


Because the number of bus riders remained constant over the years but the number of drivers was decreasing, the district had to consolidate runs, have buses make double and triple runs to serve schools, and use a variety of other strategies.

We have been able to do something that many districts across the United States were not able to do in the past two years: we have not denied students service and have not canceled school because of the driver shortage.

Because we knew our driver shortage was having a serious effect on the district, we have been researching solutions for several years and have worked with a team from the Massachusetts Institute of Technology (MIT) to help us think through options.

In the following graphic is a list of strategies that other districts have used to combat their driver shortage. You can see that we have already employed several of them.



We have employed a number of strategies, including the following:

- Optimizing numbers of students on buses
- Dropping off students at school earlier
- Using double and triple runs
- Using depots
- Increasing ride times

There are other options on this list above, including the following:

- Balancing elementary clusters across bell times
- Maximizing walking distances to school and to bus stops where safe
- Limiting transportation to geographic zones
- "Un-mirroring" morning and afternoon routes
- Creating additional bell times
- Prioritizing the allocation of resources for students with the greatest needs

Additionally, we added several other strategies, including the following:

- Using substitute and part-time drivers regularly
- Using activity bus drivers from schools and other employees with CDLs and paying them an hourly wage
- Contracting with local bus companies
- Adding a shift differential for bus drivers as part of their salary
- Aligning with the School Choice Plan rollout to look at small magnets that will become optional programs with transportation in cluster/network

During the 2021-22 school year, there were four presentations to the JCBE that described what was the current situation and thinking around transportation. These presentations were on the following dates:

- [April 20, 2021](#)
- [February 1, 2022](#)
- [February 15, 2022](#)
- [March 8, 2022](#)

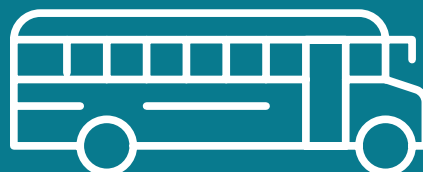
We considered implementing an option where a small set of schools whose students had high chronic absenteeism moved to a later time for the fall of the 2022-23 school year ([March 8, 2022](#)). We worked through some options, got some feedback from schools, and decided that it made sense to roll out a comprehensive plan for new start times at the same time that the new School Choice Plan was implemented.

When we decided to start the 2022-23 school year with the same parameters as previous years, the transportation team was challenged again to look closely at runs and they doubled and tripled more runs than in the previous year. Because there were fewer drivers than in the previous year, there were (and still are) multiple occasions when a bus route is not covered. When this happens, the families are notified that a bus will be coming late to get the students. A driver finishes the routes regularly assigned to the bus and then circles back and picks up the students who were on the delayed run. This means that the students on that bus are late to school. (Please see [Appendix G](#).) Our goal is to create a systemic solution that will address our driver shortage and provide better service to students.

We also spent time researching the natural sleep cycle of adolescents and knew that we wanted our proposal to move as many adolescents to a later start time as possible. This will not only support the operational needs of the district but also support students in their learning and support better attendance.

Start Times Proposal

JCPS 2023 Start Times



When it was time to create a proposal, there were several things that we knew based on our previous work and reaching out to other districts. The first is that the time has come for a more systemic change to address the driver shortage and that the way to do this is to change the times that schools start and end. Currently, the times that schools operate are in the table below:

School Level	Current Times*
Middle/High	7:40 a.m.–2:20 p.m.
Elementary	9:05 a.m.–3:45 p.m.
Early Childhood	9:45 a.m.–4:25 p.m.

*A small number of special schools are on a slightly adjusted schedule.

The second was that in the fall of 2023, the first set of kindergarten, sixth-, and ninth- grade students will begin to participate in the 2022 School Choice Plan. Students at all other levels will remain under the previous plan. This will add approximately 100 routes to the existing set of routes for the 2023-24 school year. Currently, the transportation system is stretched to just implement one plan without adding the new kindergarten, sixth-, and ninth-grade students. We have realized that our best efforts right now are not enough to prevent service problems, such as late buses, double and triple runs, and many students being delivered an hour early to school and then staying an hour or more late as well.

In order to adjust for the layering of assignment plans, a new transportation plan needs to be implemented that will continue to accommodate existing student enrollments as the new School Choice Plan is phased in to accommodate changes to enrollments. As we phase in the new plan over the next five years, each new school year will see more students enrolled in alignment with the 2022 School Choice Plan and fewer on the “old plan.” We are projecting that our peak transportation demand (when there will be the most students on both plans) will occur during the 2025-26 school year. After that, there will be more students on the new plan as the numbers in the old plan continue to phase out. It should be noted that, regardless of the number of routes decreasing in 2026-27, we would still not be able to cover the number of routes with the decreased number of drivers without a new start time plan.

The third thing that we knew was that we needed to have support from outside experts. Our team has worked diligently for years to provide an efficient system; however, the new set of challenges we are facing cannot be addressed with our current system. We had previously worked with a company called Dynamic Ideas (now known as AlphaRoute), and they understood our challenges. We reengaged this group of forward thinkers to help us consider our challenge.

Dynamic Ideas/AlphaRoute has developed routing algorithms based on research originating at MIT. Their goal is to help districts support transportation systems to increase efficiency and provide good service to riders. They have worked with districts across the country, including Providence, Rhode Island; Pinellas County, Florida; Arlington, Virginia; and many more.

John Hanlon, the CEO of the company who previously served as the Chief Operations Officer in the Boston Public School system, said, “The JCPS Transportation system is the most complex we have seen across the U.S. and parts of Canada, resulting in unbalanced inefficiencies, long bus rides, double and triple runs between schools and neighborhoods, and significant deadheading. Some of this complexity comes from an admirable interest on the district’s part to be as accommodating as possible. This is reflected in very short walk-to-stop distances, extensive school choice, students on the same buses in the AM and PM, and other goals as well. But ironically this interest in accommodation has directly led to a much higher than necessary route count, which the district cannot reliably operate because of the extent of the driver shortage.”

The team at AlphaRoute used their algorithms to create a system that would address the challenges that we face. This proposal requires more than two start times for the district. Having more start times will reduce the number of drivers needed, will reduce the need for double and triple runs, and will build sustainability for inevitable future demand.

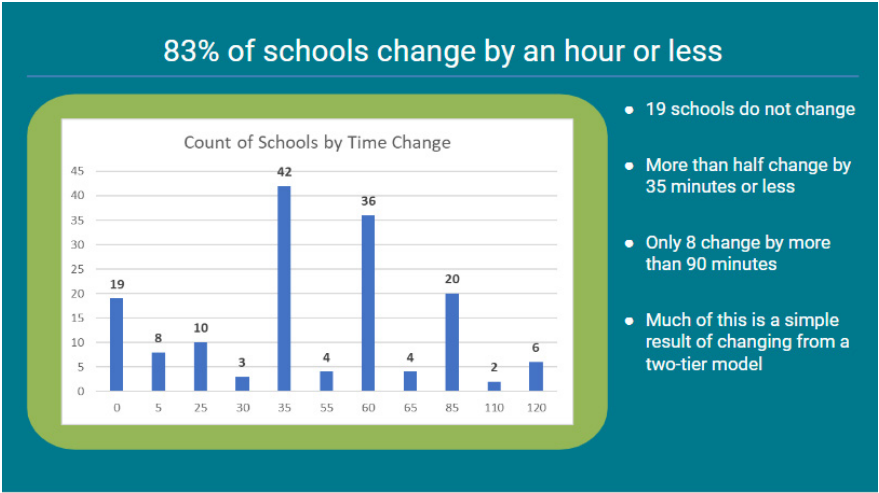
The proposal included some parameters that the AlphaRoute team used as they developed the proposal in collaboration with the JCPS team. These included the following: a maximum walk-to-stop distance of 0.5 mile for elementary and 1.0 mile for middle/high students and a maximum safe walk zone to school of 1.0 mile, eliminating as many double/triple runs as possible, and a 40-minute early dropoff and late pick-up limit. They used these parameters to create the proposal. It is important to note that these parameters often set the upper bounds of certain elements within the routing system, not the norm. For example, the maximum walk-to-stop distances indicated above simply represent the limits that the algorithms could use. The average walking distance in AlphaRoute’s resulting solution was roughly a quarter-mile, the median was less than that, and more than 36,000 riders should have a walking distance of less than three-tenths of a mile.

Similarly, despite the 40-minute early and late allowance above, the average extent of that being used by the solution is only 14 minutes. Both that and the number of students involved in early a.m. or late p.m. trips mark a big improvement over the current plan.

Lastly and on a similar note, in the AlphaRoute solution, the students who are being dropped off early in the morning are not the ones who will be picked up late in the afternoon. The same applies at the school level: if a school has early dropoffs in the AlphaRoute solution, then it should not have late pickups as well, unless other circumstances outside of the solution call for this. These components are also an improvement over the current plan, in which many students are at schools for eight-plus hours.

The proposal includes eight different school start times for k-12 schools as opposed to the two we currently have. This change in the number of tiers means, of course, that many schools will have different start times, but fortunately the plan has approximately 83 percent of our schools starting school within one hour of their current time. More than half of our schools will have a start-time change of 35 minutes or less. The chart below shows the numbers of schools and the change they experience.

Originally, the proposal had four early childhood centers starting at a ninth time at 10:40 a.m.. After receiving feedback from numerous stakeholders through our on-line survey, we worked to reduce the numbers of centers on the 10:40-5:20 start time. We have been able to contract with an outside provider to move two of the early childhood sites to a 9:40 start time and the other two will stay at the 10:40 start time.



Additionally, we are moving nearly every middle and high school with a resides to an 8:40 a.m. start time. The additional hour of sleep in the morning will benefit our adolescent students that are struggling with attendance. (See Appendix F for data on chronic absences.) Finally, this plan will reduce our bus routes to approximately 600 or roughly 130 fewer than the current plan and 230 fewer than what we project to have next year when implementing two different school choice systems.

The chart below shows the proposal:

7:40 - 2:20					8:00 - 2:40	8:10 - 2:50	8:40 - 3:20				
Blake	Hite	Watterson	Grace James	Male	Auburndale	Luhr	Chenoweth	Kammerer	Hudson	Iroquois	Western HS
Bloom	Layne	Wheeler	JCTMS	Manual	Camp Taylor	Sanders	Field	Meyzeek	Western MS	JTown HS	Breck Metro
Cane Run	Lowe	Wilt	Johnson	Moore	Trunnell	Smyrna	Portland	Newburg	Westport	PRP	Newcomer
Chancey	Mill Creek	ZT	Lassiter	Binet	Wilder	Wilkerson	Norton Comm.	Noe	Ballard	Seneca	Mary Ryan
Cochrane	Schaffner	Barret	Stuart	Waller	Brown*	Knight	Carrithers	Olmsted N	Doss	Shawnee	Phoenix
Crums Ln.	St. Matthews	Conway	Atherton		Pathfinder*	Liberty	Crosby	Olmsted S	Eastern	Southern	TAPP
Dixie	Stonestreet	DuBois	Butler			M. Daniels	Farnsley	Ramsey	Fairdale HS	Valley	
Gutermuth	Tully	Echo Trail	Central				Highland	TJ	Fern Creek HS	Waggener	

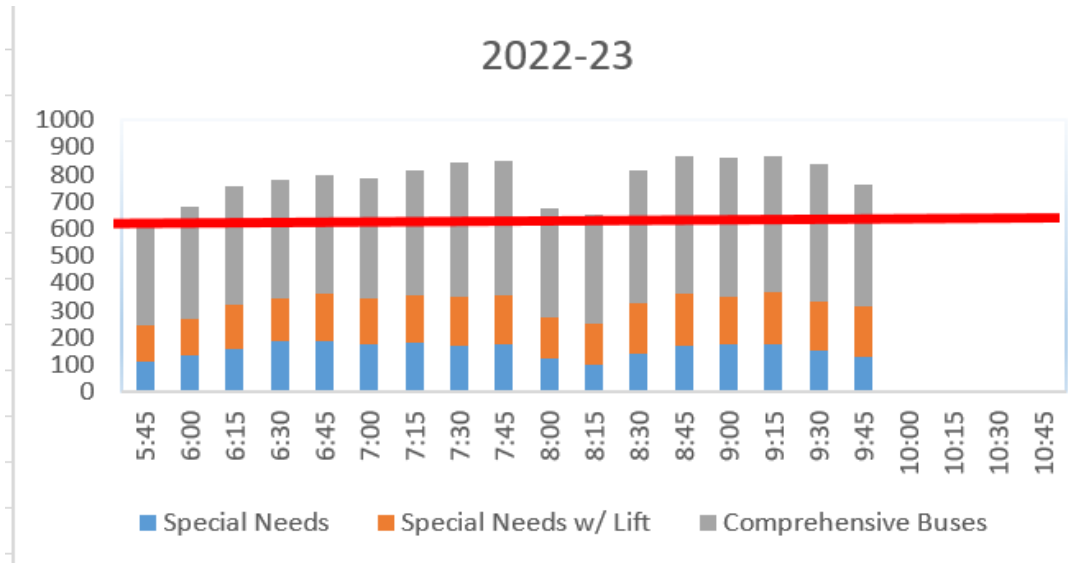
*These schools do not have bus transportation

Full Proposal

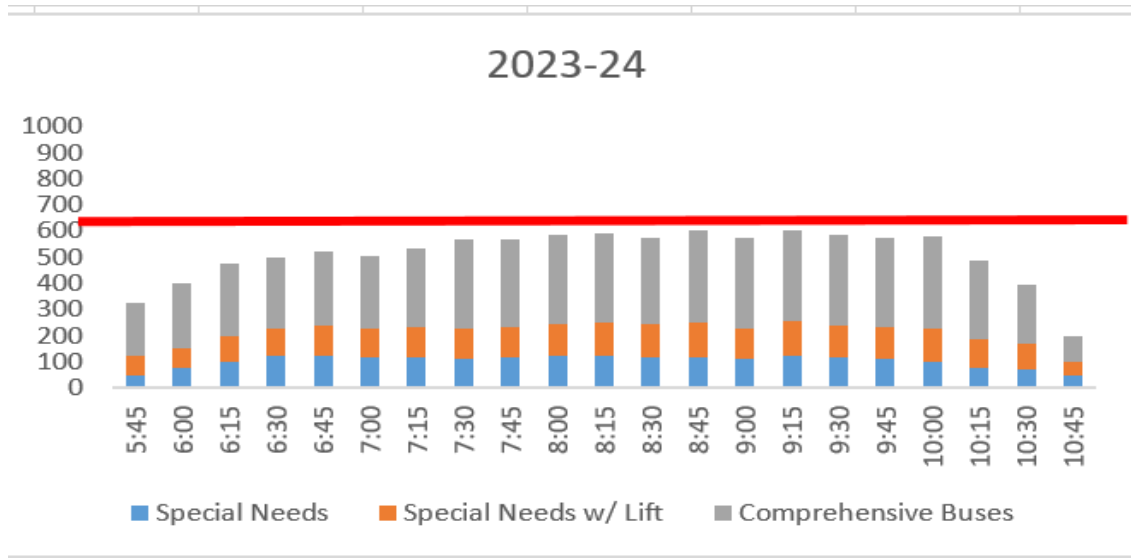
*There are a small number of community partner programs that will remain at current times.

9:00 - 3:40	9:10 - 3:50	9:30 - 4:10	9:40 - 4:20							10:40 - 5:20	
Blue Lick	Bates	Dunn	Middletown	A. Kennedy	Byck	Farmer	Hawthorne	King	Minors Ln.	Shelby	Dawson Orman
Kerrick	Coral Ridge	Eisenhower	Rangeland	Atkinson	Carter	Fern Cr ES	Hazelwood	Klondike	Norton	Slaughter	DuValle
Laukhuf	Kenwood	Greenwood		Audubon	Cochran	Foster	Indian Trail	Lincoln	Okolona	Wellington	
Stopher	Shacklette	Hartstern		Bowen	Coleridge-T	Frayser	Jacob	Maupin	Price	Perry	
		Johnsontown Rd		Brandeis	Engelhard	Goldsmith	JTown ES	McFerran	Rutherford	Young	
				Breck-Frank	Fairdale ES	Greathouse	JFK	Medora	Semple	Churchill Park	
									Unsel	Westport ECH	

If this proposal is accepted, we will need to continue connecting with experts in the field to help us create this complex set of routes in the future. The proposal that AlphaRoute has created was designed using an algorithm that balances out the number of buses needed throughout the morning and afternoon times. The chart below shows the number of routes throughout both the morning times for the current school year. You will see that the number of drivers we have is depicted by the red line, and throughout the morning, there are more routes than there are drivers.



This second chart shows what this chart would look like for next year using the new proposed start times. You see that the number of routes is less than the number of drivers. This means that routes could all be covered.



When the plan was designed, there were several things that AlphaRoute put into place to result in the relatively even number of buses needed throughout the day. The first and most obvious one is the staggered start times occurring from 7:40 a.m. on. By limiting ourselves to two tiers, we have effectively locked ourselves into a situation where each bus can only serve a maximum of two schools per morning and afternoon. This is extremely inefficient and is not something you would see in most major school districts. As we have studied this start time proposal, we have learned that we are one of the few districts in the country to only have two start times for K–12 schools, and this creates important logistical problems for our district. In Appendix E, you can find information about other large urban districts across the United States and what their start times look like.

The two start times create a more acute problem for us in Jefferson County because of the following:

- Our driver shortage is quite significant. We have roughly 400 fewer drivers now than we did five years ago, despite one of the highest driver pay rates in the region.
- Our huge geography, coupled with extensive school choice, means that we often cannot fill our buses, even in the increased time that a two-tier system provides. To counter this, we have extensively built in double and even triple runs, effectively creating additional tiers without actually doing

so. By staggering start times, the AlphaRoute proposal can keep our buses in steady use (i.e., no long layovers between tiers with no students on board) while virtually eliminating double and triple runs.

Another important strategy that AlphaRoute used is known as *un-mirroring* routes. Typically, a student gets on a bus in the morning and gets on the same bus at the end of the day to go home. When a route is un-mirrored, the student rides one bus for the morning route and a second bus in the afternoon. This is an efficient strategy and helps keep the number of routes consistent throughout the day.

Let's look at an example with mirroring. Bus A picks up students in the Choice Zone in the morning and takes them to a middle school near the Snyder Freeway. Then Bus A leaves that school and does an elementary run in the area. In the afternoon, the bus starts at the middle school and drives students to the Choice Zone. Then that bus has to drive all the way back to the elementary school in the suburbs to deliver the elementary students home. This bus has lots of *deadhead* time—meaning it is driving a long way with no students on board to get back to the elementary run. This is the strategy that we are currently using.

When we un-mirror, Bus A drives students in the morning from the Choice Zone to the school in the suburbs and then does the elementary run the same way as in the mirrored example above. However, in the afternoon, Bus A takes the students from the middle school home to the Choice Zone and then goes to an elementary school in the Choice Zone and takes those students home. Meanwhile, a separate bus that has completed a trip close to the elementary school near the Snyder Freeway goes to the elementary school and takes those students home. When you take this approach and multiply it across our entire district, you can see the potential to reduce our route count by dozens of routes if not more than 100. This is an important strategy to confront the driver shortage, and while it includes a change to the student experience, it will ultimately help us to improve service overall.

As families look at this proposal and consider their children's needs, it is important to note that the office of School Choice is always willing to work with families to discuss school options. The school transfer window opens **May 1, 2023**, and elementary families can consider the choices available in their clusters and ask for a transfer based on what works for their family.

POLICY AND PROCEDURE

Currently, there is a set of policies and procedures concerning our transportation system. JCPS Policies pertaining to transportation will be modified to ensure alignment and consistency with the proposal.

Policy is defined as a vision, principle, guideline, or overarching commitment that aligns with and/or further clarifies regulation/statute and must be adopted by a governing entity (in this case, the JCBE). As a reminder, policies are examined by a Board Committee consisting of a wide range of stakeholder representation. After the Policy Committee reviews a policy in an open meeting, it is then referred to the school board for consideration at a subsequent board meeting. The Policy Committee is chaired by a board member with an open invitation to all board members for each meeting.

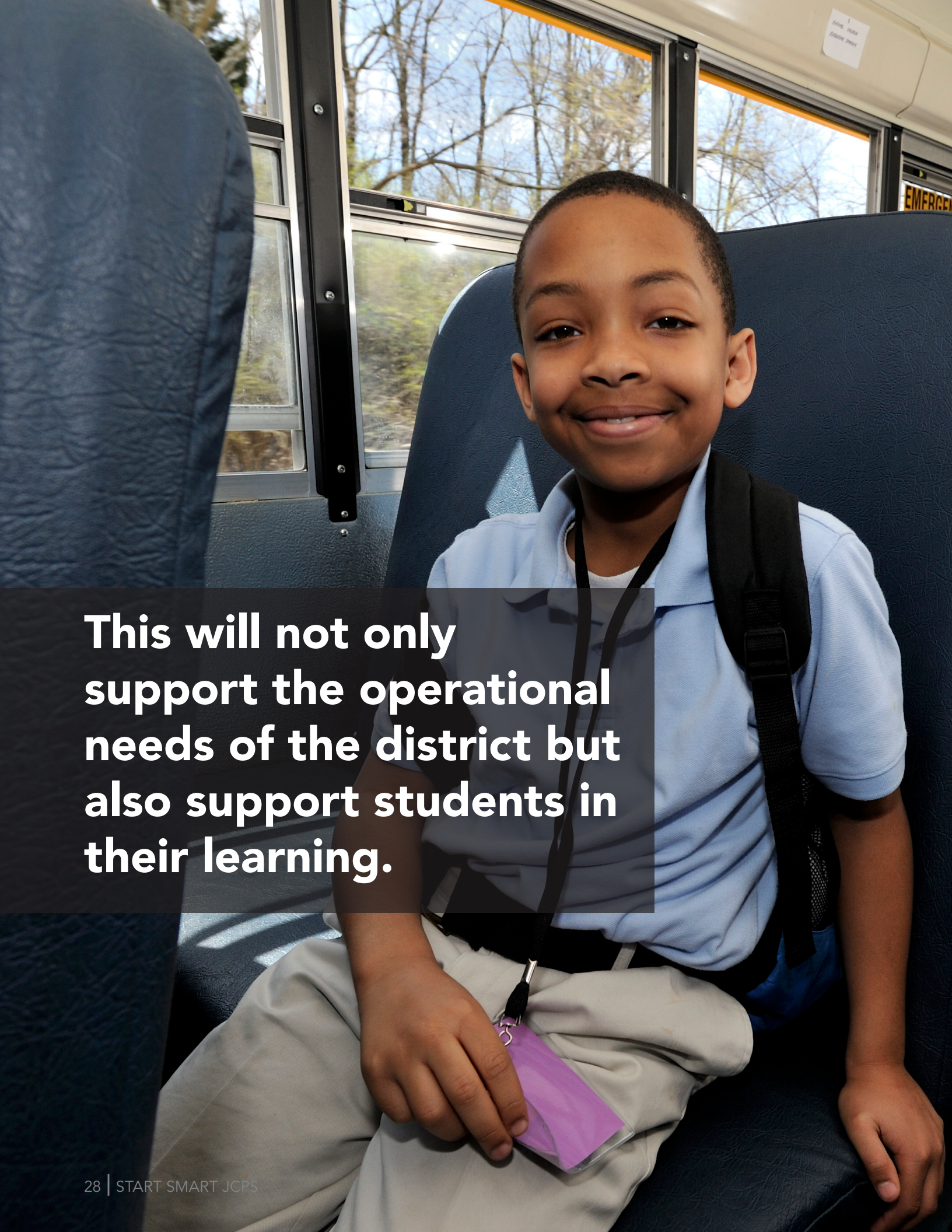
Procedures are defined to be an official strategy or method of fulfilling the commitments outlined in policy. Procedures are created by the School District Administrative Staff and are reviewed by the school board.

Practices/Protocols are defined as the specific and detailed actions taken to execute the daily implementation of both policies and procedures.

OVERVIEW OF POLICY AND PROCEDURE

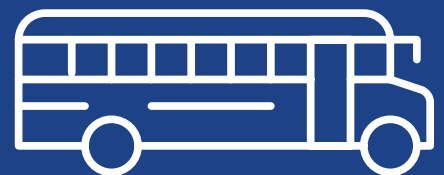
District Administrative Staff will provide these recommended policies to the Board Policy Committee. The procedures and practices will also be referenced at that meeting so that the committee has a full understanding of the proposal. After the Board Policy Committee reviews the policies and makes recommended adjustments, district administrative staff will schedule the policies to go to the board for review and potential approval. Should the proposal, policies, and procedures be adopted, the practices will be included in the *Transportation Handbook* for staff use.

Policy A vision, principle, guideline, or overarching commitment that aligns with and/or further clarifies regulation/statute (Board-Approved)	Procedure An official strategy or method of fulfilling the commitments outlined in policy (Board-Reviewed)	Practice/Protocol Specific and detailed actions taken to execute the daily implementation of both policies and procedures (Department Process)
6.31 Bus Scheduling and Routing	6.31 AP.1 Bus Scheduling and Routing	Handbook of Processes and Protocols to Support the JCPS Policies and Procedures



This will not only support the operational needs of the district but also support students in their learning.

Communications Plan



COMMUNICATIONS PLAN

The following strategies will be used in an effort to share this proposal and answer community questions relative to the proposal and its implications. A website will be developed that will serve as a landing place for all relevant information about the proposal. This will make it easy for families, staff, and stakeholders to find information.

Digital Information Sharing

The district will provide a virtual Town Hall event in which a brief review of the proposal will accompany the posting of a digital copy of the proposal. The community is encouraged to review the proposal and provide feedback.

Information Sessions

The district has shared information about the need for new start times in multiple formats before the proposal was complete. This included media interviews, information at board meetings, etc. This was to share the need for change with the community before the proposal was even completed. We have also met with internal stakeholders, including principals, school staff, transportation employees, labor partners, external partners in our work, and others, to provide information and gather feedback.

The Town Hall video will be provided on the JCPS YouTube channel to share with the community. This will ensure that across the entire community, the same information is shared.

For community members, families, and employees, there will be access to a Google Form. These stakeholders will be able to access the feedback form from the district's website. Additionally, the community is always permitted to submit written comments to the VanHoose Education Center, 3332 Newburg Road, Louisville KY 40218.

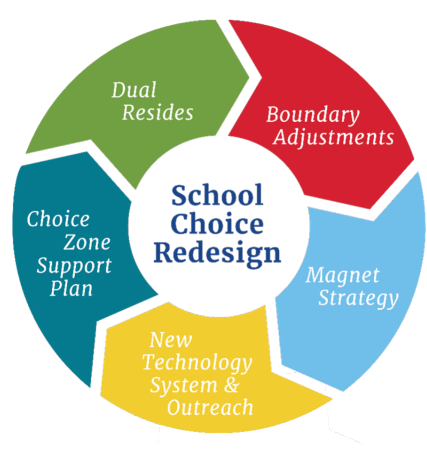
Appendices

APPENDIX A: Summary of June 1, 2022, School Choice Plan—Key Elements of the Approved Proposal

June 1, 2022, Student Choice Plan

One Coherent School Choice System

The plan that was passed on June 1, 2022, is wholly integrated and interdependent. As spokes on a wheel, the components of the plan amounted to a full redesign of the School Choice process. The approach will change the School Choice system to one that focuses on student experiences and outcomes.



Dual Resides

- True Choice for families in the Choice Zone
- Alignment of Feeders

Choice Zone Support Plan

- Staffing, Resources, Funding
- Supporting High Poverty Schools
- Continuous Improvement: Review Process

New Technology System and Outreach

- SchoolMint Implementation
- Outreach Plan with Targeted Communications
- Clear, Easy to Understand Platforms

Boundary Adjustments

- Feeder Patterns
- Predictability
- Optimizing for Building Capacity and Programming
- Maintain choice for families not in Choice Zone

Magnet Strategy

- Magnet Strategic Plan aligned with MSA national standards
- Magnetic Magnets
- Support Structure for Strong Magnets
- Remove School Initiated Exits
- Centralized Lottery
- New, Engaging Magnets (Mirror and Interest-Based)
- Diversity Targets and Goals



Timeline for Implementation of the Student Assignment Plan

School Year	Proposal
2021-22	Passage of Proposal
2022-23	• Application Process for Choice Zone Included in the Fall • Two New Elementary Buildings Open in Fall of 2022 • Eliminate school-initiated exits. • Implement centralized lottery. • Non-magnetic Magnets are identified, and plan to revamp or remove is determined. • Open Enrollment Rolled Into Transfers • Transfer Revocation Changes
2023-24	• First Class of Choice Zone—Kindergarten, Sixth, and Ninth Graders • First Year of New Suburban Boundaries—Kindergarten, Sixth, and Ninth Graders • Removal of Non-magnetic Magnets
2024-25	K-1; 6-7; 9-10 Choice Zone Implementation K-1; 6-7; 9-10 Suburban Boundary Implementation
2025-26	K-2; 6-8; 9-11 Choice Zone Implementation K-2; 6-8; 9-11 Suburban Boundary Implementation
2026-27	K-3; 6-8; 9-12 Choice Zone Implementation K-3; 6-8; 9-12 Suburban Boundary Implementation

Elementary Choice Zone and suburban boundaries will be fully implemented in SY 2028-29.

Choice Zone: Summary

Elementary, middle, and high school students in the Choice Zone have a choice between a school close to home or a school farther away. Under the previous plan, students living in the Choice Zone did not have a choice to enroll in a school close to home and were zoned for schools farther from home with no access to a local school. In addition, elementary school students could, based on the cluster system, be assigned to an elementary school far from home if close-to-home schools are at capacity. Since the clusters and satellite zones cut across the Choice Zone, a short distance move within the area could result in a disruptive transition to a new school. The 2022 School Choice Plan will provide students with an additional choice and some stability.

Example A

STUDENT A

Level

Close to Home

Away from Home

Elementary	Portland Atkinson Breck- Frank Byck	Chancey Dunn Norton Commons Norton Wilder Zachary Taylor
Middle	New West Louisville Middle	Kammerer
High	Academy @ Shawnee	Ballard

*Close to Home Elementary options are based on High School Network; Student A can choose any Network 3 elementary school within the choice zone (in addition to the Ballard Cluster).

*All students may apply for magnets, transfers, and network schools

Example B

STUDENT B

Level

Close to Home

Away from Home

Elementary	Chancey Dunn Norton Commons Norton Wilder Zachary Taylor	Portland
Middle	Kammerer	*Students may apply for magnets/transfers
High	Ballard	*Students may apply for magnets/transfers/network

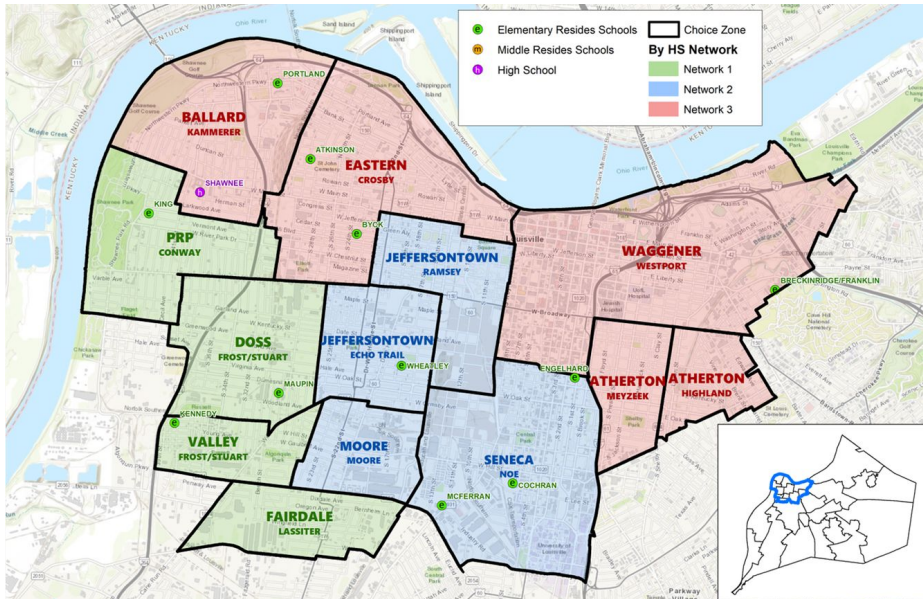
*Students may apply for magnets/transfers/network

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Choice Zone: Elementary Schools

Options Available

Students entering elementary grades are offered two cluster options: the Choice Zone cluster, as outlined by the new Academy @ Shawnee boundary that encompasses the old satellite zone; and the suburban high school cluster for which they are zoned. Essentially, families will have a guaranteed option to attend a school within the close-to-home cluster or a school within a far-from-home cluster. This lines up with middle and high Choice Zone options and Networks so that families can have a clear path from kindergarten through twelfth grade.

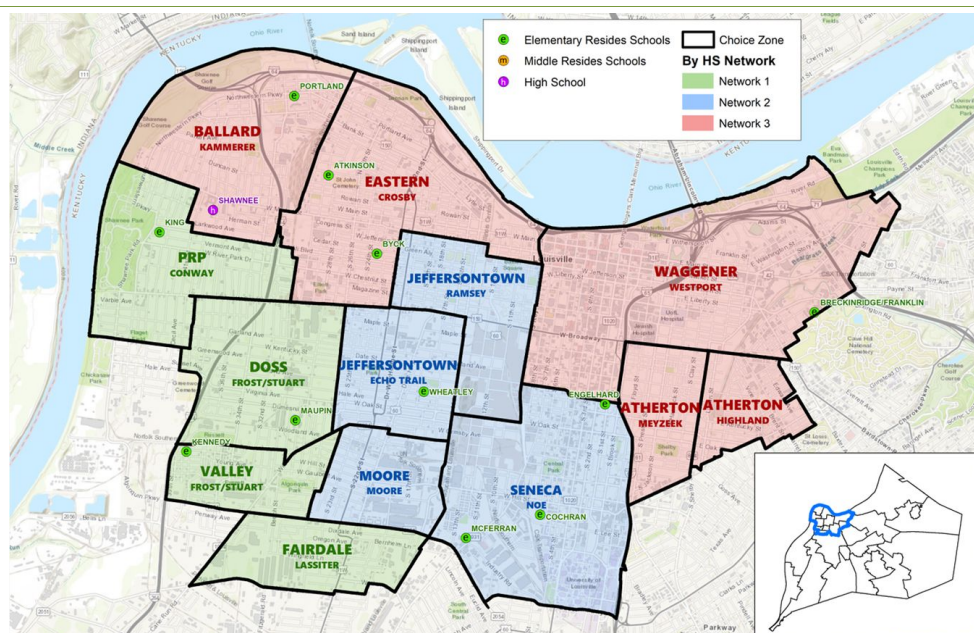


The Academy @ Shawnee	
100%	New West End Middle
Network 1	
	Maupin Elementary
	Kennedy Elementary
	King Elementary
Network 2	
	Cochran Elementary
	Engelhard Elementary
	McFerran Elementary
	Wheatley Elementary
Network 3	
	Atkinson Elementary
	Breckinridge/Franklin Elementary
	Byck Elementary
	Portland Elementary

Choice Zone: Middle Schools

Options Available

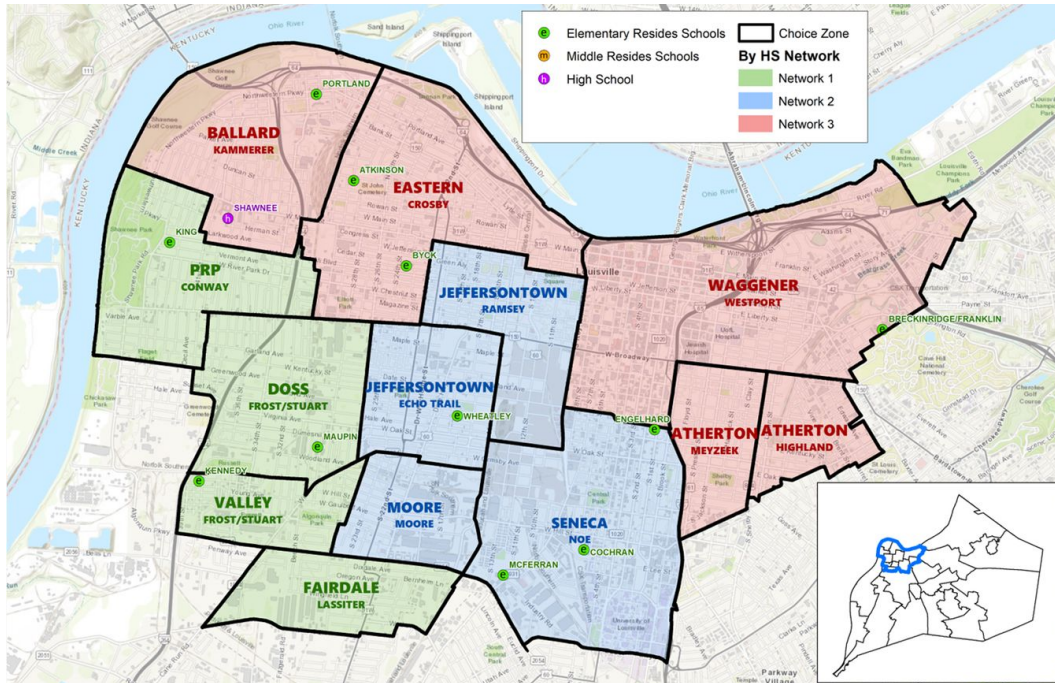
Families will have the guaranteed option of either the new West Louisville middle school or the far-from-home school they are zoned for. This provides two choices for every West Louisville middle school student.



Choice Zone: High Schools

Options Available

Families will have the guaranteed option of either the Academy @ Shawnee or the far-from-home school they are zoned for. This provides two choices for every Choice Zone high school student.



The 2022 School Choice Plan began with high school boundaries to form the base of the new suburban boundary system with the middle and elementary systems stacked within the high school footprint. Each high school boundary becomes, in essence, its own elementary cluster, and is assigned one or two middle schools. Students who live within that high school boundary will have access to the elementary schools within the high school boundary, the one or two middle schools assigned to that high school boundary, then the high school itself.

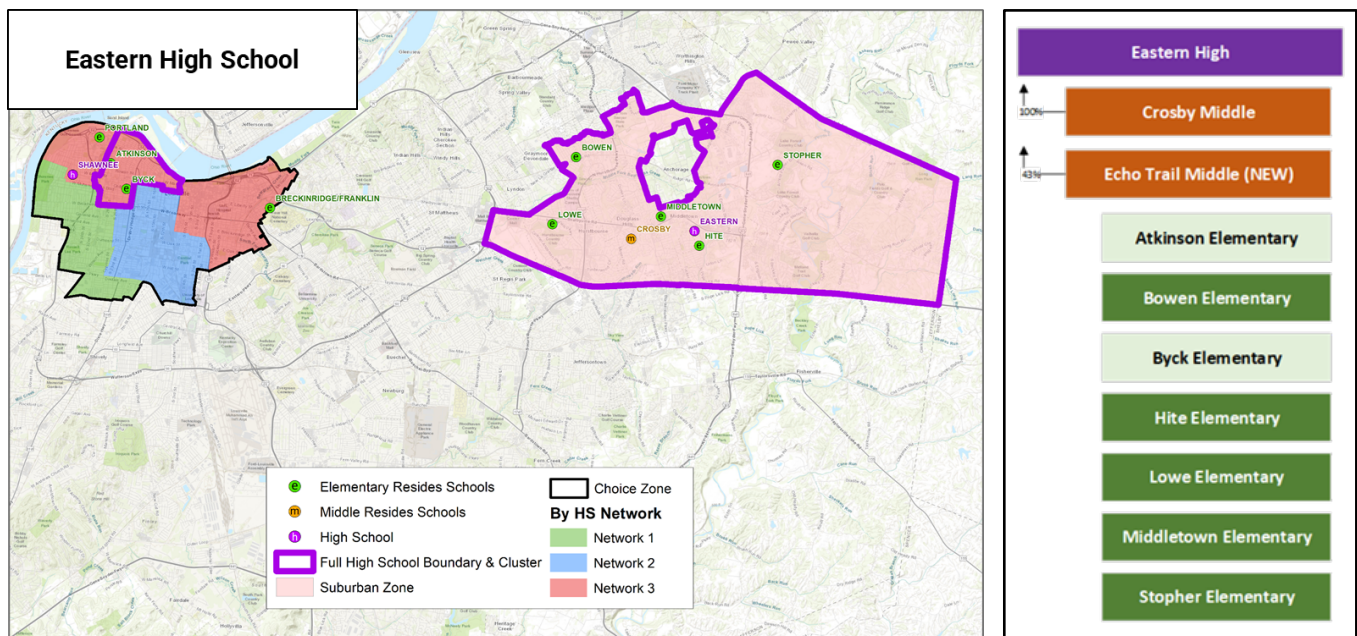
This 2022 School Choice Plan will provide a clear path for families from kindergarten through twelfth grade and eliminate the guesswork that is created through multiple unaligned boundaries as students transition from level to level. This plan will increase the opportunity for students to move along their educational experience with their friends and peers from kindergarten through twelfth grade when they stay at the same address.

High School Boundaries in the 2022 School Choice Plan

As described on the previous page, the high school boundaries serve as the basis of the revised 2022 School Choice Plan. The intent is to provide a clear, intuitive feeder pattern for students in kindergarten through twelfth grade.

The high school boundaries were crafted using major landmarks, including major streets, freeways, and neighborhoods. This resulted in fewer situations where boundaries cut across neighborhoods and divided communities.

For example, the Eastern High School attendance zone relies heavily on I-64 as its southern boundary. This is a natural cut point that is easily understood by families.



Members of the community feel tied to their high school, and high school identity very much is a part of the culture of Jefferson County. As much as possible, general locations that, as a community, identify with particular high schools were kept within the new revised boundaries. For example, in the area surrounding Pleasure Ridge Park (PRP), the community that most identifies and chooses to attend PRP High School was kept in that area.

In addition, based on the 2020 Census data, boundaries were right-sized to ensure that overcrowding concerns were mitigated, and anticipated additional population growth was taken into account. For example, the Fern Creek High and Marion C. Moore school boundaries were modified to ensure that the student enrollment aligned more closely with the building size, and anticipated future growth in the southern portion of Jefferson County, which has experienced a population boom over the last several years, was taken into account.

This proposal did not change the current assignments of students but will be phased in over time starting in 2023.

CHOICE ZONE

Students eligible for the Choice Zone option will have the benefit of that same progression from kindergarten to twelfth grade. For example, if a family exercises the far-from-home option for kindergarten through twelfth grade, the student will travel through grade levels with their peers the entire way through their education experience. They will not have to shift or transition to a different school as they do with the current plan.

Attendance Rules: High School

Much like the current system, high school students are automatically guaranteed a seat at the high school for which they are zoned. Families do not need to engage in the school choice application process to access their zoned school unless they live in the Choice Zone, in which case, they make a choice. Transportation is provided for all students living in the attendance zone.

In addition, high school students may choose to apply for a school within their network. Students use the school choice process to select these schools and only have access to the schools in the network for their address.

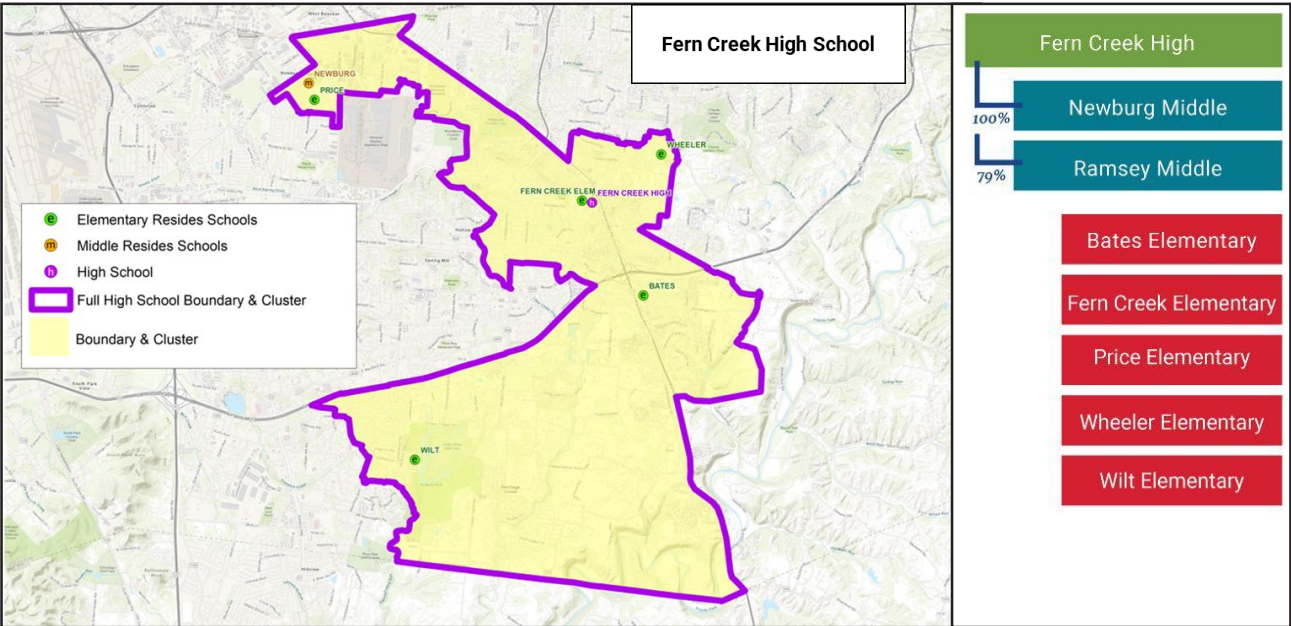
Students also have the option to apply for a magnet school or program, and transportation is provided for all districtwide programs or programs zoned for the student’s address.

Finally, families also have the option of a student transfer, which is provided on a first-come, first-served basis. Student transfers are not guaranteed, and transportation is not assured.

Middle School Alignment

Unlike the elementary and high school attendance zones discussed here, middle school assignments are connected to similarly situated high schools but may not encompass the entire high school boundary.

For example, in the Fern Creek High School attendance zone, the following middle schools are options:



This example demonstrates that while the new middle school assignment pattern is aligned to the high school boundary, due to the number and geographic location of the middle schools throughout Jefferson County, there may not be a perfect alignment between one middle school and one high school.

The benefits are still prevalent with this redesign. First, middle schools, based on the high school boundary to which they are assigned, have direct access to the elementary schools and the high school in its feeder pattern, allowing for strategic planning between the schools to ensure successful transition between grades and levels. Second, the middle school design takes into account that student sense of belonging is absolutely critical during these important developmental years, by limiting the amount of change in each class cohort at the transition years (e.g., elementary to middle, middle to high school). Third, middle school students can access, to some extent, the programming and culture of the high school they are zoned for along with their peers long before they enter the high school's doors. This allows for students to feel a sense of belonging all along the feeder pattern.

The 2022 School Choice Plan did not change the current assignments of students but will rather be phased in over time, beginning in 2023.

CHOICE ZONE

An additional benefit, for students eligible for the Choice Zone option, is that in aligning the feeders, regardless of how you access the school, whether through the Choice Zone option or because you live in the suburban attendance zone, you will have the benefit of that same progression from kindergarten to twelfth grade. For example, if a family exercises the far-from-home option kindergarten through twelfth-grade, the student will travel through grade levels with their peers the entire way through their educational experience. They will not have to shift or transition to a different school as they do with the old plan.

Attendance Rules: Middle School

Much like the current system, middle school students are automatically guaranteed a seat at the middle school for which they are zoned. Families do not need to engage in the school choice process to access their zoned school unless they live in the Choice Zone—in which case, they make a choice. Transportation is provided for all students living in the attendance zone.

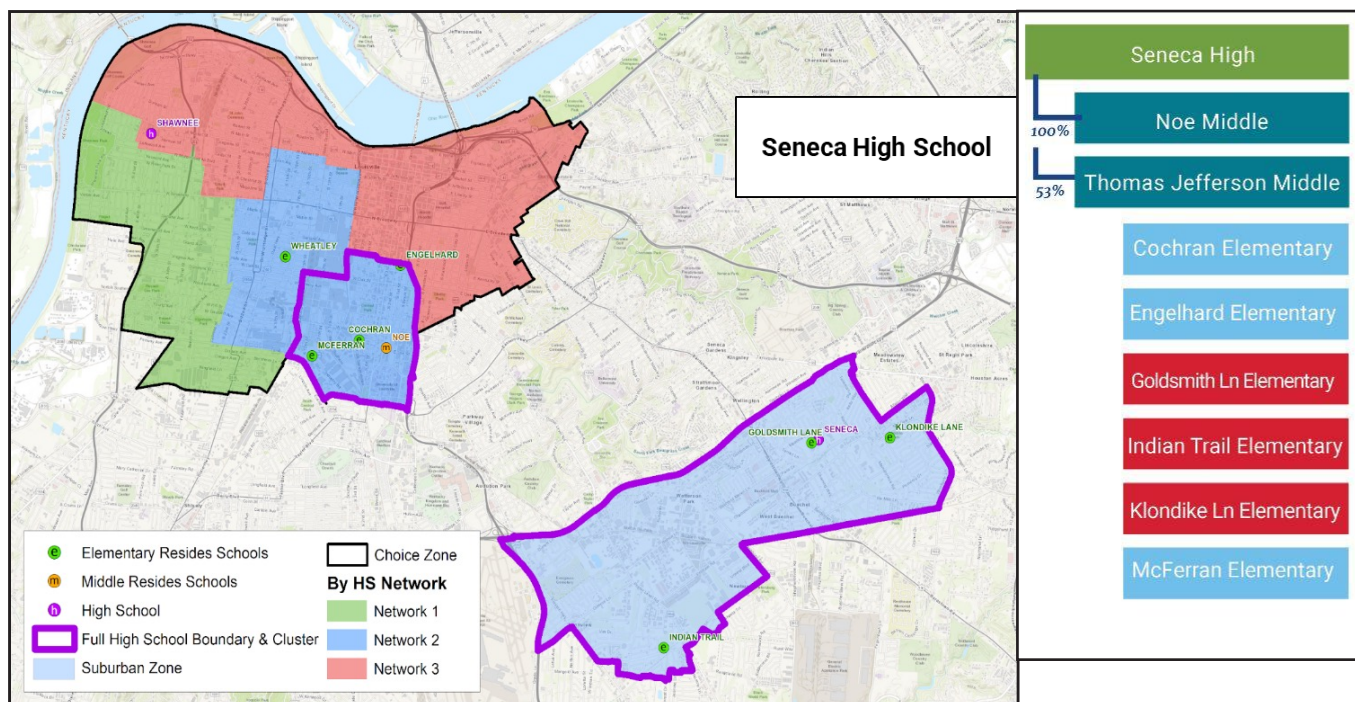
Students also have the option to apply for a magnet school or program, and transportation is provided for all districtwide programs or programs zoned for the student's address (except the K-12 J. Graham Brown School, for which no transportation is provided).

Finally, families also have the option of a student transfer, which is provided on a first-come, first-served basis. Student transfers are not guaranteed, and transportation is not assured.

Elementary School Clusters

In the 2022 School Choice Plan, the elementary clusters are redefined based on the footprint of the high school boundaries. As a result, families have a clearer understanding of where their child will be assigned from kindergarten through twelfth grade, unless they make a magnet school or program choice. Much like the current clusters, the elementary system in the 2022 School Choice Plan allows families the ability to rank their school choices from the list of schools within the high school boundary or cluster.

For example, the Seneca High School Cluster includes the following elementary schools that parents living in the Seneca attendance zone have to choose from:



The 2022 School Choice Plan modifies all current elementary clusters as the previous clusters were not aligned at all with high school boundaries. This will be phased in over time starting in the 2023-24 school year.

CHOICE ZONE

An additional benefit for students eligible for the Choice Zone option is that in aligning the feeders—regardless of whether you access the school through the Choice Zone option or because you live in the suburban attendance zone—you will have the benefit of that same progression from kindergarten to twelfth grade. For example, if a family exercises the far-from-home option for kindergarten through twelfth grade, the student will travel through grade levels with their peers the entire way through their educational experience. They will not have to shift or transition to a different school.

Attendance Rules: Elementary Schools

The elementary application rules require families to submit an application if they are new to the district (i.e., entering kindergarten or having moved into Jefferson County) or have changed addresses and no longer live within the same cluster attendance zone.

A number of factors determine the school to which students are assigned. Some of the factors are school and program capacity, parental preference, the assignment of a student's siblings, a student's base (resides) school, and the district's diversity guidelines. Every effort to accommodate parental preference is made. However, the district cannot guarantee placement in any specific school, including the base (resides) school for the student's address.

Assignments are valid for five school days. After five days, a new application may be required if the seat is no longer available.

In addition to elementary cluster options, families may apply for a magnet or optional school/program. All elementary magnet and optional schools/programs have lottery admissions, and families may apply using the magnet application. No other information or criteria is necessary. Transportation is provided in some cases, but not all, and largely depends on attendance zones served by the magnet and optional school/program. More information about magnet and optional school/program transportation can be found within the JCPS *Elementary Choices* guide on the JCPS website.

Finally, families also have the option of a student transfer. Student transfers for elementary students are provided on a first-come, first-served basis and are based on space within the requested elementary school. Student transfers are not guaranteed, and transportation is not assured.

BOUNDARY MODIFICATION IMPLICATIONS FOR MAGNET SCHOOLS AND PROGRAMS

Guiding Principles

The importance of this shift to whole-school magnets resonates deeply with each of the District's Guiding Principles. By providing a strong, whole-school learning environment, students attending these programs will get exactly what they expect. Since admissions will continue to be based on a lottery, access will be opened up across the district as districtwide transportation will be available for each.

Magnet and Optional Schools/Programs

The 2022 School Choice Plan incorporated a redesign of the magnet offerings. The magnet redesign aspect of the Plan is just as significant as the redesign of the boundary system. In order to further educational equity, the Magnet Strategic Plan was adopted in tandem with the modifications to school attendance zones.

The Traditional Pipeline

The Traditional program is among the most sought-after magnet themes in JCPS. Families seek out the Traditional pipeline early in their child's education for many reasons, but among those is the definite feeder into one of the two Traditional high schools, Louisville Male and Butler. Under the "old" plan, eighth-grade students at any of the following Traditional middle schools were guaranteed a seat at their choice of Traditional high school for ninth grade: Jefferson County Traditional Middle School, Johnson Traditional Middle School, and Barret Traditional Middle School. In addition, students may choose to attend their resides high school or apply for a different magnet school or program, apply for a network school, or apply for a transfer.

In the old plan, eighth-grade Traditional students were permitted to select either Male or Butler, meaning that there is not a cap on the number of Traditional middle school students that may attend either high school for ninth grade. The chart on the next page shows how this shaped the ninth-grade class at both schools over the last several years.

**Male/Butler Ninth Grade
(Eighth-Grade Traditional Students)***

School Year	Male	Butler
2022-23	704	78
2021-22	671	127

**Students included may be accepted to another magnet. This data only captures their selection and not the actual enrollment.*

Over time, it is clear that students have overwhelmingly selected Male as their Traditional high school choice. This resulted in an accelerated increase in the student enrollment at Male and in a space crunch in Male's current building, the Durrett Campus at 4409 Preston Highway.

Summary of the Solution in the 2022 School Choice Plan

In an effort to stabilize enrollment across the two Traditional high schools, the district will implement a boundary for Male and Butler.

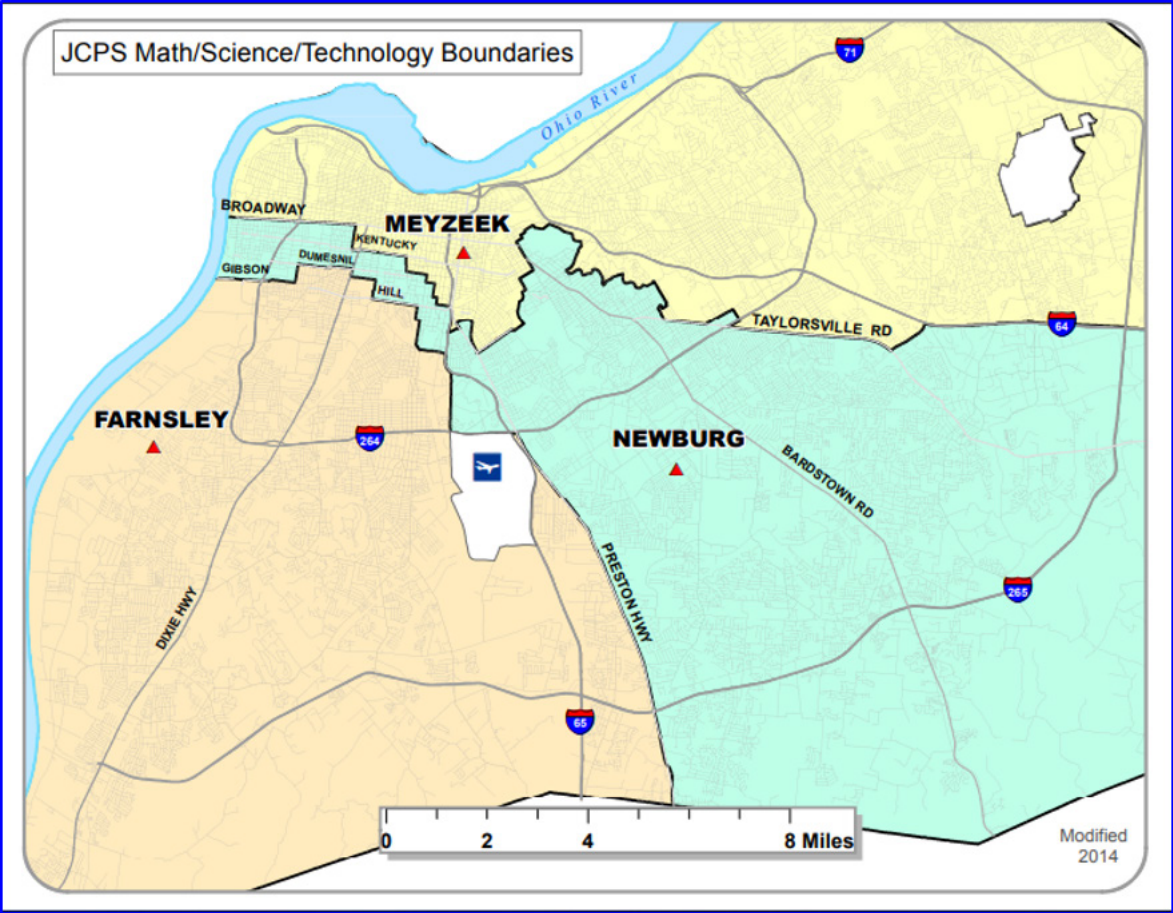
This will align with the use of boundaries at every other level of the Traditional program and allow for balancing of enrollment at the two schools.

This will be implemented at the start of the 2023-24 school year, meaning that 2021-22 sixth graders will be the last class to be able to select either Male or Butler. Students following this class will be assigned to a Traditional high school based on their address.

Additionally, the 2022 School Choice Plan includes a full-school traditional program at Foster Traditional Academy. This required adding a boundary for this school and adjusting the other four Traditional elementary schools: Audubon, Carter, Greathouse/Shryock, and Schaffner.

Alignment of MST Seats
Equitable Distribution of Seats

The three Math/Science/Technology (MST) magnet programs are highly sought-after offerings at the middle school level. The three middle schools—Newburg, Farnsley, and Meyzeek—are zoned and students who are accepted into these programs are assigned based on their address.



These programs sit within schools, meaning that each of the MST middle schools also have a resides portion of their enrollment. Over time, as a population shift has pulled families toward the central part of the county, Newburg Middle School’s resides population has grown while Farnsley and Meyzeek have remained largely the same. The result was a lower number of seats available for magnet students at Newburg compared with the other two MST magnets.

This was inequitable because it allowed for a difference in accessibility to the MST programming entirely based on the zone in which a student lived. The table below demonstrates that students living in the Newburg MST boundary were competing for fewer seats at the school’s magnet. Students in the other two boundaries had a larger number of seats available.

School	Enrollment
Meyzeek	500 Students
Newburg	250 Students
Farnsley	500 Students

Summary of 2022 School Choice Plan

As a result of the change in resides boundaries, the district took into account the number of available magnet seats at the three MST middle schools and built the equitable distribution of MST seats into the new boundaries. The table below shows the new balance of magnet seats across the three middle schools.

School	Enrollment
Meyzeek	500 Students
Newburg	500 Students
Farnsley	500 Students

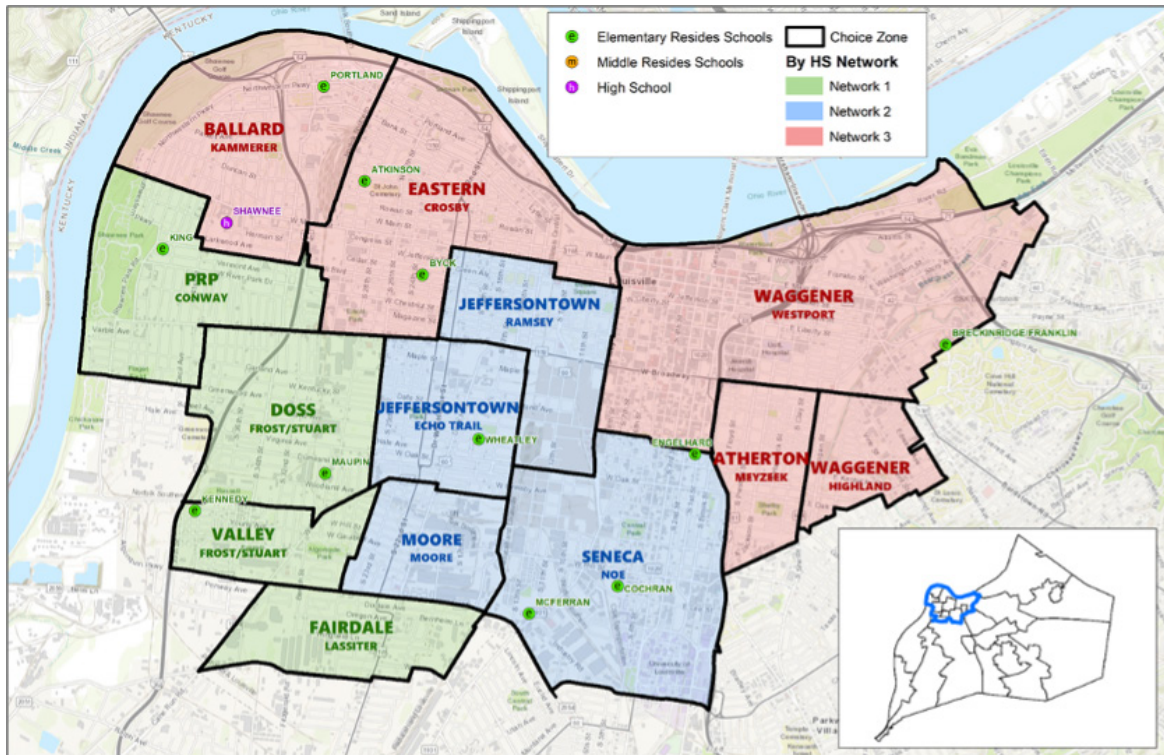
This portion of the plan will revamp or eliminate non-magnetic magnet programs in favor of attractive programs that families want their students to attend. These programs will be assessed on a triangulation of the following data points:

- Enrollment at each grade level
- Number of applications from students who would not otherwise have access to the school/program
- Theme fidelity and clarity provided to families regarding what students will experience in that programming

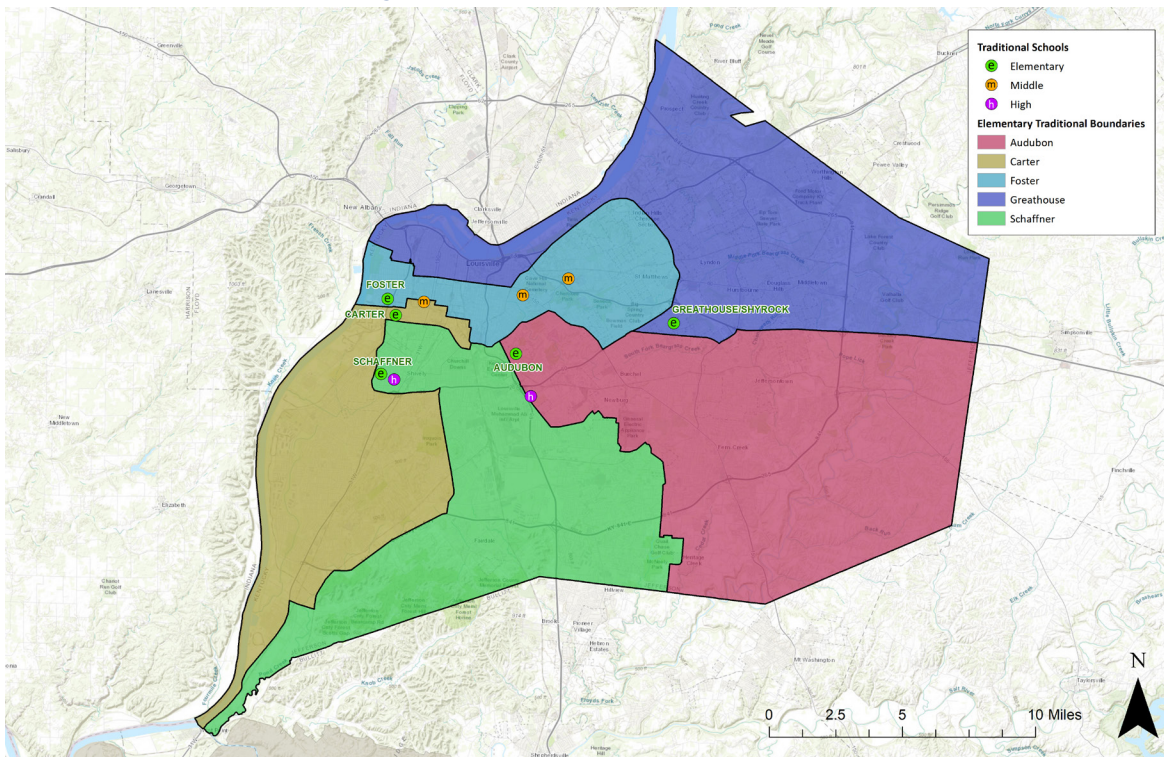
A similar process took place during the review conducted by the Magnet Schools of America team in 2014. The audit team provided a list of schools or programs recommended to be decommissioned as magnets, moved to probation, or expanded and replicated. While the district ultimately decommissioned some non-magnetic magnets, the 2022 School Choice Plan moves this process forward as a critical means to ensure the alignment of magnet purpose, programming, and resourcing.

APPENDIX B: MAPS

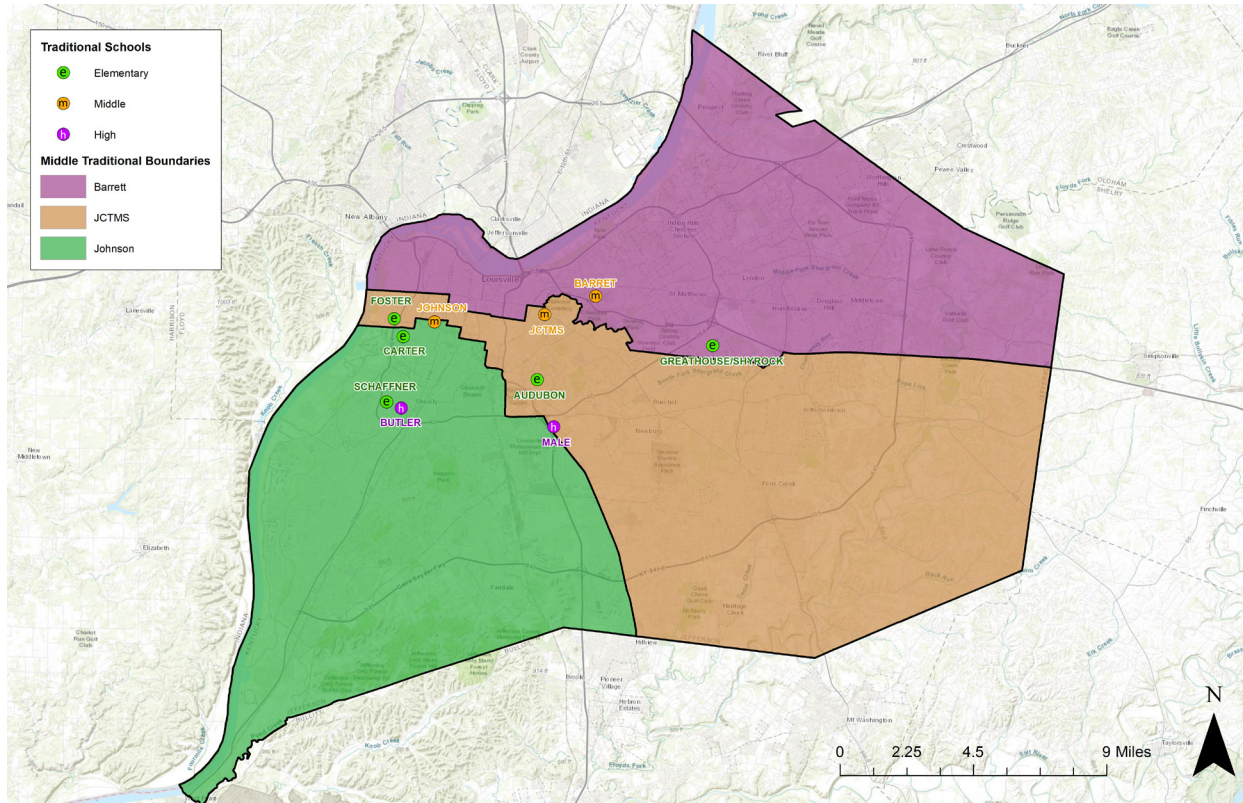
Choice Zone



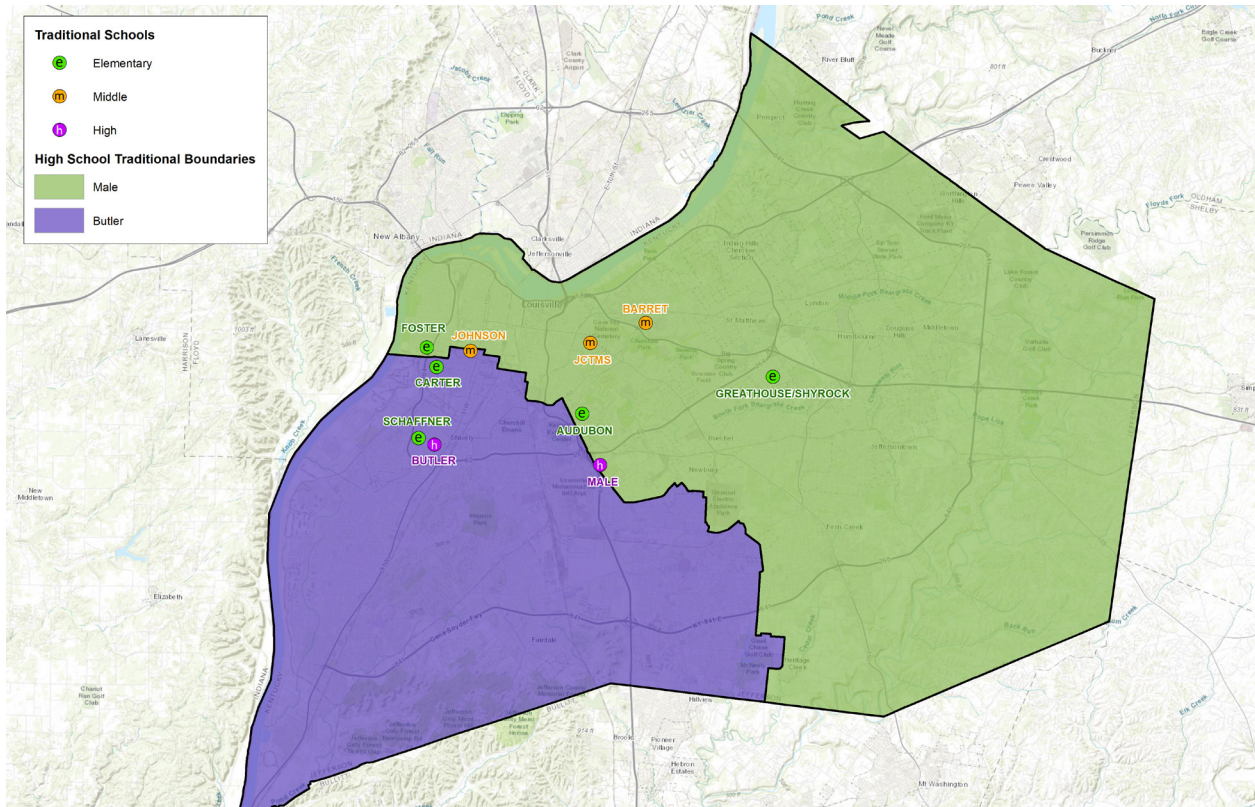
Traditional Elementary Boundaries



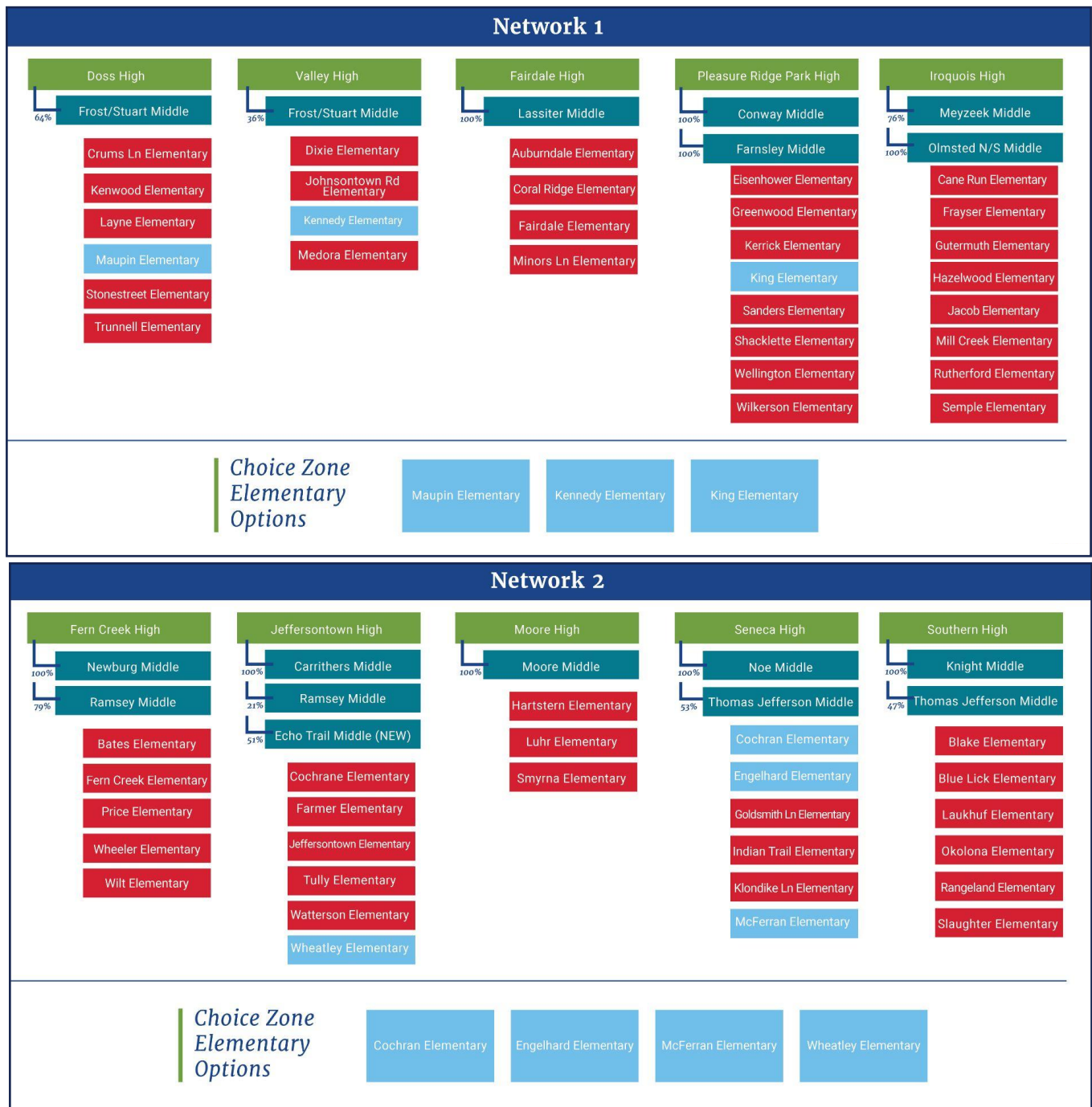
Traditional Middle Boundaries (no change)



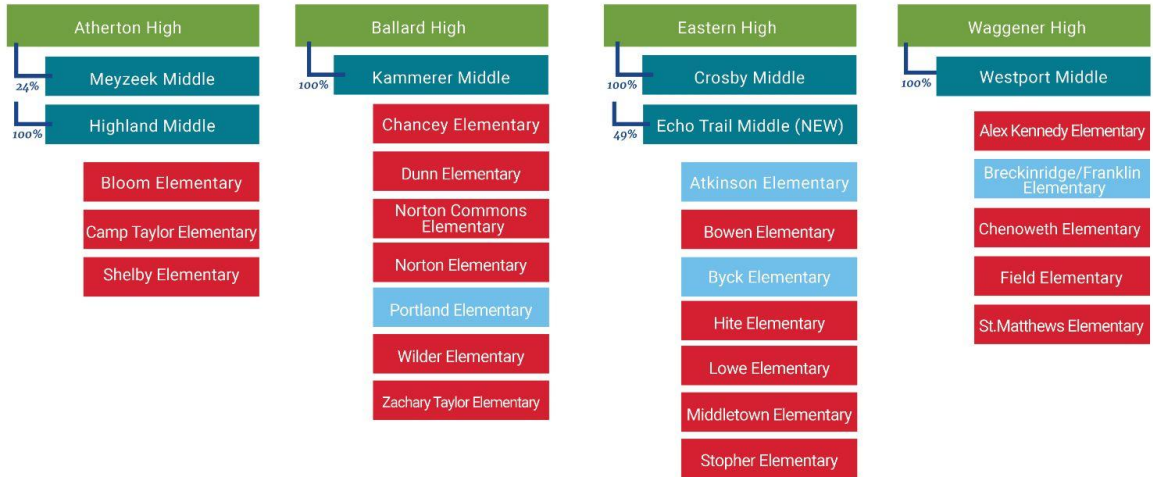
Traditional High Boundaries



APPENDIX C: FEEDER PATTERNS



Network 3



APPENDIX D: Racial Equity Analysis Protocols (REAPs)

The Racial Equity Analysis Protocol (REAP) was an important tool used during the review process. The purpose of the REAP is to apply an equity lens to JCPS District policies, practices, and procedures. Using the REAP is only the first step in improving the equitable access, delivery, and implementation of practices.

The Cabinet filtered the proposal through the Racial Equity Analysis Protocol several times in the past. When this final proposal was completed, the Cabinet used the REAP to consider multiple perspectives. This was completed on February 6, 2023. The District REAP Team filtered the proposal through the REAP on February 15, 2023. The document is below.

Racial Equity Analysis Protocol

Date: December 15, 2022; February 6, 2023; February 15

Department: Operations

Name of Policy/Plan: Start Time Proposal

Filtered by: Operations Work Team; Cabinet, District REAP Team

REAP Questions	REAP Responses
1. What is the overarching purpose of the policy/practice/initiative?	The Operations Team has partnered with Dynamic Ideas/Alpha Routes to work through options on a Start Time Proposal to make effective and efficient use of our resources to meet the challenges of a shrinking workforce while facing higher transportation needs that include both the phasing in of the “new” School Choice Plan that was passed June 1, 2022, and the phasing out of the “old” Student Assignment Plan. Our goal is to provide transportation that will support the goals of the new School Choice Plan and to consolidate runs so that every student can arrive at school on time with minimal issues, such as double runs, triple runs, very early arrival times, etc. Additionally, the resulting later times for many adolescents will better align with their sleep cycles and improve attendance. To improve access for schools in the community as well as increase attendance for students, particularly students who are racialized
2. Is the policy/practice/initiative resourced to guarantee full implementation and monitoring??	This proposal will not require substantial funding. The same number of students are being transported, just at varying times. It will save money and time at schools because staff will not have to arrive early and stay late to supervise students. It will also free up staff time to focus on instruction instead of supervision. Cutting routes from 750 to 600 will reduce operational expenses. Funding for staff and childcare for employees are affected by different start times.

REAP Questions	REAP Responses
3. Which racial/ethnic groups could be inequitably affected by this policy/practice/initiative? How?	One of the goals of the district's new School Choice Plan is to provide choice and access to students, particularly students in the Choice Zone (CZ), who are overwhelmingly Students of Color. The goal will be to work to determine solutions that ensure CZ students have transportation and access to schools of their choice. The proposal will provide better transportation services to students. Families, in many cases, will have new start times for their schools. This will potentially require them to rethink their schedules. If a family has a time that does not work in their schedule, they will have the option to put in a transfer to other schools. Allowing adolescents to go to school later has shown to have a positive effect on achievement and attendance. Moving most non-magnet middle and high schools to a later time will positively affect students and allow them to benefit from more sleep. This will positively affect the achievement gap and support Students of Color. How will students be negatively affected by adolescents who are responsible for watching younger siblings after school? CEP is not offered everywhere. What about high school students who work after school? Does this affect Black students for the better or worse? • Will our parents who do not have the flexibility in their job to accommodate the change in their child's schedule have the opportunity to transfer their child to a school that has a start time that works better for their work schedule? • Will there be an affordable cost for CEP? • Will CEP be adding more locations, specifically in the West End? • CEP sites: McFerran, Brandeis, Coleridge-Taylor, and Lincoln • Homeless shelters are centered on schools, and this will affect services in shelters. • Has anyone reached out to the homeless shelters? • Burden on many of our Black working families. Many of our preschool families are eligible because they either have a disability or they meet the poverty income threshold.
4a. Which racial or ethnic group may have the most concerns with this policy/practice/initiative?	Families may have concerns based on schedules changing—these will not necessarily be aligned with race. There are families whose older student has arrived home in the afternoon before their elementary student in the past. In some cases, this will no longer be true. This will be a change for families and may require a family to pay for daycare that they are not currently paying for—this could affect families with higher poverty more significantly than others.
4b. Why might these racial or ethnic groups have the most concerns with this policy/practice/initiative?	Families may have concerns based on schedules changing—these will not necessarily be aligned with race.

REAP Questions	REAP Responses
5. What unintended consequences could result from the policy/practice/initiative (racial inequities or otherwise)?	Families may have to find daycare for their children. If we do not put this proposal in practice, we will have more and more students who we cannot get to school on time, which will have an inequitable effect on Students of Color and will exacerbate the achievement gap. Families with multiple students could have multiple start times. The ability to implement this successfully (operationally)—first week processes - Any considerations regarding bus drivers moving on to other jobs? - No, there are still stipends, may shift to 8 hours; pay has been a part of the considerations. - Routes through some neighborhoods have been considered. - Do not want to put students in harm's way. - According to one community member, it might help ease tension and may help with students and parents. - Will students be able to transfer? - Will students be given priority when transferring? - Prioritizing siblings and childcare; first this will fall under childcare. - Will teachers be able to transfer? - For our JCPS employees—What consideration will be given? - What are the affects for sporting events and citywide events? - This will have little impact on athletics. Students typically were staying after school for sports; there have been discussions with Dr. Brooks and athletics. - Students may be able to attend and participate in other things. - Why does the burden have to be on the kids? - Not seeing the district make adjustments and be flexible with employees, some position start and stop times are not flexible, we should not put the burden on the students. - This could have a negative impact on teacher retention. - State testing could be affected—kids testing earlier versus kids testing later in the day, assumed advantages and disadvantages with later start times. - Along with PTC, the Satellite Office may be used differently, accessing school at different times. - Can Community School locations be used to help with childcare? - Waiting to hear back from the YMCA/CEP first. - How will this shift the PD office? - May need to add a.m. options - Deploying people to go into the schools - May need to push PDs back to 5 p.m. to accommodate schools that end at 4:20 p.m. - What are the dates for the Town Hall meetings? - Pivot to progress and positivity
6. Have stakeholders, particularly those most affected by this decision, been meaningfully informed or involved in the discussion of the policy/practice/initiative? How did the process go? What was the feedback?	Principals, school staff members, bus drivers, bus compound staff, families, and other key stakeholders are being presented the information shortly, and their feedback will be solicited. ACRE and other committees will also have the opportunity to provide feedback. The Town Hall(s) will be presented live and will be available on the JCPS website for future viewing whenever it is convenient for stakeholders. Surveys and informational sheets; if passed, postcards will be sent to each household.

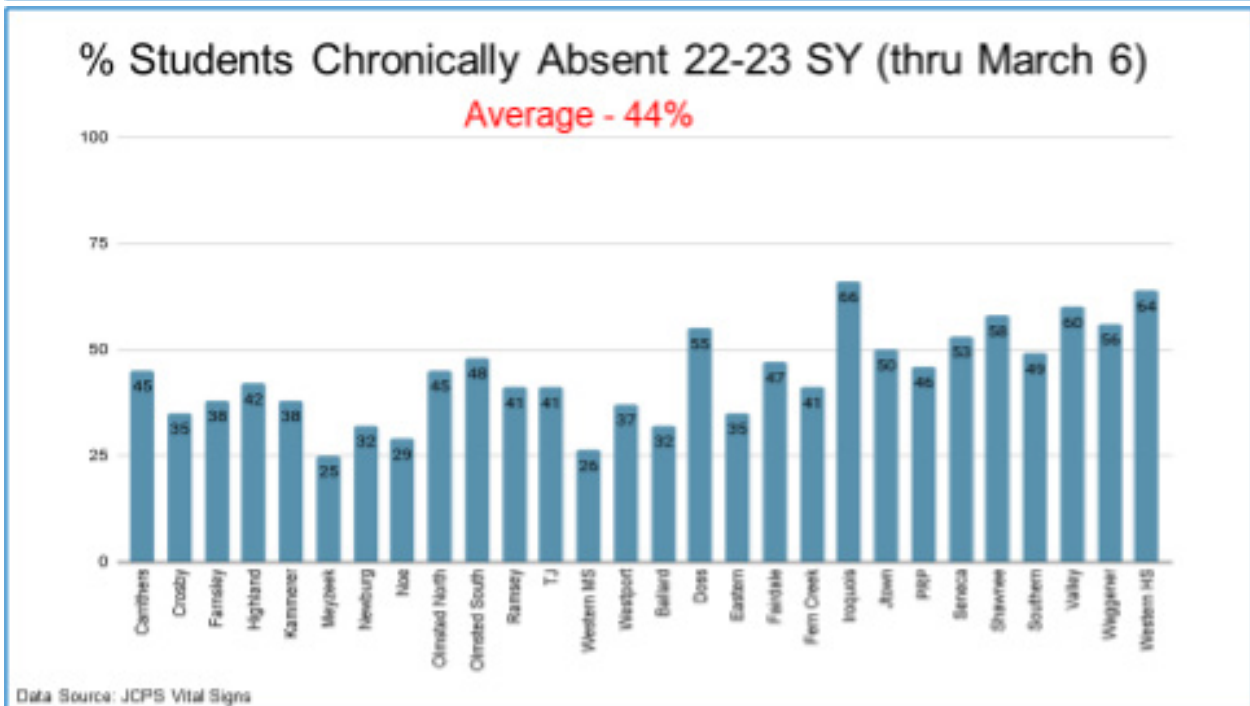
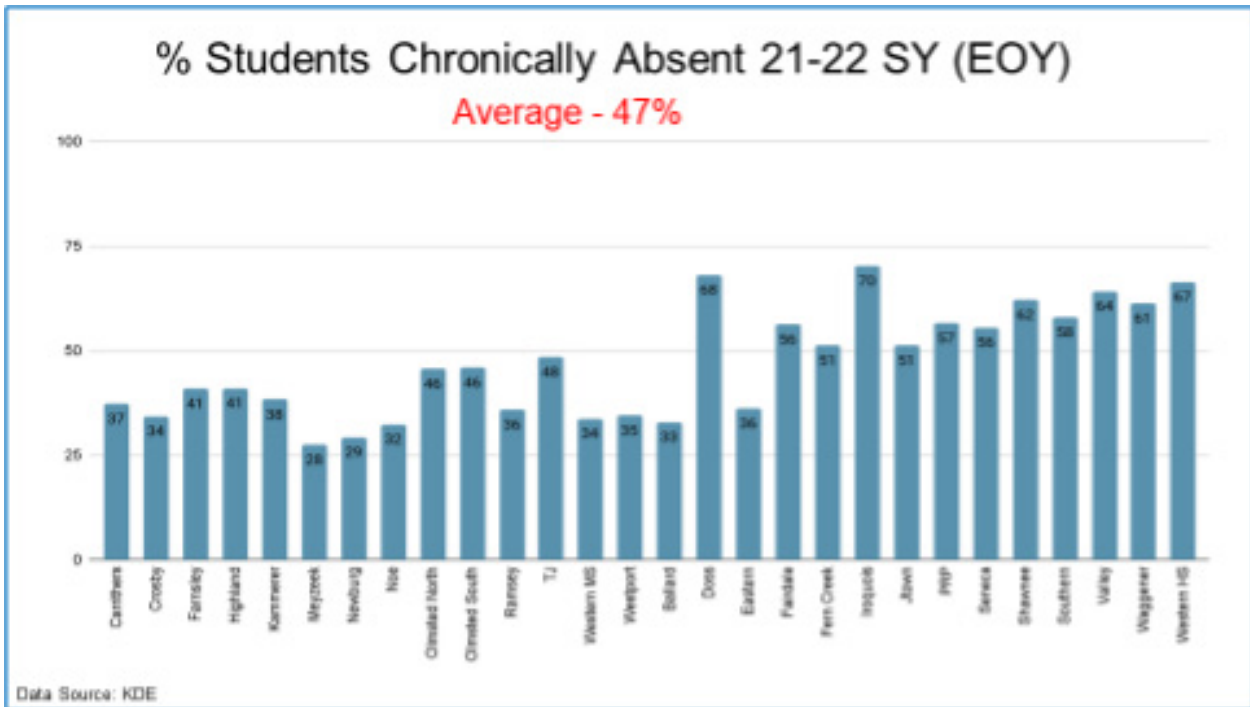
REAP Questions	REAP Responses
7. What root causes may be producing and perpetuating racial inequities associated with this issue? Does this policy/practice/initiative deepen these inequities or improve them?	The basic root cause of this project is the staffing shortage in the bus driver ranks. In order for us to reliably get students to school on time, we need to revamp our start times. Getting to school on time is essential for students because every minute of instruction missed is an opportunity for learning that is lost. Our students, particularly our most vulnerable students, need to have every minute of instruction available to them. By putting this proposal in place and getting students to school on time, the achievement gap can be positively affected. Earlier start time is negatively affecting student attendance for highest-needs kids.
8. Who (e.g., individual, department, team) is the main driver for improving racial equity for this particular policy/practice/initiative?	Operations Division and Schools
Next Steps	
9. After filtering the program, policy, or practice through the REAP, should Jefferson County Public Schools move forward with the program, policy, or practice?	Yes
If yes with conditions, what changes need to be made in order to move forward?	This plan should be regularly reviewed and modifications made if necessary. Language access to inform parents will be crucial. With the variety of issues that could arise from this transition, could we curate resources for nutrition, childcare, personnel that could provide options to family or sibling dynamics, etc.? This packet could help families figure out solutions to their specific problems. Many of them may not realize the community support that is available. Family engagement and FACE team may be able to work on something like that. Considerations that will be given for our JCPS employees: Will follow up with the Chief of HR. Flexibility may come in the form of staff or students being able to change their situation. We have several types of positions that are shared, especially elementary music/art and orchestra at all levels. Has Paul Robinson been involved in understanding the adjustments to these allocations/assignments so he is prepared to respond to the school employee pairings across schools so that our arts are not negatively affected? Cite the research on adolescents and sleep cycles. Perhaps add data on achievement if we do this and if we do not do this. Best practice on REAPs add supporting data where applicable. Attendance, bus driver shortages, etc. We will need to do the same with shelters that we did with CEP; Giselle will reach out to the Homeless Coalition.
Now that it is filtered, when does this program, policy, practice come into effect?	Fall of 2023

APPENDIX E: Start Times From Other Urban Districts

85 percent of Council of the Great City Schools districts with 75,000 or more students have more than one start time per level.

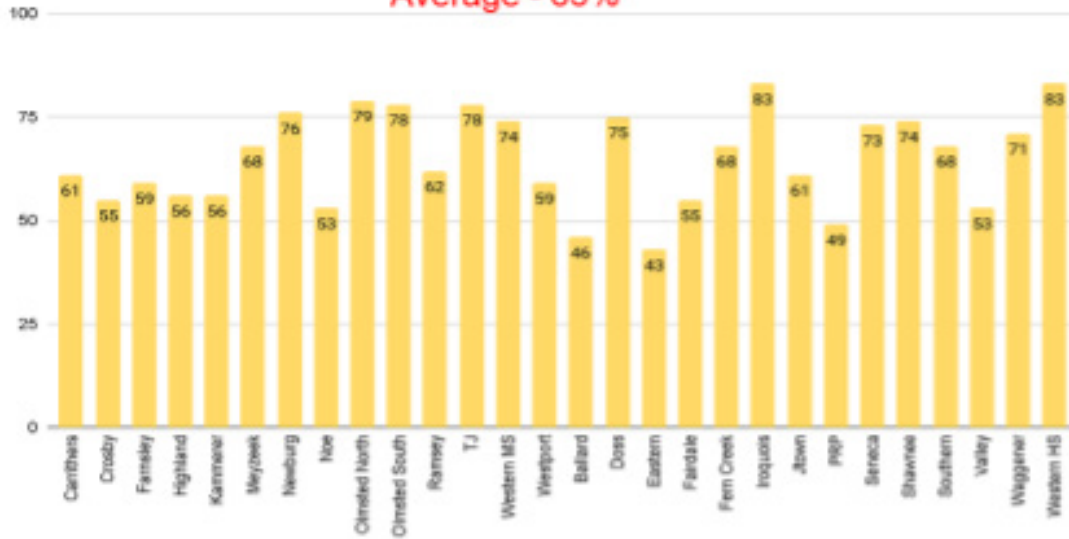
Council Member District (with 75,000 students or more)	Enrollment	Total # of Different ES Start Times	Total # of Different MS Start Times	Total # of Different HS Start Times
New York City Department of Education	1,126,501	15	25	53
Los Angeles Unified School District	464,731	35	12	2
Chicago Public Schools	355,156	4	4	3
Miami-Dade County Public Schools	345,000	2	3	1
Clark County School District	320,000	17	16	10
Broward County Public Schools	260,715	6	10	10
Toronto District School Board	247,000	14	14	14
Houston Independent School District	210,061	1	1	1
Hillsborough County Public Schools	206,841	5	4	3
Orange County Public Schools	206,000	4	2	2
The School District of Philadelphia	203,000	2	1	1
The School District of Palm Beach County	197,000	13	5	6
Hawaii Department of Education	180,000	5	8	9
Dallas Independent School District	154,000	1	2	3
Charlotte-Mecklenburg Schools	148,299	7	7	4
San Diego Unified School District	121,000	3	4	3
Duval County Public Schools	105,091	1	1	1
Jefferson County Public Schools	97,072			
Pinellas County Public Schools	101,427	5	2	4
Shelby County Schools	100,000	2	2	3
Denver Public Schools	93,815	14	9	7
Metro Nashville Public Schools	86,000	1	1	1
Fort Worth Independent School District	84,000	1	1	1
Baltimore City Public Schools	79,187	ES Only: 6 Comb.: 6	MS Only: 2 Comb.: 6	HS Only: 3 Comb.: 5
Milwaukee Public Schools	77,746	7	9	4
Albuquerque Public Schools	75,300	24	13	4

APPENDIX F: CHRONIC ABSENCES



% Students of Color 22-23 SY

Average - 65%



Data Source: JCPS Vital Signs

Middle School	% Chronically Absent 21-22 SY (EOY)	% Chronically Absent 22-23 SY (3.6.23)	% Students of Color 22-23 SY
Carrithers	37	45	61
Crosby	34	35	55
Farnsley	41	38	59
Highland	41	42	56
Kammerer	38	38	56
Meyzeek	28	25	68
Newburg	29	32	76
Noe	32	29	53
Olmsted North	46	45	79
Olmsted South	46	48	78
Ramsey	36	41	62
TJ	48	41	78
Western MS	34	26	74
Westport	35	37	59

High School	% Chronically Absent 21-22 SY (EOY)	% Chronically Absent 22-23 SY (3.6.23)	% Students of Color 22-23 SY
Ballard	33	32	46
Doss	68	55	75
Eastern	36	35	43
Fairdale	56	47	55
Fern Creek	51	41	68
Iroquois	70	66	83
Jtown	51	50	61
PRP	57	46	49
Seneca	56	53	73
Shawnee	62	58	74
Southern	58	49	68
Valley	64	60	53
Waggener	61	56	71
Western HS	67	64	83

APPENDIX G:

Students With Late Bus and Instructional Minutes Lost

School Name	Current students with 1 or more minutes missed due to late bus	Total minutes lost due to late bus
	21336 distinct	3575024 mins
Ramsey Middle	218	391580
Westport Middle	578	285961
Eastern High	634	187714
Newburg Middle	228	157868
Carrithers Middle	228	146007
Waggener High	265	131883
Fairdale High	286	107718
Camp Taylor Elementary	205	102788
Crosby Middle	274	86758
Fern Creek High	388	83754
Highland Middle	303	77758
Stuart Academy	631	70255
Ballard High	492	66793
Audubon Traditional Elementary	295	60029
Goldsmith Elementary	260	58597
Slaughter Elementary	157	57759
Johnson Traditional Middle	287	52239
Hartstern Elementary	153	50642
Chancey Elementary	220	47996
Lincoln Elementary	161	44362
Thomas Jefferson Middle	239	41532
Central High	499	37920
Kammerer Middle	231	36388
Cochran Elementary	44	34894
Farmer Elementary	272	30855
Barret Traditional Middle	224	29343
Seneca High	435	28617
Alex R. Kennedy Elementary	93	28520
Knight Middle	193	26231
Breckinridge-Franklin Elementary	162	26025
Watterson Elementary	103	25973
Jeffersontown High	155	24759

Olmsted Academy North	225	23406
Wilder Elementary	113	23354
Georgia Chaffee TAPP	42	22248
Southern High	291	21749
Smyrna Elementary	121	21321
Waller-Williams Environmental	50	21235
Greathouse/Shryock Traditional	281	20868
Trunnell Elementary	152	20140
Tully Elementary	163	20118
Fern Creek Elementary	153	19679
Middletown Elementary	189	18668
Cochrane Elementary	130	17721
Zachary Taylor Elementary	157	17691
Klondike Lane Elementary	43	17647
Noe Middle	489	17042
Semple Elementary	114	16899
Mill Creek Elementary	130	16307
Louisville Male High	299	16104
Wilkerson Elementary School	237	15713
St Matthews Elementary	103	15401
Minor Daniels Academy	70	15324
Doss High	220	15284
Iroquois High	615	15213
Dupont Manual High	436	14292
Wheatley Elementary	61	14150
Laukhuf Elementary	108	14121
Johnsontown Road Elementary	108	13852
Luhr Elementary	142	13772
Shelby Academy	164	12863
Layne Elementary	136	12697
Coleridge-Taylor Elementary	66	12349
Conway Middle	156	11843
Norton Commons Elementary	124	11141
Newcomer Academy	295	10963
Stonestreet Elementary	159	10835
The Phoenix School of Discovery	108	10786
Coral Ridge Elementary	100	10686
Schaffner Traditional Elementary	115	10589

Meyzeek Middle	175	9547
Hawthorne Elementary	62	9470
Field Elementary	63	9392
Wellington Elementary	100	9344
Price Elementary	112	9109
Wheeler Elementary	143	9063
Engelhard Elementary	31	9015
Jacob Elementary	76	8750
Jefferson Co. Traditional Middle	210	8729
W.E.B. DuBois Academy	216	8711
McFerran Preparatory Academy	74	8319
Indian Trail Elementary	153	8174
Wilt Elementary	85	8110
Chenoweth Elementary	106	8108
Auburndale Elementary	125	7938
Kennedy Elementary	90	7875
Dixie Elementary	89	7847
Binet School	16	7481
Marion C. Moore School	360	7423
Atherton High	173	7370
Bowen Elementary	121	7302
Norton Elementary	150	7192
Dunn Elementary	35	6483
Farnsley Middle	161	6081
Sanders Elementary	93	5937
Cane Run Elementary	89	5828
Kenwood Elementary	104	5674
Okolona Elementary	58	5560
Atkinson Academy	46	5457
Butler Traditional High	244	5401
Medora Elementary	38	5103
Hazelwood Elementary	85	5068
Carter Traditional Elementary	116	4799
Pleasure Ridge Park High	181	4743
Blake Elementary	112	4649
Greenwood Elementary	85	4633
Frayser Elementary	58	4429
Hite Elementary	76	4361

Young Elementary	57	4255
Rangeland Elementary	45	4241
Valley High	228	3956
Foster Traditional Academy	97	3768
Western Middle	201	3736
Liberty High	76	3052
Breckinridge Metropolitan High	35	3028
Bloom Elementary	25	2560
Maupin Elementary	113	2292
Western High	125	2125
Rutherford Elementary	70	2090
Jeffersontown Elementary	65	1907
Grace M. James Academy	122	1713
Gutermuth Elementary	39	1449
Mary Ryan Academy	8	1327
Portland Elementary	37	1307
Western Day Treatment	13	1294
Shacklette Elementary	37	1273
Crums Lane Elementary	68	1125
Byck Elementary	22	1064
Eisenhower Elementary	8	1023
The Academy @ Shawnee	28	758
Louisville Day	4	691
Stopher Elementary	14	662
Olmsted Academy South	45	560
Kerrick Elementary	7	395
Brandeis Elementary	7	351
Blue Lick Elementary	11	241
Churchill Park School	2	205
U OF L Pact Program	1	193
Lowe Elementary	9	155
Minors Lane Elementary	2	78
Lassiter Middle	1	62
Fairdale Elementary	2	24
Total Days:	8125	
Average # Days per student with late bus:	2.63	
if 70,000 students ride bus, nearly 30% have missed instructional time due to late bus		

JCPS Bus Dashboard for Week of February 20, 2023

Bus Number	Schools on Route	Estimated Delay
629	Goldsmith	30 minutes
771	Westport	100 minutes
774	Ramsey/Fern Creek High	210 minutes
848	Westport—Run 2 (stops scheduled after 7 a.m.)	20 minutes
1036	Crosby—Run 1 (stops scheduled before 7 a.m.)	150 minutes
1036	Crosby—Run 2 (stops scheduled after 7 a.m.)	150 minutes
1083	Knight—Run 1 (stops scheduled before 7 a.m.)	50 minutes
1236	Hite	30 minutes
628	Carrithers	165 minutes
1304	T.J. Middle	150 minutes
1316	Ballard/Kammerer	90 minutes
1423	Waller Williams	60 minutes
1439	Stuart—Run 1 (stops scheduled before 6:45 a.m.)	45 minutes
1439	Stuart—Run 2 (stops scheduled after 7 a.m.)	10 minutes
1506	Crosby	60 minutes
1513	Newcomer	120 minutes
1542	Ballard/Kammerer	30 minutes
1622	Ballard/Kammerer	60 minutes
1701	Cochran	15 minutes
1701	Heuser	15 minutes
1719	Ramsey—Run 1 (stops scheduled before 6:35 a.m.)	190 minutes
1719	Ramsey—Run 2 (stops scheduled after 7 a.m.)	115 minutes
1719	Alex Kennedy	75 minutes
1725	Farmer—Run 1 (stops scheduled before 8:15 a.m.)	70 minutes
1725	Farmer—Run 2 (stops scheduled after 8:15 a.m.)	25 minutes
1725	Ramsey—Run 1 (stops scheduled before 6:30 a.m.)	170 minutes
1725	Ramsey—Run 1 (stops scheduled after 7 a.m.)	120 minutes
1734	Farnsley	20 minutes
1853	Seneca—Run 1 (stops scheduled before 7 a.m.)	35 minutes
1853	Seneca—Run 2 (stops scheduled after 7 a.m.)	20 minutes
1914	Eastern/Crosby	60 minutes
1915	Lowe	25 minutes
1915	Zachary Taylor	25 minutes
2024	Fern Creek Elementary	45 minutes

CITATIONS

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1974–1976

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1983–1995

Cooperative Strategies, LLC

- [February 11, 2020](#), Jefferson County Board of Education Meeting

IQS Research

- [October 30, 2018](#), Jefferson County Board of Education Meeting
- [Contract](#)



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