DPS SchoolChoice: How It All Works

2021-2022

Purpose of this Presentation: To give families a more detailed understanding of how the choice system works, including:

- *Historical context*

- *Overview of the choice system*

- *Key inputs to the system*

- *Sample of how the matching works*

Historical Context

Prior to 2011-12, families had to complete different applications for different schools on different timelines. Some students were accepted into 10 schools, other students were not accepted anywhere.

In January 2012, unified SchoolChoice was implemented to simplify the enrollment process for families and ensure equitable access to all schools.

What is the "System"?

➢ Based on the 2012 Nobel Prize of Economics-winning principles of applied game theory by Dr. Al Roth

➢ Implemented first in New York City over 10 years ago.

➢ All public schools in Denver: district, charter, or magnet all participate in the same system. Denver is the only district in the country with all schools participating.

➢ **1** timeline and **1** application

Philosophy of the System

➢ Seeks to maximize the number of students getting their most preferred option, subject to space.

➢ Balances students preferences with a set of admissions priorities for schools, such as:

  ➢ Neighborhood preference / boundary

  ➢ Siblings

  ➢ Other considerations (children of full-time school-site staff members, qualification status, socioeconomic diversity, etc.)

Types of Boundaries

Guarantees	Colorado statute requires that DPS guarantee students a seat at a given school (boundary) or set of schools (enrollment zone) for kinder through 12th grade.

Boundary	A geographic area where the students residing within it are guaranteed enrollment at a school.
	Examples include: North High, Edison Elementary

Enrollment Zone	Geographic area where the students residing within it are guaranteed a seat at one of several schools, but not at any one particular school within that zone.
	Examples include Lake Middle School Zone, Southwest MS Zone

Types of Schools in Choice

Boundary	A geographic area where the students residing within it are guaranteed enrollment at a school.
	Examples include: North High, Beach Court Elementary There are roughly 100 boundary schools in DPS.

Enrollment Zone	A geographic area where the students residing within it are guaranteed a seat at one of several schools, but not guaranteed a seat at any one particular school within that zone.
	Examples include Southwest Middle School Zone, Central Park Elementary Zone. There are 14 enrollment zones in DPS.

Non-Boundary Schools	Schools that do not serve either a boundary or a zone. Some of these schools have qualification requirements, like Denver School of the Arts. There are roughly 70 non-boundary schools in DPS, of which roughly 20 primarily serve off-track students.

Rounds of Choice

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug

Round 1

- Transition grades
- Anyone wanting to change schools

Round 2

- Opens after Round 1 results are released
- Families who did not participate in Round 1
- Families who want to change their mind

Timeline of Round 1 Activities

Nov	Dec	Jan	Feb	Mar

Families

Research schools	Apply Jan. 15-Feb. 16, 4 p.m.	Get results by Late March

DPS

Boundaries / zones finalized by Board	Schools decide # of seats per grade	Data clean-up	Run system	Email/text results

Who participates in Choice?

➢ Majority of applications are for students who are transitioning from one school to another. Often this occurs going into kindergarten, sixth grade and ninth grade.

➢ Some schools have different transition grades (for instance, Montessori programs transition after sixth grade)

➢ DPS has the highest participation rates in the United States.

➢ In every middle school enrollment zone, participation rates exceed 90% due to high outreach by schools and the Office of Choice & Enrollment.

Key Components of the System

School Capacity: # of seats

- Number of students by grade
- Factors in the number of students already at the school in the preceding grade

School Priority Structure

- Boundary
- Enrollment Zone
- Non-boundary

Student Profile

- Age / grade
- Address
- Siblings
- Random lottery number between 1 and 999,999
- Other factors like language, FRL

What determines each component of the System?

School Capacity: # of seats	School Priority Structure	Student Profile
• Determined by the school leader in December-January	• Determined by board policy and principal agreement	• Determined by information in Infinite Campus and the Choice application

System Components

Capacity: # of seats	Priority Structure	Student Profile

- Number of students desired by grade
- Factors in the number of students already at the school in the preceding grade

- Boundary
- Enrollment Zone
- Non-boundary

- Age
- Address
- Siblings
- Random lottery number between 1 and 999,999

How is capacity set? Entry Grades Kindergarten classroom (or 6th or 9th grades)
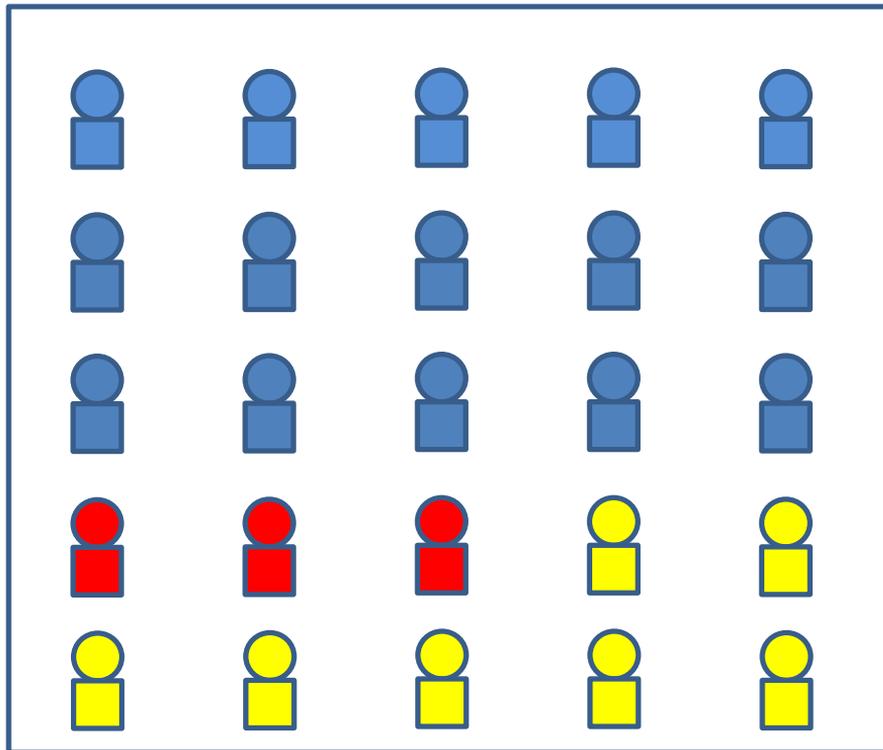
- School leaders determine based on building and classroom space

- DPS Choice & Enrollment Services uses three years of historical data to help inform sizes
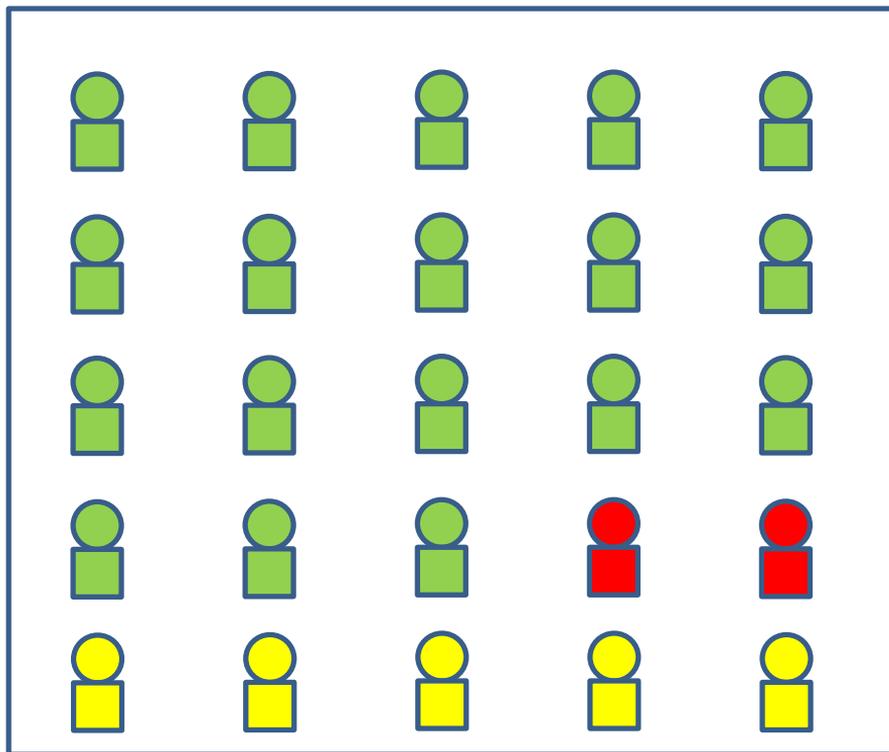
Students who reside in the boundary

Students who move into the boundary between Feb. 16 and Oct. 1

Seats entered into the Choice system

How is capacity set? Re-enrolling Grades (most grades other than K, 6, 9)

- School leaders determine based on building and classroom space

- DPS Choice & Enrollment Services uses three years of historical data to help inform sizes

Students already attending the school who will reenroll

Students who move-in new to the boundary between Feb. 16 and Oct. 1

Choice seats. Note there are generally much fewer seats offered in returning grades

15

System Components

Capacity: # of seats

- # of students desired by grade
- Factors in the number of students already at the school in the preceding grade

Priority Structure

- Boundary
- Enrollment Zone
- Non-boundary

Student Profile

- Age
- Address
- Siblings
- Random lottery number between 1 and 999,999

How do you decide who gets in?

If there are more students applying to a school than there are seats at a school, the choice system has to **prioritize** students to determine who is assigned.

There are three types of school set-ups for choice, each of which has a standard set of system **priorities**.

1. Boundary schools

2. Shared Enrollment Zone schools

3. Non-boundary schools, including qualification schools

System Priorities: Boundary schools

While some schools have a variation, most boundary schools follow a standard set of priorities.

#1 (Guarantee)	Students residing in the boundary
#2	Students with a sibling currently attending the school
#3	Children of full-time staff members at that school
#4	Denver residents
#5	Non-Denver residents

System Priorities: Enrollment Zone schools

While some schools have a variation, most zone schools follow a standard set of priorities. Note that no students have a guaranteed seat at a particular zone school.

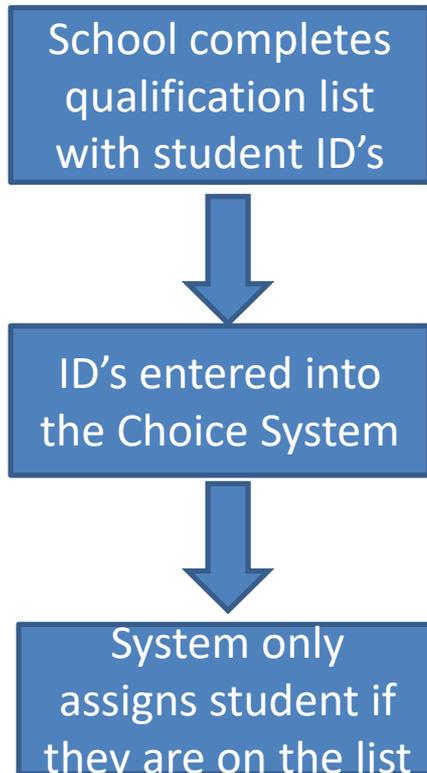|	
#1	Children of full-time staff members at that school
#2	Students with a sibling currently attending the school (reside in zone)
#3	Zone residents
#4	Students with a sibling currently attending the school (reside in Denver)
#4	Denver residents
#5	Non-Denver residents

System Priorities: Non-boundary schools

While some schools have a variation, most choice schools follow a standard set of priorities. Note that no students are guaranteed assignment at a non-boundary school.

#1	Children of full-time staff members at that school
#2	Students with a sibling currently attending the school
#3	Neighborhood preference (if applicable)
#4	Denver residents
#5	Non-Denver residents

System Priorities: Qualification schools

Denver Public Schools has very few schools where an application / audition is required for enrollment, such as Denver School for the Arts or Polaris. Students must complete this step to be included on a qualification list that is then entered into the system.

School completes qualification list with student ID's

↓

ID's entered into the Choice System

↓

System only assigns student if they are on the list

Priorities for Students on Qualification List	
#1	Children of full-time staff at the school
#2	Students with a sibling at the school
#3	Neighborhood preference (if applicable)
#4	Denver residents
#5	Non-Denver residents

How do I know what the priorities are for each school?

They are published on the DPS Choice website each January.

School Name	2016-17 Grade Levels	Boundary	Enrollment Zone	Non-boundary
Elementary Schools				
Academy 360	EC-5			Charter
Amesse	EC-5	X		
Archuleta	K-5	X		Advanced Kinder, Gifted Magnet
Asbury	K-5	X		
Ashley	EC-5	X		
Barnum	EC-5	X		
Beach Court	EC-5	X		
Bradley International	EC-5	X		
Bromwell	EC-5	X		
Brown International	EC-5	X		
Carson	EC-5	X		Gifted Magnet
Castro	K-5	X		
Centennial	EC-5	X		
Cheltenham	EC-5	X		
CMS Community	EC-5	X		
Cole Arts & Science Academy	EC-5	X		

http://schoolchoice.dpsk12.org/school-admission-priorities/

System Components

Capacity: # of seats	Priority Structure	Student Profile
• # of students desired by grade • Factors in the number of students already at the school in the preceding grade	• Boundary • Enrollment Zone • Choice • Qualification	• Age • Address • Siblings • Random lottery number between 1 and 999,999

Student Profile

Gathered from the application as well as existing student information in Infinite Campus. Among the data points used for where a student is guaranteed a seat and also where they are prioritized for other schools:

- School Preferences, in order

- Age / Grade

- Primary Address if in a split household

- Current school

- Siblings

- If parent/guardian is FTE

- Random lottery number

- Language preference

- Socioeconomic status

- Qualification status

- Center-based program IEP

Ready for Launch

By Feb. 16, the system is now loaded with the following information

Capacity:
# of seats

Priorities

Student
Profile

How Do Students Get Assigned to Schools?

SchoolChoice Assignment Tool
Simulation

How Do Students Get Assigned to Schools?

The system is dynamic and is
doing two things at once:

1. Filling the available seats at each school according to the priority rules for those seats

2. Maximizing the number of students assigned to their most-preferred school

Part 1: School-Based View of the System

School Profile & Applicant Pool

Scenario:

- Broncos Elementary has 25 kindergarten seats and 50 applicants
- Broncos Elementary serves a boundary

Applicants:

- 15 neighborhood students
- 5 choice-in students with siblings at the school
- 20 Denver residents
- 10 Non-Denver residents

School Priority Structure

Since there are more applicants than there are seats at Broncos Elementary, the choice system has to prioritize students to determine who gets assigned.

School Priorities in Choice System:
1. Boundary students
2. Siblings of currently attending students
3. Children of full-time school staff
4. Denver residents
5. Non-Denver residents

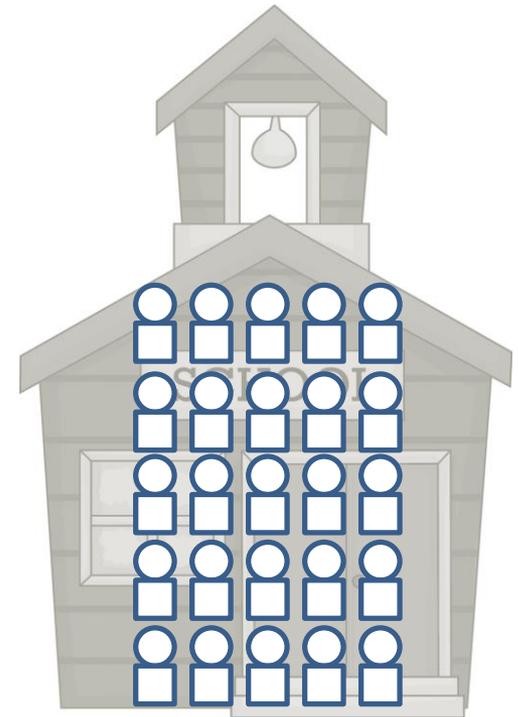# Students are assigned to the highest applicable priority based on their student profile.

Boundary
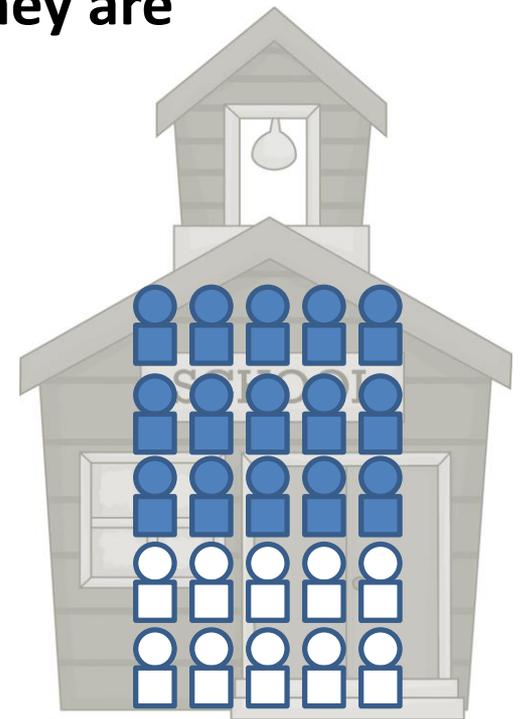
Siblings
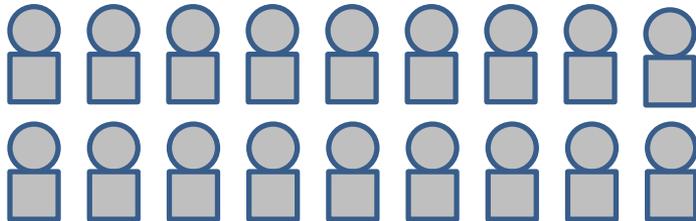
Denver Residents

Non-Denver Residents

25 seats open

System now assigns students based on their priority

Since the first priority in the system for Broncos Elementary is to assign boundary students, they are each assigned

15 of the 25 kindergarten seats are now full

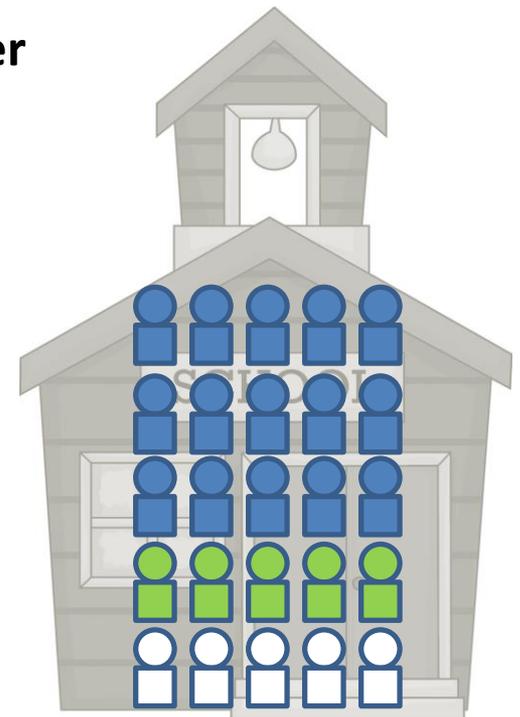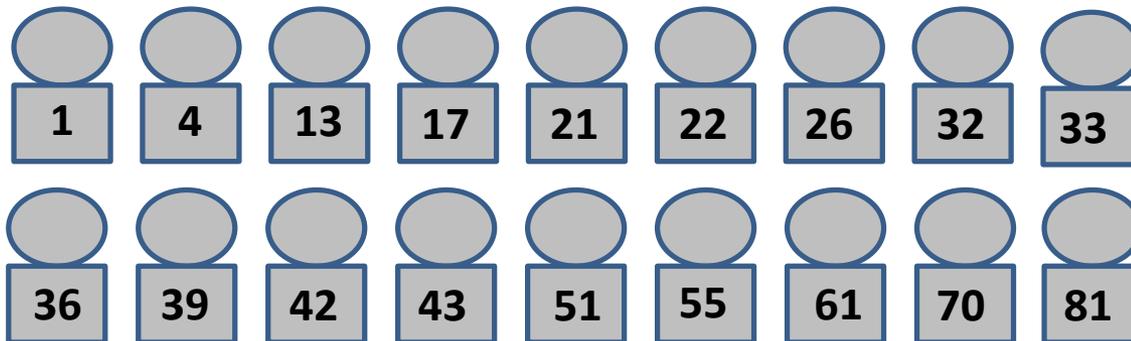# System now assigns students based on their priority

The next priority in the system for Broncos Elementary School is for siblings of current students who will be returning next year. Note that if you are both a boundary student and a sibling, you get the higher priority, which would be a boundary student.

Siblings

All 5 siblings are assigned and now 20 of the 25 seats are full

System now assigns students based on their priority

The next system priority is for Denver residents. There are 20 Denver resident applicants, but only 5 seats remaining. The system now looks at the lottery number of each student to determine assignment.

1	4	13	17	21	22	26	32	33

36	39	42	43	51	55	61	70	81

System now assigns students based on their priority

The system continues assigning students within this group starting with the lowest lottery number until all seats are full. The remaining students are then put on the waitlist in the order of their lottery number.

1	4	13	17	21	22	26	32	33
36	39	42	43	51	55	61	70	81
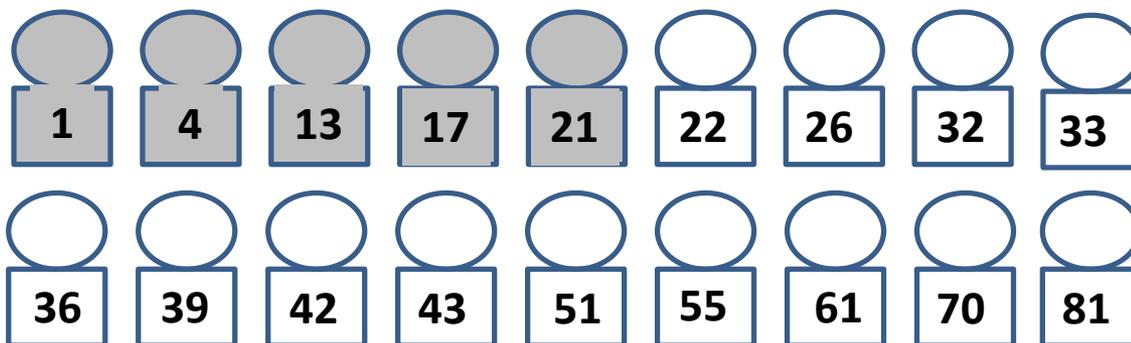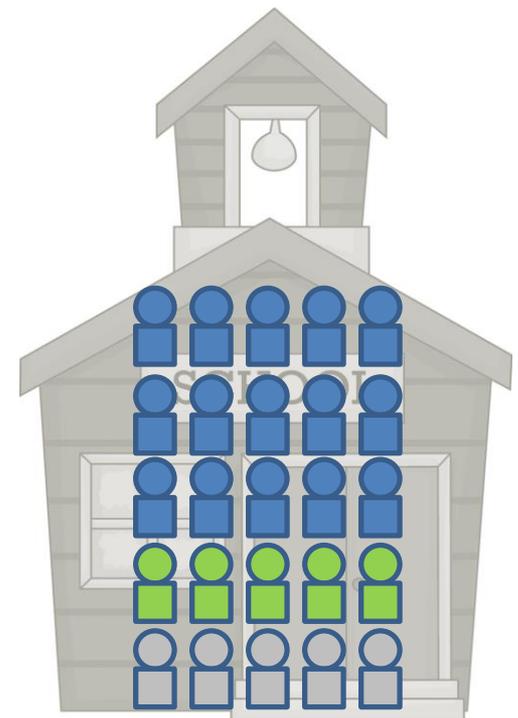
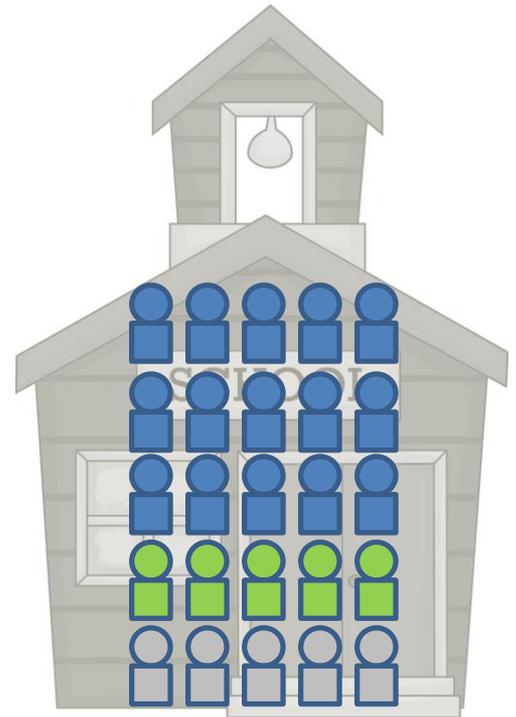Assigned   Waitlisted

All seats are now full and remaining students are waitlisted

System now assigns students based on their priority

Students from the remaining priority groups are also waitlisted in the order of their lottery number within their waitlist

Non-Denver Residents

Part 2: Student-Based View of the System

Student Profile

Name: Peyton Elway

Submitted application online

Currently an eighth-grader at Rockies Middle School

Going into ninth grade next year

Lives in the Buchanan High School Boundary

Does not have any siblings

System randomly assigned lottery # 456,789 (remember, numbers are between 1 and 999,999)

Student Choices

1St Choice: Fillmore High

2nd Choice: Van Buren High

3rd Choice: Polk High

4th Choice: Pierce High

5th Choice: Buchanan High

System Priorities are assigned for Each Choice

1St Choice: Fillmore High – Denver resident

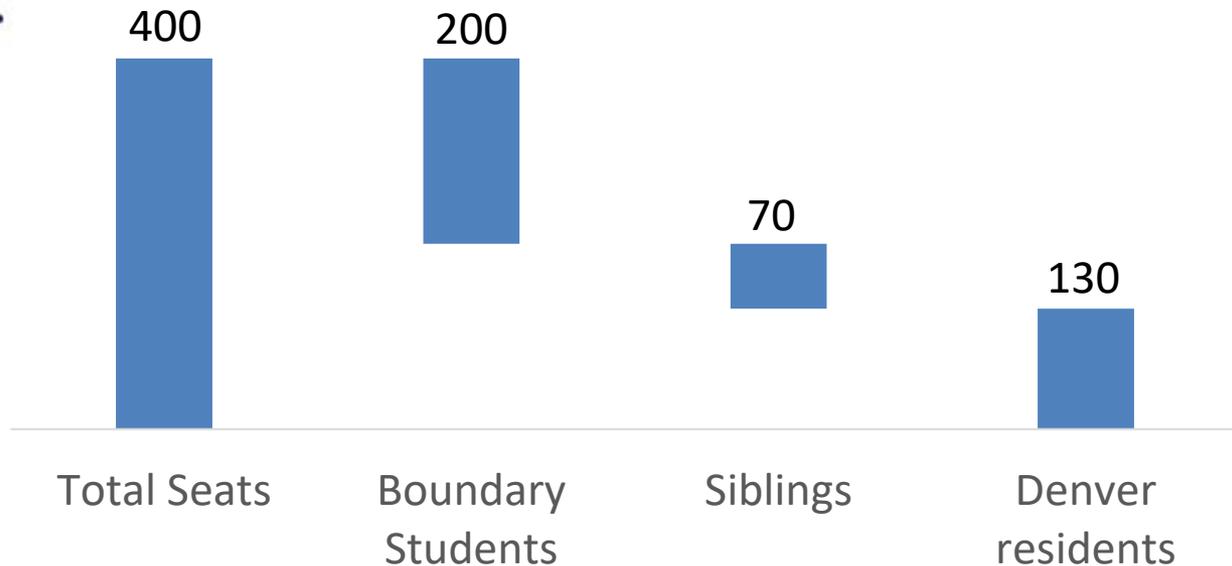2nd Choice: Van Buren High – Denver resident

3rd Choice: Polk High – Denver resident

4th Choice: Pierce High – Denver resident

5th Choice: Buchanan High – <u>Boundary</u> resident

Algorithm run: School No. 1
Fillmore High: Denver resident priority

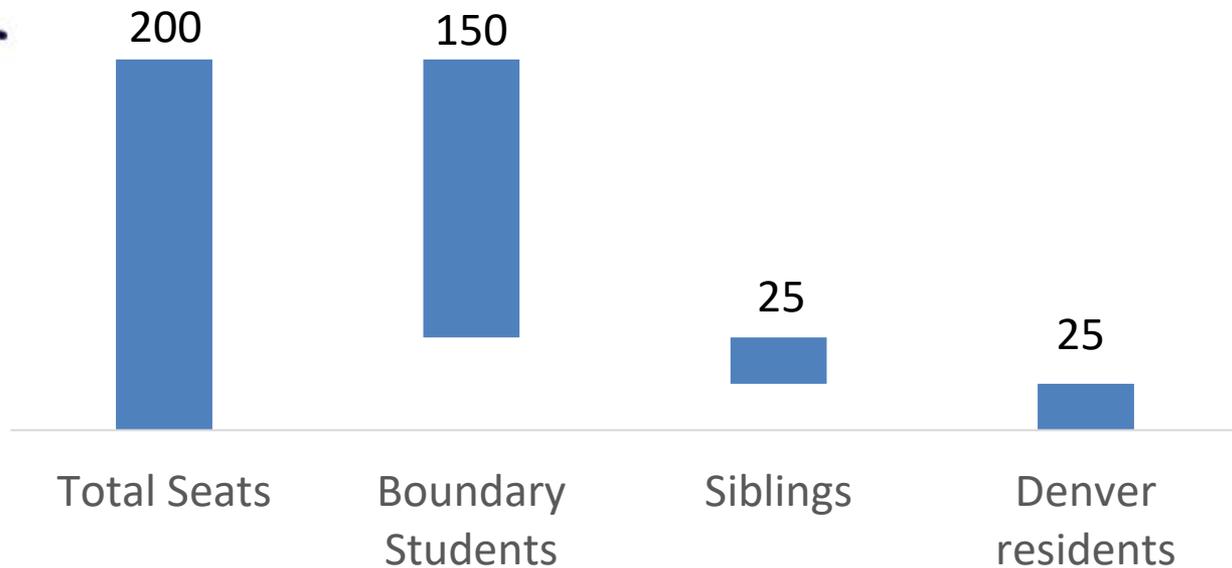|			
400	200	70	130
Total Seats	Boundary Students	Siblings	Denver residents

200 Denver residents applied for 130 seats.

Peyton has the 135th best lottery number within this group.

Peyton has been waitlisted at No. 5 for Fillmore High.

Algorithm run: School No. 2
Van Buren High: Denver resident priority

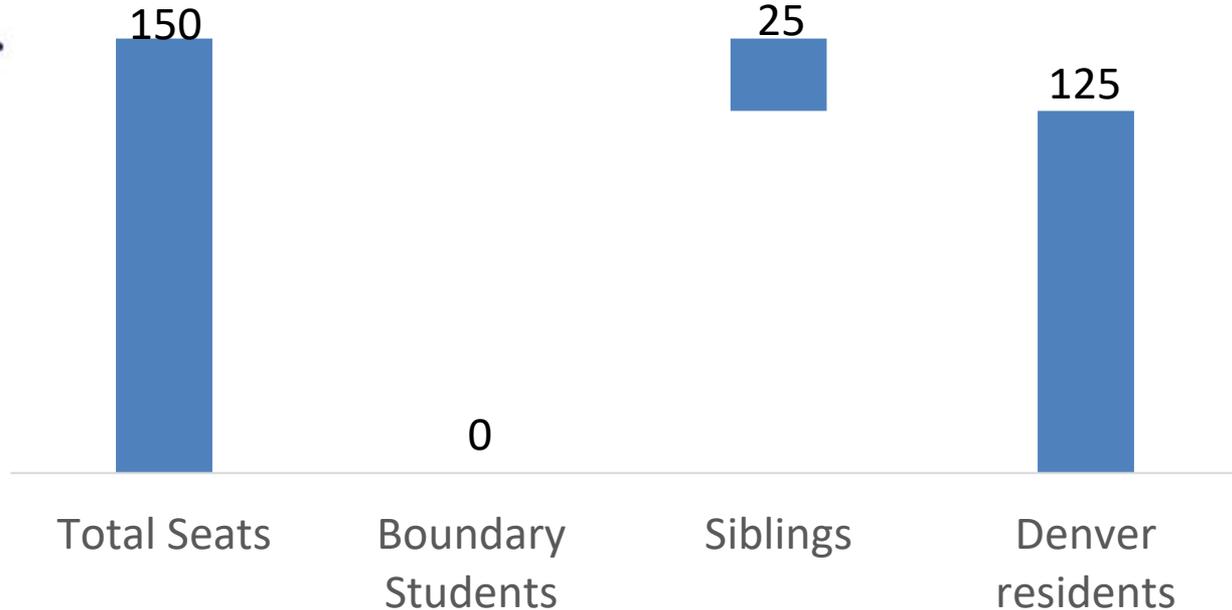|	
Total Seats	200
Boundary Students	150
Siblings	25
Denver residents	25

150 Denver residents applied for 25 seats.

Peyton has the 80th best lottery number within this group.

Peyton has been waitlisted at No. 55 for Van Buren High.

Algorithm run: School No. 3
Polk High: Denver resident priority

| | 150 | | 25 | 125 |

Chart values:
- Total Seats: 150
- Boundary Students: 0
- Siblings: 25
- Denver residents: 125

200 Denver residents applied for 125 seats.

Peyton has the 60th best lottery number within this group.

Peyton has been assigned to Polk High!!!

Algorithm run: School Nos. 4 and 5 and forfeiting a seat at your boundary school

Since Peyton was assigned to his third choice, his choice records for choices 4 and 5 were inactivated.

Since Peyton was assigned to a higher choice than his boundary high school, he has now forfeited his seat at his boundary school.

If Peyton were to change his mind and want to attend his boundary high school, he would have to submit a Round 2 Choice form. In Round 2, boundary guarantees no longer apply, it is based on priority groups and first-come first-serve.

Summary of Student Choice Outcome

1St **Choice: Fillmore High – waitlist No. 5**

2nd **Choice: Van Buren High – waitlist No. 55**

3rd **Choice: Polk High - ASSIGNED**

4th **Choice: Pierce High - inactivated**

5th **Choice: Buchanan High - inactivated**

Dynamic Nature of the System

This presentation showed the two major components of the system separately.

When the system is run, it is seeking to balance filling seats according to the priorities of the school while also seeking to maximize the number of students getting their most-preferred option.

Questions?

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