



STUDENT/TEACHER CLASSROOM RATIOS PROJECT

Board of Managers' Meeting

February 17, 2015

Prepared by Internal Audit

BACKGROUND

The Student to Teacher Ratio Project was approved as part of the 2014-2015 Audit Plan.

Criteria:

- TEC Section 25.112 Class Size. “...(a) Except as otherwise authorized by this section, a school district may not enroll more than 22 students in a kindergarten, first, second, third, or fourth grade class.”
 - A District must submit a request for a class size exception for any classroom that exceeds the 22 student limit as stated in TEC 25.112.
- TEC Section 25.114. Student/Teacher Ratios in Physical Education Classes; Class Size. “...(b) If a district establishes a student to teacher ratio greater than 45 to 1 in a physical education class, the district shall specifically identify the manner in which the safety of the students will be maintained.”

OBJECTIVES AND SCOPE

- Provide assurance to the Board on the accuracy of class sizes provided by administration.
- This includes:
 - Reviewing the process used by administration for staffing campuses,
 - Reviewing the data/methodology for calculating student/teacher ratios, and
 - Performing an analysis of class sizes.



METHODOLOGY

To achieve our objective, we:

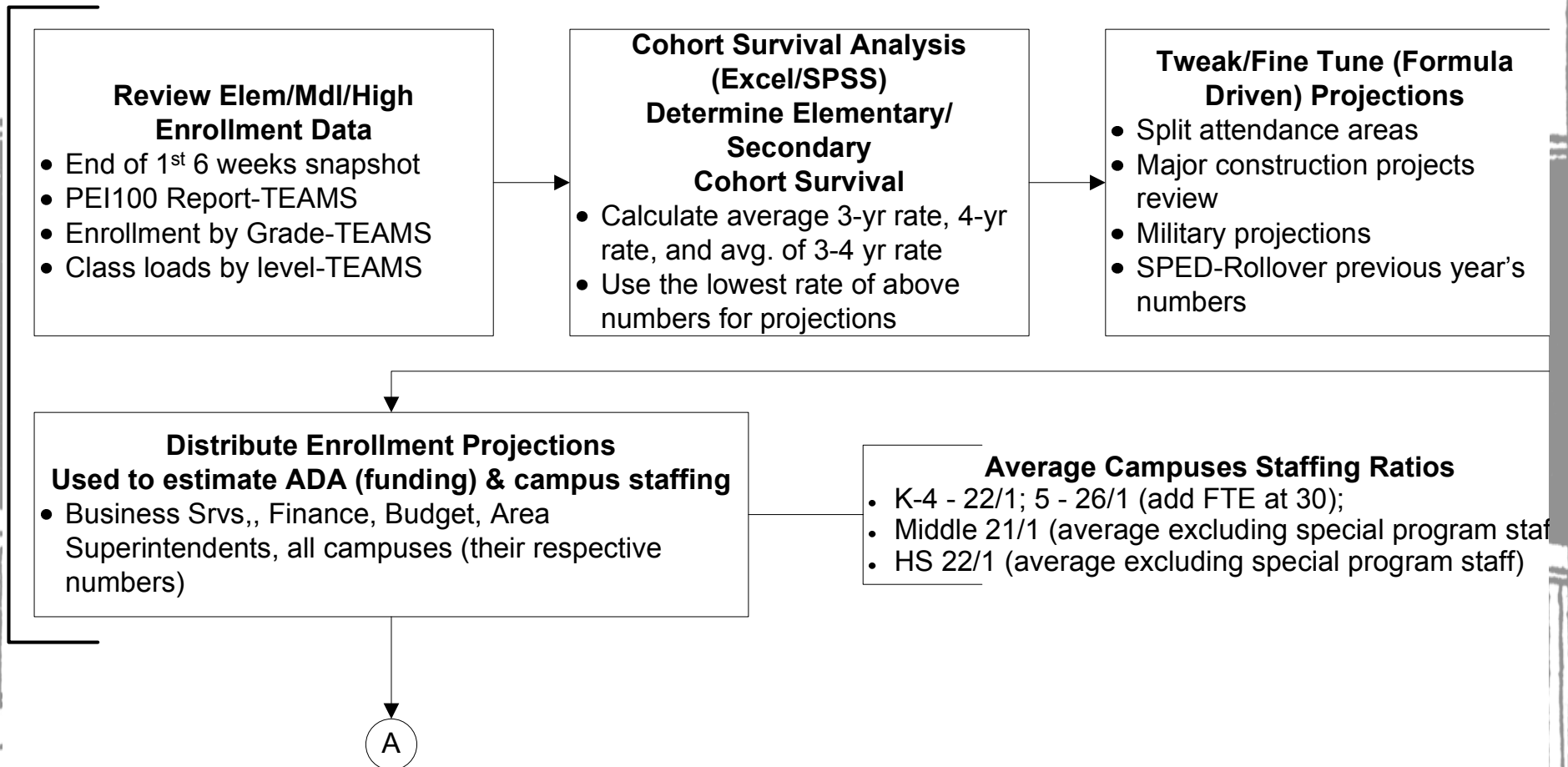
- Searched for relevant laws, policies, and local procedures,
- Conducted interviews with District personnel to obtain an understanding of the process for staffing schools and building Master Schedules,
- Collected and analyzed class size data from TEAMS, and
- Sent surveys to relevant campus staff.

OVERVIEW

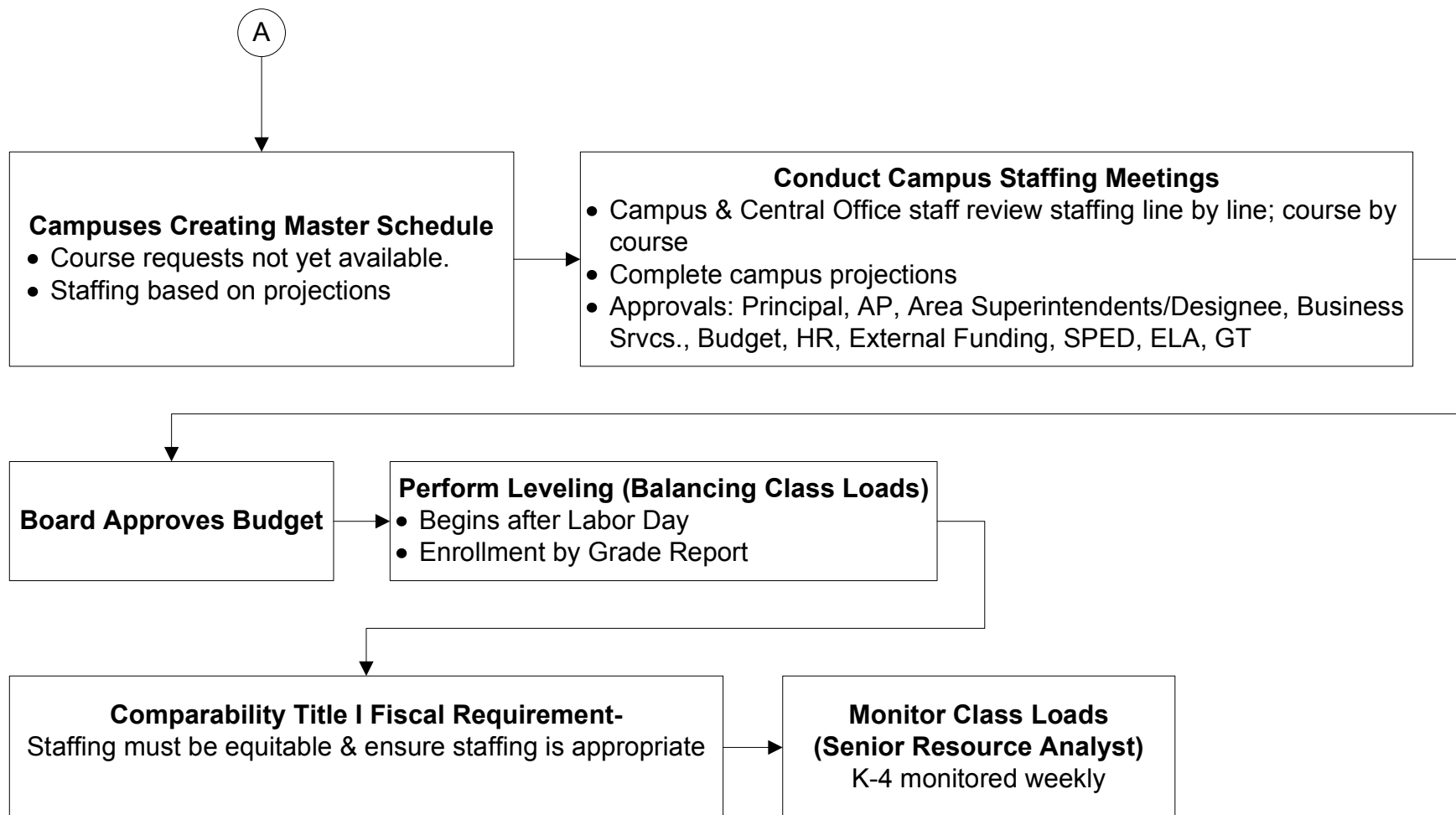
Conclusions and recommendations:

- Staffing process
- Master Schedule development
- Monitoring of class sizes
- Class size analysis and results

Staffing Process Flowchart



Staffing Process Flowchart



Conclusion: Staffing Process

Conclusion:

We found the process used by Central Office administration appears to be appropriate to ensure equity among schools while still considering the needs of students enrolled in special programs (since these may vary from one campus to the next).

We recommend administration consider the following:

The processes for enrollment projections, staffing, and monitoring class sizes/ratios should be documented in the form of standard operating procedures.

Documenting the process can:

- a. Provide consistency, regardless of who is performing the tasks, and
- b. Serve as an internal control to provide reasonable assurance the District staffing methodology complies with the Title I comparability fiscal requirement.

Conclusion: Class Size Monitoring

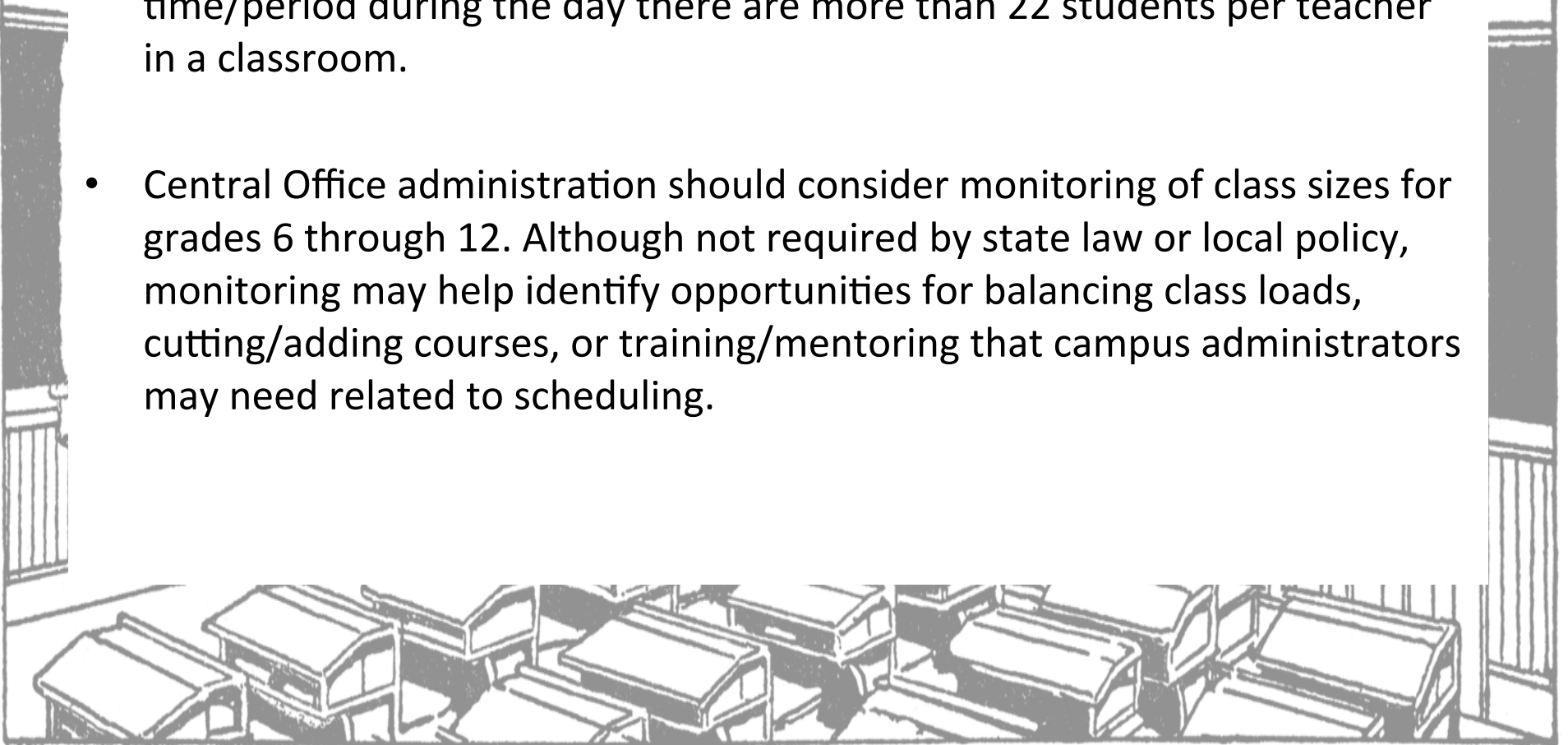
Conclusion:

- Based on the information provided by the Resource Analyst in Business Services, we found that the District monitors for the TEC class size requirement at appropriate intervals (minimum weekly).
- Monitoring of homeroom periods alone does not ensure that at no time/period during the day a teacher has more than 22 students in a classroom for campuses who have “departmentalized” certain grade levels.
- It appears that there is no monitoring, by Central Office administration, of class sizes for grades 6 through 12. According to several campus administrators, they monitor class sizes to student to teacher ratios and staffing are appropriate for their respective campuses.

Conclusion: Class Size Monitoring

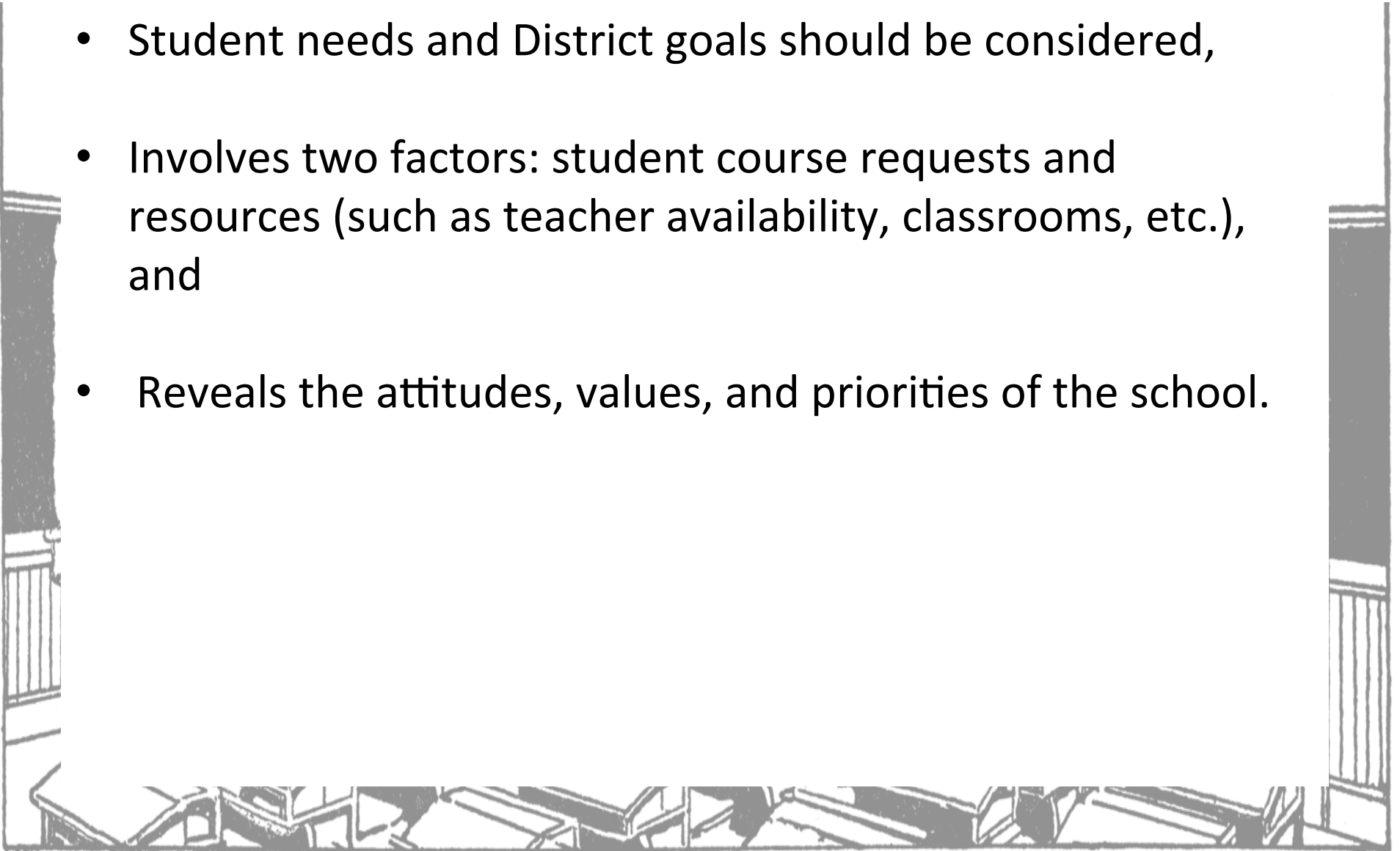
We recommend administration consider the following:

- Monitoring of class sizes for grades Kinder through 4 should be based on class period, not just homeroom. This monitoring would ensure that at no time/period during the day there are more than 22 students per teacher in a classroom.
- Central Office administration should consider monitoring of class sizes for grades 6 through 12. Although not required by state law or local policy, monitoring may help identify opportunities for balancing class loads, cutting/adding courses, or training/mentoring that campus administrators may need related to scheduling.



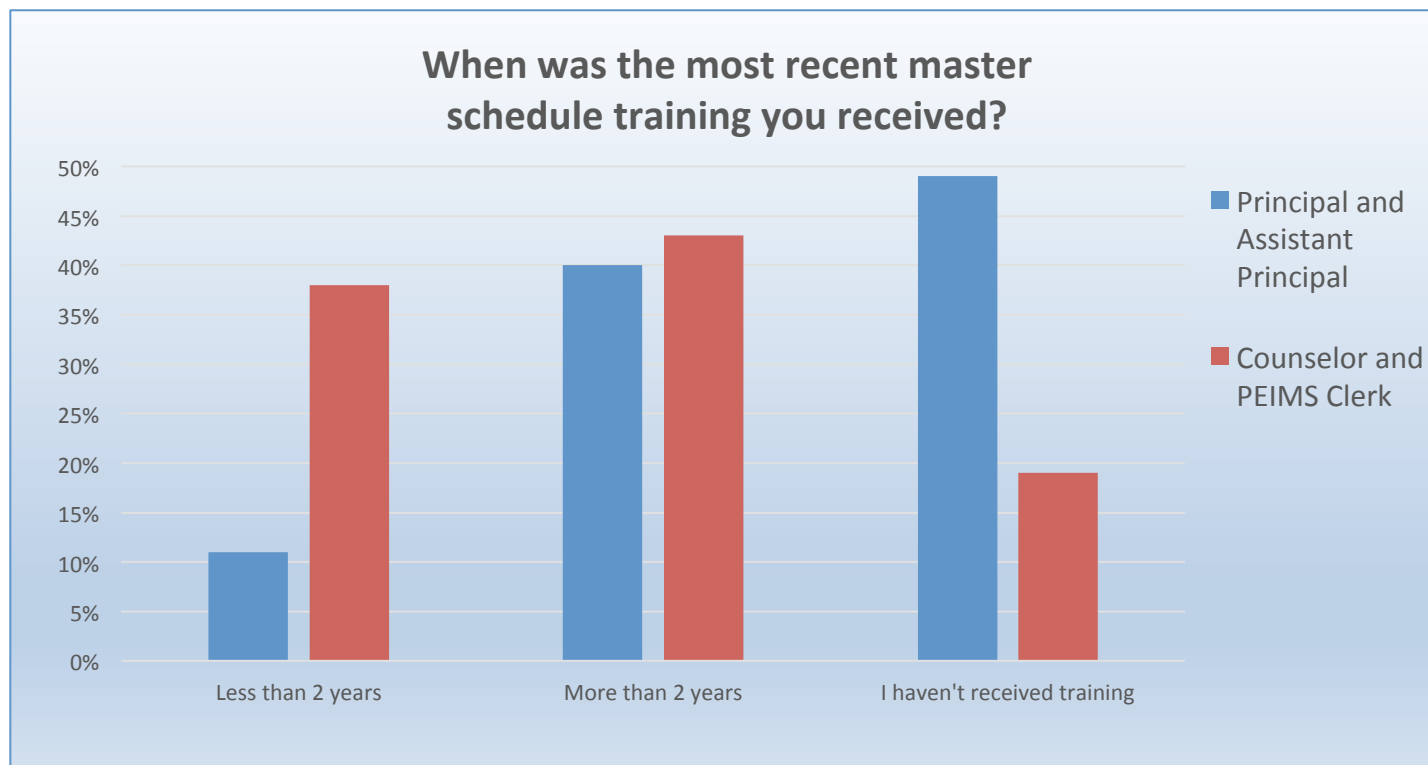
Building a Master Schedule

- Student needs and District goals should be considered,
- Involves two factors: student course requests and resources (such as teacher availability, classrooms, etc.), and
- Reveals the attitudes, values, and priorities of the school.



Building a Master Schedule

Survey responses from 82 principals/assistant principals and 37 counselors/PEIMS clerks who have a role in creating the Master Schedule:



Note that training on building a Master Schedule in TEAMS was provided in December 2014. However, the focus of training was on the use of the system.

Conclusions: Building a Master Schedule

Conclusions:

1. It appears there is a lack of training for staff involved in building a Master Schedule. Although not required by state law or local policy, training can help address risks such as:
 - a. Not allocating resources (teachers) to maximum potential,
 - b. Class sizes may not be balanced (too small or too large), or
 - c. Student course requests may not be satisfied.
2. District does not have a common Master Schedule vision and philosophy of what a most effective Master Schedule should entail and aligned with District goals, objectives, and resources.

Conclusions: Building a Master Schedule

We recommend administration consider the following:

- Provide Master Schedule training, mentoring, support, and monitoring to ensure resources are utilized at maximum level. The training may include a hands-on workshop that is made available to principals, assistant principals, and other administrators who aspire to become principals/assistant principals.
- Define a common Master Schedule vision and philosophy of what a most effective Master Schedule should entail that is aligned with District goals, objectives, and resources.
- Annually, provide campus administrators recommended minimum/maximum class sizes by grade level, subject, or special programs for grades 5-12. To demonstrate transparency, the recommended minimum/maximum class sizes should be included in the annual budget submitted to the Board for review and approval.

CLASS SIZES: DATA ANALYZED

Grades Kinder through 4

We obtained data for class sizes by teacher and day/period for grades Kinder through 12 for the fall of 2014. For Kinder through 4th grade, we:

- ✓ Quantified class sizes by homeroom period,
- ✓ Created a table to illustrate the number of homeroom periods (1,387) by class size ranges, and
- ✓ Identified homeroom periods that exceed the TEC's 22 class size requirement

Class Sizes: Grades Kinder through 4

Class Size Ranges for Homeroom Periods			
Class Size Ranges	Number of Periods	Total Students	Percent of Population
Less than 11	162	709	3.22%
11- 14	198	2,560	11.62%
15 - 18	572	9,535	43.29%
19 - 22	441	8,890	40.17%
Greater than 22	14	326	1.69%
	1,387	22,020	100.00%

Class Sizes: Grades Kinder through 4

Homeroom Periods

17

Fourteen periods had over 23 or 24 students in the classroom:

- Five periods have a class size exception waiver approved by the state,
- A request for a class size exception waiver is on the February Board agenda for one of the periods,
- Teachers adds were approved to balance six of the periods, and
- Two periods are being submitted to Grants Council for review.

CLASS SIZES: DATA ANALYZED

Grade 5

We obtained data for class sizes by teacher and day/period for grades Kinder through 12 for the fall of 2014. For 5th grade, we:

- ✓ Extracted class data for departments with core subjects - English Language Arts (ELA), Math (MA), Science (SC), and Social Studies(SS),
- ✓ We quantified class size by periods, and
- ✓ Created a table to illustrate the number of homeroom periods (234) by class size ranges.

Class Sizes: Grade 5 for Core

Class Size Ranges for ELA, MA, SC, and SS Homeroom Periods

Class Size Ranges	Number of Periods	Total Students	Percent of Population
Less than 11	28	104	2.38%
11- 14	11	145	3.32%
15 - 18	45	758	17.35%
19 - 22	86	1,763	40.34%
23-26	48	1,156	26.45%
27-30	16	444	10.16%
	234	4,370	100.00%

CLASS SIZES: DATA ANALYZED

Grades 6-8

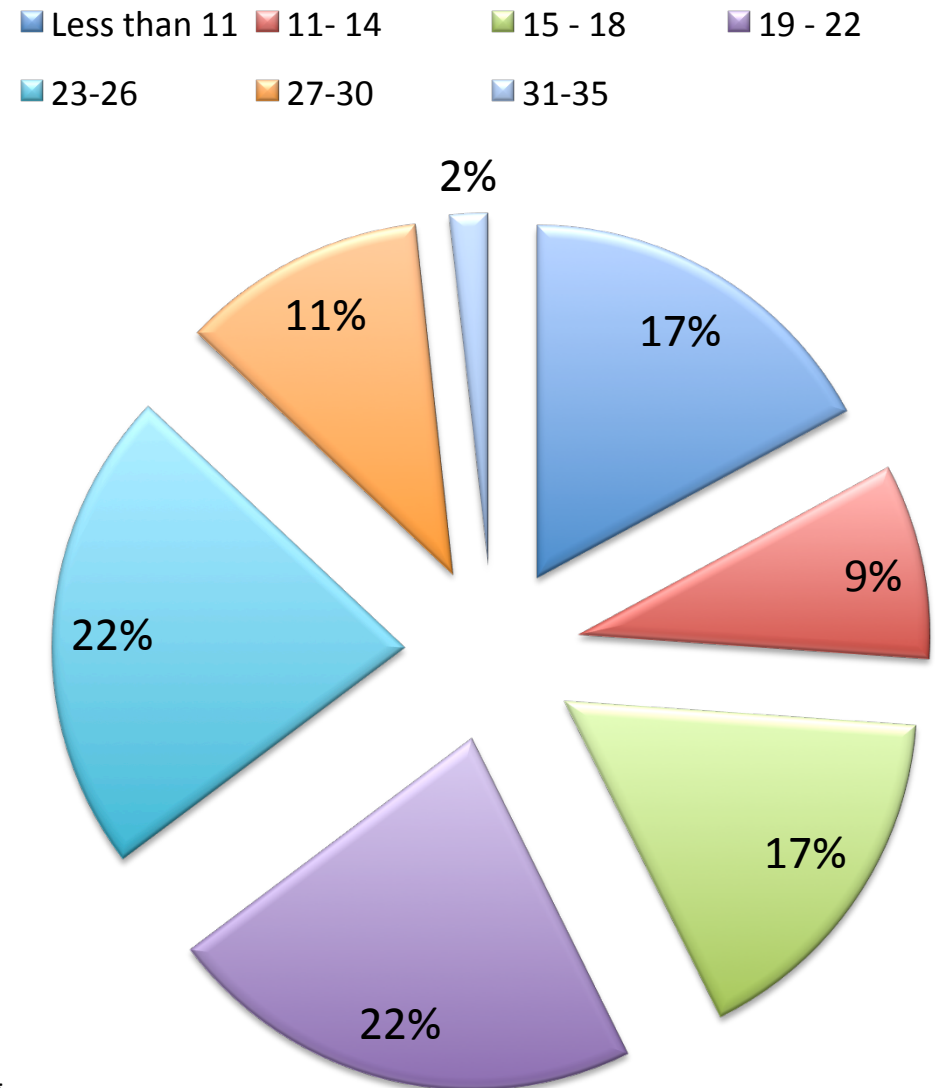
We obtained data for class sizes by teacher and day/period for grades Kinder through 12 for the fall of 2014. For 6th through 8th grade, we:

- ✓ Extracted class data for departments with core subjects - ELA, MA, SC, SS, and Physical Education (PE),
- ✓ We quantified class sizes by period for core and PE departments (separately), and
- ✓ Created tables to illustrate the number of core periods (3,579) and PE periods (395) by class size ranges.



Class Sizes: Grades 6-8 for Core

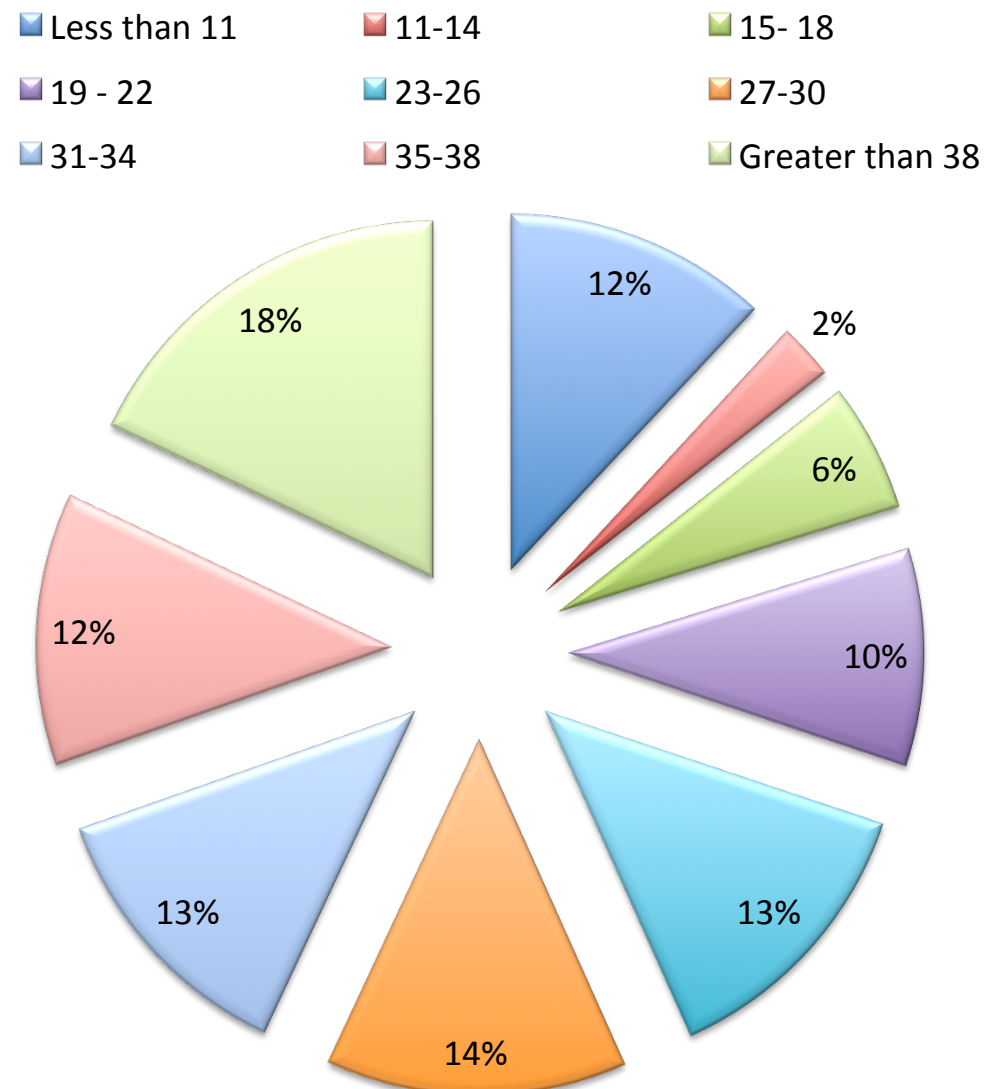
Class Size Ranges for ELA, MA, SC, or SS Periods		
Class Size Ranges	Number of Periods	Percent of Periods**
Less than 11	614	17.16%
11- 14	320	8.94%
15 - 18	594	16.60%
19 - 22	789	22.05%
23-26	798	22.30%
27-30	403	11.26%
31-35	61	1.70%
	3,579	100.00%



**Percentages may not always total 100% due to rounding.

Class Sizes: Grades 6-8 for PE

Class Size Ranges for PE Periods		
Class Size Ranges	Number of Periods	Percent of Periods**
Less than 11	47	11.90%
11-14	10	2.53%
15- 18	23	5.82%
19 - 22	39	9.87%
23-26	52	13.16%
27-30	54	13.67%
31-34	50	12.66%
35-38	49	12.41%
Greater than 38	71	17.97%
	395	100.00%



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CLASS SIZES: DATA ANALYZED

Grades 9-12

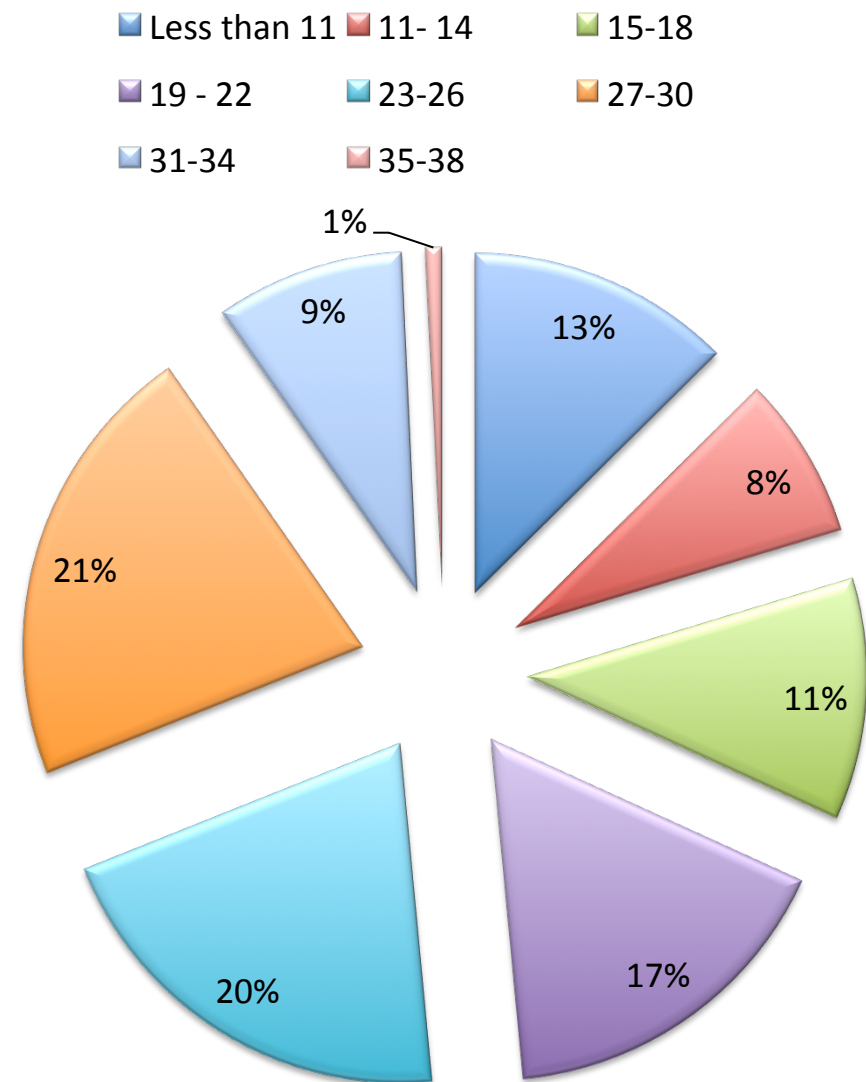
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We obtained data for class sizes by teacher and day/period for grades Kinder through 12 for the fall of 2014. For 9th through 12th grade, we:

- ✓ Extracted class data for eleven of the District's high schools for departments with core subjects - ELA, MA, SC, SS, and PE,
- ✓ We quantified class sizes by periods for core and PE departments (separately), and
- ✓ Created tables to illustrate the number of core periods (3,965) and PE periods (506) by class size ranges.

Class Sizes: Grades 9-12 for Core

Class Size Ranges for ELA, MA, SC, or SS		
Class Size Ranges	Number of Periods	Percent of Periods**
Less than 11	498	12.56%
11- 14	308	7.77%
15-18	455	11.48%
19 - 22	662	16.70%
23-26	811	20.45%
27-30	847	21.36%
31-34	355	8.95%
35-38	29	0.73%
	3,965	100.00%



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Class Sizes: Grades 9-12 for Core

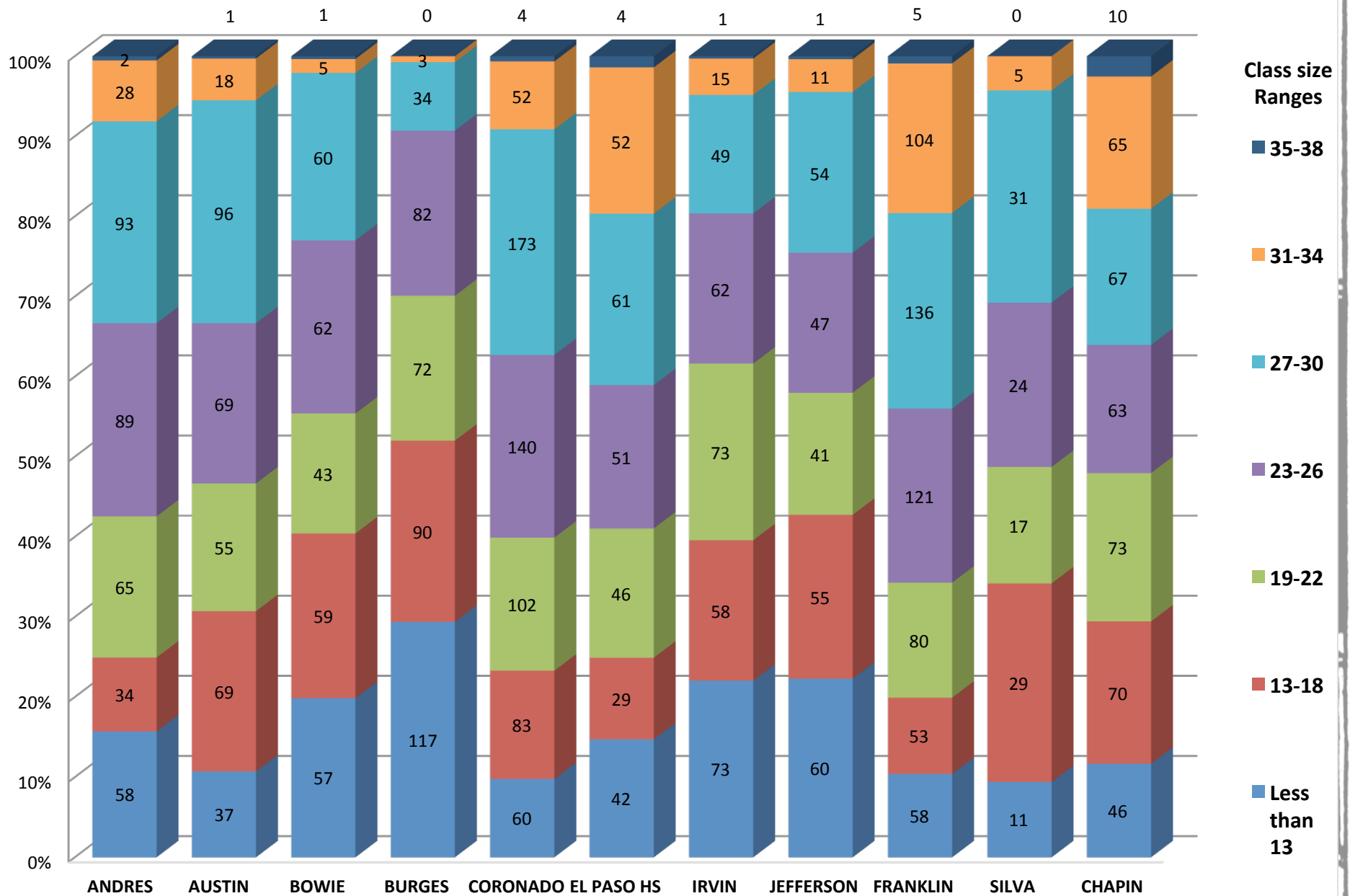
**Percentage of Periods by Class Size Range
For Department Codes: ELA, MA, SC, and SS**

Campus	Andres	Austin	Bowie	*Borges	Coronado	El Paso	Irvin	Jefferson	Franklin	Silva	Chapin
Less than 13	16%	11%	20%	29%	10%	15%	22%	22%	10%	9%	12%
13-18	9%	20%	21%	23%	14%	10%	18%	20%	10%	25%	18%
19-22	18%	16%	15%	18%	17%	16%	22%	15%	14%	15%	19%
23-26	24%	20%	22%	21%	23%	18%	19%	17%	22%	21%	16%
27-30	25%	28%	21%	9%	28%	21%	15%	20%	24%	26%	17%
31-34	8%	5%	2%	1%	8%	18%	5%	4%	19%	4%	16%
35-38	1%	0%	0%	-	1%	1%	0%	0%	1%	-	3%
TOTAL**	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Only campus on a traditional schedule in which teachers have 7 of 8 classes. According to Principal, will be going back to 6 of 8 next year.

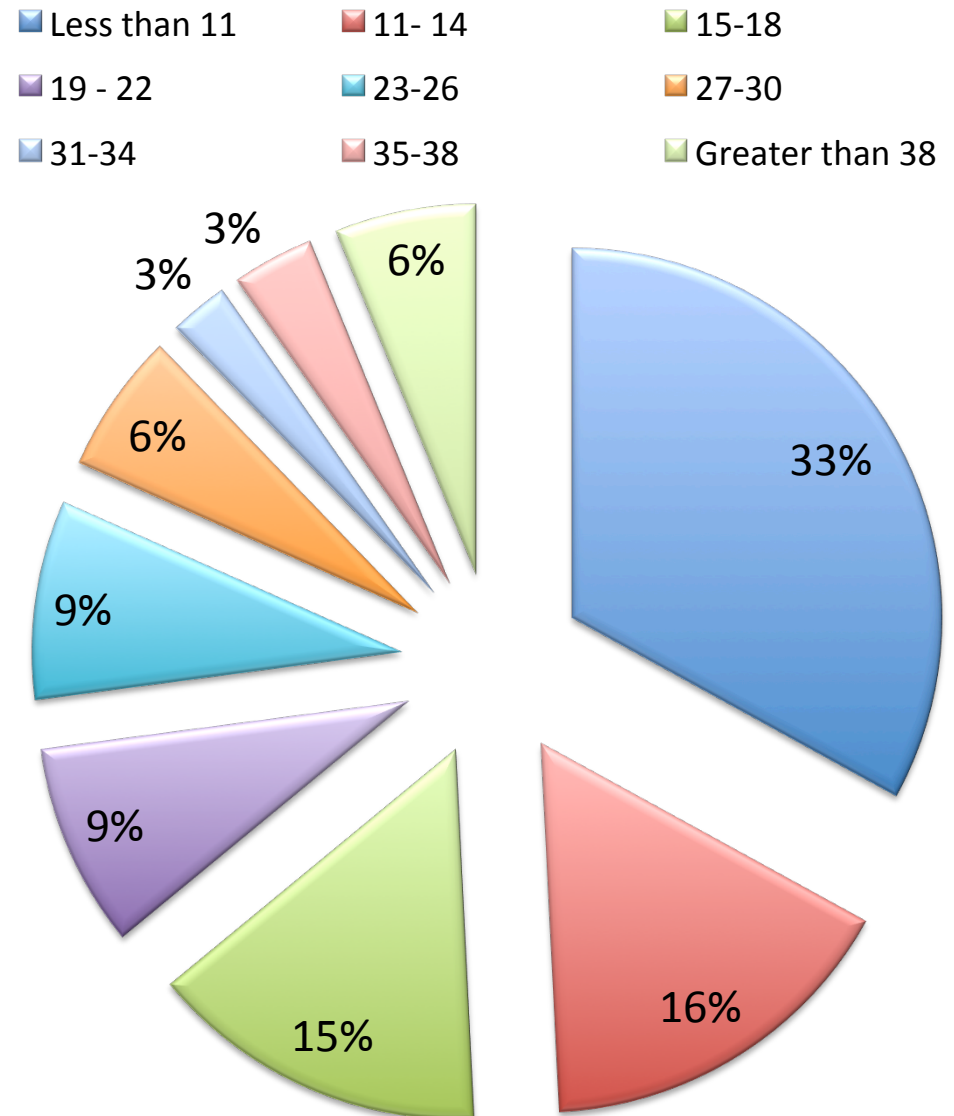
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Number of Periods by Class Size Range For Department Codes: ELA, MA, SC, and SS



Class Sizes: Grades 9-12 for PE

Class Size Ranges for PE Periods		
Class Size Ranges	Number of Periods	Percent of Periods**
Less than 11	167	33.00%
11- 14	82	16.21%
15-18	75	14.82%
19 - 22	45	8.89%
23-26	44	8.70%
27-30	31	6.13%
31-34	13	2.57%
35-38	18	3.56%
Greater than 38	31	6.13%
	506	100.00%



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Class Sizes: Grades 9-12 for PE

Percentage of Periods by Class Size Range

Class Ranges	Andress	Austin	Bowie	Burges	Coronado	El Paso	Irvin	Jefferson	Franklin	Silva	Chapin
Less than 11	47%	17%	42%	22%	12%	37%	29%	67%	19%	100%	22%
11-14	15%	13%	15%	16%	16%	17%	21%	18%	17%	-	14%
15-18	19%	9%	2%	14%	16%	9%	7%	7%	32%	-	18%
19 - 22	7%	-	17%	8%	18%	2%	14%	2%	12%	-	6%
23-26	4%	9%	13%	11%	12%	13%	10%	2%	9%	-	8%
27-30	1%	22%	4%	8%	6%	6%	7%	4%	5%	-	10%
31-34	1%	-	2%	3%	6%	7%	2%	-	-	-	4%
35-38	4%	9%	4%	8%	-	4%	10%	-	1%	-	2%
Greater than 38	-	22%	2%	11%	14%	6%	-	-	5%	-	14%
Totals**	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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