

# **Alameda Unified School District Demographic Trends and Forecasts**

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# Agenda

- **Evaluation of last year's enrollment forecast**
- **Define "enrollment"**
  - **Where students live, not where they attend school**
  - **Students on the boundaries of attendance areas**
  - **Current versus future students**
    - **Forecasting methodology; Edison used as an example**
  - **SDC status**
- **Define "capacity"**
- **Compare enrollments & capacity for each school attendance area**
- **Options for dealing with the mismatch between enrollments and capacity**

# Evaluation of Last Year's Enrollment Forecast

- **Our forecast was quite close to actual enrollments:**
  - **K-5 ( within 0.5% )**
  - **6-8 ( within 1.2% )**
  - **9-12 ( within 1.0% )**

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- **K-12 ( within 0.4% )**
- **We also compared forecasted and actual enrollments by subarea**

## Evaluation of Last Year's Forecast

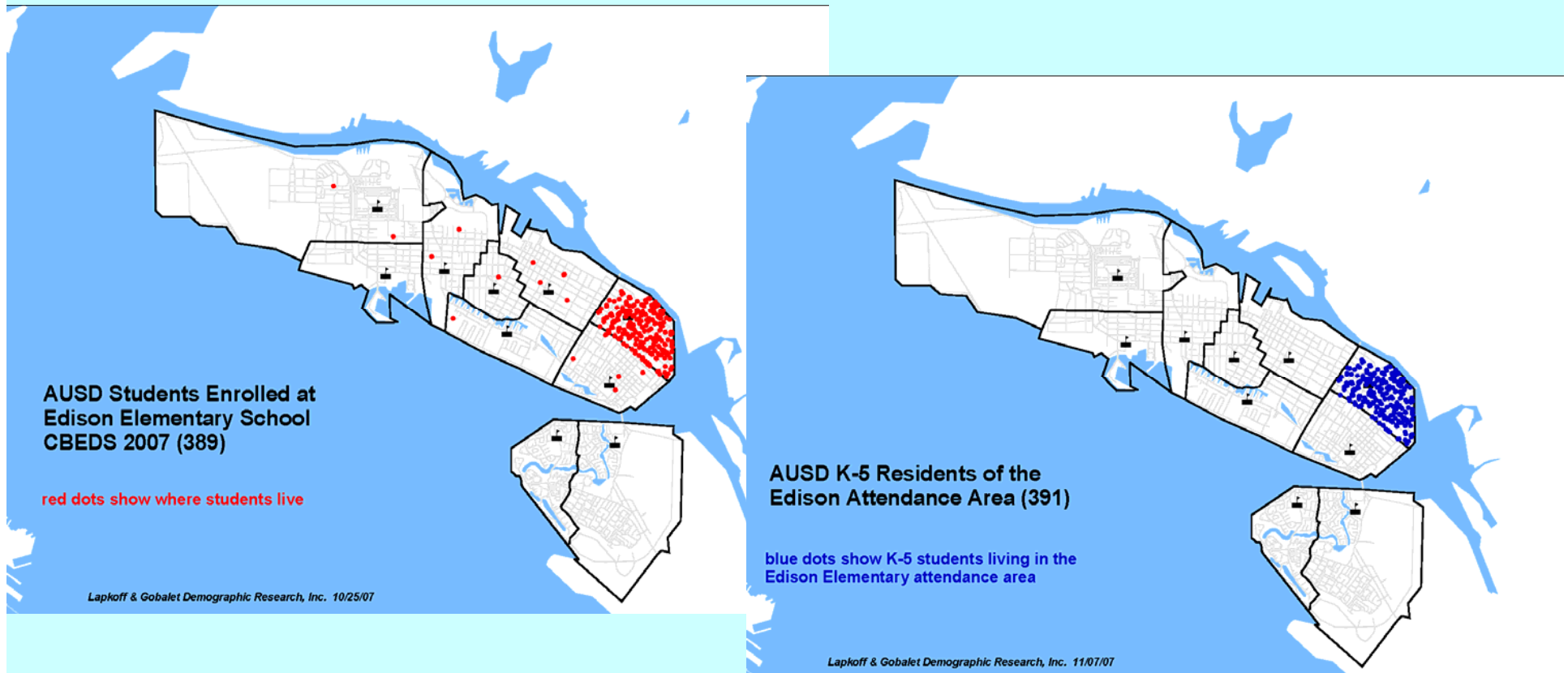
	Forecast for Fall 2007 using 2006-07 enrollments	Actual Fall 2007 Enrollments	Difference (Actual - Forecast)	% difference
<b>K to 5</b>				
Bay Farm Island	988	1,015	27	
East of Park, Main Island	834	848	14	
Park to Webster	1,603	1,596	-7	
Webster to Main, S. of Atlantic	457	490	33	
Harbor Island/Summer House Apts	24	26	2	
Bayport	67	59	-8	
Marina Village (New CG housing)	77	76	-1	
North Housing (Old CG housing)	0	0	0	
Alameda Point	88	72	-16	
Out-of-District students	174	154	-20	
<b>Total</b>	<b>4,313</b>	<b>4,336</b>	<b>23</b>	<b>0.5%</b>
<b>6 to 8</b>				
Bay Farm Island	510	509	-1	
East of Park, Main Island	485	466	-19	
Park to Webster	870	855	-15	
Webster to Main, S. of Atlantic	200	229	29	
Harbor Island/Summer House Apts	12	12	0	
Bayport	35	22	-13	
Marina Village (New CG housing)	21	18	-3	
North Housing (Old CG housing)	0		0	
Alameda Point	48	39	-9	
Out-of-District students	91	95	4	
<b>Total</b>	<b>2,273</b>	<b>2,245</b>	<b>-28</b>	<b>-1.2%</b>

## Evaluation of Last Year's Forecast

	Forecast for Fall 2007 using 2006-07 enrollments	Actual Fall 2007 Enrollments	Difference (Actual - Forecast)	% difference
<b>9 to 12</b>				
Bay Farm Island	697	691	-6	
East of Park, Main Island	700	667	-33	
Park to Webster	1,303	1,313	10	
Webster to Main, S. of Atlantic	366	353	-13	
Harbor Island/Summer House Apts	16	15	-1	
Bayport	37	22	-15	
Marina Village (New CG housing)	21	16	-5	
North Housing (Old CG housing)	0	0	0	
Alameda Point	45	53	8	
Out-of-District students	216	236	20	
<b>Total</b>	<b>3,400</b>	<b>3,366</b>	<b>-34</b>	<b>-1.0%</b>
<b>K to 12</b>				
Bay Farm Island	2,195	2,215	20	
East of Park, Main Island	2,020	1,981	-39	
Park to Webster	3,777	3,764	-13	
Webster to Main, S. of Atlantic	1,023	1,072	49	
Harbor Island/Summer House Apts	52	53	1	
Bayport	139	103	-36	
Marina Village (New CG housing)	118	110	-8	
North Housing (Old CG housing)	0	0	0	
Alameda Point	181	164	-17	
Out-of-District students	481	485	4	
<b>Total</b>	<b>9,986</b>	<b>9,947</b>	<b>-39</b>	<b>-0.4%</b>

## Our Approach to Forecasting Enrollments

- We have geocoded (electronically pin-mapped) AUSD students' residences from 1997 through 2007, and use this information to understand enrollment trends, overall and by subarea.
- We compare where students are enrolled with where they live, and look at various categories of students.



# Defining “Enrollment”

- **For planning purposes, we forecast AUSD student residents of each attendance area, regardless of which AUSD school they attend.**
- **We exclude SDC students from our neighborhood analysis, because SDC students require different facilities and may not attend their neighborhood schools. The result is a comparison of regular education students with regular education facilities.**
- **Some students who live on the boundary between two schools have a choice where to attend. We account for typical choices.**
- **The number of future residents of some attendance areas may differ from current residents because of new housing construction and turnover in houses and apartments.**

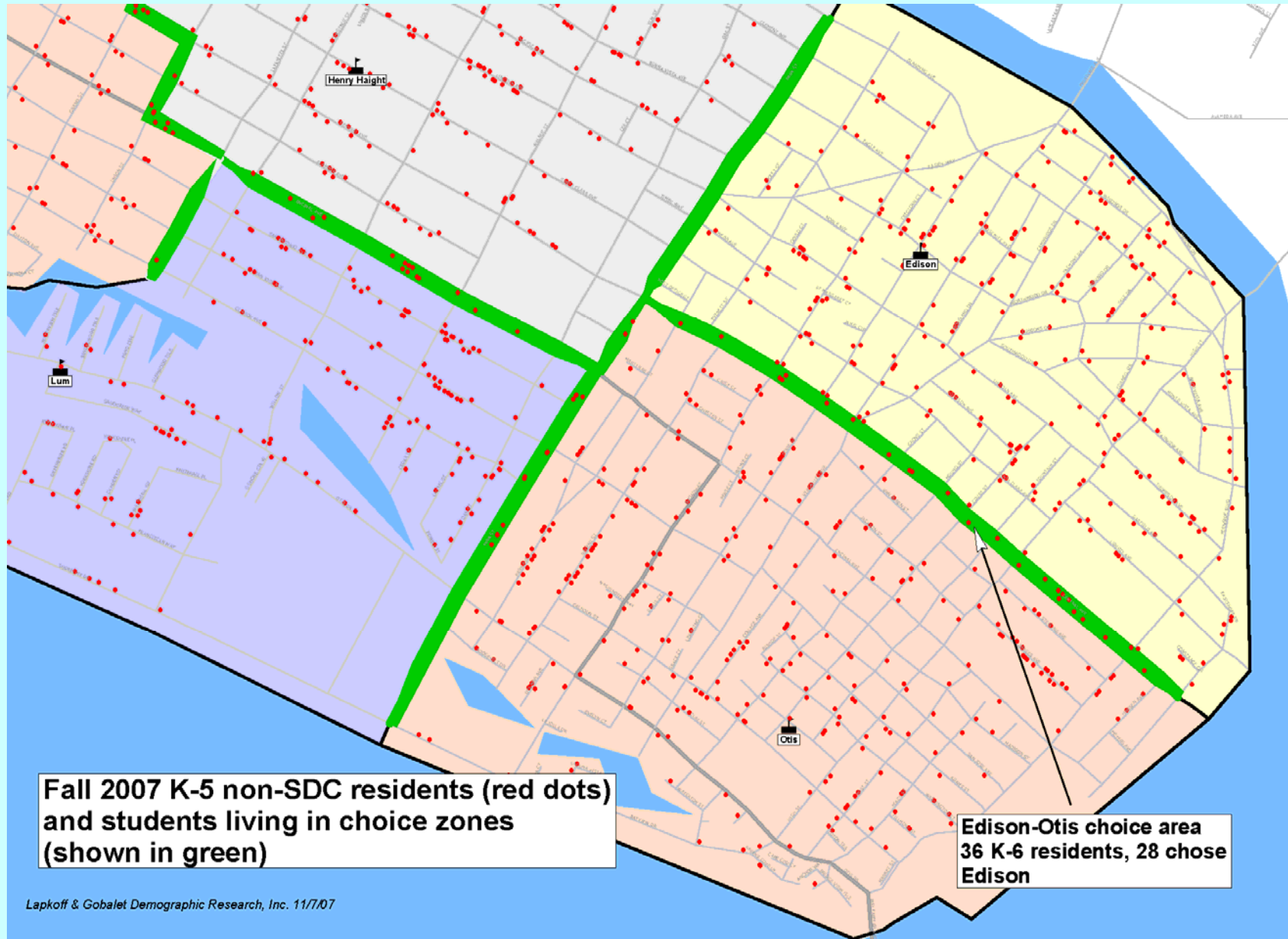
## Defining “Enrollment” (continued)

- **About 150 K-5 students attend AUSD who live outside the District’s boundaries. District administrators have discretion regarding how many students to admit and where they attend school.**
- **Some students do not attend their neighborhood school, but transfer to another area.**

*We have forecasted residents of each elementary attendance area. Note, however, that because the population base for each area is small, these forecasts may not match actual future enrollments due to random variation and unforeseen factors. The forecasts serve only as a guide for planning purposes.*



# Understanding AUSD enrollment patterns is complicated by a variety of factors, including the need to consider the choice zone students:

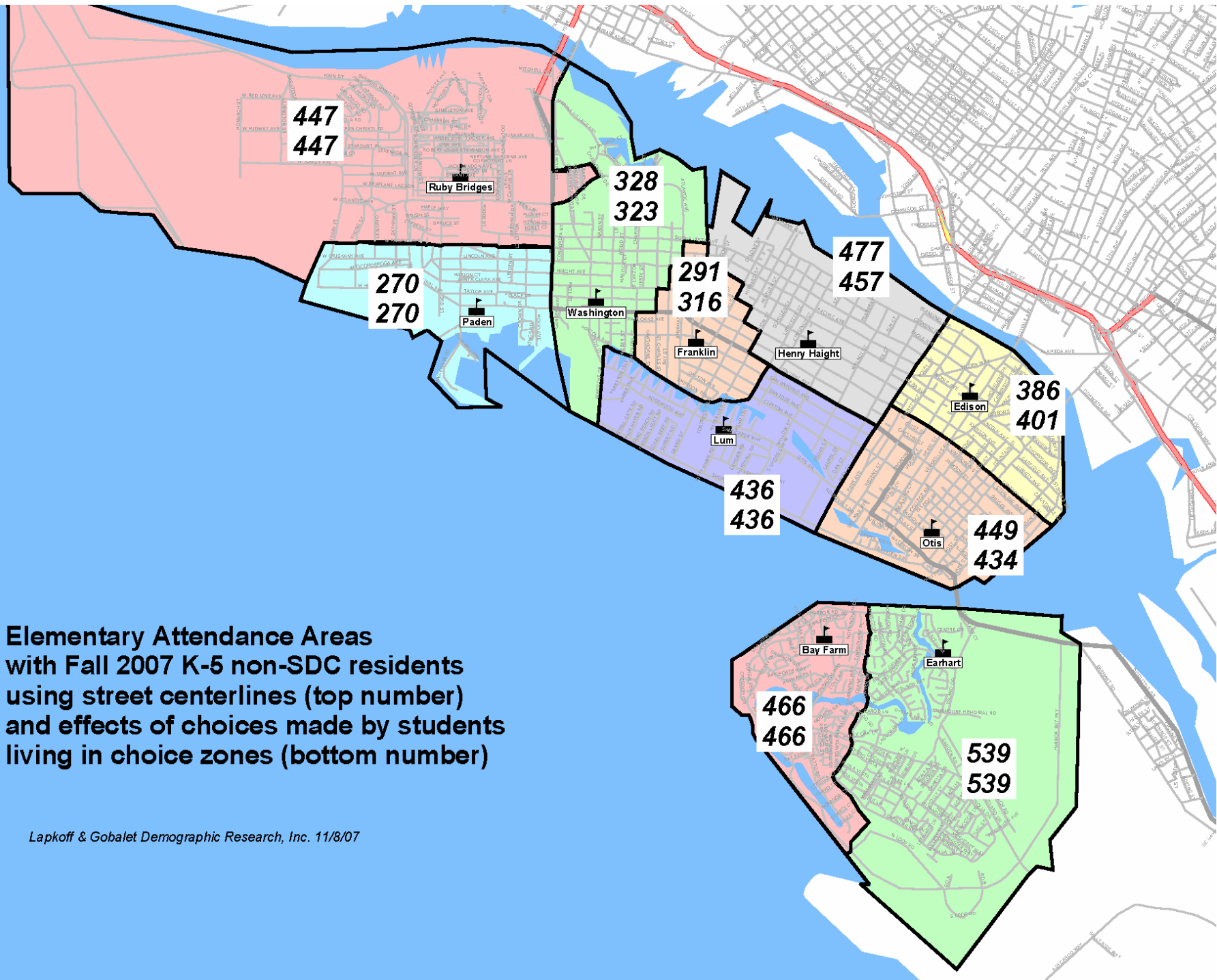


## **Categories of students that need to be considered when forecasting elementary attendance area residents:**

- 1. Fall 2007 CBEDS non-SDC student residents**
- 2. Choice students (living on the attendance area boundaries)**
- 3. Expected students from future housing**
  - Bayport +
  - Summer House
- 4. Expected students from future turnover in houses and apartments**
- 5. Inter-district transfer students**
  - At the District's discretion
- 6. Intra-district transfer students**
  - At the District's discretion

# Where students enroll versus where they live:

K to 5 Regular Education Students Only, Fall 2007											
School Attending											Total Residents
Bay Farm	Earhart	Edison	Franklin	Haight	Lum	Otis	Paden	Ruby Bridges	Washington		
Bay Farm	440	26									466
Earhart	26	489		1	3	11	4	3	2		539
Edison	6	5	341		3	2	10	2			369
Franklin	1	2	1	190	7	1	3	9	5	20	239
Haight	8	10	4	6	341	26	7	14	12	9	437
Lum	5	3		8	15	350	4	6	6	7	404
Otis	16	10	6		1	24	341	11	5	2	416
Paden Elementary					5	4		231	18	7	265
Ruby Bridges	1	4			4	8	4	33	372	20	446
Washington	3	4	1	8	17	15	1	16	32	215	312
<b>Choice Areas</b>											
Edison/Otis			28		1	1	6				36
Franklin/Haight				41	6	3	1	2	3	3	59
Franklin/Lum				1							1
Franklin/Washington				29						9	38
Haight/Lum					6	16					22
Haight/Otis							2	1			3
Lum/Otis					3	4	6		1	1	15
Lum/Washington		1			1	11					13
Paden/Washington								5		1	6
RubyBridges/Washington					1						1
<b>Not AUSD</b>	5	12	1	2	13	14	5	11	44	42	149
<b>Total Enrollees</b>	<b>511</b>	<b>566</b>	<b>382</b>	<b>286</b>	<b>427</b>	<b>490</b>	<b>394</b>	<b>344</b>	<b>500</b>	<b>336</b>	<b>4,236</b>
<b>6th Grade Students Attending Bay Farm Elementary, Fall 2007</b>											
Bay Farm	28										
Earhart	1										
Edison	1										
Otis	1										
Not AUSD	1										
Total	32										
<b>All 6th Grade Students Living in Bay Farm Elementary Attendance Area, Fall 2007</b>											
School Attending											
	ACLIC	Bay Farm	Chipman	Lincoln	Wood	Total					
Bay Farm Elem 6th Graders	1	28	63	1	1	94					



**Elementary Attendance Areas  
with Fall 2007 K-5 non-SDC residents  
using street centerlines (top number)  
and effects of choices made by students  
living in choice zones (bottom number)**

*Lapkoff & Gobalet Demographic Research, Inc. 11/8/07*

# Summary of Current & Forecasted Attendance Area Residents

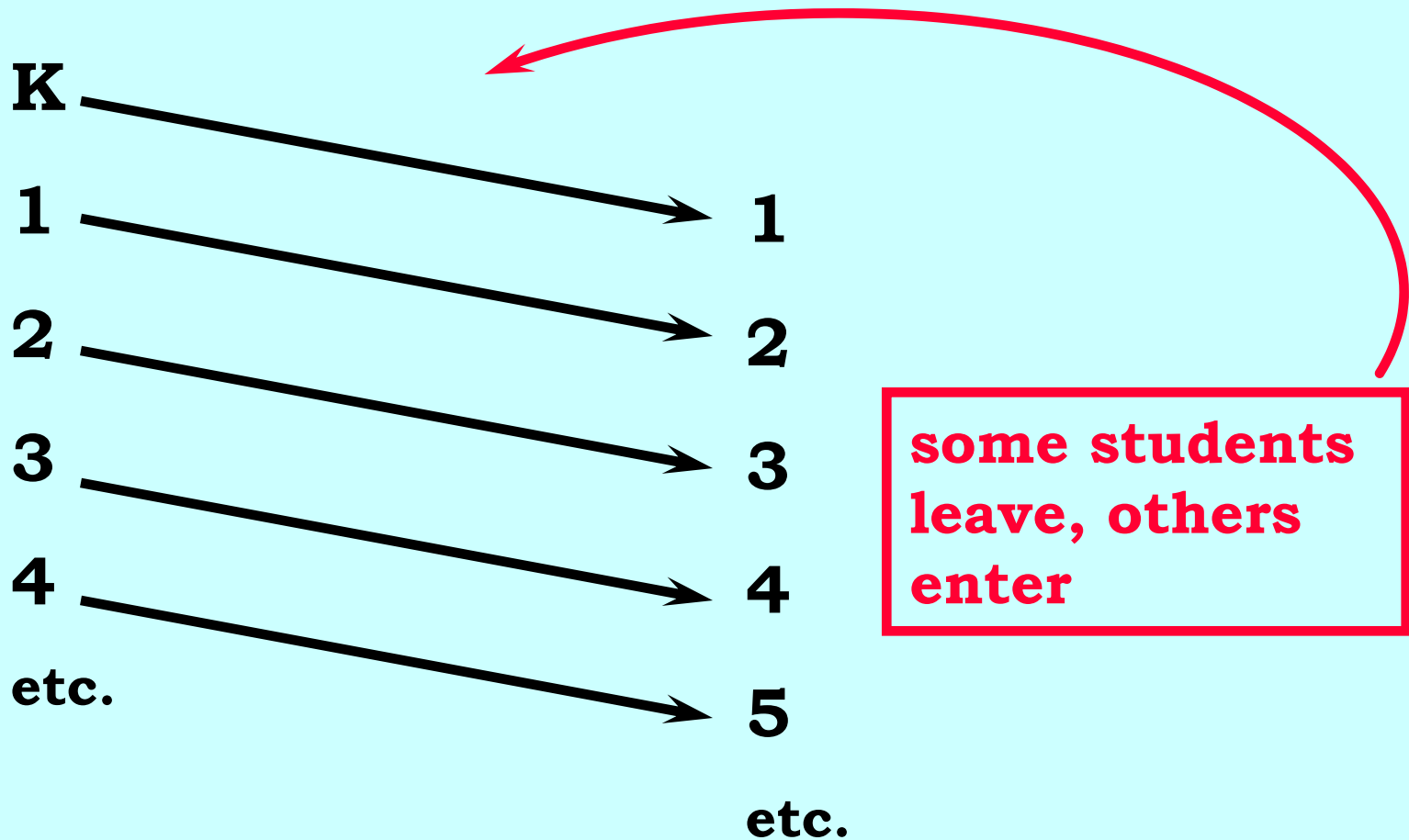
	Current Residents (center of street for choice areas)	Adjustment for Choice students	Estimated Students from New Housing within the next 5 years	Expected Growth in Existing Housing			Intra-district Transfer Students	Out-of-District Students	Total Expected Students		
				Low	Medium	High			Low	Medium	High
Bay Farm	466			-27	3	54	At the District's discretion	At the District's discretion	439	469	520
Earhart	539			-57	-4	38			482	535	577
Edison	386	15		40	73	105			441	474	506
Franklin	291	25		-18	13	46			298	329	362
Haight	477	-20		-110	-18	11			347	439	468
Lum	436			-10	32	69			426	468	505
Otis	449	-15		-3	25	60			431	459	494
Paden	270			0	22	43			270	292	313
Ruby Bridges	447		90	-15	23	60			522	560	597
Washington	328	-5		-76	-24	16			247	299	339
Out-of-District	149										
<b>Total</b>	<b>4238</b>	<b>0</b>							<b>0</b>	<b>149</b>	<b>3903</b>

# Review of Forecasting Methodology

- **Cohort survival methodology used**
  - **CBEDS 2007 residents are “aged” and progressed to the next grade**
  - **Grade progression adjustments are applied**
    - **We studied historical grade progressions to decide what to use in the forecast model**
  - **New kindergarten classes are added**
    - **Usually based on historical trends in the area**
    - **The number of Alameda births has not changed much in the last several years (birth data for small areas (like school attendance areas) are not available)**
- **Small population numbers mean that forecasts may have large error rates**
- **Edison attendance area example**

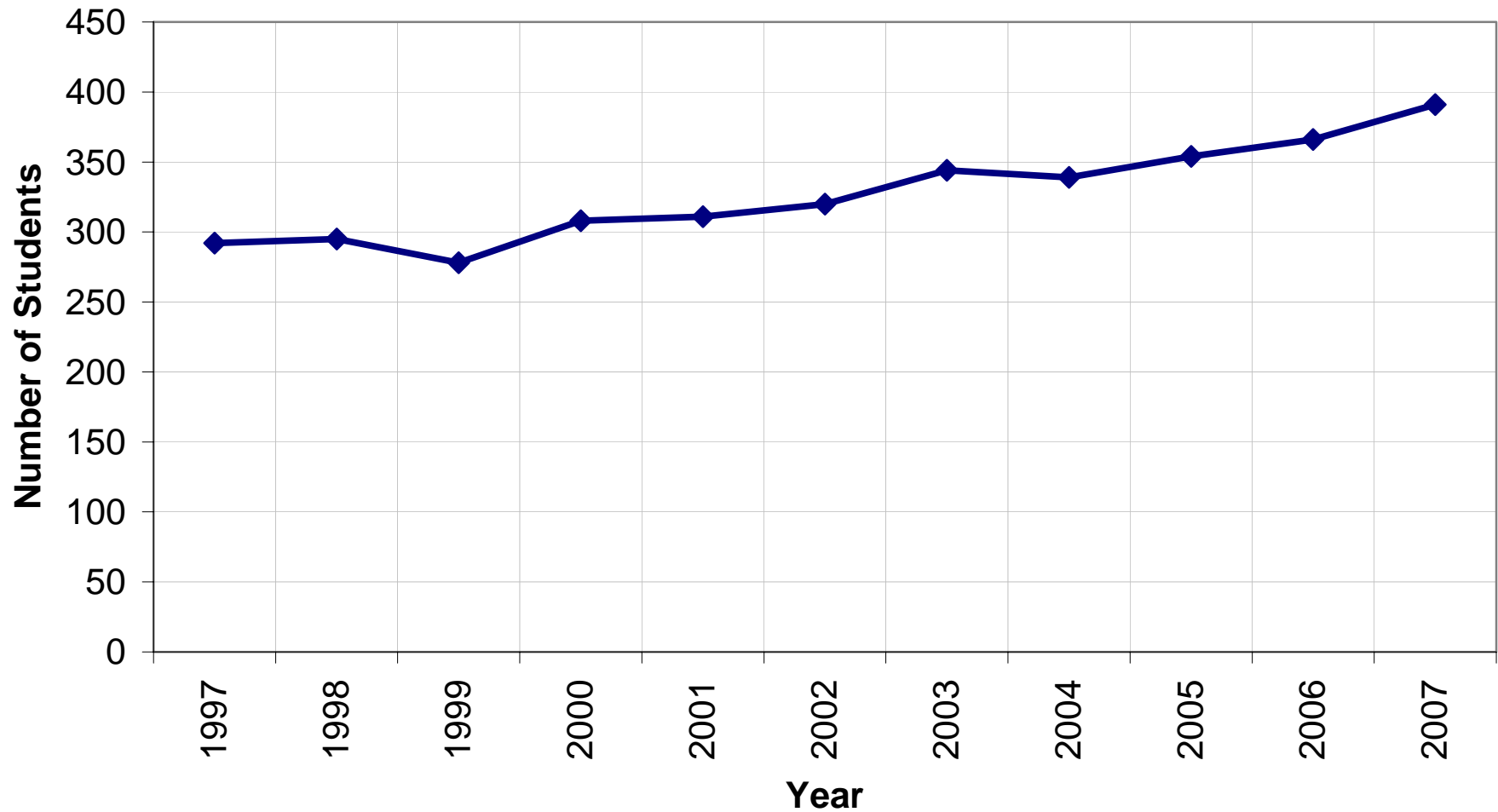
## Grade Progressions

**Start with today's students by grade, then advance the students one grade**



## Edison Attendance Area Example

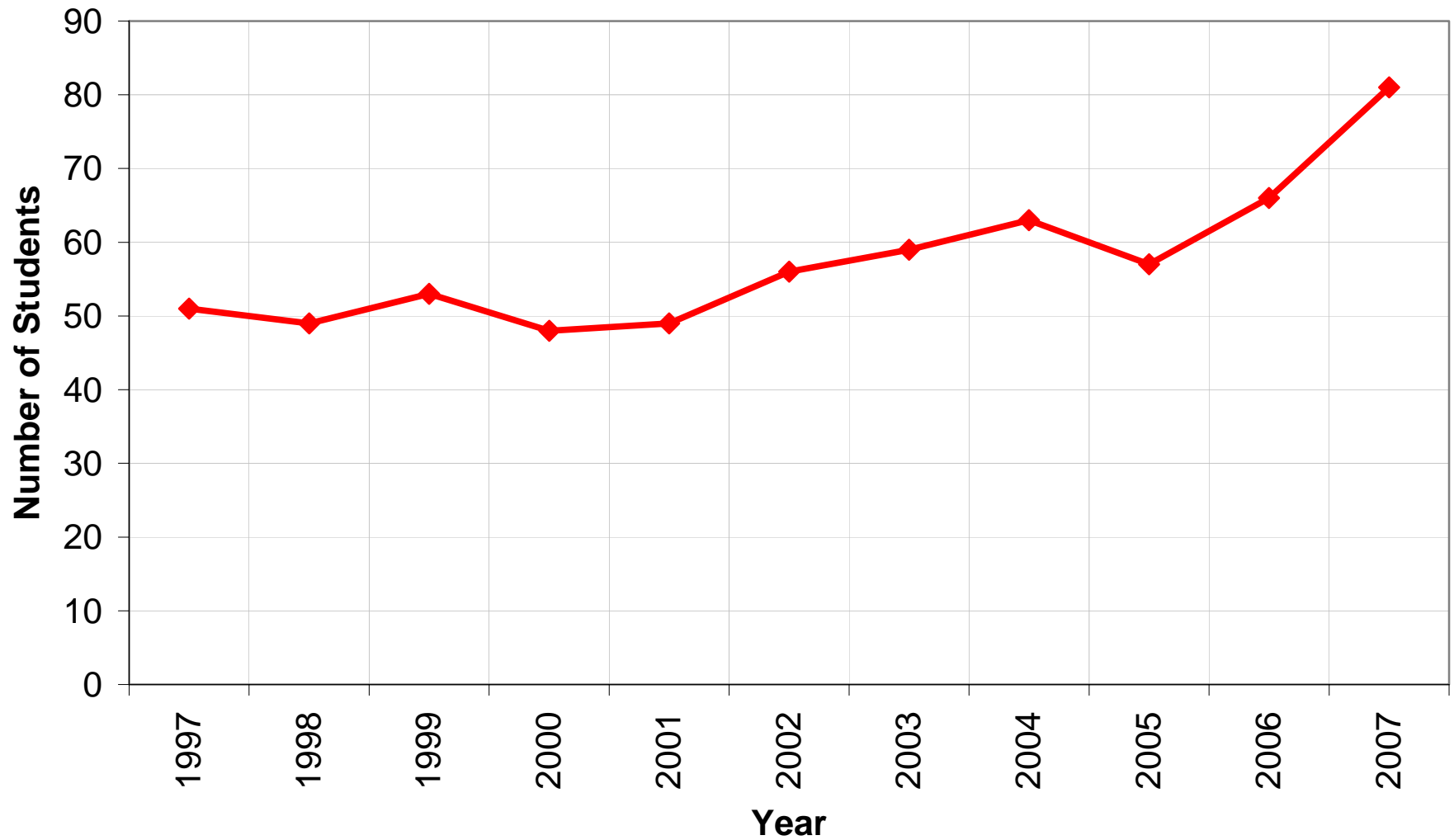
### Edison Attendance Area K-5 Resident History, 1997-2007





# Edison Attendance Area Kindergarten Resident History

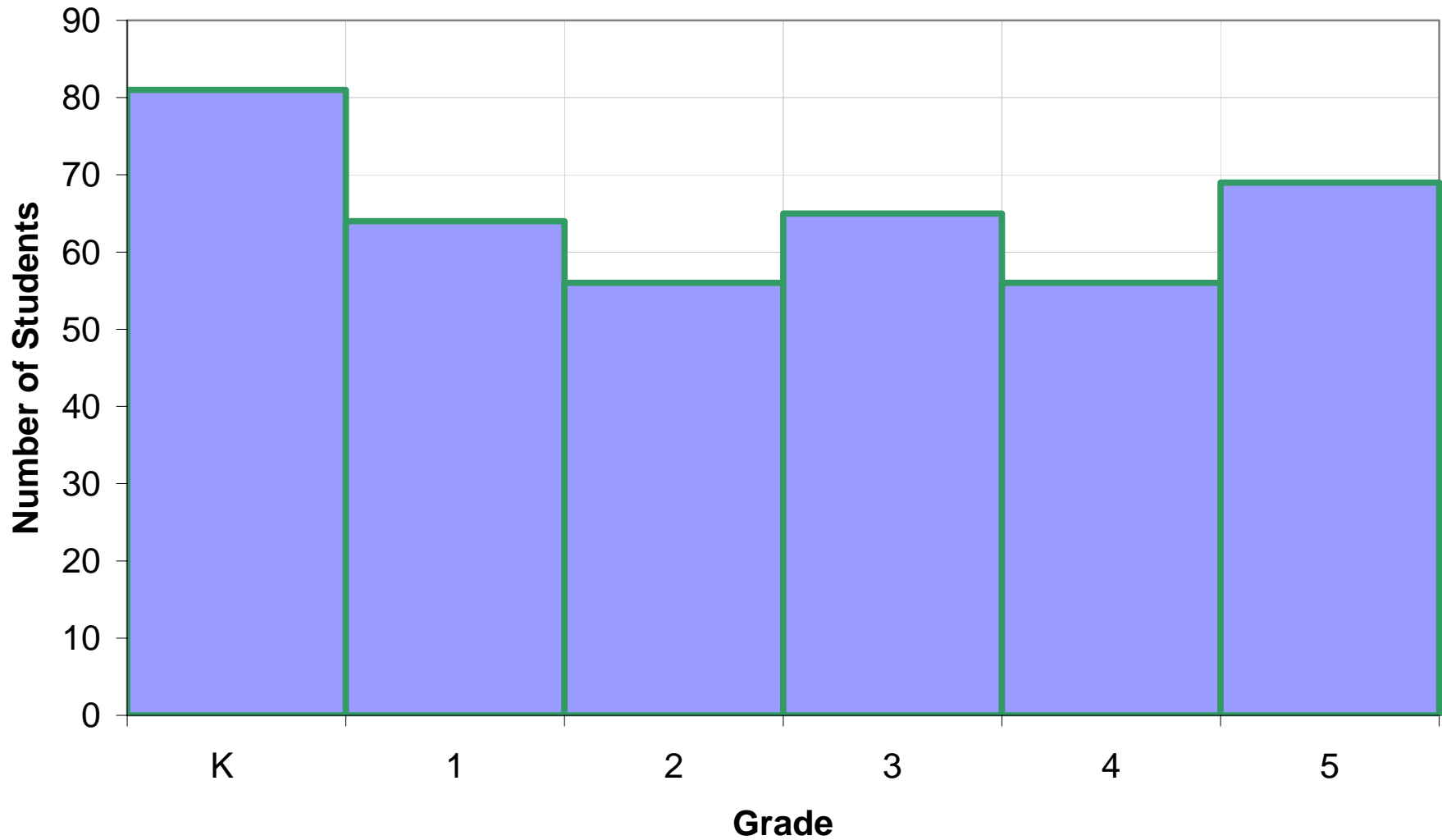
## Edison Resident Kindergartners



# Edison Attendance Area K-5 Residents 2007

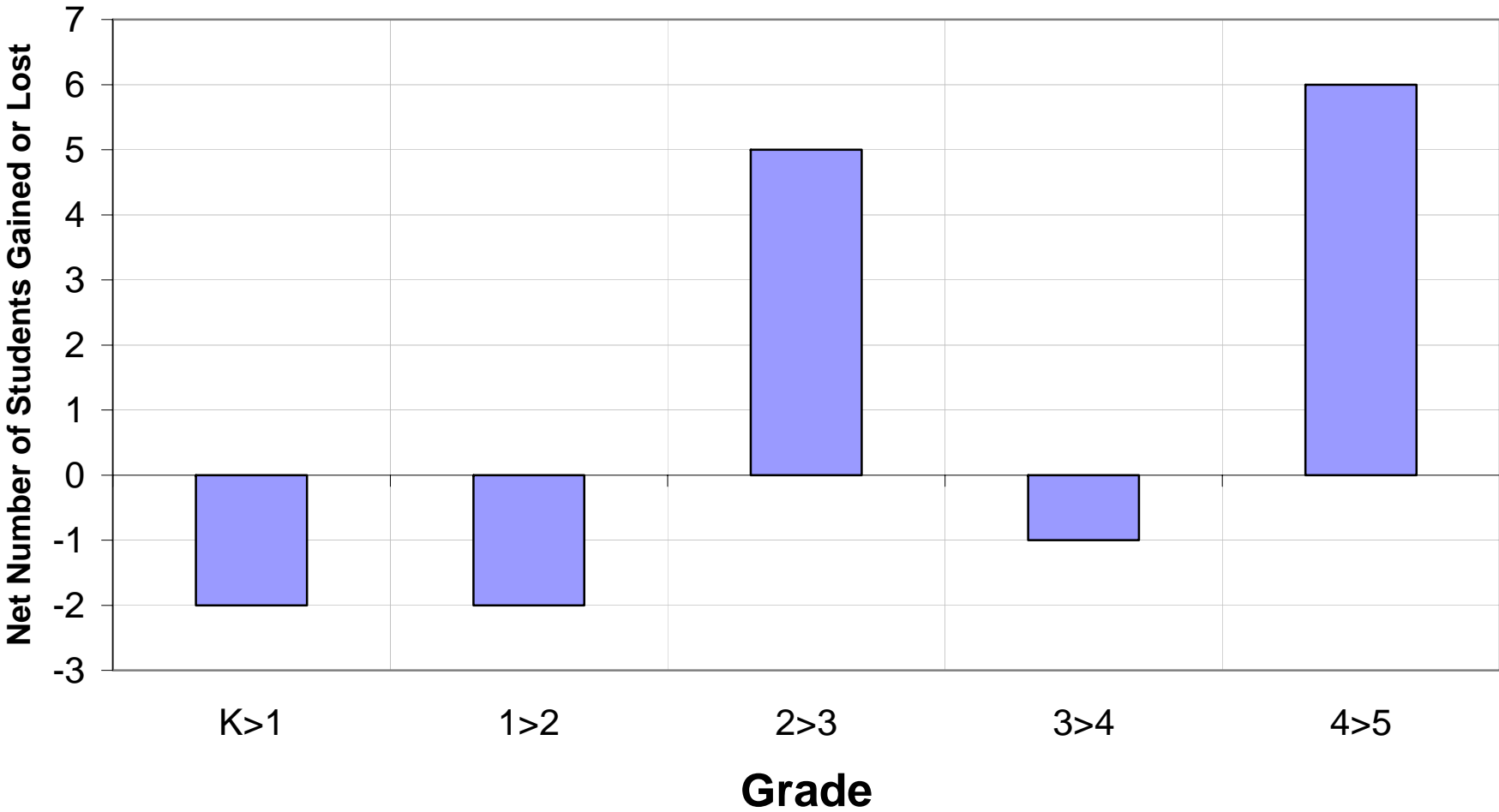
## Edison's Current Residents by Grade

### Edison Attendance Area's CBEDS 2007 Residents by Grade



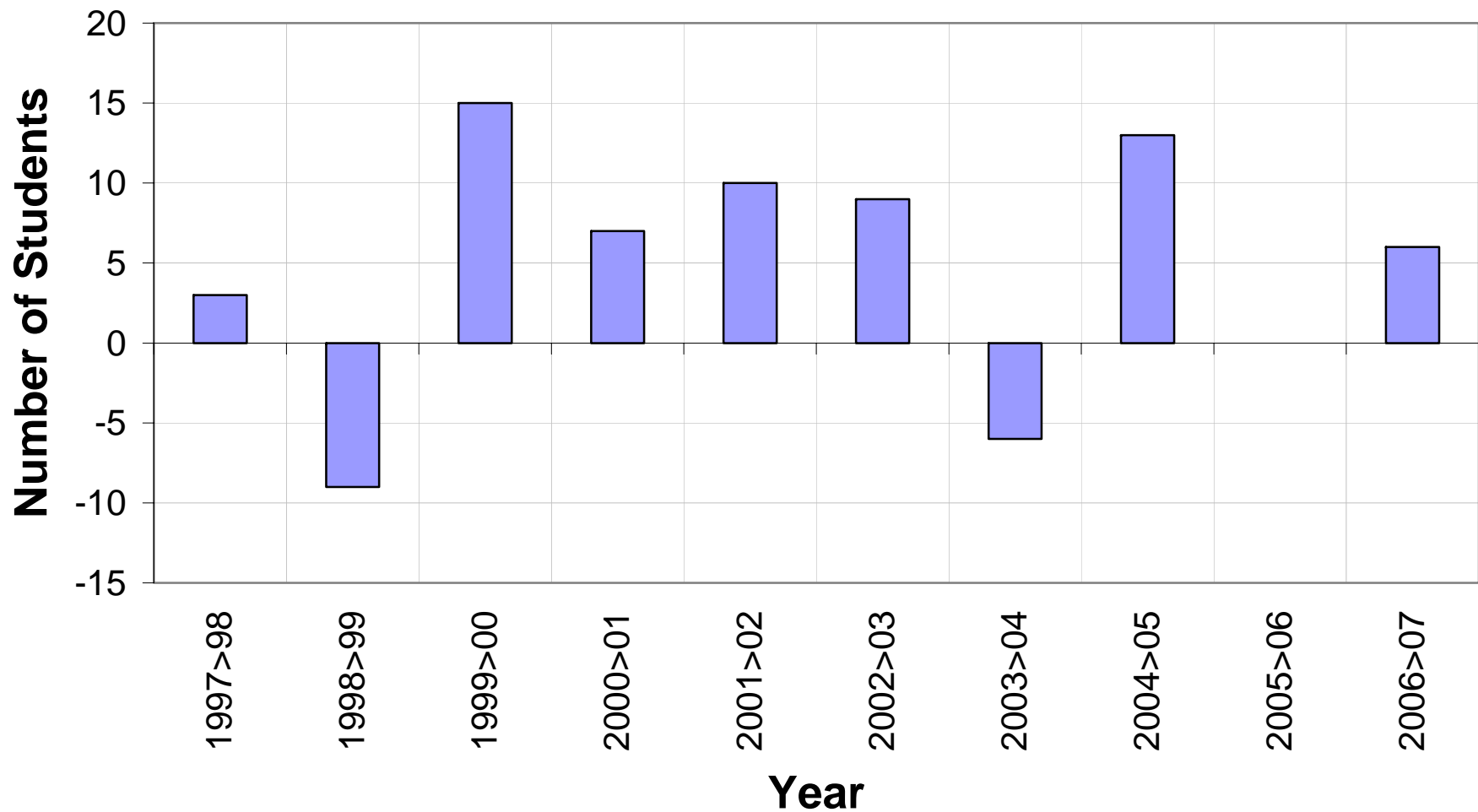
# Edison Attendance Area K-5 Grade Progressions most recent pattern

## Edison's Grade Progression Differences between Fall 2006 and Fall 2007



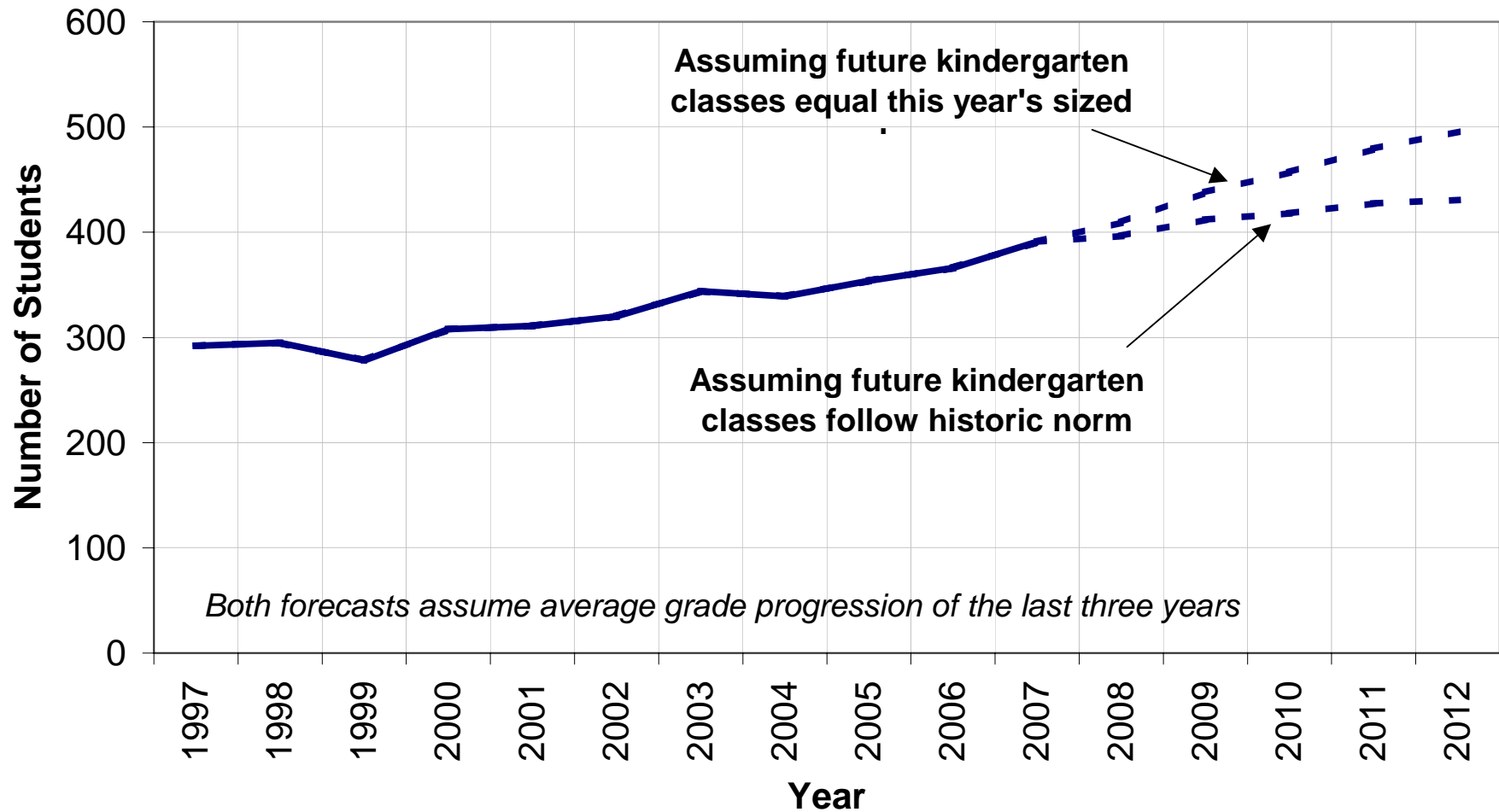
# Edison Attendance Area K-5 Grade Progressions over time

Edison's Elementary Grade Progressions Summarized  
Grades K to 4 into Grades 1 to 5



# Edison Attendance Area K-5 Resident Forecast

## K to 5 Residents Edison



# Defining Capacity

- **Number of rooms per school**
- **Usage of rooms**
  - **Regular education**
  - **SDC, Resource rooms**
  - **Miscellaneous rooms**
- **Initial definition of capacity: how rooms are currently used**
  - **District might consider changes in room usage to increase capacity at some schools**

## Rooms per School and 2006-07 Usage

School	Total Rooms Used for Regular Ed	Reg. Ed Current Capacity	SDC Rooms	Special Resource Rooms	Misc. rooms	Subtotal
Bay Farm	23	514	1	1	2	4
Earhart	25	554	2	0	6	8
Edison	16	356	1	1	2	4
Franklin	13	287	0	1	2	3
Haight (prelim)	19	425	1	0	7	8
Lum	23	514	1	0	1	2
Otis	17	376	1	0	4	5
Paden	16	356	2	1	3	6
Ruby Bridges	23	505	2	0	4	6
Washington	16	356	3	1	6	10
<b>Total</b>	<b>191</b>	<b>4,243</b>	<b>14</b>	<b>5</b>	<b>37</b>	<b>56</b>

Assumes 20 students per room in K-3 and 29 students per room in 4-5.

# Comparing Capacity & Enrollments

- **Non-SDC Capacity – how rooms are currently used**
- **Non-SDC Enrollments**
  - **Fall 2007 *residents* of each attendance area**
  - **Expected future *residents* of each attendance area**



## ***Current residents & capacity***

<b>Comparing Enrollments to Capacity, Step 1</b>			
	<b>Current Residents</b>	<b>Current Reg. Ed. Capacity</b>	<b>Surplus/ Deficit</b>
<b>Bay Farm</b>	<b>466</b>	<b>514</b>	<b>48</b>
<b>Earhart</b>	<b>539</b>	<b>554</b>	<b>15</b>
<b>Edison</b>	<b>401</b>	<b>356</b>	<b>-45</b>
<b>Franklin</b>	<b>316</b>	<b>287</b>	<b>-29</b>
<b>Haight</b>	<b>457</b>	<b>425</b>	<b>-32</b>
<b>Lum</b>	<b>436</b>	<b>514</b>	<b>78</b>
<b>Otis</b>	<b>434</b>	<b>376</b>	<b>-58</b>
<b>Paden</b>	<b>270</b>	<b>356</b>	<b>86</b>
<b>Ruby Bridges</b>	<b>447</b>	<b>505</b>	<b>58</b>
<b>Washington</b>	<b>323</b>	<b>356</b>	<b>33</b>
<b>Out-of-District</b>	<b>149</b>		<b>-149</b>
<b>Total</b>	<b>4,238</b>	<b>4,243</b>	<b>5</b>

## ***Forecasted residents & capacity***

<b>Comparing Enrollments to Capacity, Step 2</b>			
	<b>Expected Future Residents (Medium)</b>	<b>Current Reg. Ed. Capacity</b>	<b>Surplus/ Deficit</b>
<b>Bay Farm</b>	<b>469</b>	<b>514</b>	<b>45</b>
<b>Earhart</b>	<b>535</b>	<b>554</b>	<b>19</b>
<b>Edison</b>	<b>474</b>	<b>356</b>	<b>-118</b>
<b>Franklin</b>	<b>329</b>	<b>287</b>	<b>-42</b>
<b>Haight</b>	<b>439</b>	<b>425</b>	<b>-14</b>
<b>Lum</b>	<b>468</b>	<b>514</b>	<b>46</b>
<b>Otis</b>	<b>459</b>	<b>376</b>	<b>-83</b>
<b>Paden</b>	<b>292</b>	<b>356</b>	<b>64</b>
<b>Ruby Bridges</b>	<b>560</b>	<b>505</b>	<b>-55</b>
<b>Washington</b>	<b>299</b>	<b>356</b>	<b>57</b>
<b>Out-of-District</b>	<b>149</b>		<b>-149</b>
<b>Total</b>	<b>4,472</b>	<b>4,243</b>	<b>-229</b>

# Overview of the Current Situation

- **There is a mismatch between current and expected future resident counts of elementary attendance areas and school capacities.**
  - We have compared elementary resident counts & school capacities.
  - There are capacity shortfalls on the eastern and western ends of the island, and some surplus capacity in the middle.
- **Common options for handling capacity shortfalls:**
  - Overflowing/diverting students
  - Encouraging students to enroll voluntarily in sites with excess capacity
  - Changing attendance boundaries
  - Increasing capacity in overcrowded areas