

Decision Making Information in K-12 Education

-- Using Data Resources from Census 2000 for Hawaii¹

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The importance of relevant, high quality, usable data about the K-12 school infrastructure to successful outcomes and maintaining an environment for best educational opportunities can hardly be overstated. It is my pleasure to be with you today to provide an overview of what we will discuss in the next two days concerning this topic. I want offer an overview of some of the key items that we will cover.

Most schools and school districts maintain a vast array of data about their school or district. Most of these data are required by another entity, such as the Federal government, and education leaders often do not examine these data other than to validate them or to include them in a report. Similarly, school and school district leaders typically do not have the resources to assess how they are doing relative to their own progress over time, in comparison to peers and neighbors, or relative to statewide performance targets and norms. In addition, there is a vast array of data, from the Census Bureau and other sources, about children, their living environment, and the neighborhood/community, that needs to be understood by education leaders responsible for implementing K-12 education programs. By combining internal school system data with data about the children and their living environment, and using them in performance analysis applications, education leaders, teachers, students, households, and related stakeholders have the best opportunity to provide and benefit from the highest quality education.

These are the topical areas that we will be addressing in the next two days. Here is an update on some of the items that we will cover—with particular focus on Census 2000.

Over the next few years, the Census Bureau will release thousands of important demographic data tabulations from Census 2000 for each of more than 8 million census blocks and a myriad of other types of geographic areas. For some key types of data and statistical areas, many of these data will be used as "benchmark" data throughout the decade ahead. The demographic subject matter for most of these geographic areas will not be available from any other source. In the session on January 26, we will review important data resources from Census 2000 as to content, structure, schedule, and uses.

The Census Bureau released the first data from Census 2000 at the end of December. The official Census 2000 population resident population count for Hawaii is 1,211,537, reflecting a growth of 9.3 percent, since the 1990 Census resident population of 1,108,229.

¹ This document was prepared by Warren Glimpse for a presentation at the Hawaii Data Quality and Access Workgroup meeting on January 24, 2001, in Honolulu, Hawaii. Warren Glimpse, based in the Washington, DC area, is an econometrician and specialist in geodemographic decision making information resources. He may be reached by telephone at (703) 256-9850 and via e-mail at wglimpse@proximityone.com. Information on his business, Proximity, is available via the Web site <http://proximityone.com>. Information on the programs being presented in Hawaii on January 25 and 26, 2001, is available at <http://proximityone.com/hipgms.htm>.

TIGER Files. The Census Bureau has started releasing the Census 2000 “TIGER/Line” files – the underlying mapping/cartographic database for Hawaii (and all other states). These mapping data will be the backbone of all types of mapping—school-related and otherwise—by wide ranging users throughout the State. Examples of maps that can be prepared using the TIGER/Line files non-Census data are shown on the next page in Figures 1 and 2. On Friday, January 26, we will review how these mapping resources can be used to facilitate school planning and analysis.

Redistricting Data. Within the next few weeks, the Census Bureau will release the first population by race data, in the redistricting data file, for Hawaii. While these data are produced for purposes of redistricting, the detailed geographic summaries make them useful for many other applications as well. In the session on January 25, we will review the structure, content, and use of these files. In the session on January 26, we will discuss how the census block level data in these files can be aggregated to high school complex and administrative district areas for Hawaii. These data resources and their use will be new to Hawaii K-12 education leaders and provide many analytical capabilities.

Detailed Demographics. The TIGER and redistricting data files are just the beginning of the data flow from Census 2000. More detailed “complete count” data will be released throughout 2001 on a state-by-state flow basis. The richer, sample-based data will start to flow be released in 2001 and 2002. The sample data will enable analysis of subjects like income, educational attainment, housing value, employment, and other such items for geographic areas ranging from “block groups,” components of high school complex areas, through other types of intermediate geographic summaries to state totals. We will be discussing the scope, scheduling and use of these data over the next two days.

New from Census 2000 will be new types of subject matter tabulations relating to Native Hawaiians and Hawaiian Homelands. During the next two days, we will be reviewing what data of this nature will be available from the Census Bureau and how they can be used and benefit Hawaii data users.

School District Special Tabulation. Also new from Census 2000 will be “school district special tabulation” data for Hawaii high school complexes and administrative areas. This past summer, the Hawaii Department of Education developed high school complex and administrative area boundary maps for inclusion in the Census 2000 TIGER files. As a result, the Census Bureau, under sponsorship of the National Center for Education Statistics, will produce a special set of extensive demographic data about children, children’s households, and children’s parents – that will be available for each of these areas in early 2003. These data will offer benchmarking data valuable throughout the 2000’s.

The tables included at the end of this document provide examples of data for Hawaii and the United States made available from the 1990 Census School District Special Tabulation. Similar data, with much greater detail, will be available for each of Hawaii’s high school complex areas. The final two pages, tables 5 through 7, provide unique data regarding the characteristics of children, their living environment, and enrollment. This is the only source of reliable data that enable us to characterize children enrolled in public school as well as children enrolled in private school. As comprehensive K-12 education programs require us to address the needs of all children, these data are indispensable in providing a basic understanding of the distribution and characteristics of children and help education leaders form plans for the decade ahead.

Benchmark Decision Making Information for the 2000's. Many exciting new developments will be made possible through the use of the forthcoming Census 2000 data and the integration of these data with school data, and other data about the communities. On January 26 we will discuss how the school level data, developed for all schools in the State, can be integrated with other data to perform a wide range of analyses. Our goal is to help further empower participants to develop, use, and analyze performance indicators and understand the education community infrastructure in a way that can help them identify strengths and weaknesses, develop school improvement strategies, and assess trends in meeting education goals.

January 24, 2001

Hawaii Population and Housing Characteristics				
Source: School District Data Book; 1990 Census ; see http://proximityone.com/sddba.htm				
Subject	Hawaii		United States	
	1990 Census SDST		1990 Census SDST	
	Tabulated	Percent	1990 Census	Percent
1. Total Population				
Total Persons	1,108,229	100.00	248,709,873	100.00
Male	564,338	50.92	121,172,379	48.72
Female	543,891	49.08	127,537,494	51.28
Total Persons - 100-Percent Count	1,108,229	100.00	248,709,873	100.00
Unweighted Sample Count	155,913	14.07	38,607,515	15.52
Persons by Type of Household				
Persons in Households	1,071,484	96.68	242,050,161	97.32
Persons in Non-household Settings	36,745	3.32	6,659,712	2.68
Persons by Urban/Rural Status				
Urban - Inside Urbanized Areas	747,028	67.41	158,258,042	63.63
Urban - Outside Urbanized Areas	238,791	21.55	28,793,501	11.58
Rural - Farm	6,277	0.57	3,871,583	1.56
Rural - Nonfarm	116,133	10.48	57,786,747	23.23
Persons by Race (Non-Hispanic)				
White	347,804	31.38	188,424,773	75.76
Black	25,475	2.30	29,284,596	11.77
American Indian, Eskimo, Aleut	4,574	0.41	1,866,807	0.75
Asian and Pacific Islander	648,706	58.54	6,994,302	2.81
Other Races	2,928	0.26	239,306	0.10
Persons of Hispanic Origin	78,742	7.11	21,900,089	8.81
2. Housing Units				
Total Housing Units	389,810	100	102,263,678	100.00
Occupied Housing Units	356,267	91.40	91,947,410	89.91
Owner Occupied	191,894	49.23	59,031,378	57.72
Renter Occupied	164,373	42.17	32,916,032	32.19
Vacant Housing Units	33,543	8.60	10,316,268	10.09
Total Housing Units-100-Pct Count	389,810	100	102,263,678	100.00
Unweighted Sample Count	54,191	13.90	16,326,603	15.97
Occupied Housing Units				
Urban - Inside Urbanized Area	241,559	61.97	59,243,029	57.93
Urban - Outside Urbanized Area	75,386	19.34	10,792,596	10.55
Rural - Farm	1,958	0.50	1,391,483	1.36
Rural - Nonfarm	37,364	9.59	20,520,302	20.07
Inside Metro				
In Central City	134,563	34.52	29,793,633	29.13
Not in Central City - Urban	122,397	31.40	32,332,671	31.62
Not in Central City - Rural	8,344	2.14	9,139,082	8.94
Outside Metro - Urban	59,985	15.39	7,937,968	7.76
Outside Metro - Rural	30,978	7.95	12,744,056	12.46

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	Tabulated	Percent	1990 Census	Percent
3. Social and Economic Characteristics				
Households				
Total	356,748	100.00	91,993,582	100.00
With Children 3-19 Years, NHSG	129,463	36.29	31,050,897	33.75
With Children Under 18 Years	145,481	40.78	33,989,004	36.95
With Children 5 to 17 Years	113,499	31.81	26,867,196	29.21
Families				
Parents Living with Children	222,952	N/A	51,984,201	N/A
Labor Force Status (Persons 16 Years & Over)				
Persons In Labor Force	602,348	70.41	125,182,378	65.26
Persons In Armed Forces	54,001	6.31	1,708,928	0.89
Civilian Employed	529,059	61.84	115,681,202	60.30
Civilian Unemployed	19,288	2.25	7,792,248	4.06
Educational Attainment (Persons 20 Years & Over)				
12th Grade or Less, No Diploma	148,553	18.61	42,600,296	24.00
High School Graduate	242,634	30.39	53,459,489	30.12
Some College, No Bachelor Degree	238,445	29.87	47,160,089	26.57
Bachelor or Higher Degree	168,702	21.13	34,293,949	19.32
Selected Income and Expenditure Categories				
Median Gross Rent	\$650	N/A	\$447	N/A
Median Housing Value	\$242,565	N/A	\$78,500	N/A
Per Capita Income in 1989	\$15,770	N/A	\$14,420	N/A
Median Household Income	\$38,829	N/A	\$30,056	N/A
Households by Public Assistance Income in 1989				
Households with Assistance	24,240	6.79	6,943,269	7.55
Households without Assistance	332,508	93.21	85,050,313	92.45
Poverty Status, Income in 1989				
Persons with Income Above Poverty Level	982,944	91.75	210,234,995	86.88
Persons with Income Below Poverty Level	88,408	8.25	31,742,864	13.12
4. Education-Related Attributes of Children				
Persons 16-19 Years				
Dropouts: Persons In Households (NHSG, NEIS)	4,041	7.07	1,528,412	10.68
Dropouts: Persons In Group Quarters (NHSG, NEIS)	226	0.40	77,082	0.54
Persons Less than 6 Years of Age				
At-Risk Pre-School Age Children -- less than 4 years	1,691	1.71	951,559	4.33
At-Risk Pre-School Age Children -- 4 to 5 years of age	800	0.81	431,465	1.97
Persons 6 to 19 Years of Age				
At-Risk School-Age Children (6 to 19 years of age)	3,926	1.86	2,232,178	4.53
NHSG: Not High School Graduate; NEIS: Not Enrolled in School				
At-Risk: Children [for specified age cohort] living with mother; mother not high school graduate; mother single, divorced, or separated; and mother below poverty level in 1989.				

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Subject	Hawaii		United States	
	1990 Census SDST		1990 Census SDST	
	Tabulated	Percent	1990 Census	Percent
5. Children: Population 3-19 Years, Not High School Graduate (SDST Only)				
Total Children (3-19 Years, Not High School Graduate)	237,583	21.44	55,325,634	22.25
Male	123,425	51.95	28,562,469	51.63
Female	114,158	48.05	26,763,165	48.37
Children by Urban/Rural Status				
Urban - Inside Urbanized Area	148,647	62.57	33,726,276	60.96
Urban - Outside Urbanized Area	59,540	25.06	6,563,128	11.86
Rural - Farm	1,567	0.66	892,513	1.61
Rural - Nonfarm	27,829	11.71	14,143,717	25.56
Children by Race (NonHispanic)				
White	63,046	26.54	38,131,162	68.92
Black	5,917	2.49	8,174,313	14.77
American Indian, Eskimo, Aleut	1,065	0.45	553,604	1.00
Asian and Pacific Islander	140,781	59.26	1,714,600	3.10
Other Races	1,224	0.52	92,780	0.17
Children of Hispanic Origin	25,550	10.75	6,659,175	12.04
Children by Age				
Age 3 Years	16,492	6.94	3,656,737	6.61
Age 4 Years	16,237	6.83	3,682,236	6.66
Age 5 Years	16,848	7.09	3,686,738	6.66
Age 5 to 13 Years	142,840	60.12	32,007,392	57.85
Age 14 to 17 Years	54,024	22.74	13,061,288	23.61
-- In Households	53,509	22.52	12,914,917	23.34
-- In Group Quarters	515	0.22	146,371	0.26
Age 18 to 19 Years	7,990	3.36	2,917,981	5.27
Children by Household Type				
In Family Households	234,486	98.70	54,539,895	98.58
Child (natural, adopted, step)	202,702	85.32	50,150,370	90.65
Other (e.g., householder, spouse)	31,784	13.38	4,389,525	7.93
In Nonfamily Households	1,976	0.83	483,176	0.87
In Group Quarters	1,121	0.47	302,563	0.55
Children by Poverty Status				
Income Above Poverty Level	206,629	86.97	44,568,994	80.56
Income Below Poverty Level	27,064	11.39	9,869,682	17.84

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	Tabulated	Percent	1990 Census	Percent
6. Children Enrolled in School (Population 3-19 Years, Not High School Graduate , SDST Only)				
Children Enrolled in School	203,294	18.34	45,745,358	18.39
Male	104,811	51.56	23,574,082	51.53
Female	98,483	48.44	22,171,276	48.47
Children by Race (NonHispanic)				
White	53,274	26.21	31,799,914	69.52
Black	4,783	2.35	6,732,276	14.72
American Indian, Eskimo, Aleut	891	0.44	449,369	0.98
Asian and Pacific Islander	121,653	59.84	1,457,709	3.19
Other Races	1,054	0.52	73,480	0.16
Children of Hispanic Origin	21,639	10.64	5,232,610	11.44
7. Children Enrolled in Public School (Population 3-19 Years, Not High School Graduate , SDST Only)				
Children Enrolled in Public School	163,522	14.76	39,880,220	16.03
Male	84,613	51.74	20,594,707	51.64
Female	78,909	48.26	19,285,513	48.36
Children by Race (NonHispanic)				
White	40,384	24.70	27,095,956	67.94
Black	4,365	2.67	6,265,423	15.71
American Indian, Eskimo, Aleut	753	0.46	424,747	1.07
Asian and Pacific Islander	98,519	60.25	1,239,862	3.11
Other Races	792	0.48	63,453	0.16
Children of Hispanic Origin	18,709	11.44	4,790,779	12.01
8. NCES Common Core of Data				
Students (CCD)	169,493		39,809,102	
Teachers	8,866		2,319,127	
Schools	234		81,637	