

HAWAI'I SCHOOL IMPACT FEE WORKING GROUP REPORT

A Report to the
Governor and the
Legislature of the
State of Hawai'i

Hawai'i School Impact Fee
Study
Prepared by
Duncan Associates
and
Group 70 International, Inc.

March 2007

THE AUDITOR
STATE OF HAWAI'I

Background

In 1995, the Legislature found that new residential development resulted in a need for development of adequate infrastructure to service this new construction. While this includes such obvious elements as roads, water, sewage, telephone, cable television and internet, and electricity, it also includes a less obvious element, that of school facilities.

Recognizing the impact of new residential development on school facilities, the state Department of Education had been collecting fair share contributions from individual development firms to defray a portion of the costs of new school facilities. These contributions, often in the form of cash and donated real estate, were used by the department to expand existing school facilities or to build new school facilities.

Fair share contribution arrangements, however, were made on a case-by-case basis. Both the Department of Education and the development community desired to achieve a greater level of predictability to these arrangements. To this end, several impact fee measures were introduced during the 2004 and 2005 legislative sessions. It was the consensus of the stakeholders, however, that more information needed to be gathered to arrive at an equitable solution satisfactory to all concerned parties.

As a result, Act 246, Session Laws of Hawai‘i 2005, was passed, which directed the establishment of a School Impact Fee Working Group (“Working Group”). The Working Group, which would be administered by the Office of the Auditor, was charged with preparing the scope of work for an updated study of alternative financing methods for construction of new and expanding existing educational facilities, including analysis of how school districts accommodate growth and redistribution of student population; a needs assessment study using Central O‘ahu as the case study; and development of specific recommendations to implement methods for financing new or expanding existing Department of Education educational facilities.

The act also requested that two studies be updated: *School Fair Share Contribution Study* (Group 70 International, Inc. and Duncan Associates, May 2001) and *Impact Fees in Hawai‘i: Implementing the State Law* (James C. Nicholas & Dan Davidson, December 1992).

The Working Group, which consists of ten members, met from 2005 to 2006. Some members were named in the act. Others were appointed pursuant to the act by the President of the Senate, the Speaker of the House of Representatives, the Mayor of the City and County of Honolulu, the Superintendent of Education, and the Executive Director of the Land Use Commission. The Working Group members include:

- Senator Norman Sakamoto, Chair
- Bob Bruhl, Director of Acquisitions and Forward Planning, D.R. Horton, Schuler Division, Hawai‘i
- Anthony Ching, Executive Director, State Land Use Commission
- Austin Y. Imamura, CEO, Pacific Rim Bank
- Councilmember Dain Kane, Past President, Hawai‘i State Association of Counties
- Duane Kashiwai, Public Works Manager, Department of Education
- Randolph G. Moore, Acting Assistant Superintendent / Project Manager, Department of Education
- Patricia Park, Complex Area Superintendent, Department of Education
- Councilmember Mel Rapozo, President, Hawai‘i State Association of Counties
- Representative Roy Takumi
- Dean Uchida, Former Executive Director, Land Use Research Foundation

As provided in Act 246 (SLH 2005) and with the guidance of the Working Group, the State Auditor selected Group 70 International, Inc. and Duncan Associates as the consultant to develop the updated study. Both entities were involved in the development of the May 2001 *School Fair Share Contribution Study*.

This report represents the consultant’s updated study. It determined that there are two types of school impact districts that might warrant school impact fees: *greenfield* areas and *non-greenfield* areas. Greenfield areas are planned development projects on former agricultural lands that are large enough to need their own new schools, from elementary to high school. Non-greenfield areas, in contrast, are areas comprising one or more existing high school complexes where new development typically occurs on smaller, scattered sites. This study addresses both scenarios and offers draft alternatives for legislative consideration.

Foreword

The 2005 Legislature, through Act 246, Session Laws of Hawai'i 2005, created the School Impact Fee Working Group. Charged with preparing the scope of work for an updated study of alternative financing methods for construction of new and expanding existing educational facilities, the Working Group provided guidance to the Office of the Auditor in its selection of a consultant to update prior school impact fees studies.

On behalf of the School Impact Fee Working Group as well as my office, we wish to express our appreciation for the cooperation and help of the many individuals who oriented us to the myriad issues associated with school impact fees. We also want to thank our contractor, Group 70 International, Inc. and Duncan Associates, for its technical assistance and dedication to this effort.

Marion M. Higa
State Auditor

Chair's Message

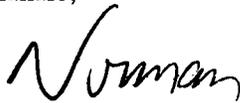
Aloha:

During the 2004 and 2005 legislative sessions, development of new residential communities gave rise to issues relating to fair share contribution arrangements. Although the practice of requesting developers in Hawai'i to contribute to the provision of new public schools had been in effect for many years, both the state Department of Education and the development community expressed discontent with the unpredictability of arrangements that were determined strictly on a case-by-case basis through negotiated exactions or fees-in-lieu. The Legislature found the situation unworkable and lacked the needed information to work toward a viable solution.

Thus, through passage of Act 246, Session Laws of Hawai'i 2005, it was our hope that additional information in the form of updated studies on school impact fees would shed light on solutions that, ultimately, would be acceptable to all stakeholders. The School Impact Fee Working Group, which is comprised of members carefully selected for their expertise and perspectives on the issue, was charged with guiding the effort towards mutual agreement and providing insight into the topic's many facets.

As Chair of the School Impact Fee Working Group and the Senate Education Committee, I am confident that the efforts of the Working Group and the Legislature will achieve a workable solution. I express my personal thanks to each of the members of the Working Group, the consultant, Group 70 International, Inc. and Duncan Associates, and the Office of the Auditor for its administrative support.

Mahalo,



Senator Norman Sakamoto, Chair
School Impact Fee Working Group

Hawaii School Impact Fee Study



Prepared for
State of Hawaii
School Impact Fee Working Group
Established by State Act 246, Session Laws of Hawaii 2005

Prepared by
duncan|associates



January 2007

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Executive Summary

This report has been prepared to support the deliberations of the School Impact Fee Working Group established by the 2005 Hawaii State Legislature. Act 246, Session Laws of 2005,¹ sets forth the following tasks for the Working Group:

- Analyze salient issues, including current “Fair Share” practices and enrollment projections by the Department of Education (DOE), alternative funding mechanisms and best practices utilized by other jurisdictions nation-wide, and different infrastructure needs imposed by different types of development, including infill.
- Conduct a case study for a specific area in Central Oahu.
- Develop new or revised statutes, ordinances or DOE procedures that could be used to implement Working Group recommendations.

Overview of Study

This report begins in Chapter 1 with a description of DOE’s current “Fair Share” system of negotiated developer exactions.

Chapter 2 contains the “Policy Recommendations” of the consultant team to the Working Group. It proposes State authorizing legislation to empower the elected State Board of Education to impose school land dedication requirements and school construction impact fees in growth areas, or “school impact districts,” that meet specific criteria. Two alternative legislative proposals are described, with detailed language provided in the Appendices. The “tailored approach” detailed in Appendix B would require that the amount of the fees be calculated for each school impact district. The recommended “uniform approach” detailed in Appendix C would require only a limited analysis to show that a percentage of the fees calculated for the Ewa case study would not exceed that actual school impacts of new residential development.

Chapter 3 contains a “Salient Issues Analysis” that addresses the fundamental issue now confronting proponents of school impact fees in Hawaii, which is the state-wide decline in public school enrollment. The conclusion of the analysis is that while impact fees cannot be justified on a state-wide or school district basis, they can be justified for smaller areas where new development will generate significant population growth and require the construction of new schools (referred to herein as “school impact districts”).

The final three chapters present the technical impact fee analysis. Chapter 4 contains the state-wide technical analysis. While state-wide impact fees are no longer recommended like they were in the 2001 *School Fair Share Contribution Study*, some of the technical analysis required to develop impact fees for school impact districts must be done at the state-wide level. The analysis in this chapter follows the basic methodology set forth in the 2001 study.

¹ See excerpts in Appendix A.

Chapter 5 provides impact fee calculations for the Central Oahu case study area. This case study is an example of a “greenfield” school impact district, which consists of a large tract of former agricultural land being developed primarily for residential use.

Chapter 6 provides impact fee calculations for the Ewa case study area. This case study is an example of a “non-greenfield” school impact district, which consists of an area with substantial existing development where new residential development is occurring in a more scattered pattern.

The appendices contains supplementary material. Several are notable. Appendix D contains the legal framework for impact fees that was described in the 2001 *School Fair Share Contribution Study* and remains relevant today with few amendments. Appendix E updates the discussion of the alternative financing techniques used on the mainland to fund school facilities that was contained in the 2001 study. The approaches themselves have not changed, but some of the examples have been updated, and the discussion of impact fees has been completely re-written.

Previous Reports

State-wide reports related to school infrastructure finance and impact fees in Hawaii were conducted in 1992 and 2001. The 1992 study, entitled *Impact Fees in Hawaii: Implementing the State Law*,² presented an analysis of the State impact fee law of 1992. The 2001 *School Fair Share Contribution Study*³ specifically addressed the issue of school financing in Hawaii.

The 1992 study was sponsored by the Land Use Research Foundation of Hawaii in order to assist Hawaii counties in developing impact fee ordinances in response to the State impact fee act of 1992. The study provided a history of impact fees and their legal basis along with a discussion of their role as an instrument of fiscal policy and how impact fees were used in different jurisdictions. The report’s primary focus was to serve as a handbook for local governments in calculating and administering impact fees and the drafting of impact fee ordinances.

While the 1992 study was designed to help counties implement impact fees, the report’s discussion of the State enabling act and impact fee methodology is relevant to this study. The consultants followed the recommended methodology in developing the technical analysis and impact fee schedule for schools for this report.

The 2001 *School Fair Share Contribution Study* examined the existing DOE practice of assessing Fair Share contributions, updated the school Fair Share fee schedule and recommended that the State consider implementation of a state-wide school impact fee. DOE has subsequently used the recommended land component for Fair Share contributions and 30 percent of the recommended construction cost component in Fair Share negotiations with developers.

²James Nicholas and Dan Davidson, *Impact Fees in Hawaii, Implementing the State Law*, 1992.

³Duncan Associates and Group 70 International, *School Fair Share Contribution Study*, 2001.

Summary of Technical Analysis

The results of the analysis described in this report for single-family development are compared with the results of the 2001 *School Fair Share Contribution Study* and DOE's current Fair Share requests of developers in Table 1. (Note that construction costs shown are for the Honolulu area, and would be higher for many other areas of the state.) DOE currently asks for the amount of land dedication that was calculated in the 2001 study, but only about 30 percent of the net cost of school buildings documented in that study.

Table 1
COMPARATIVE ANALYSIS FOR SINGLE-FAMILY UNITS

	Current Fair Share	2001 Study	Current Study		
			State- Wide	Central Oahu	Ewa
Students/Unit	0.5760	0.5760	0.4388	0.6687	0.6687
Acres per Student	0.0156	0.0156	0.0195	0.0197	0.0197
Acres per Unit	0.00899	0.00899	0.00856	0.01316	0.01316
Percent Permanent Stations*		86.7%	86.9%	83.7%	83.3%
Adjusted Construction Cost/Student:**					
Elementary		\$18,105	\$30,202	\$30,202	\$30,202
Middle School		\$21,112	\$32,746	\$32,746	\$32,746
High School		\$33,110	\$56,526	\$56,526	\$56,526
Construction Cost per Unit		\$13,169	\$17,102	\$25,110	\$25,507
Revenue Credit per Unit		\$4,698	\$2,786	\$2,786	\$2,786
Net Construction Cost per Unit	\$2,541	\$8,471	\$14,316	\$22,324	\$22,721
Land Cost per Unit (\$350,000/ac.)***	\$3,147	\$3,147	\$2,996	\$4,606	\$4,606
Total Net Cost per Unit	\$5,688	\$11,618	\$17,312	\$26,930	\$27,327

* Percent of student stations in permanent buildings, weighted with student generation rates by housing type and grade level

** Construction cost per unit in the Honolulu area, adjusted for percent of classrooms in permanent buildings

*** \$350,000 cost per acre assumed for illustrative purposes

Source: Current Fair Share and 2001 study data from Group 70 International and Duncan Associates, *School Fair Share Contribution Study*, May 2001 and Table 4; 2006 update study data from this report; percent permanent stations and adjusted cost per student are weighted averages based on relative shares of single-family and multi-family units and elementary, middle and high school student generation rates by housing type.

The state-wide technical analysis prepared as part of this study indicates that construction costs per student have increased by over 50 percent between the two studies. This is due not only to increases in construction costs over the last five years, but also to more accurate, up-to-date cost data used in this update. The cost data in the 2001 study were for projects that had been recently completed as of August 1998, while the data in this study are for schools completed from 1997 through 2007, adjusted for cost inflation.

The revenue credit per unit that reflects general tax dollars spent on schools has decreased significantly from the 2001 study. This is primarily due to the fact that State spending on school capital improvements has declined significantly over the last five years. The State Legislature

authorized an average of \$115 million annually in school capital funding from 1992 to 1998, compared to only \$84 million annually from 2001 through 2005.

The maximum fees that can be justified in the two school impact district case studies are more than 50 percent higher than the maximum fees based on the state-wide analysis, with or without the inclusion of land costs. This is due to the fact that student generation rates in these areas are about 50 percent higher than the state average.

The value of school land dedications depends on the value of land in a development. In the draft legislation, fees in lieu of dedication would be based on the appraised value of the property for larger developments, and on an average cost per acre determined for each school impact district for smaller developments. For illustrative purposes, a value of \$350,000 per acre has been assumed. Based on this assumption, typical current Fair Share developer exactions (total of land and construction) amount to only about one-fifth of the full net cost to provide schools in school impact districts.

The two case studies, Central Oahu and Ewa, have very similar potential fees. The consultants' expectation was that the Ewa non-greenfield case study would have lower fees, because the increased students from new units would be partially offset by declining numbers of students from existing units. This turned out not to be the case in Ewa, though it could be the case in other non-greenfield areas.

A similar comparison is shown in Table 2 for multi-family development. The difference between the 2001 study and this one is much wider than it is for single-family development, because of the greater difference in the multi-family student generation rates used in the two studies.

**Table 2
COMPARATIVE ANALYSIS FOR MULTI-FAMILY UNITS**

	Current Fair Share	2001 Study	Current Study		
			State- Wide	Central Oahu	Ewa
Students/Unit	0.2180	0.2180	0.2249	0.4636	0.4636
Acres per Student	0.0156	0.0156	0.0189	0.0187	0.0187
Acres per Unit	0.00340	0.00340	0.00425	0.00865	0.00865
Percent Permanent Stations*		86.7%	86.9%	83.7%	83.3%
Adjusted Construction Cost/Student:**					
Elementary		\$18,105	\$30,202	\$30,202	\$30,202
Middle School		\$21,112	\$32,746	\$32,746	\$32,746
High School		\$33,110	\$56,526	\$56,526	\$56,526
Construction Cost per Unit		\$5,102	\$8,499	\$16,868	\$17,010
Revenue Credit per Unit		\$1,778	\$1,428	\$1,428	\$1,428
Net Construction Cost per Unit	\$997	\$3,324	\$7,071	\$15,440	\$15,582
Land Cost per Unit (\$350,000/ac.)***	\$1,190	\$1,190	\$1,488	\$3,028	\$3,028
Total Net Cost per Unit	\$2,187	\$4,514	\$8,559	\$18,468	\$18,610

* Percent of student stations in permanent buildings, weighted with student generation rates by housing type and grade level

** Construction cost per student in Honolulu cost area, adjusted by percent of classrooms in permanent buildings

*** \$350,000 cost per acre assumed for illustrative purposes

Source: Current Fair Share and 2001 study data from Group 70 International and Duncan Associates, *School Fair Share Contribution Study*, May 2001 and Table 4; 2006 update study data from this report; percent permanent stations and adjusted cost per student are weighted averages based on relative shares of single-family and multi-family units and elementary, middle and high school student generation rates by housing type.

Summary of Recommendations

In the context of declining state-wide public school enrollment, the updated state-wide analysis provides the background data and analysis to support the development of school impact fees for individual school impact districts. There are two types of school impact districts that might warrant school impact fees: “greenfield” areas and “non-greenfield” areas.

Greenfield areas are planned development projects on former agricultural lands that are large enough to need their own new schools, from elementary to high school. In general, these areas are somewhat isolated or distant from existing development, so that the schools that will serve them will be located within the school impact district. The Central Oahu case study is an example of a greenfield area impact fee calculation.

Non-greenfield areas, in contrast, are areas comprising one or more existing high school complexes where new development typically occurs on smaller, scattered sites. The key characteristic of non-greenfield areas is that, for the most part, the same schools will serve both existing and new housing. The Ewa case study is an example of a non-greenfield area impact fee calculation.

The proposed draft legislation consists of two components: school land dedication/fee-in-lieu and school construction impact fee. The land dedication requirement applies at the time of subdivision approval, while the school construction impact fee would be collected at time of building permit issuance. In each case, the requirements would apply only to residential development located in designated “school impact districts.” School impact districts are geographic areas where anticipated housing construction will necessitate new or expanded school facilities over the next ten years. Proposed school impact districts would be mapped and described in a written analysis prepared by DOE. Approval by the State Board of Education would be required to designate a school impact district and establish the impact fee requirements. Counties would be required to ensure compliance with school impact district requirements prior to final subdivision approval and building permit issuance.

Draft Legislative Alternatives

The consultant team has prepared two alternative sets of draft legislation. The first “tailored” alternative would require each school impact district study to determine appropriate student generation rates for the area. The second “uniform” alternative would require only an analysis of growth potential and average land costs, and would rely on the Ewa case study impact fee analysis.

The consultant team and the Working Group recommend the uniform alternative. While an individual study of student generation rates for each school impact district could theoretically provide a stronger nexus between the amount of the impact fee and the actual impact of new housing, detailed student generation data is not available for most areas of the state. State-wide data is distorted by resort residential development, and areas where residential development is generating the need for new schools are likely to have student generation rates similar to those in the Ewa/Central Oahu case study areas. Therefore, we recommend using the student generation rates developed in the Ewa case study in establishing a uniform state-wide approach for school land dedication/construction impact fee requirements.

It appears based on the case studies that school impact district studies would justify very high school construction impact fees (more than \$20,000 per single-family unit). Given the magnitude of these maximum fees, basing the fees on a percentage of the fees derived from the Ewa case study could avoid unnecessary complexity and provide a more consistent set of school construction impact fees in school impact districts across the state.

Basic Legislative Framework

Both alternatives follow the same general framework or process. DOE would prepare a written report that includes a map of the proposed school impact district, an analysis that shows that anticipated new residential development in the area will create the need for new school facilities in the next ten years, and a determination of the average value per acre of improved land in the area suitable for school sites. Greenfield school impact districts would not have any significant existing development, and be large enough to ultimately support at least one new high school. Non-greenfield school impact districts would consist of one or more existing high school complex attendance areas. Fees in-lieu of land dedication for smaller developments would be based on the average value of improved land suitable for school sites in the area where the school impact district would be located.

Board of Education approval would be required to designate a school impact district and establish the dedication requirements and impact fees for the area. Counties would be required to ensure that school land dedication and fee-in-lieu requirements were met before final approval of residential subdivisions in designated school impact districts. Counties would also be required to ensure that school impact fees had been paid before issuing residential building permits in designated districts. DOE would periodically update the analysis for review by the State Board of Education, at which time the dedication requirements and fees could be adjusted.

Alternative 1: Tailored Fees

The “tailored” alternative would require determination of appropriate student generation rates for each growth area. The localized student generation rates would then be multiplied by acres per student ratios from the state-wide analysis to determine the land dedication requirement per unit. The school construction impact fees would be the product of the localized student generation rates and the state-wide construction costs per student (adjusted for the cost area), less the state-wide credit per unit. This alternative is presented in Appendix B.

Alternative 2: Uniform Fees

The “uniform” alternative would require, for non-greenfield areas, an analysis to confirm that 80 percent of the Ewa case study student generation rates do not overstate the net impact of new development on the need for schools in the area. Assuming that could be demonstrated, the land dedication requirements and impact fees in both greenfield and non-greenfield areas would be based on the Ewa case study analysis. Incorporating the recommendations of the Working Group, the land dedication requirement would be 80 percent of the Ewa case study calculations, while the construction impact fee would be no more than 40 percent of the Ewa case study calculations (30 percent is shown). This alternative is presented in Appendix C. This is the alternative recommended by both the Working Group and the consultant team. Based on 30 percent of the net cost in the Ewa case study, the school construction impact fees (not including land costs) in the Honolulu cost region would be \$7,652 per single-family unit and \$5,103 per multi-family unit.

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Chapter 1: The Current “Fair Share” System

The practice of requesting or requiring developers in Hawaii to contribute to the provision of new public schools has been in effect for many years. Efforts to obtain developer contributions for new schools have historically been and continue to be based solely on adopted Board of Education policy. No specific statutory authority currently exists to authorize or mandate the assessment of developers for these costs. The primary vehicle for accomplishing this has been to condition the approval of new residential developments requiring changes in State Land Use District classifications from a non-urban district to the Urban District. In addition, certain counties also impose school fair-share conditions as part of the local planning process; however, only Maui regularly includes such conditions in land use approvals.

In the early years following the establishment of the State Land Use Districts in 1962, DOE would only comment as to the adequacy of existing schools when asked to review reclassification petitions. No requests were made for developer contributions of land or facilities. The philosophy at that time was that schools would be built by the State, and the Department of Education (DOE) would need to “make do” with what the State could provide. However, within a few years it became obvious that adequate funding for growth-related education needs were not being met under this policy. Consequently, DOE began to look at ways to obtain additional funds, eventually leading DOE to start requesting contributions for schools from new residential development.

The form of developer contribution was determined strictly on a case-by-case basis through negotiated exactions or fees-in-lieu. There were no “formulas” or formally established policies to guide the process of negotiating what constituted a reasonable developer contribution. Initially, DOE asked developers for a place to build a school. While some sites were provided, many were not in good locations—an example being a school in Waipahu that is located in a gully. Developers rarely agreed to provide well-located sites because they were also prime locations for building homes.

The policy of negotiated exactions was unable to fulfill the need for new schools and the funding available to build them. In the late 1980's, DOE started asking for a “Fair Share” of the cost of building the new schools. The request was based on the student impact of the development projects. Fair Share was determined by dividing the total number of new students by the standard class size to obtain the number of required new classrooms. In order to obtain the total Fair Share contribution, the number of required classrooms was multiplied by the average cost of building a new classroom, determined by DOE by island.

The primary route that DOE has utilized to secure developer commitments for land dedication and construction cost contributions has been through conditions of approval imposed by the State Land Use Commission for a change in the State Land Use District classification. This has been possible because, being a State agency, the Commission has generally been willing to support DOE's efforts to get developers of residential projects to contribute to the cost of new schools, and has made the negotiated developer contribution a condition of approval. Typical wording of this condition is as follows:

The Petitioner shall contribute to the development, funding, and/or construction of school facilities, on a fair-share basis, as determined by and to the satisfaction of the Department of Education. Terms of the contribution shall be agreed upon by the Petitioner and the DOE prior to Petitioner applying for county rezoning.

Not all new development proposals require State Land Use Commission approval. Requests for approvals go directly to the counties where a planned development involves land that is either already in the State Urban District or is 15 acres or less in size. Obtaining developers' contributions for new school facilities has proved to be more difficult at the county level.

The original Fair Share assessment formula was land-based—that is, it was intended to provide sufficient funds only to cover the cost of purchasing land for new schools. Land requirements were based on the Board of Education's Educational Specifications and Standards for Facilities and its School Size Standards Policy (No. 6701). The initial Fair Share assessment was calculated to be \$850 per housing unit. DOE consulted with developers on the establishment of the new formula, including the \$850 per unit assessment. Some considered it reasonable; others felt it was too high.

The School Size Standards Policy was revised by DOE in March 1997 to reduce maximum enrollment standards per school by a little over 30% on the average. However, school site size standards were reduced by only an average of 8 percent, resulting in a significant increase in the required site area per student. Consequently, the fee per unit was raised from \$850 to \$1,125.

Where land for a school site was to be dedicated in lieu of paying the per unit fee, a land value of \$100,000 per acre was used to determine the amount of credit given for the land dedication, which was based on the average cost per acre of new school sites purchased since 1985. Collected fees were deposited in a trust account with separate trust accounts for each high school complex. This was intended to ensure that Fair Share fees were expended in the same areas where the developments paying them were located.

However, even with the established formula and fee per unit, developers' contributions to new school facilities were still being negotiated on a case-by-case basis. Generally, the wording of the condition in land use reclassification petition approvals did not specify whether a fee was to be paid or land for a new school site was to be dedicated. The initial formula addressed only the monetary value of the contribution required from developers. Consequently, an agreement on the dedication of land, as opposed to payment of a fee, had in each case to be negotiated between the developer and DOE.

In May 2001, a study was completed for DOE by the consultant team, which recommended land dedication requirements per dwelling unit, as well as fees in-lieu of land dedication and impact fees for school construction costs. Since that time, DOE has been asking developers to contribute the acres of land needed for new schools based on the standards derived from that study, as well as 30 percent of the maximum construction-related impact fee amounts calculated in that study.

DOE's current Fair Share formula includes both a land and construction component. The current land component schedule was implemented in 2003 based on the 2001 *School Fair Share*

Contribution Study. The current schedule for land applies to developments less than 50 acres, and is based on ratios of school land per student station and a land cost of \$100,000 per acre. For developments greater than 50 acres, DOE utilizes the same acre-per-unit requirement, and DOE determines on a case-by-case basis whether the developer will provide a land dedication for a school or be assessed the land portion of the fee based on the appraised value per acre of the development. The current Fair Share contribution formula per unit is shown in Table 3.

The current standard acres/unit is based on DOE's student generation multipliers multiplied by the acres per student developed in the 2001 study. That study based the standard provision of land per student on actual school construction from 1988 to 1997. Based on the student generation rates and land requirements per student, the land requirement ranges from 0.00899 acres per unit for single-family units to 0.00356 acres per unit for multi-family units. Based on the land cost of \$100,000 per acre used for fee-in-lieu for development of less than 50 acres, the current in-lieu fee for the land component is \$899 per unit for single-family and \$356 for multi-family.

**Table 3
CURRENT FAIR SHARE LAND CONTRIBUTION FORMULA**

	Students/ Unit	Acres/ Student	Acres/ Unit	Cost/ Acre	In-Lieu Fee/Unit
Elementary	0.2790	0.0122	0.00340	\$100,000	\$340
Middle School	0.1430	0.0114	0.00163	\$100,000	\$163
High School	0.1540	0.0257	0.00396	\$100,000	\$396
Total, Single-Family*			0.00899		\$899
Elementary	0.1090	0.0122	0.00133	\$100,000	\$133
Middle School	0.0400	0.0114	0.00046	\$100,000	\$46
High School	0.0690	0.0257	0.00177	\$100,000	\$177
Total, Multi-Family			0.00356		\$356

* includes single-family detached, single-family attached and duplex units

Note: Fee calculation for developments over 50 acres based on per acre appraisal prior to subdivision.

Source: State of Hawaii Department of Education "Fair Share Calculation Worksheet," June, 2005.

The cost of school construction varies among regions of the state. For the Honolulu area, developers are currently being asked to contribute \$2,541 per single-family unit and \$997 per multi-family unit toward construction costs. The existing Fair Share construction cost schedule is shown in Table 4.

Table 4
CURRENT FAIR SHARE CONSTRUCTION COST SCHEDULE

District/ Island	Cost District	Single- Family	Multi- Family
Honolulu	Honolulu	\$2,541	\$997
Central	Ewa	\$2,541	\$997
Central	Wahiawa	\$2,739	\$1,074
Central	Waialua	\$2,936	\$1,150
Windward	Koolaupoko	\$2,541	\$997
Windward	Koolauloa	\$2,936	\$1,150
Leeward	Ewa	\$2,541	\$997
Leeward	Waianae	\$2,936	\$1,150
Hawaii	Hilo	\$3,134	\$1,227
Hawaii	Puna	\$3,332	\$1,303
Hawaii	Kona	\$3,332	\$1,303
Hawaii	Hamakua	\$3,332	\$1,303
Hawaii	South Kohala	\$3,332	\$1,303
Hawaii	North Kohala	\$3,529	\$1,380
Hawaii	Pohakuloa	\$3,529	\$1,380
Hawaii	Kau	\$3,727	\$1,457
Maui	Wailuku	\$3,134	\$1,227
Maui	Makawao	\$3,529	\$1,380
Maui	Lahaina	\$3,727	\$1,457
Maui	Hana	\$3,924	\$1,533
Molokai	Molokai	\$3,727	\$1,457
Lanai	Lanai	\$3,924	\$1,533
Kauai	Lihue	\$3,134	\$1,227
Kauai	Koloa	\$3,332	\$1,303
Kauai	Kawaihau	\$3,332	\$1,303
Kauai	Waimea	\$3,529	\$1,380
Kauai	Hanalei	\$3,529	\$1,380

Source: Department of Education, Facilities Development Branch, Fair Share Worksheet.

The annual Fair Share revenue over the past four years and the account balance are shown in Table 5 (the revenue does not include the value of land dedication commitments). As reflected in the balance of the account, DOE has not made any expenditures from the Fair Share contributions since 2002. The DOE has commitments from developers through current Fair Share agreements to provide an additional \$4.4 million. The funding commitments will be combined with the existing fund balance to offset construction and land costs for new schools.

Table 5
SCHOOL FAIR SHARE REVENUE, 2003-2006

Year	Annual Contributions	Fund Balance
2002		\$419,205
2003	\$159,156	\$578,361
2004	\$487,636	\$1,065,997
2005	\$242,651	\$1,308,648
2006*	\$490,701	\$1,799,349

* Note: 2006 contributions through the third quarter.

Source: Hawaii Department of Education, Facilities Development Branch, May 18, 2006.

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Chapter 2: Policy Recommendations

This chapter addresses several major issues facing the School Impact Fee Working Group relating to development exactions for school facilities in Hawaii:

1. Should State authorizing legislation be sought?
2. Who would decide where school impact fees are imposed?
3. What form should the land cost component take?
4. What form should the school construction cost component take?
5. Should uniform state-wide formulas be used to determine the school land requirements and construction impact fees, or should they be tailored to more closely reflect the student generation rates in the local area where they are to be imposed?

The chapter concludes with a summary of the consultant team's and the Working Group's recommendations.

State-Level Approach

The Department of Education's (DOE's) current Fair Share Contribution formula is similar to a land dedication requirement or an impact fee, but since it is not imposed by statute or ordinance, it is implemented in a manner similar to a negotiated developer exaction. DOE must rely on the State Land Use Commission and the counties to impose school exactions on developers, and usually gets involved in negotiating the amount of the dedication or fee with developers.

Obviously there is a need for some negotiation when DOE wants to secure a school site within a development. But when the amount of the fee to be paid is the only issue, it is difficult to see why negotiation should be required. There should be a consistent formula applied to determine the cost of a residential development's impact on the need for new school facilities.

DOE has an explicit formula, but cannot consistently apply it because it lacks the force of State law or county ordinance. In Hawaii, there are two potential mechanisms for implementing a rational system of developer exactions for schools—the State legislature or the counties. We recommend the state-level approach.

School facility capital funding in Hawaii is unique in certain respects from the experience of the mainland. The most significant difference is that the public school system in Hawaii is provided by a single, state-level agency—the Department of Education (DOE). A state-wide school system provides less incentives to counties to implement school dedication requirements or to enact school impact fees than if there was a local school district that matched county boundaries. Certainly, if counties in Hawaii had direct financial and administrative control of their individual school districts, as they do in some other states, they would almost certainly be more interested in the subject of developer exactions for schools. And as county officials are undoubtedly aware, the capital funding provided by school exactions or impact fees in one county could result in available State capital funding being shifted to other counties that do not impose impact fees or developer exactions.

None of the four counties has adopted school land dedication requirements, which are the most common form of developer exactions for schools on the mainland, much less school impact fees. DOE has had more consistent success in implementing its current limited development exaction system when State approval is required in the development process (e.g., through the State Land Use Commission). Even there, however, developers are required to negotiate with DOE.

The result is a system that is uneven in its application and is perceived by some to be unfair. Small projects generally are not required to contribute, and projects that do not require a change in State land use designation are less likely to be required to contribute than those that do. Those projects that are required to make some contribution negotiate with DOE and end up making various levels of contributions.

Hawaii's system of developer exactions for schools could be made more consistently and uniformly applied through State legislative action. Only if the Fair Share Contribution policy or some other form of school exaction or impact fee has the force of State law will the "playing field" be leveled and individual developers treated equitably.

Decision to Impose Fees

If State legislation is to authorize the imposition of school impact fees in areas where residential development will require the provision of new schools (hereinafter referred to as "school impact districts"), who will make the decision on where fees will be imposed? There are several possibilities:

- o The State Legislature,
- o individual County Councils,
- o State Board of Education, or
- o Department of Education staff.

In general, the decision to impose impact fees in a particular school impact district should probably be made by an elected body, rather than by DOE staff.

The authorizing legislation could establish the framework for school impact fees, but still require an additional act of the Legislature to designate each school impact district. However, this process might be rather cumbersome and unnecessary, especially if the legislation is drafted to provide clear guidance in identifying areas for which impact fees would be appropriate.

An alternative to the Legislature would be to require action by the County Council of the county in which the proposed school impact district is located. A potential problem with this is that it would give veto power over an alternative funding source for school construction to a body that is not responsible for school construction. As noted above, the county governments have not always been supportive of DOE's efforts to secure developer participating in mitigating school impacts.

The consultant team and the Working Group both recommend that the State Board of Education have the authority to designate school impact districts for school impact fee. The

Board of Education is elected state-wide, and is the body responsible for providing public school facilities.

Land Dedication Component

Should State legislation authorizing school impact fees in certain school impact districts include a separate land dedication requirement? Or should it forego the idea of requiring dedication and instead concentrate on securing sufficient school fees to purchase school sites? These are the questions addressed in this section.

School land dedication requirements are among the oldest and most widespread types of developer exactions. And with good reason—public school sites, particularly for elementary schools, need to be located in proximity to residential developments. School districts need to be interacting with developers in the early planning stages, and land dedication requirements are typically imposed at the time of subdivision approval.

On the surface, DOE's current Fair Share policy for land is virtually identical to the typical school land dedication/fee-in-lieu requirement imposed by a city or county on the mainland. However, because DOE cannot require compliance with it, the policy is not truly a dedication requirement.

Dedication requirements always require some amount of negotiation, since it is not possible to identify the most appropriate site for a school with predetermined rules. The fact that the location of a site is a major determinant of its value gives the developer an incentive to resist school district requests for dedication of prime home-building sites. The negotiation over school sites within new development projects could be much easier if DOE already had secured land acquisition funds from some other source and was simply interested in reaching agreement on the fair market value of the desired site.

DOE could, of course, avoid these difficult negotiations over the site to be dedicated by always asking for the fee-in-lieu and then using those funds to purchase its desired site. Or it could go one step further and abandon the concept of a land-based exaction completely, by folding land costs into a school impact fee to be assessed at time of building permit.

There are some good reasons for retaining a land-based exaction, regardless of whether an additional fee for construction costs is pursued. First, despite the fact that developers often want to have a school within their development, there may be occasions when DOE needs to be able to require a developer to provide a site that is appropriately located within the school's service area. Second, the fact that a land dedication requirement or fee-in-lieu is imposed at the time of subdivision means that it is paid by the developer rather than the homebuilder. The earlier in the development process such fees are assessed the more likely they are to be absorbed by the landowner in lower land costs. Third, despite their complaints about its fairness, developers are used to the current land-based policy. And finally, it may be strategically wise to carry forward proposals to the Legislature for both land-based requirements and construction-based fees that can be adopted independently of each other.

One issue that must be addressed in a land dedication or fee-in-lieu requirement is how to determine the value of land. The fees-in-lieu can be based on 1) the average land value for the

entire jurisdiction or a subarea, or 2) on the average value of land within the development making the dedication. DOE's current Fair Share policy uses a combination of the two approaches. For small projects (less than 50 units), the fees-in-lieu are based on an assumed average value per acre, in order to avoid requiring appraisals that might be relatively more expensive for small projects. For larger projects, the fees are based on the average value of land in the development.

Our recommendation is to continue the blended approach. Projects below a certain size threshold should be exempt for the dedication requirement, and should have their fees-in-lieu based on a standard land value. Developers who believe the value of their land is significantly below the standard land value would have the option to hire appraisers to attempt to demonstrate that their fees should be lower. For larger projects where DOE does not want to require dedication of a site, the fees-in-lieu would be based on the value of the property.

A related issue is the time at which the property should be valued. Should the value be based on raw land prices, or on the value of the land once subdivision improvements have been made? Generally, land dedication requirements stipulate that the land to be dedicated must have road access, proper drainage and utilities installed to the perimeter of the site. Consequently, it makes sense to base the value of the property for the purpose of determining fees in lieu of dedication on improved land after the completion of road, drainage and utility improvements.

A final issue is whether the amount of land to be dedicated per dwelling unit should be reduced below the amount calculated if the school construction impact fee is charged at only a percentage of the full calculated cost. Since DOE will need sufficiently-sized and sufficiently-numerous sites located within new residential developments, no corresponding percentage reduction of the land dedication requirement should be made.

However, if a uniform state-wide approach is used, what student generation rates would be appropriate? The state-wide student generation rates underestimate student generation from non-resort areas, and especially underestimate multi-family student generation in such areas. On the other hand, not all non-resort residential growth areas will necessarily have student generation rates as high as the Ewa case study. The consultant team's recommendation is to use 80 percent of the Ewa/Central Oahu case study figure, which amounts to a virtual splitting of the difference between the single-family dedication requirements derived from the state-wide analysis (0.00856 acres per unit) and the Ewa/Central Oahu case study analysis (0.01316 acres per unit). The recommended single-family requirement would be 0.01053 acres per unit. The multi-family requirement would also be 80 percent of the Ewa/Central Oahu case study figure, or 0.00692 acres per unit.

Construction Cost Component

The legislation to enact school construction impact fees should contain provisions similar to those required by Act 282 for county impact fee ordinances. These include provisions for credits against the fees for any required developer contributions toward school facilities (other than land dedication or payment of a fee in-lieu of dedication), earmarking of funds for school capital improvements, restriction of funds for expenditure in the school impact district in which they were collected, and refunding of fees if not expended within a specified period of time (ten years is proposed rather than the six years required by Act 282). Age-restricted retirement

housing or assisted living communities for the disabled or elderly will not generate school children and should be exempted from payment of school impact fees.

Given their potential magnitude, the impact fees could be charged at some percentage of the maximum fees calculated in this study. This percentage should not exceed the 80 percent reduction recommended for the land dedication requirement, but as a practical matter will probably need to be lower. The Working Group has recommended that the percentage be no higher than 40 percent, and has suggested 30 percent as being consistent with DOE's current practice of asking for 30 percent of the maximum calculated in the 2001 study. This approach has been incorporated in the draft legislation that is provided in Appendices B and C.

In addition, school construction impact fees could be phased-in gradually to avoid disrupting development plans already underway. For example, fees could be adopted initially at 25 percent of the ultimate fee, raised to 50 percent after six months, raised to 75 percent after one year, and raised to the ultimate level after two years. The necessity for a phase-in is reduced if the percentage of the maximum fee charged is low. The Working Group recommends that there be no phasing as long as the fees are charged at no more than 40 percent of the maximum amount. The draft legislation in Appendices B and C reflects the Working Group's recommendation and does not include any provision for a phasing in of school construction impact fees.

Tailored or Uniform Approach

There are two alternative approaches that can be taken to school land dedication/school construction impact fee requirements. One is a "tailored" approach that would require each school impact district study to determine appropriate student generation rates for the area. Another is a "uniform" approach that would require only an analysis of growth potential and average land costs, and would rely on the Ewa case study analysis. The recommendation of the consultant team and the Working Group is to use the uniform approach.

While an individual study of student generation rates for each school impact district could theoretically provide a stronger nexus between the amount of the land dedication requirement/impact fee and the actual impact of new housing, lack of truly localized student generation data limits this advantage. Due to the geography of U.S. Census areas, year 2000 student generation data is available only for areas of at least 100,000 persons. As a result, data is only available for the entire Big Island, and for the combination of Maui and Kauai Counties. There are no available sources of student generation data for only those (non-resort) portions of the neighbor islands where major new development to house residents has occurred in the past and/or is likely to occur in the future. Given the lack of available data for most areas of the state that accurately reflects local conditions, a uniform state-wide approach would be more appropriate.

Major new developments on the neighbor islands that are intended to house residents can reasonably be expected to closely reflect the character of current and future residential development in the Ewa/Central Oahu area. Consequently, the student generation rates derived from data for Ewa/Central Oahu should also closely reflect the rates for similar developments across the state. Therefore, the consultant team recommends using the student generation rates developed in the Ewa case study in establishing a uniform state-wide approach for school land

dedication/construction impact fee requirements. The Working Group concurs with this recommendation.

Initially, the consultant team was concerned that new housing in “non-greenfield” areas with substantial existing housing might have very little net impact on the need for new schools, due to declining state-wide student generation rates and the aging of the population living in existing housing units. However, this proved not to be the case in Ewa, where student generation rates have actually been increasing over time. It would be reasonable to assume that other areas in the state that are experiencing growth in non-resort housing will have similar student generation rates to the Ewa area.

It appears based on the case studies that school impact district studies would justify very high school construction impact fees (more than \$20,000 per single-family unit). Given the magnitude of these maximum fees, basing the fees on a percentage of the fees derived from the Ewa case study could avoid unnecessary complexity and provide a more consistent set of school construction impact fees in school impact districts across the state.

Basic Legislative Framework

Both approaches to establishing school impact fees follow the same general framework. DOE would prepare a written report that includes a map of the proposed school impact district, analysis that shows that anticipated new residential development in the area will create the need for new school facilities in the next ten years, and a determination of the average value per acre of improved land in the area suitable for school sites. Fees in-lieu of land dedication for smaller subdivisions would be based on the average value of improved land suitable for school sites in the area.

There are two types of school impact districts that might warrant school impact fees: “greenfield” areas and “non-greenfield” areas. Greenfield areas are planned development projects on former agricultural lands that are large enough to need their own new schools, from elementary to high school. In general, these areas are somewhat isolated or distant from existing development, so that the schools that will serve them will be located within the school impact district. Greenfield school impact districts must not have any significant existing development, and be large enough to ultimately support at least one new high school.

Non-greenfield areas, in contrast, are areas comprising one or more existing high school complexes where new development typically occurs on smaller, scattered sites. The key characteristic of non-greenfield areas is that, for the most part, the same schools will serve both existing and new housing. Non-greenfield school impact districts must consist of one or more existing high school complex attendance areas.

The consultant team and the Working Group recommend State legislation to authorize the imposition of school land dedication requirements and construction impact fees in selected school impact districts meeting specific criteria. Department of Education staff would map a proposed school impact district and prepare a written analysis supporting the appropriateness of impact fees. The final decision on designating a school impact district would lie with the State Board of Education. Within designated school impact districts, the legislation would require counties to ensure compliance with school land dedication requirements and fees in-lieu prior to approval of residential subdivision plats, and to ensure payment of school impact fees

prior to approval of residential building permits. DOE would periodically update the analysis for review by the State Board of Education, at which time the dedication requirements and fees could be adjusted.

Alternative 1: Tailored Fees

The “tailored” alternative, although not recommended, was considered by the consultant team and the Working Group and is preserved as an option. This alternative would require determination of appropriate student generation rates for each school impact district. The localized student generation rates would then be multiplied by acres per student ratios from the state-wide analysis to determine the land dedication requirement per unit. The school impact fees would be the product of the localized student generation rates and the state-wide construction costs per student (adjusted for the cost area), less the state-wide credit per unit. Draft legislation for this alternative is presented in Appendix B.

Alternative 2: Uniform Fees

The recommended “uniform” alternative would require, for non-greenfield areas, an analysis to confirm that 80 percent of the Ewa case study student generation rates do not overstate the net impact of new development on the need for schools in a particular area.⁴ Assuming that could be demonstrated, the land dedication requirements and school construction impact fees in both greenfield and non-greenfield areas would be based on the Ewa case study analysis. In the event that the student generation rates in the proposed district are less than 80 percent of the Ewa student generation rates, the land dedication requirement would be based on the lower local student generation rates. As long as the local student generation rates are not less than 30 percent of the Ewa rates, the school construction impact fees would be based on 30 percent of the Ewa fee calculations.

Draft legislation for this alternative is presented in Appendix C. This is the alternative recommended by the consultant team and the Working Group. Based on 30 percent of the net cost in the Ewa case study, the school construction impact fees (not including land costs) in the Honolulu cost region would be \$7,652 per single-family unit and \$5,103 per multi-family unit.

Summary of Recommendations

The overall decline in public school enrollment makes it impossible to justify state-wide school impact fees. Instead, this study provides a framework for determining fee schedules for areas of the state that are experiencing new residential development that is expected to create the need of new or expanded school facilities. The process for developing local impact fee schedules for both “greenfield” and “non-greenfield” school impact districts are explored in the two case studies presented in subsequent chapters of this report.

State passage of a land dedication and fee in-lieu requirement would ensure that all new residential developments in designated school impact districts pay their fair share for the cost

⁴ This could be accomplished by applying 80 percent of the Ewa area student generation rates to existing dwelling units by housing type within the district and comparing to the number of existing public school students actually enrolled in the district. If the expected number of students is less than the actual number of students, then the use of 80 percent of the land dedication requirements from the Ewa area is reasonable.

of school sites. It would level the playing field between developers and get DOE and the State Land Use Commission out of the process of having to negotiate school land dedications or fees for each development project.

Key characteristics of the recommended land component include the following:

- The land dedication/fee-in-lieu requirement would apply only to new residential units;
- The amount of the dedication requirement would be based on existing state-wide levels of service (acres per student), rather than “desired” standards;
- The amount of the dedication requirement would be 80% of the acres per unit calculated in this report for the Ewa case study area, although the Board of Education could update the Ewa analysis periodically;
- Fees in-lieu of dedication would be based on the value of the applicant’s property, although smaller projects would have the option of paying fees based on a uniform cost per acre determined for the district as a whole;
- Fees-in-lieu would be based on the value of improved land, after typical subdivision improvements such as roads, drainage and utilities are installed;
- Fees-in-lieu would be collected at time of final subdivision approval;
- Retirement housing and developments that have already entered into Fair Share agreements with the Department of Education would be exempt;
- Fees would be earmarked for expenditure to acquire school sites or construct schools within the same school impact district in which they were collected.

State passage of a school construction impact fee would ensure that all new residential developments in designated school impact districts pay their fair share for the cost of school buildings and related improvements. The school impact fee act should have the following features:

- It would be reasonably consistent with the requirements of Act 282 for county impact fee ordinances;
- It would apply only to new residential units;
- Retirement housing and developments that have already entered into Fair Share agreements with the Department of Education would be exempt;
- Impact fees would be collected at the time of issuance of building permits;
- Impact fees would be assessed at 30 percent of the maximum allowable fees calculated in this report for the Ewa case study area, although the Board of Education could update the Ewa analysis periodically; and

- Impact fee revenues would be earmarked for school construction or site acquisition within the school impact district in which they were collected.

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Chapter 3: Salient Issues Analysis

This section discusses some of the issues related to implementing an impact fee for school facilities and land. The fundamental issue is the relationship between residential development and enrollment growth and the resulting need for new school facilities. Other issues to consider in developing impact fees include existing school facility capacity available to accommodate new growth, variations in land and construction costs between different areas of the state, and the fair distribution of fees collected within certain benefit districts for new school facilities.

New School Facilities Planning

State and local school planning coordination is essential in planning new facilities and determining staff and resource needs for existing schools. The DOE planning process for new school facilities includes three steps: identification of school facility need, prioritizing facility needs, and budget planning for facilities. The identification of need includes the evaluation of the annual enrollment projections and school capacity reports, evaluation of compliance requirements, and evaluation of other projects requested by the schools or identified by DOE staff. Areas with the highest need are prioritized with facility requests for these areas included in DOE's biennial budget request. The budget request includes a ranking of projects by priority; however, the original facility requests and priority rankings are often modified as the biennial budget works through both chambers of the Legislature. Final construction funding is made available for approved facilities upon approval of allotment requests, subject to available State resources. DOE's most recent new school construction priority schedule is shown in Appendix F.

DOE interacts with county-level planning agencies at several stages of the new school facility planning process. The most formalized step in DOE's relationship to county planning agencies is county solicitation of DOE's comments when a proposed development needs county land use approvals. Land use approvals are typically required for zoning changes, planned development district approvals, special management area approvals, cluster housing and State land use changes for parcels less than 15 acres. DOE provides comments on all developments and may request the imposition of a condition requiring a school Fair Share contribution. DOE follows residential projects throughout the local review process if it includes a Fair Share request. On large projects, DOE will meet with local developers before they submit their county applications to determine the need for school facilities and initiate Fair Share contribution negotiations.

Once the need for a school facility has been established, DOE works with both developers and local governments in determining the design and location of a school. For most large developments, developers will have established school sites within the development plan and submit the plans to DOE and the appropriate county for review. DOE's primary interaction with county planning agencies during the site and design process occurs during the county zoning and building permit review process. Counties also have the opportunity to comment on school facility locations at the time DOE files an environmental impact statement or assessment for a new school facility.

Recent Enrollment Trends

An important prerequisite for impact fees or other forms of developer exactions is a demonstration that growth and development are occurring and creating the need for new school facilities. In Hawaii, approximately 36,000 new housing units were constructed from 2000 to 2005, resulting in an increase of almost 1.5 percent per year to the existing housing stock. However, total enrollment in Hawaii's public schools fell by 220 students during the same period. These conflicting trends seem to suggest that new housing has not created additional state-wide demand for public school facilities in Hawaii. In this subsection, we explore the factors responsible for these trends, and how the state-wide analysis masks the more localized need for schools created by growth.

While public schools for the entire State of Hawaii are administered by a single State agency, the Department of Education has divided the state into seven "districts" for administrative purposes. The island of Oahu is divided into four school districts (Honolulu, Central, Leeward and Windward), while the other islands are served by three districts (Hawaii, Maui and Kauai) whose boundaries are coterminous with the county boundaries.

Public school enrollment by school district from 2000 to 2005 is shown in Table 6. Among the districts, only Leeward's enrollment increased between 2000 and 2005. A portion of the enrollment loss among the districts' regular schools can be explained by the growth in charter school enrollment since 2000.

Table 6
PUBLIC SCHOOL ENROLLMENT, 2000-2005

District	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Leeward	37,152	37,672	38,250	38,827	39,409	39,811
Central	33,505	33,749	33,566	33,034	32,866	32,683
Honolulu	33,767	33,277	32,800	32,812	32,454	32,289
Windward	18,669	18,268	18,019	17,697	17,243	16,829
Hawaii	26,658	25,470	24,969	24,168	24,049	24,079
Maui	21,645	21,596	21,488	21,244	20,738	20,376
Kauai	10,697	10,443	10,263	10,050	9,876	9,595
Regular Schools Subtotal	182,093	180,475	179,355	177,832	176,635	175,662
Special Schools	86	88	93	100	95	97
DOE Schools Total	182,179	180,563	179,448	177,932	176,730	175,759
Charter Schools	1,341	3,066	3,350	4,502	5,167	5,596
State Totals	183,520	183,629	182,798	182,434	181,897	181,355

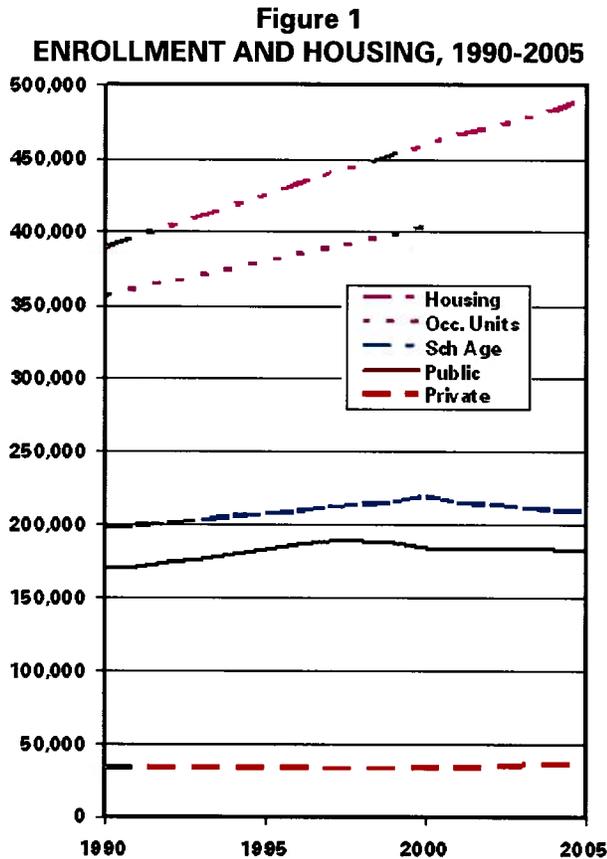
Source: Hawaii Department of Education, *School Enrollment Report*, 2000/01 to 2005/06 school years.

Public school enrollment includes students enrolled in charter schools. Four of the existing charter schools (Lanikai, Waimea Middle, Kualapuu, and Waiālae) were converted from regular public schools and operate on DOE campuses. The remaining "independent" charter schools receive an annual per pupil allotment to cover facility costs.⁵ In addition, there is no guarantee

⁵The per pupil funding for 2006-07 is \$6,940, an additional amount of \$686 per pupil is provided to cover facility costs for charter schools not located on DOE campuses.

that individual charter schools will not fail and return the responsibility of providing capital facilities for their students to the regular public school system.

The total projected enrollment decline reflects a state-wide trend in declining public school enrollment since it peaked at 189,281 in 1997/98. This has occurred despite continued growth in housing units. A summary of enrollment and housing trends is provided in Appendix G, and is illustrated in Figure 1.



A number of factors could be responsible for the decline in public school enrollment. One factor is the increase in private school enrollment. Enrollment in private schools has risen slowly over the last five years, and accounts for 16.5 percent of the state's students (although it is still under the 17 percent high recorded in the late 1980s).⁶ Since 1997, private school enrollment grew by 3,415 students from 32,566 to 35,981 in the 2005/06 school year, during the time public school enrollment declined by 7,130, from 188,485 to 181,355.

As shown in Table 7, the more affluent areas of the state tend to have the highest private school enrollment. The highest private school enrollment occurs in East Honolulu and Central

⁶Enrollment trend and private school enrollment data from Hawaii DOE, *2005 Superintendent's 16th Annual Report*, p. 2, 2005.

Honolulu. Overall, private school enrollment accounts for 21 percent of single-family household students and 14 percent of students from multi-family unit households.

Table 7
PRIVATE SCHOOL ENROLLMENT BY AREA

PUMA	Region	Single-Family	Multi-Family
100	Hawaii County	12.7%	9.3%
200	Maui, Kauai	11.3%	8.3%
303	East Honolulu	43.7%	28.3%
304	Central Honolulu	45.5%	25.9%
305	Liliha-Kalihi	14.3%	7.3%
306	Moanalua-Pearl City	24.6%	9.8%
307	Central Oahu-Ewa	19.2%	11.1%
301	Koolauloa-N Shore-Wahiawa-Waianae	13.1%	7.8%
302	Windward (so.)-Koolaupoko	32.2%	22.4%
State Total		20.1%	13.7%

Source: 2000 U.S. Census, 5% Public Use Microdata Sample.

The growth in private school enrollment does not completely explain the decline in public school enrollment, and certainly does not account for the fact that public school enrollment did not increase while the number of housing units increased significantly.

A more significant factor accounting for the lack of growth in public school enrollment is the aging of the population. The declining enrollment trend parallels an overall drop in the state's population of school-age children. For example, the number of children aged 5-17 dropped by almost 9,000 from 2000 to 2005, even as the number of housing units increased by over 30,000 during the same five-year period.

Another major contributing factor is that many of the new units constructed are not meant for permanent occupancy, but are for seasonal or recreational use. For example, the increase in vacant units held for seasonal or recreational use from 1990 to 2000 accounts for 20 percent of the total increase in housing units during the last decade. Other vacancies also increased during the decade. The presence of vacant units further reduces the number of school-aged children per housing unit beyond demographic changes, explaining more than half of the decline of 6.5 percent for all housing units in the number of school-aged children per unit in the last decade. As shown in Table 8, the prominence of resort development and vacant units in Hawaii is concentrated in Hawaii County and Maui. However, multi-family vacancy rates are relatively high throughout the state.

**Table 8
RESORT AND VACANT UNITS BY AREA**

PUMA	Region	Resort Development		Vacant Units	
		Single-Family	Multi-Family	Single-Family	Multi-Family
100	Hawaii County	5.0%	43.7%	8.5%	51.8%
200	Maui, Kauai	5.1%	25.2%	11.6%	34.8%
303	East Honolulu	0.9%	8.3%	3.9%	16.2%
304	Central Honolulu	0.6%	8.3%	3.8%	20.2%
305	Liliha-Kalihi	0.4%	0.6%	5.3%	7.3%
306	Moanalua-Pearl City	0.0%	0.6%	3.9%	9.8%
307	Central Oahu-Ewa	0.3%	0.8%	5.1%	9.0%
301	Koolauloa-N Shore*	2.5%	7.4%	9.5%	26.9%
302	Windward (so.)-Koolaupoko	0.7%	1.5%	3.8%	10.8%
State Total		2.4%	11.6%	6.9%	21.7%

* includes Wahiawa and Waianae
Source: 2000 U.S. Census, 5% Public Use Microdata Sample.

Enrollment Projections

In planning new facilities and accommodating student growth, DOE relies on local, district and state-wide enrollment projections. DOE prepares both one- and six-year enrollment projections for each school, high school complex, district and the entire state. The enrollment projections are prepared annually, and are useful in determining demand for new facilities, which typically require several years to plan and build. One- and six-year enrollment projections are based on computer-generated models with additional external factors added to the final models by staff in the Information Resource Management Branch.

DOE's computer-generated model is based on general enrollment trends adjusted by a cohort-survival ratio. The general enrollment trends are based on incoming grade size, the exiting grade size and migration of students over the past six years. The incoming grade size is based on census birth data and feeder school enrollment. Migration of students includes students entering and exiting the public school system, districts, complexes and individual schools. Enrollment by grade is determined by examining the movement of students from grade to grade over the past six years.

In addition to the computer-generated models, DOE analysts add external factors to the final enrollment model for both the one- and six-year projections. Migration factors related to the children of military families are factored for areas with large military installations. DOE collects new housing projections by housing type (single-family and multi-family) for each complex area. Most new residential development in Hawaii is undertaken by a handful of large development companies, and DOE collects new construction data directly from these housing developers. In addition to the number of new units, DOE considers a development's characteristics, such as location, house price and development age in determining an appropriate student generation rate for each development.

The application of computer-generated models and external factors have been developed by DOE staff through experience and statistical analysis. Nonetheless, the conditions related to enrollment projections are subject to change that cannot always be factored into either the model or the external factor analysis. This is particularly true for forecasts of individual complexes and schools within a complex. For example, local and national economic conditions may cause a sudden change in the absorption rate of new housing, or a developer may change the marketing focus for a given development and suddenly attract more families. Such changes can result in variation between the actual and forecast enrollment, particularly for complexes and individual schools. Nonetheless, the forecast is essential for planning for new school facilities and budgeting for operational expenses, and provide a basis for determining the applicability of a school impact fee in Hawaii.

The most recent DOE enrollment projections, for the period 2005/2006-2010/2011, indicate that, state-wide, there will be about 3,900 fewer new public school students over the five-year period. The projections show that the rate of state-wide enrollment decline is projected to slow, with the Leeward and Hawaii school districts expected to grow and enrollment stabilizing in Maui. As shown in Table 9, four districts will continue to experience declining overall enrollment, and only the Leeward and Hawaii Districts are expected to see significant growth.

Table 9
PROJECTED PUBLIC SCHOOL ENROLLMENT BY DISTRICT, 2006-2011

School District	2005/06	2010/11	Increase	Percent
Honolulu	32,289	28,965	(3,324)	-10.3%
Central	33,215	31,079	(2,136)	-6.4%
Leeward	39,811	42,171	2,360	5.9%
Windward	17,160	15,015	(2,145)	-12.5%
Hawaii	24,595	25,631	1,036	4.2%
Maui	20,790	20,888	98	0.5%
Kauai	9,595	8,798	(797)	-8.3%
State-wide Total	177,455	172,547	(4,908)	-2.8%

Source: Department of Education, Facilities Branch (see Appendix H), excluding enrollment in non-State-owned charter school facilities.

Despite the declining enrollment trends at the state and school district levels, new residential development in certain areas is likely to create localized demand for expanded school facilities. The state-wide and even school district level analysis tends to average-out areas that consist of resort condominium units and vacation homes with areas that are populated with permanent year-round residents.

In addition, a decline in enrollment in one high school complex does not necessarily free up facilities for use by new students in another complex. Similarly, declines in enrollment in one grade level (e.g., elementary) do not necessarily free up facilities that are appropriate for use by new students in another grade level (e.g., high school). As shown in Table 10, the Leeward, Hawaii and Maui school districts will have an overall district-wide need for new facilities based on the projected enrollment growth by grade through 2011. Aside from Honolulu and Windward, all school districts will experience growth in elementary school students. The projected growth in elementary school students may indicate a reversal of recent demographic

trends that led, in part, to an overall public school enrollment decline. Only the Leeward district has projected growth in middle school students, and no district has projected high school enrollment growth.

Table 10
PROJECTED ENROLLMENT GROWTH BY GRADE, 2006-2011

School District	Elem.	Middle	High	Other	Total	New Demand
Honolulu	(1,354)	(691)	(1,279)	na	(3,324)	0
Central	(1,168)	(340)	(628)	na	(2,136)	919
Leeward	1,990	685	(315)	na	2,360	2,675
Windward	(721)	(373)	(900)	(151)	(2,145)	0
Hawaii	1,798	(293)	(554)	85	1,036	1,883
Maui	1,047	(78)	(629)	(242)	98	990
Kauai	94	(256)	(635)	na	(797)	94
State-wide Total	1,686	(1,346)	(4,940)	(308)	(4,908)	6,561

Source: Department of Education, Facilities Branch (see Appendix H), less enrollment in non-State-owned charter schools.

Districts are further divided into high school complex area for administrative purposes. Throughout Hawaii, certain complexes within districts are experiencing enrollment growth due to new development and localized demographic variation while other areas within the same district are experiencing declining enrollment and excess facility capacity. As a result, high school complex areas provide a second level of analysis in understanding where public school enrollment growth is expected to occur. The Central, Leeward, Hawaii and Maui school districts all include individual high school complexes that will face overall enrollment growth. Complexes that are forecast to experience enrollment growth from 2005/2006 to 2010/2011 are shown in Table 11. Of these, the most significant growth will occur in Campbell and Kapolei (Leeward), Honokaa and Waiakea (Hawaii), and Baldwin and Maui (Maui).

Table 11
HIGH SCHOOL COMPLEXES WITH ENROLLMENT GROWTH, 2006-2011

Complex	District	Current Enrollment	Projected Enrollment	Growth
Pearl Harbor	Central	6,710	6,777	67
Mililani	Central	7,883	8,087	204
Campbell	Leeward	8,317	10,960	2,643
Kapolei	Leeward	6,654	7,712	1,058
Honokaa	Hawaii	2,646	3,178	532
Kealakehe	Hawaii	4,521	4,713	192
Kohala	Hawaii	908	932	24
Kanawaena	Hawaii	2,351	2,365	14
Waiakea	Hawaii	3,730	4,118	388
Kau-Pahala	Hawaii	585	656	71
Keaau	Hawaii	2,662	2,869	207
Lahainaluna	Maui	3,004	3,016	12
Baldwin	Maui	4,207	5,174	967
Maui	Maui	6,968	7,859	891

Source: Complexes with forecast growth based on school inventory from Appendix H.

Reflecting the district-wide trend, most of the projected growth in high school complexes is the result of elementary school enrollment growth. As shown in Table 12, all of the complexes with projected overall enrollment growth will have expanded elementary school enrollment, while four complexes will likely experience growth in middle school enrollment (Campbell, Kapolei, Baldwin and Maui). High school enrollment is projected to increase in seven of the complexes (Mililani, Campbell, Kapolei, Honokaa, Waiakea, Baldwin and Maui).

Table 12
HIGH SCHOOL COMPLEX ENROLLMENT GROWTH BY GRADE LEVEL

Complex	District	Current Enrollment			Projected Enrollment			Growth			
		Elem.	Middle	High	Elem.	Middle	High	Elem.	Middle	High	Total
Pearl Harbor	Central	4,487	880	1,343	4,721	799	1,257	234	(81)	(86)	67
Mililani	Central	4,530	932	2,421	4,949	596	2,542	419	(336)	121	204
Campbell	Leeward	4,833	1,201	2,283	6,276	2,149	2,535	1,443	948	252	2,643
Kapolei	Leeward	2,741	1,580	2,333	3,404	1,754	2,554	663	174	221	1,058
Honokaa	Hawaii	1,570	241	835	2,054	239	885	484	(2)	50	532
Kealakehe	Hawaii	2,026	965	1,530	2,444	874	1,395	418	(91)	(135)	192
Kohala	Hawaii	409	214	285	439	214	279	30	0	(6)	24
Kanawaena*	Hawaii	976	446	929	1,180	399	786	204	(47)	(143)	14
Waiakea	Hawaii	1,510	908	1,312	1,895	882	1,341	385	(26)	29	388
Kau-Pahala**	Hawaii	358	NA	227	429	NA	227	71	0	0	71
Keaau	Hawaii	1,162	633	867	1,398	619	852	236	(14)	(15)	207
Lahainaluna	Maui	1,393	578	1,033	1,730	490	796	337	(88)	(237)	12
Baldwin	Maui	1,803	830	1,574	2,345	1,053	1,776	542	223	202	967
Maui	Maui	3,480	1,779	1,709	4,079	1,919	1,861	599	140	152	891

Notes: *"Other" schools classified under Elementary schools; ** "Other" schools classified under High Schools.

Source: Complexes with forecast growth based on school inventory from Appendix H.

New Development Growth

Areas of the state that are likely to experience enrollment growth as a result of new development can be isolated by examining planned development in each of Hawaii's high school complex areas. As part of its enrollment projections, DOE conducts a survey of active and planned residential development to help plan for new growth. The survey data includes single-family and multi-family units compiled by district and complex. The total number of units planned during the forecast period are based on annual estimates, which are constantly adjusted in the survey to reflect the current demand trend and developers' construction plans. The survey of developers captures a large portion of new home construction given that development in Hawaii generally occurs in planned developments rather than on scattered lots.

The development survey results for complexes with greater than 100 planned new units are shown in Table 13. Based on the survey, planned development between 2006 and 2011 will add a total of 32,860 units, with 18,401 single-family units and 14,459 multi-family units. Based on the DOE survey, ten of the complexes are projected to have more than 1,000 new housing units added between 2006 to 2011. These include the following: Baldwin, Maui and Lahainaluna in the Maui District; Campbell, Kapolei and Pearl City in the Leeward District; McKinley in Honolulu; Honokaa and Kealakehe in the Hawaii District; and Kauai in the Kauai District. Based on state-wide student generation rates, the new development would be expected to add 13,307 new students.

Table 13
PLANNED UNITS AND RELATED ENROLLMENT BY COMPLEX, 2006-2011

District	Complex	Forecast Units			Enrollment Growth		
		Single-Family	Multi-Family	Total	Single-Family	Multi-Family	Total
Maui	Baldwin	1,191	572	1,763	616	150	766
Maui	Maui	1,358	809	2,167	702	212	914
Maui	Kekaulike	485	140	625	251	37	288
Maui	Lahainaluna	740	1,010	1,750	383	265	648
Maui	Lanai	17	84	101	9	22	31
Leeward	Campbell	3,579	1,443	5,022	1,851	378	2,229
Leeward	Kapolei	3,239	1,509	4,748	1,675	395	2,070
Leeward	Waianae	732	0	732	379	0	379
Leeward	Pearl City	1,277	2,743	4,020	660	719	1,379
Leeward	Waipahu	76	330	406	39	86	125
Honolulu	McKinley	0	2,945	2,945	0	772	772
Central	Mililani	313	320	633	162	84	246
Central	Pearl Harbor	430	480	910	222	126	348
Hawaii	Honokaa	1,979	1,002	2,981	1,024	263	1,287
Hawaii	Kau	460	0	460	238	0	238
Hawaii	Keaau	820	0	820	424	0	424
Hawaii	Kealakehe	574	474	1,048	297	124	421
Hawaii	Konawaena	333	212	545	172	56	228
Kauai	Kapaa	181	0	181	94	0	94
Kauai	Kauai	617	386	1,003	319	101	420
Total		18,401	14,459	32,860	9,517	3,790	13,307

Source: Hawaii DOE, Facilities Development Branch, Planning Section "Development Survey," September, 2006; planned enrollment growth from new development based on state-wide student generation rate from Table 18.

Existing School Capacity

This section analyzes the existing school district, complex and individual school capacity as measured by DOE and school administrators. At the state level, the entire school system has sufficient capacity to handle growth based on current and projected enrollment and current design capacity of schools. However, based on an analysis of school district facilities in Appendix H, school-specific capacity shortfalls exist in all areas of the state, with more than 80 school facilities experiencing enrollment that is higher than 95 percent of their designed capacity.

As shown in Table 14, district-wide capacity deficiencies exist for middle schools in the Leeward and Maui school districts, and high school facility deficiencies exist in Honolulu, Central, Windward and Leeward districts. Overall, the high school facilities are at capacity at the system-wide level; however, the available capacity is expected to increase over the next few years as the number of high school-age students declines.

Table 14
DISTRICT CAPACITY SUMMARY

District	Capacity	Enrollment	
		2005/06	% of Capacity
Elementary	20,682	16,339	79%
Middle	7,714	6,271	81%
High	9,755	9,679	99%
Total, Honolulu	38,151	32,289	85%
Elementary	20,854	17,884	86%
Middle	6,300	5,764	91%
High	9,088	9,567	105%
Total, Central	36,242	33,215	92%
Elementary	11,733	9,408	80%
Middle	3,421	2,094	61%
High	4,174	3,779	91%
Other	1,551	1,879	121%
Total, Windward	20,879	17,160	82%
Elementary	23,225	21,057	91%
Middle	5,979	6,243	104%
High	11,022	12,511	114%
Total, Leeward	40,226	39,811	99%
Elementary	12,785	11,000	86%
Middle	6,648	4,931	74%
High	9,091	8,066	89%
Other	1,330	598	45%
Total, Hawaii	29,854	24,595	82%
Elementary	10,757	9,393	87%
Middle	4,288	4,313	101%

District	Capacity	Enrollment	
		2005/06	% of Capacity
High	5,188	6,112	118%
Other	2,041	972	48%
Total, Maui	22,274	20,790	93%
Elementary	5,634	4,238	75%
Middle	2,886	2,131	74%
High	3,617	3,226	89%
Total, Kauai	12,137	9,595	79%
Elementary	105,670	89,319	85%
Middle	37,236	31,747	85%
High	51,935	52,940	102%
Other	4,922	3,449	70%
Total, All Districts	199,763	177,455	89%

Source: Enrollment and capacity data from Appendix H; Table 67; "Other" schools have multiple grade levels.

The full impact of large planned developments is in many cases not reflected in the six-year enrollment projections, because the planning and build-out necessary for such developments are beyond the projection time period. As a result, in implementing an impact fee, areas that are at or above their capacity and likely to experience additional enrollment growth should be considered for school impact fees. High school complexes that currently have enrollment exceeding 95 percent of the overall capacity are shown in Table 15.

Table 15
RESTRICTED CAPACITY COMPLEXES

Complex	District	Capacity	Enrollment 2005/06	% of Existing Capacity
Mililani	Central	8,240	7,883	95.7%
Moanalua	Central	1,640	2,016	122.9%
Campbell*	Leeward	8,414	8,317	98.8%
Kapolei	Leeward	6,616	6,654	100.6%
Waianae	Leeward	6,917	6,580	95.1%
Waipahu	Leeward	8,264	8,651	104.7%
Pearl City	Leeward	7,164	6,831	95.4%
Kahuku	Windward	3,597	3,845	106.9%
Honokaa	Hawaii	3,224	3,162	98.1%
Kealakehe	Hawaii	4,741	4,521	95.4%
Lahainaluna	Maui	2,740	3,004	109.6%
Baldwin	Maui	4,370	4,207	96.3%
Maui	Maui	6,962	6,968	100.1%
Lanai	Maui	553	616	111.4%

* excluding capacity of Ocean Pointe Elementary, which opens in 2007
Source: Complexes with greater than 95 percent of current capacity based on school inventory from school inventory tables, Appendix H.

It should be noted that the public school district and high school complex boundaries are not fixed, and DOE has the ability to adjust district and complex boundaries to match capacity needs and accommodate some of the projected enrollment growth. DOE can also accommodate growth by changing district and complex assignments for individual schools. Demand for schools can also be modified by adjusting the grade levels; for example, fifth graders could be switched from a grade school to a middle school if additional capacity were available at the middle school level.

While the flexibility to modify school district and high school complex boundaries allows DOE to accommodate some growth, in many cases it may not be feasible to transport students in growing areas with enrollment pressure to areas with excess capacity. Given the strong public desire to have school facilities located close to the developments they serve, areas with little available school capacity would need new facilities to accommodate large residential development.

School capacity is based on the total number of available classrooms and a school's configuration. In some cases, school capacity can be adjusted without physically adding space by re-arranging classroom schedules, re-configuring existing space, or from a change in the mix of students. For example, some schools can be configured to accommodate a multi-track school schedule that maximizes space by using a facility year-round. Such a strategy can increase school capacity by as much as 25 percent.

However, the ability of a school district to reconfigure classroom space, schedules and utilization depends on the design flexibility of the original structure and the degree to which such efforts have already been undertaken to maximize capacity, as well as community acceptance to the proposed change. For the analysis of school facility capacity, the consultants assumed that DOE and local school administrators maximize space in existing facilities.

Potential Impact Fee Areas

In order to fund new school facilities that are required due to growth, it is recommended that the State of Hawaii implement school impact fees in areas that are experiencing overall enrollment growth, are expected to experience new residential development within the next ten years that will require additional school facilities, and have limited available capacity.

There are really two types of school impact districts that meet these criteria: "greenfield" areas and "non-greenfield" areas. Greenfield areas are planned development projects on undeveloped lands that are large enough to need their own new schools, from elementary to high schools. In general, these areas are somewhat isolated or distant from existing development, so that all of the schools that ultimately will serve them (some students from these areas may attend existing middle and high schools in the short-term) will be located within the school impact district. The Central Oahu case study is an example of a greenfield area.

Non-greenfield areas, in contrast, are areas comprising one or more existing high school complexes where new development typically occurs on smaller, scattered sites. The key characteristic of non-greenfield areas is that the same schools will serve both existing and new housing. In non-greenfield areas, average student generation rates may over-predict the impact

of new development, if declining enrollment from existing housing is freeing up capacity in the existing schools. The Ewa case study is an example of a non-greenfield area.

To identify potential non-greenfield area candidates, an enrollment growth threshold of approximately 400 new housing units within the next six years for which projections are available was utilized. High school complex areas are used to illustrate school impact districts since data is collected by DOE for each complex area. However, as will be discussed in the “Technical Analysis” section of this report, the actual boundaries of impact fee areas may not necessarily correspond to existing complex area boundaries. The existing complex areas that meet the criteria defined in this report are shown in Table 16. The high growth complex areas fall within three existing school districts: Maui, Leeward and Hawaii. The Ewa case study encompasses the two Leeward high school complexes identified here.

**Table 16
ENROLLMENT GROWTH AREAS**

District	Complex	Projected Enrollment Growth, 2006-2011	New Students from Expected Housing Growth 2006-2011	Current Facility Capacity
Maui	Baldwin	967	794	96.3%
Maui	Maui	891	957	100.1%
Leeward	Campbell	2,643	2,297	100.2%
Leeward	Kapolei	1,058	2,145	100.7%
Hawaii	Honokaa	532	1,337	98.1%

Source: Complex areas with forecast enrollment growth from Table 12; new students expected from residential growth from Table 13; current facility capacity from Table 15.

The criteria used above eliminates several complex areas that are forecast to experience significant growth in new residential units from 2006 to 2011. Based on state-wide student generation rates, these areas would be expected to experience overall enrollment growth, but in many cases these districts are actually projected to have declining enrollment. As shown in Table 17, these high school complex areas include Pearl City in the Leeward District, McKinley in the Honolulu District and Kauai in the Kauai District, all of which are expected to experience enrollment declines. DOE does not expect new development in Honolulu and Kauai to generate many students since these are typically high-end multi-family or resort developments.

The Pearl City developments include the large residential developments of Koa Ridge and Waiawa that together form a greenfield area and are the subject of the Central Oahu case study. These developments will ultimately become their own high school complex, but are not expected to start significant construction of new dwelling units until 2010. Consequently, the fact that projected enrollment in the Pearl City high school complex is projected to decline in the next six years even with some new housing growth does not mean that there will not ultimately be a need for new school facilities to serve those new housing units.

**Table 17
LOW GROWTH, HIGH DEVELOPMENT AREAS**

District	High School Complex	Overall Enrollment Growth, 2006-2011	New Development Growth 2006-2011
Maui	Lahainaluna	12	707
Leeward	Pearl City	(276)	1,548
Honolulu	McKinley	(528)	963
Hawaii	Keaau	207	418
Hawaii	Kealakehe	192	448
Kauai	Kauai	(295)	441

Source: Complex areas overall enrollment growth from Appendix H; new development residential growth from Table 13.

Chapter 4: State-Wide Technical Analysis

This section calculates the maximum school impact fees that could be charged in Hawaii if a state-wide school impact fee were adopted. The maximum impact fee calculation also provides an update of the assumptions utilized in the existing land and construction components of DOE's current Fair Share formula. This section updates the state-wide technical analysis the consultant team prepared in the 2001 Fair Share study.

As previously noted, the establishment of a state-wide school impact fee is not recommended. Instead, the purpose of this state-wide analysis is to provide a basis for developing impact fee schedules for specific growth areas, referred to as "school impact districts," throughout the state.

Student Generation Rates

The impact of new residential development on the demand for school facilities is based on the number of public school students generated per dwelling unit. The most current available data source on student generation rates by type of dwelling unit is the 2000 U.S. Census 5-percent Public Use Microdata Samples (PUMS). The 2000 PUMS data for Hawaii consists of census enumerations for occupied and vacant housing units. In using the census sample data, public school students are defined as persons enrolled in public school and attending preschool through 12th grade. The student generation rates from the 2000 census sample data by housing type are shown in Table 18.

Table 18
STATE-WIDE STUDENT GENERATION RATES, 2000

	Public Students	Total Units	Students/ Unit
Elementary	59,972	288,988	0.2075
Middle School	43,520	288,988	0.1506
High School	45,963	288,988	0.1590
Total, Single-Family*	149,455	288,988	0.5172
Elementary	20,040	171,655	0.1167
Middle School	12,917	171,655	0.0752
High School	12,020	171,655	0.0700
Total, Multi-Family	44,977	171,655	0.2620
All Housing Types	194,432	460,643	0.4221

* includes single-family detached, single-family attached and duplex units
Source: U.S. Census Bureau, weighted 2000 PUMS 5% sample data for State of Hawaii; students per unit is ratio of public school students to total dwelling units (occupied plus vacant); public school students are defined as persons attending preschool through 12th grade in public school (elementary is pre-K through 4th grade, middle is 5th through 8th grades, and high school is 9th through 12th grades).

One problem with the student generation rates derived from the 2000 sample data is how the grade levels are defined. The Census defines middle school as grades 5-8, while middle schools in Hawaii are either grades 6-8 or grades 7-8. A school-by-school analysis of middle schools revealed that there are no fifth graders attending them, and only 42 percent of all sixth graders are enrolled in middle schools (most of the rest are in elementary schools).

To correct for this problem, as well as to ensure that the student generation rates are representative of actual conditions today, the expected public school students based on the number of estimated dwelling units in 2006 and the student generation rates derived from the 2000 census sample data are compared to the actual public school enrollment in Hawaii for the current school year. Not surprisingly, as Table 19 shows, the Census multipliers under-predict elementary school enrollment and over-predict middle school enrollment, due to the differences in grade level definitions discussed above.

**Table 19
EXPECTED AND ACTUAL STUDENTS, 2006**

Housing Type/Grade Level	2006 Units	Student Generation Rates	Expected Students	Actual Students	Adjustment Factors
Single-Family:*					
Elementary	319,828	0.2075	66,364		
Middle	319,828	0.1506	48,166		
High	319,828	0.1590	50,853		
Multi-Family:					
Elementary	182,457	0.1167	21,293		
Middle	182,457	0.0752	13,721		
High	182,457	0.0700	12,772		
All Dwelling Units:					
Elementary			87,657	93,196	1.0632
Middle			61,887	32,735	0.5289
High			63,625	55,424	0.8711
Total			213,169	181,355	

* includes single-family detached, single-family attached and duplex units

Source: Total 2006 units based on units from 2000 U.S. Census, Summary File 3 (weighted 1-in-6 sample data), plus building permits issued in 2000 through 2005 from the Census Bureau web site; student generation rates from Table 18; actual enrollment from Hawaii Department of Education, *Official Enrollment Counts, 2005-2006*, from web site (6th graders allocated 42% to middle school and 58% to elementary school, based on analysis of middle school enrollments).

The student generation rates from the 2000 sample data have been calibrated by adjusting them by the factors calculated in the previous table, as shown in Table 20.

**Table 20
CALIBRATED STUDENT GENERATION RATES**

	2000 Students/ Unit	Adjustment Factor	Calibrated Students/ Unit
Elementary	0.2075	1.0632	0.2206
Middle School	0.1506	0.5289	0.0797
High School	0.1590	0.8711	0.1385
Total, Single-Family*	0.5172		0.4388
Elementary	0.1167	1.0632	0.1241
Middle School	0.0752	0.5289	0.0398
High School	0.0700	0.8711	0.0610
Total, Multi-Family	0.2620		0.2249
All Housing Types	0.4221	0.8555	0.3611

* includes single-family detached, single-family attached and duplex units
Source: 2000 students per unit from Table 18; adjustment factors from Table 19.

The state-wide student generation rates calculated above do not account for regional variation. For example, student generation rates per unit will vary between areas that include a significant number of resort condominium units and vacation homes versus areas that are primarily populated with permanent year-round residents. As a result, the state-wide rate calculated in this analysis will likely overstate the student generation rates for housing in resort areas and understate the generation rate in regions of the state with traditional residential development and year-round residents.

The variation in student generation rates by individual school districts or conglomerations of school districts can be seen in data available from the 2000 Census, as shown in Table 21. The factors related to lower student generation rates are discussed in more detail in the “Salient Issues Analysis” section of this report. Not surprisingly, the Leeward district and the northern part of the Central district, U.S. Census Public Use Microdata Areas (PUMAs) 307 and 301, respectively, which have among the lowest percentages of private school enrollment and vacancies due to seasonal and recreational use, have the highest student generation rates. The Big Island contains a mixture of mostly non-resort single-family with a low rate of private schooling and resort condominium development, giving it the third-highest single-family student generation rate and the second-lowest multi-family rate.

Table 21
STUDENT GENERATION RATES BY CENSUS DISTRICT, 2000

PUMA	School District/Area	Unadjusted Student Generation Rates			Percent Private	Vacancy Rate
		Single-Family*	Multi-Family	Average		
100	Hawaii County	0.5686	0.1400	0.4362	12.3%	21.9%
200	Maui, Kauai	0.5177	0.1844	0.4606	11.1%	15.6%
303	East Honolulu	0.2641	0.1967	0.2496	41.5%	6.6%
304	Central Honolulu	0.2094	0.1134	0.1282	32.0%	17.6%
305	Liliha-Kalihi	0.4783	0.4013	0.4387	11.2%	6.3%
306	Moanalua-Pearl City	0.4585	0.4464	0.4536	19.3%	6.3%
307	Central Oahu-Ewa	0.6921	0.4936	0.6301	17.4%	6.3%
301	Koolauloa-N Shore**	0.6963	0.4485	0.6346	12.2%	13.8%
302	Windward (so.)-Koolaupoko	0.4873	0.3639	0.4621	30.8%	5.2%
State-Wide Total		0.5172	0.2620	0.4221	18.7%	12.4%

* includes single-family detached, single-family attached and duplex units

** includes Wahiawa and Waianae

Source: 2000 US Census, 5% Public Use Microdata Sample.

The student generation rates discussed so far have been based on all dwelling units existing in Hawaii at the time of the 2000 census. However, the 2000 census sample data also allow us to look at how student generation varies with the age of the unit. These data allow us to confirm that new dwelling units do, in fact, contain public school children and therefore have an immediate impact on the need for new school facilities.

The public school student generation rate by housing unit age, displayed in Table 22, clearly confirm that new dwelling units, regardless of whether “new” is defined as units built in the last five, ten or 20 years, contain substantial numbers of public school students and thus have an immediate impact on the need for public educational facilities. The fact that the number of students per unit fluctuates somewhat depending on the age of a dwelling unit is to be expected, but the impact fee should be based on the expected student occupancy over the life of the housing unit.⁷ The impact of new development is not confined to the immediate impact, but also includes the long-term impact. The State of Hawaii public school system will have the responsibility of providing facilities to serve a new dwelling unit in perpetuity.

⁷ As the Florida Supreme Court observed in *St. Johns County, et al. v. Northeast Florida Builders Ass'n*, 583 So.2d 635 (1991): “During the useful life of the new dwelling units, school-age children will come and go. It may be that some of the units will never house children. However, the county has determined that for every one hundred units that are built, forty-four new students will require an education at a public school.”

**Table 22
PUBLIC SCHOOL STUDENT GENERATION BY AGE OF THE HOUSING UNIT**

Housing Type	All Units	Age of the Housing Unit (Years)			
		0-5	6-10	11-20	>20
Single-Family*	0.517	0.553	0.656	0.635	0.459
Multi-Family	0.262	0.289	0.195	0.239	0.275
All Housing Types	0.422	0.474	0.492	0.490	0.388
Sample Size	33,079	2,433	3,252	5,300	22,094

* includes single-family detached, single-family attached and duplex units
Source: Unadjusted multipliers from U.S. Census Bureau, 2000 PUMS 5% sample data for Hawaii; multipliers are ratios of public school students to total dwelling units; public school students are defined as persons attending preschool through 12th grade in public school; age of unit based on year built, with 0-5 years old being units built 1995 through 2000, etc.

Overall, several countervailing factors are at work in the student generation rate per household. First, the state-wide student generation rates based on the 2000 Census data and calibrated for 2006 enrollment are likely to understate actual current student generation rates in areas of the state that are experiencing significant, non-resort residential development. On the other hand, they may overstate the long-term impacts, as the number of students generated by both existing and new homes continues to decline. The two case studies presented in subsequent sections of this report provide an opportunity to develop calibrated local student generation rates for two different types of school impact districts.

The state-wide student generation rates are considerably lower for single-family and slightly higher for multi-family than the rates that DOE currently uses in Fair Share negotiations, as shown in Table 23. DOE's student generation rates may be more reflective of the impacts of growth in traditional residential developments, since the state-wide rates include both resort areas and high-income areas with high private school enrollment.

**Table 23
COMPARATIVE STATE-WIDE STUDENT GENERATION RATES**

	Current DOE Practice	Calibrated State-Wide Rates
Elementary	0.2790	0.2206
Middle School	0.1430	0.0797
High School	0.1540	0.1385
Total, Single-Family*	0.5760	0.4388
Elementary	0.1090	0.1241
Middle School	0.0400	0.0398
High School	0.0690	0.0610
Total, Multi-Family	0.2180	0.2249
All Housing Types	0.4120	0.3611

* includes single-family detached, single-family attached and duplex units
Source: Existing student multipliers from Hawaii Department of Education;
 proposed student multipliers from Table 20.

Land Component

DOE’s current Fair Share formula for land was presented earlier in this report (see Table 3). While the land component of the current Fair Share formula is based on the actual school site sizes, DOE utilizes a somewhat different set of design standards in planning new facilities. As shown in Table 24, the current design standards range from 0.0218 acres per student for elementary schools to 0.0500 acres per student for high schools.

**Table 24
SCHOOL DESIGN STANDARDS**

Grade Level	Typical Capacity	Typical Acres	Acres/Student
Elementary (K-5)	550	12	0.0218
Intermediate (6-8)	600	18	0.0300
High (9-12)	1000	50	0.0500

Source: State-wide general design assumptions from DOE Facilities Branch, April 10, 2006.

Impact fees and development exactions should not be a means of requiring new development to provide a higher level of service than is already being provided to existing development. This principle is incorporated into Hawaii’s Act 282, which states that impact fees shall be based on a level of service standard that “shall apply equally to existing and new public facilities.” The service standard upon which to base fees is the existing level of service. For this study, Hawaii’s existing level of service is based on recent school construction standards. As shown in Table 25, recent school sites have provided 0.0156 acres per student for elementary schools, 0.0110 for middle schools and 0.0306 for high schools.

**Table 25
ACRES PER STUDENT BASED ON RECENT SCHOOL CONSTRUCTION**

School	District	Year	Design		
			Site Size	Enrollment	Acres/Student
Keaau II Elementary	5	1998	15.40	900	0.0171
Konawaena Elementary	5	2000	10.00	658	0.0152
Maui Lani Elementary	6	2007	13.90	650	0.0214
Mililani Ike Elementary	2	2004	11.87	728	0.0163
Nanaikapono Elementary (Nanakuli)	3	2004	13.96	1,134	0.0123
Oceanpointe Elementary	3	2007	11.80	725	0.0163
Waikele Elementary	3	1998	10.12	796	0.0127
Elementary Total			87.05	5,591	0.0156
Chiefess Kamakehelei Middle (Kauai)	7	2000	14.28	1,271	0.0112
Kapolei Middle	3	1999	20.00	1,435	0.0139
Mililani Middle	2	1998	15.48	1,821	0.0085
Middle School Total			49.76	4,527	0.0110
Kapolei High	3	2000	45.07	2,053	0.0220
Keaau High	5	1999	50.42	1,178	0.0428
Kealakehe High	7	1997	48.85	1,480	0.0330
High School Total			144.34	4,711	0.0306

Source: New school construction projects from DOE Planning Section, Construction Reports, April 10, 2006; design Enrollment from DOE Facility Inventory, Appendix H; and site size from DOE School Parcel Ownership report, sent June 23, 2006

The recent data on school capacity and site size indicate that DOE in the recent past provided slightly more acreage per student than called for in the current Fair Share formula; however, it is has not been providing the desired level of service based on current design standards. The comparisons are shown in Table 26.

**Table 26
COMPARISON OF ACRES PER STUDENT RATIOS**

Grade Level	Design Standards	Current Fee Basis	Recent Schools
Elementary (K-5)	0.0218	0.0122	0.0156
Intermediate (6-8)	0.0300	0.0114	0.0110
High (9-12)	0.0500	0.0257	0.0306

Source: Design standard acres per student from Table 24; current fee basis acres per student from Table 3; and recent school construction standards from Table 25.

As noted earlier, the current Fair Share formula uses an average school land cost of \$100,000 per acre. This figure is based on the average cost of land acquisitions from the 2001 Fair Share study, which examined land acquisition data from 1988 to 2000. Land acquisitions for new schools over the past ten years are shown in Table 27. As illustrated in the table, the State has

made only three market-rate acquisitions of sites for schools over the past ten years. The small Kauai Intermediate School site was purchased by the State, but the balance of the site (ten acres) was acquired through a Fair Share contribution. The remaining sites have been acquired through below market rates or through developer agreements. Based on the three market-rate site acquisitions, the average cost per acre is \$153,786. However, the average cost of each parcel varies considerably, with the Kauai Intermediate School site costing almost ten times more per acre than the Kapaa Middle School site. These data illustrate the difficulty of determining an average land cost per acre.

**Table 27
RECENT LAND ACQUISITION COSTS**

School	Year	Original Cost	Inflation Factor	Cost in 2005 \$	Acres	Cost/Acre in 2005 \$
Konawaena Elem	1998	\$825,000	1.236	\$1,019,700	10.45	\$97,579
Kauai Intermediate	1998	\$2,250,000	1.236	\$2,781,000	4.28	\$649,766
Kapaa Middle	1996	\$959,700	1.284	\$1,232,255	18.01	\$68,428
Total				\$5,034,960	32.74	\$153,786
Keaau II Elem	2003	na			15.40	
Mililani Ike Elem	2002	na			11.87	
Kauai Intermediate	1999	na			10.00	
Keaau High*	1998	\$687,835			63.26	
Kapaa Middle	1998	na			10.00	
Mililani Middle	1997	na			15.48	
Kapaa Middle	1996	na			17.28	
Waikele Elem**	1996	na			10.12	
Total					143.40	

Notes: *Non-market priced land acquisition; ** Includes 4.12 acre park site.

Source: Year of acquisition, original land cost and acres purchased from DOE, "Total Cost of Recent New Schools," May 11 and May 15, 2006; inflation factor based on U.S. Bureau of Labor Statistics, Consumer Price Index (CPI), U.S. City Average, All Items (April 2006 = 201.5).

For illustrative purposes, the consultant utilized the land cost of \$350,000 per acre used in recent Fair Share agreements in providing an updated land cost schedule. The land cost schedule in Table 28 reflects changes in student generation rates and updates in the provision of land per student based on recent school construction since the 2001 *School Fair Share Contribution Study*.

**Table 28
STATE-WIDE SCHOOL LAND DEDICATION AND FEE-IN-LIEU SCHEDULE**

	Students/ Unit	Acres/ Student	Acres/ Unit	Cost/ Acre*	In-Lieu Fee/Unit*
Elementary	0.2206	0.0156	0.00344	\$350,000	\$1,204
Middle School	0.0797	0.0110	0.00088	\$350,000	\$308
High School	0.1385	0.0306	0.00424	\$350,000	\$1,484
Total, Single-Family**			0.00856		\$2,996
Elementary	0.1241	0.0156	0.00194	\$350,000	\$679
Middle School	0.0398	0.0110	0.00044	\$350,000	\$154
High School	0.0610	0.0306	0.00187	\$350,000	\$655
Total, Multi-Family			0.00425		\$1,488

* Illustrative. – cost per acre for impact fee zones would be determined based on fair market value.

** includes single-family detached, single-family attached and duplex units

Source: Students per unit based on recent school construction site size from Table 20; acres per student from Table 25; cost per acre based on DOE's current Fair Share "fee-in-lieu" calculation for developments less than 50 acres.

Construction Cost Component

The construction cost component of the impact fee is determined based on the current provision of facilities and facility costs. DOE's current Fair Share construction cost component is based on the 2001 *School Fair Share Contribution Study*. However, the current Fair Share fee is thirty percent of the maximum fee calculated in the 2001 report.

The State Department of Accounting and General Services (DAGS) has identified construction cost factors for 26 regions of the state, which are shown in Table 29. These factors reflect the relative construction costs in each region compared to construction costs in Honolulu. As is the current practice for the DOE's Fair Share calculation for construction costs, it is recommended that determinations of the amount of the fees to be assessed in different impact fee areas reflect the construction cost differences between these 26 cost districts.

The DAGS construction cost variable districts are illustrated in Appendix I, and are superimposed on maps of each school district and high school complex area. Many of the DAGS cost district boundaries do not correspond to the existing school districts or complex area boundaries; however, the level of detail permits assignment of geographic areas that will be subject to impact fees to the primary DAGS cost districts within which the impact fee benefit area lies.

**Table 29
CONSTRUCTION COST DISTRICT VARIABLES**

Island	School District	High School Complex Areas	Cost District	Cost Factor
Oahu	Honolulu	Kaiser, Kalani, Roosevelt, McKinley, Kaimuki, Farrington, Moanalua, Radford	Honolulu	1.00
Oahu	Central/Leeward	Kapola, Campbell, Waipahu, Pearl City, Aiea	Ewa	1.00
Oahu	Central	Waianae, Nanakuli	Waianae	1.10
Oahu	Central	Waialua	Waialua	1.10
Oahu	Windward	Castle, Kailua, Kalaheo	Koolaupoko	1.00
Oahu	Windward	Kahuku	Koolauloa	1.10
Oahu	Leeward	Leilehua	Wahiawa	1.05
Hawaii	Hawaii	Hilo	Hilo	1.15
Hawaii	Hawaii	Waiakea, Kea'au, Pahoa	Puna	1.20
Hawaii	Hawaii	Kealakehe, Konawaena	Kona	1.20
Hawaii	Hawaii	Laupahoehoe	Hamakua	1.20
Hawaii	Hawaii	Honoka'a	South Kohala	1.20
Hawaii	Hawaii	Kohala	North Kohala	1.25
Hawaii	Hawaii	None assigned	Pohakuloa	1.25
Hawaii	Hawaii	Kau	Kau	1.30
Maui	Maui	Maui, Baldwin	Wailuku	1.15
Maui	Maui	Kekaulike	Makawao	1.25
Maui	Maui	Lahainaluna	Lahaina	1.30
Maui	Maui	Hana	Hana	1.35
Molokai	Molokai	Molokai	Molokai	1.30
Lanai	Lanai	Lanai	Lanai	1.35
Kauai	Kauai	None assigned	Lihue	1.15
Kauai	Kauai	Kauai	Koloa	1.20
Kauai	Kauai	None assigned	Kawaihau	1.20
Kauai	Kauai	Waimea	Waimea	1.25
Kauai	Kauai	Kapaa	Hanalei	1.25

Source: Department of Accounting and General Services, Public Works Division, Planning Branch, *Budget Estimating Guide*, 2004; complex areas assigned based on complex area map and cost district map overlap presented in Appendix I.

In determining the basis for the construction component of the fee, the costs of recent school construction projects were divided by the appropriate regional cost factors to arrive at adjusted costs that represent construction costs within the Honolulu area. The fees will ultimately be multiplied by the same regional cost factors to determine fees by region as is currently the practice in determining the construction component for the State's Fair Share fee. Based on school construction over the past ten years, the average building cost per student station, normalized for Honolulu area construction costs, ranges from \$36,097 for middle school students to \$64,780 for high school students, as shown in Table 30.

**Table 30
SCHOOL CONSTRUCTION COST PER STUDENT**

District	School	Year	Cost	Time- Adj. Cost	Cost Factor	Area- Adj. Cost	Design Cap.	Cost/ Student
Central	Mililani Ike	2004	\$23,800,000	\$26,958,000	1.05	\$25,674,000	650	\$39,498
Leeward	Nanaikapono	2004	\$25,800,000	\$29,224,000	1.00	\$29,224,000	1,042	\$28,046
Maui	Maui Lani	2007	\$32,000,000	\$32,000,000	1.25	\$25,600,000	650	\$39,385
Leeward	Oceanpointe	2007	\$27,200,000	\$27,200,000	1.00	\$27,200,000	725	\$37,517
Hawaii	Keaau II	1998	\$24,400,000	\$35,097,000	1.15	\$30,519,000	945	\$32,295
Leeward	Waikele	1998	\$16,600,000	\$23,877,000	1.00	\$23,877,000	750	\$31,836
Hawaii	Konawaena	2000	\$26,300,000	\$35,679,000	1.15	\$31,025,000	700	\$44,321
Total, Elementary						\$193,119,000	5,462	\$35,357
Kauai	Kamakehelei	2000	\$36,900,000	\$50,059,000	1.20	\$41,716,000	1,300	\$32,089
Leeward	Kapolei	1999	\$36,970,000	\$52,431,000	1.00	\$52,431,000	1,200	\$43,693
Central	Mililani	1998	\$36,600,000	\$52,645,000	1.05	\$50,138,000	1,350	\$37,139
Kauai	Kapaa	1997	\$28,670,000	\$41,273,000	1.20	\$34,394,000	1,100	\$31,267
Total, Middle School						\$178,679,000	4,950	\$36,097
Leeward	Kapolei	2000	\$98,700,000	\$133,896,000	1.00	\$133,896,000	1,800	\$74,387
Hawaii	Keaau	1999	\$74,670,000	\$105,897,000	1.15	\$92,084,000	1,330	\$69,236
Hawaii	Kealakehe	1997	\$74,600,000	\$107,394,000	1.15	\$93,386,000	1,800	\$51,881
Total, High School						\$319,366,000	4,930	\$64,780

Source: Construction cost data from Department of Education, Facilities Development Branch; design enrollment from Department of Education, based on "single-track" enrollment design capacity; time-adjusted cost based on First Hawaiian Bank and Hawaii State Department of Business, Economic Development & Tourism, Honolulu Construction Cost Index: High-Rise Building, using 171.7 (2006 annual average based on first three quarters) (http://www.hawaii.gov/dbedt/info/economic/data_reports/qser/construction-tables.xls); area adjustment cost factor from Department of Accounting and General Services "Table A9: Regional Cost Factors."

The construction costs per student in this report are considerably higher than the construction costs utilized in the current Fair Share formula that were implemented in 2003, which were based on the 2001 *School Fair Share Contribution Study*. Construction costs per student increased over the 2001 study by approximately 66 percent for elementary schools and high schools, with elementary school cost per student increasing from \$21,300 to \$35,357 and high school costs increasing from \$38,500 to \$64,780. Middle school construction costs per student increased by approximately 56 percent, from \$23,200 to \$36,097. No new middle schools were constructed since the 2001 study, so the increase in middle school construction reflects increased construction costs as measured by the Honolulu Construction Cost Index and an adjustment to the design capacity for Mililani, which reflects the school's lower single-track enrollment capacity.

A principle of impact fees, which also applies to DOE's existing Fair Share fee calculation, is that new development should not be charged for a higher level of service than is being provided to existing development. A reasonable measure of the level of service is the percent of classrooms that are in permanent structures, as opposed to portable buildings. This is especially important because the cost per student calculated in Table 30 is based on "brick and mortar"

school construction, not on the much lower cost of portable buildings. Consequently, the building cost per student should be multiplied by the percent of classrooms in permanent structures to derive the adjusted cost per student station that reflects the existing level of service. This is shown in Table 31. It should be noted that this cost per student is representative of costs in the Honolulu area, and will need to be modified by regional cost factors.

**Table 31
ADJUSTED CONSTRUCTION COST PER STUDENT**

Grade Level	Building Cost/ Student	% Perm. Classrooms	Adj. Cost/ Student
Elementary	\$35,357	85.4%	\$30,202
Middle	\$36,097	90.7%	\$32,746
High	\$64,780	87.3%	\$56,526

Source: Construction cost from Table 30; share of permanent classrooms from Appendix H Table 67.

To get from cost per student to cost per dwelling unit, it is necessary to multiply by the expected number of public school students to be generated per dwelling unit. The school construction costs per dwelling unit in the Honolulu area based on state-wide student generation rates are shown in Table 32.

**Table 32
SCHOOL CONSTRUCTION COST PER DWELLING UNIT**

	Students/ Unit	Adjusted Cost/ Student	Cost/ Unit
Elementary	0.2206	\$30,202	\$6,663
Middle School	0.0797	\$32,746	\$2,610
High School	0.1385	\$56,526	\$7,829
Total, Single-Family*			\$17,102
Elementary	0.1241	\$30,202	\$3,748
Middle School	0.0398	\$32,746	\$1,303
High School	0.0610	\$56,526	\$3,448
Total, Multi-Family			\$8,499

* includes single-family detached, single-family attached and duplex units

Source: Students per unit from Table 20; adjusted cost per student from Table 31.

Net Construction Cost

An important principle of impact fees is that new development should not have to pay more than once for the same facilities. Thus, State general tax revenues that will be generated by a new residential unit and used to fund school capital facilities and pay for outstanding debt on existing facilities should be credited to new development against school impact fees. New school facilities are funded primarily through the State's Capital Projects Fund. The Capital Projects Fund accounts for most of the financial resources obtained and used for the acquisition or construction of the State's capital assets and facilities. The resources utilized for school construction and maintenance are derived principally from proceeds of general obligation bond issues. Capital projects are programmed through the Capital Improvement Program (CIP) as part of the State's budget process. Funds are programmed through the CIP for both new construction and maintenance and rehabilitation projects.

New school capital projects programmed in the State's CIP since 2001, along with repair and maintenance projects funded through bond funds since 2003, are shown in Table 33. All of the new CIP project funding was utilized for new facilities or additional space for existing facilities, such as additional classrooms, gymnasiums or other ancillary facilities. Repair and maintenance project funding represents major facility replacement and repair projects for which bond proceeds were utilized to fund the construction. CIP funding for new facilities has averaged \$37.7 million per year over the past five years, while repair and maintenance project funding has averaged \$46.4 million per year since 2003.

Table 33
SCHOOL CAPITAL FUNDING, FY 2001-2005

	2001	2002	2003	2004	2005	Average
New Projects	\$75,448,234	\$6,685,511	\$31,772,006	\$54,962,881	\$19,515,825	\$37,677,000
Repair/Maint.	na	na	\$35,357,868	\$20,077,967	\$83,651,000	\$46,362,000
Total	\$75,448,234	\$6,685,511	\$67,129,874	\$75,040,848	\$103,166,825	\$84,039,000

Source: New CIP Projects for 2001 and 2002 from Hawaii School Expenditure Reporting System FY 2001 to FY 2002; new CIP projects and repair and maintenance projects funded through bond funds from DOE *Financial Report*, Fiscal Years 2003 through 2005.

The current level of capital funding for new facilities amounts to about \$212 per student per year. Over the life of new school facilities, which is assumed to be 25 years, this annual revenue stream is equivalent to a current lump-sum payment of \$3,174, as shown in Table 34. The 25-year period used in this credit calculation is consistent with Act 282, Hawaii's impact fee enabling act for counties, which requires credit for developer contributions over the last five years and the next 20 years. It is also more generous than required, in that it attributes all credit to residential development, even though a portion of some of these capital funds provided from the State's general fund are generated by nonresidential development (e.g., corporate income and franchise taxes).

**Table 34
STATE CAPITAL FUNDING PER STUDENT**

Annual Capital Funding	\$37,677,000
Current Enrollment	177,455
Annual Capital Funding per Student	\$212.32
Present Value Factor (25 years @ 4.42%)	14.95
Capital Funding Credit per Student	\$3,174

Source: Annual capital funding from Table 33; current enrollment from Table 67; net present value discount rate is the average interest rate on state and local bonds for the last three months (July through September, 2006) from the Federal Reserve at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_SL_Y20.txt

The State of Hawaii issues general obligation debt for a variety of purposes and earmarks a portion of new debt for DOE capital improvement projects approved as part of the State's budget process. As mentioned earlier, this debt may be utilized for new facilities or for major maintenance and repair of existing facilities. Based on available data, DOE accounts for approximately one-third of the State's total debt service cost. In 2005, the State of Hawaii had total outstanding debt of \$4,256.6 million; the amount of total outstanding debt attributable to school facilities was approximately \$1,300.7 million in 2005 as shown in Table 35.

**Table 35
TOTAL OUTSTANDING SCHOOL FACILITY DEBT**

DOE Debt Service Cost	\$98,377,766
Total State Debt Service Cost	\$321,948,000
DOE Share of Total Debt Service	30.6%
Total Hawaii Outstanding Debt, 2005	\$4,256,633,000
DOE Share of Outstanding Debt	\$1,300,700,875

Source: DOE debt service from DOE, *FY 2005 Financial Report*, p. 4, 2005; total State debt service cost and outstanding debt from State of Hawaii *Comprehensive Annual Financial Report*, pp. 126 -127, July 2005.

A credit only needs to be provided for the portion of outstanding debt attributable to new facility construction. A portion of the outstanding debt is attributable to maintenance and rehabilitation projects of existing facilities. As shown in Table 36, over the past three years, the share of total bond issues for repair and maintenance of existing facilities has accounted for 56.7 percent of DOE's debt-funded projects, while construction of new facilities has accounted for 43.3 percent.

**Table 36
NEW FACILITY SHARE OF SCHOOL DEBT, 2003-2005**

	2003	2004	2005	Total	% of Total
New Facility	\$31,772,006	\$54,962,881	\$19,515,825	\$106,250,712	43.3%
Repair/Maint.	\$35,357,868	\$20,077,967	\$83,651,000	\$139,086,835	56.7%
Total	\$67,131,877	\$75,042,852	\$103,168,830	\$245,337,547	

Source: Hawaii DOE, Annual Financial Report (FY 2003 to 2005), "Summary of Capital Improvement Projects."

The total debt credit related to existing school facilities based on the total DOE share of outstanding debt and the share of debt issues attributable to new facilities is \$3,174 per student, as shown in Table 37.

**Table 37
SCHOOL FACILITY DEBT CREDIT**

DOE Share of Outstanding Debt	\$1,300,700,875
New Facility Share of DOE Debt	43.3%
Total New Facility Outstanding Debt	\$563,203,479
Enrollment	177,455
Total New Facility Debt per Student	\$3,174

Source: DOE share of outstanding debt from Table 35; new facility share of DOE debt from Table 36; enrollment from Table 67.

Multiplying the number of students expected to be generated by a dwelling unit by the State capital funding and debt revenue credit per student yields the revenue credit per dwelling unit. As shown in Table 38, a new single-family unit can be expected to contribute the equivalent of about \$2,786 in State ongoing capital school funding and debt service for outstanding debt on existing facilities, while a multi-family unit will contribute about \$1,428.

**Table 38
TOTAL CREDIT PER DWELLING UNIT**

	Single-Family	Multi-Family
Capital Funding per Student	\$3,174	\$3,174
Debt Funding per Student	\$3,174	\$3,174
Total	\$6,348	\$6,348
Students per Unit	0.439	0.225
Credit per Unit	\$2,786	\$1,428

Source: Capital funding credit per student from Table 34; debt funding per student from Table 37; students per unit from Table 20.

Since most capital funding expenditures and debt issues for new schools are utilized for construction costs, the credit calculated in this section of the report is applied fully to the net cost schedule for construction. Table 39 shows the net cost schedule by region. Unlike with the previous study, however, this state-wide schedule is not recommended to be used as the basis of a state-wide school construction impact fee. For that, we turn to the case study analysis.

**Table 39
STATE-WIDE CONSTRUCTION COST SCHEDULE**

Island	Cost District	Cost Factor	Single-Family Dwellings			Multi-Family Dwellings		
			Cost	Credit	Net Cost	Cost	Credit	Net Cost
Oahu	Honolulu	1.00	\$17,102	\$2,786	\$14,316	\$8,499	\$1,428	\$7,071
Oahu	Ewa	1.00	\$17,102	\$2,786	\$14,316	\$8,499	\$1,428	\$7,071
Oahu	Wahiawa	1.05	\$17,957	\$2,786	\$15,171	\$8,924	\$1,428	\$7,496
Oahu	Waialua	1.10	\$18,812	\$2,786	\$16,026	\$9,349	\$1,428	\$7,921
Oahu	Koolaupoko	1.00	\$17,102	\$2,786	\$14,316	\$8,499	\$1,428	\$7,071
Oahu	Koolauloa	1.10	\$18,812	\$2,786	\$16,026	\$9,349	\$1,428	\$7,921
Oahu	Waianae	1.10	\$18,812	\$2,786	\$16,026	\$9,349	\$1,428	\$7,921
Hawaii	Hilo	1.15	\$19,667	\$2,786	\$16,881	\$9,774	\$1,428	\$8,346
Hawaii	Puna	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Hawaii	Kona	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Hawaii	Hamakua	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Hawaii	South Kohala	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Hawaii	North Kohala	1.25	\$21,378	\$2,786	\$18,592	\$10,624	\$1,428	\$9,196
Hawaii	Pohakuloa	1.25	\$21,378	\$2,786	\$18,592	\$10,624	\$1,428	\$9,196
Hawaii	Kau	1.30	\$22,233	\$2,786	\$19,447	\$11,049	\$1,428	\$9,621
Maui	Wailuku	1.15	\$19,667	\$2,786	\$16,881	\$9,774	\$1,428	\$8,346
Maui	Makawao	1.25	\$21,378	\$2,786	\$18,592	\$10,624	\$1,428	\$9,196
Maui	Lahaina	1.30	\$22,233	\$2,786	\$19,447	\$11,049	\$1,428	\$9,621
Maui	Hana	1.35	\$23,088	\$2,786	\$20,302	\$11,474	\$1,428	\$10,046
Molokai	Molokai	1.30	\$22,233	\$2,786	\$19,447	\$11,049	\$1,428	\$9,621
Lanai	Lanai	1.35	\$23,088	\$2,786	\$20,302	\$11,474	\$1,428	\$10,046
Kauai	Lihue	1.15	\$19,667	\$2,786	\$16,881	\$9,774	\$1,428	\$8,346
Kauai	Koloa	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Kauai	Kawaihau	1.20	\$20,522	\$2,786	\$17,736	\$10,199	\$1,428	\$8,771
Kauai	Waimea	1.25	\$21,378	\$2,786	\$18,592	\$10,624	\$1,428	\$9,196
Kauai	Hanalei	1.25	\$21,378	\$2,786	\$18,592	\$10,624	\$1,428	\$9,196

Source: Cost factors from Table 29; cost per single-family and multi-family units is base cost from Table 32 times cost factor; credit per unit from Table 53.

Chapter 5: Central Oahu Case Study

This section of the report analyzes the current and future demand for additional school facilities related to additional residential growth in the Central Oahu case study area and identifies the school infrastructure and funding necessary to meet the needs of planned residential development. Specifically, this analysis focuses on the Gentry Waiawa and Castle and Cooke Koa Ridge projects in Central Oahu. The Central Oahu case study area is illustrated in Figure 2.

The Central Oahu area provides a basis for applying the impact fee principles developed in this report to a “greenfield” area. A “greenfield” area is one in which one or more developers plan on developing large undeveloped tracts of land over a period of years. Greenfield development areas include contiguous residential developments with more than 5,000 units on sites with little or no existing development. Such developments will typically require their own high school complex and will not share school facilities with already existing development at final build-out.

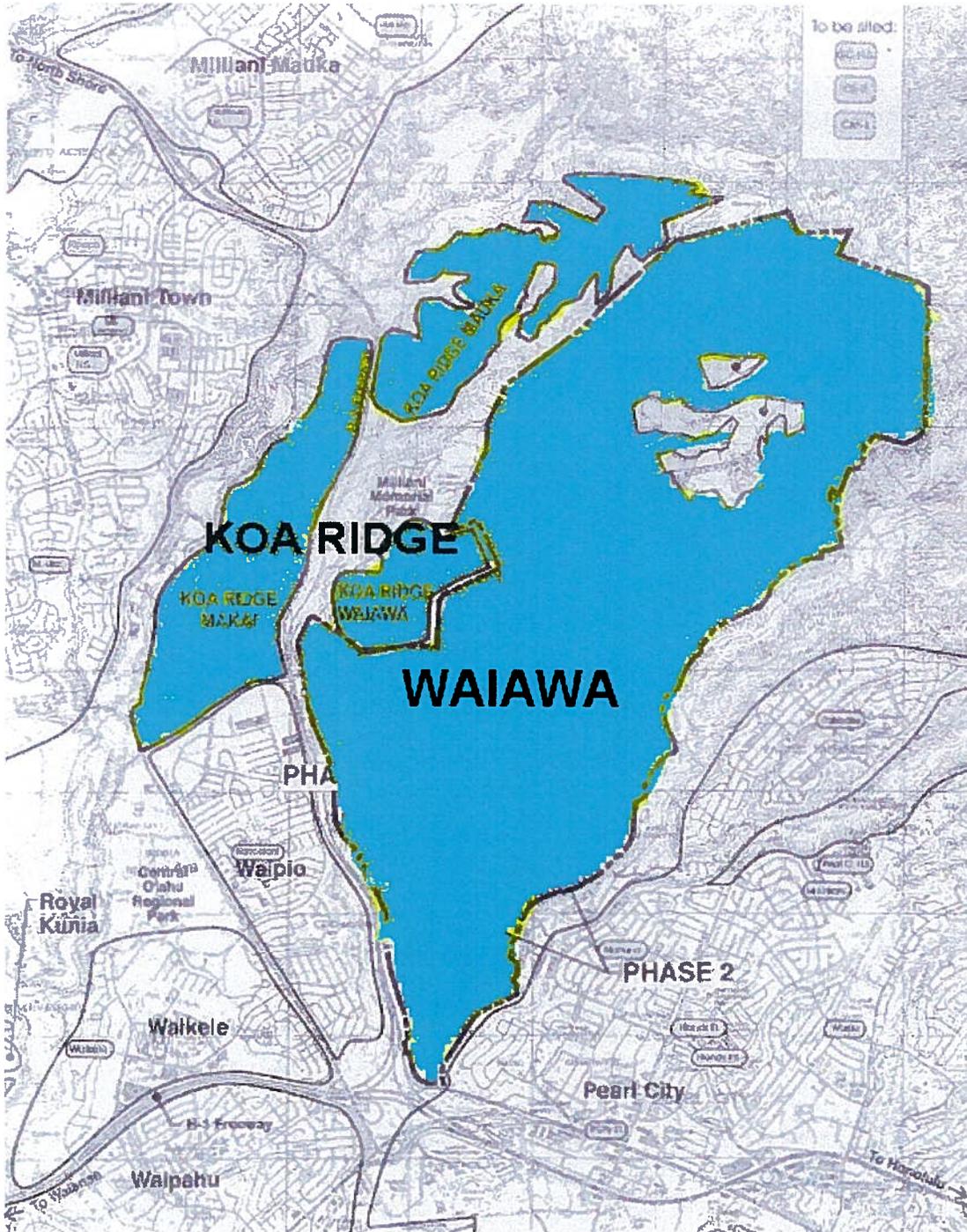
Central Oahu was historically dominated by the sugar and pineapple agricultural industry. As a result of this agricultural history, the contiguous land holdings remain large and are suitable to large scale, multi-phase development. Large-scale residential development in Central Oahu began in the late 1960s when Castle & Cooke began development of Mililani Town, a 3,500 acre planned community of low-density single family housing. Additional major residential development has occurred above Waipahu and the H-1 Freeway in Gentry Waipio, Waikele, Village Park, Royal Kunia, and other development projects.⁸

The Honolulu City Council designated Central Oahu as one of Oahu’s principal residential development areas in 1989. Since then, Central Oahu, along with the Primary Urban Center (PUC) and the Secondary Urban Center and urban fringe areas in Ewa, have provided the bulk of the new housing developed on the island.⁹

⁸City of Honolulu Department of Planning and Permitting, *Central Oahu Sustainable Communities Plan*, December 2002.

⁹Ibid.

Figure 2
CENTRAL OAHU CASE STUDY AREA



Service and Facility Standards

Service and facility standards in Central Oahu should meet the service standards established by the Department of Education for both site size and school construction. Ideally, school sites should meet the design guidelines established by the DOE. However, in developing the impact fee charged for new development, the existing level of service for the area in which the greenfield developments are to occur must be considered in order to satisfy the legal requirement that new development not pay for a higher level of service than existing development.

**Figure 3
US CENSUS PUMA 307**



The analysis of the Central Oahu case study utilizes the local student generation rates in Central Oahu. The U.S. Census student generation rates for Central Oahu are included in the U.S. Census sample data for the Ewa/Central Oahu area (see Figure 3). This is the smallest area including Central Oahu for which student generation sample data is available. The 2000 Census sample data by housing type are shown in Table 40. The student generation rates for Ewa/Central Oahu area are higher than the state-wide average for both single-family and multi-family housing. The data suggests that student generation rates for new housing in the Ewa/Central Oahu area will be higher than the state-wide average.

**Table 40
EWA/CENTRAL OAHU STUDENT GENERATION RATES, 2000**

	Public Students	Total Units	Students/ Unit
Elementary	10,857	36,986	0.2935
Middle School	6,798	36,986	0.1838
High School	7,944	36,986	0.2148
Total, Single-Family*	25,599	36,986	0.6921
Elementary	3,450	16,800	0.2054
Middle School	2,752	16,800	0.1638
High School	2,090	16,800	0.1244
Total, Multi-Family	8,292	16,800	0.4936
All Housing Types	33,891	53,786	0.6301

* includes single-family detached, single-family attached and duplex units

Source: U.S. Census Bureau, weighted 2000 PUMS 5% sample data for PUMA 307; students per unit is ratio of public school students to total dwelling units (occupied plus vacant); public school students are defined as persons attending preschool through 12th grade in public school.

Since there is no existing development in the Central Oahu case study area, it is not possible to calibrate the 2000 Census student generation rates based on actual student enrollment and housing in this area. One possibility would be to estimate actual student generation rates for the Waipahu and Mililani high school complex areas, since the development in these two areas

is very similar to what is planned for the Central Oahu case study area. Unfortunately, existing housing data for this area could not be obtained. Therefore, for purposes of this analysis, it was considered reasonable to assume that student generation rates in Central Oahu would be similar to those in the Ewa area, which were derived from the same Census geography and calibrated to actual conditions in the Ewa planning area. Consequently, the Ewa/Central Oahu rates have been calibrated by adjusting them based on the Ewa case study adjustment factors, as shown in Table 41.

Table 41
EWA/CENTRAL OAHU CALIBRATED STUDENT GENERATION RATES

	2000 Students/ Unit	Adjustment Factor	Calibrated Students/ Unit
Elementary	0.2935	1.1493	0.3373
Middle School	0.1838	0.6216	0.1143
High School	0.2148	1.0105	0.2171
Total, Single-Family*	0.6921		0.6687
Elementary	0.2054	1.1493	0.2361
Middle School	0.1638	0.6216	0.1018
High School	0.1244	1.0105	0.1257
Total, Multi-Family	0.4936		0.4636
All Housing Types	0.6301	0.9348	0.5890

* includes single-family detached, single-family attached and duplex units

Source: 2000 students per unit from Table 40; Ewa case study adjustment factors from Table 55.

Student generation rates by housing unit age for the Ewa/Central Oahu sample area are considered in order to establish the applicability of the calibrated student generation rates for new housing in the case study area. As shown in Table 42, the public school generation rates by housing unit age show that new dwelling units in the Ewa/Central Oahu area have slightly lower student generation rates than units that are older than 11 years.

In general, this table shows that, for large areas with a substantial existing “mature” housing stock as well as significant ongoing new housing development, variations over time in area-wide student generation rates are relatively minor and do not indicate a definite declining (or increasing) trend. Some members of the Working Group expressed concern that the Ewa/Central Oahu student generation rates are only reflective of the early years of a development, when there are many young families with school-aged children, and that long-term student generation rates would be lower as families in existing housing units age. While such a student generation “hump” may occur in certain residential developments, it is not reflected in student generation rates for the Ewa/Central Oahu case study area. The consultant team considers the relative stability of the Ewa/Central Oahu student generation rates to be a reasonable representation of what can be expected to occur in all of the school impact districts that could be established in Hawaii.

**Table 42
EWA/CENTRAL OAHU STUDENT GENERATION BY AGE OF UNIT**

Housing Type	All Units	Age of the Housing Unit (Years)			
		0-5	6-10	11-20	>20
Single-Family*	0.692	0.705	0.756	0.713	0.652
Multi-Family	0.494	0.296	0.290	0.670	0.677
All Housing Types	0.630	0.583	0.545	0.703	0.658
Sample Size	2,206	338	467	427	974

* includes single-family detached, single-family attached and duplex units

Source: Unadjusted multipliers from U.S. Census Bureau, 2000 PUMS 5% sample data for Hawaii Puma 307; multipliers are ratios of public school students to total dwelling units; public school students are defined as persons attending preschool through 12th grade in public school; age of unit based on year built, with 0-5 years old being units built 1995 through 2000, etc.

Existing School Facilities

The Central Oahu case study area is within or bordered by three DOE high school complex areas in two school districts. The complexes include Pearl City and Waipahu in the Leeward District and Mililani in the Central District. Of these, most of the current growth is concentrated in the Waipahu High School complex, with future growth likely to occur with new residential development planned in areas included in the Mililani and Pearl City complex areas. However, the case study area is expected to become its own complex area once the new schools serving the developments are completed.

In the short-term, development in the Central Oahu case study area will be served by existing schools in neighboring complexes. The inventory of school facilities, current enrollment and current design capacity for each school in the Central Oahu planning area are shown in Table 43. In total, each complex is near or above total capacity based on current enrollment and design capacity. All of the Central Oahu planning area high schools and all but one of the middle schools are above capacity. There is considerably more variation in the enrollment and capacity available in elementary schools. However, since elementary schools serve much smaller geographic areas than middle or high schools, it likely would not be feasible to utilize available elementary school classroom space in an already developed part of a high school complex area to accommodate students from new housing development in a different area.

**Table 43
CENTRAL OAHU SCHOOL FACILITY INVENTORY**

Type	Capacity 04-05	Enroll 05-06	% of Exist Cap.	Classrooms		
				Perm.	Portable	% Port.
Elementary	4,425	3,917	89%	218	26	10.7%
Middle	1,005	1,021	102%	46	7	13.2%
High School	1,734	2,007	116%	96	4	4.0%
Total, Pearl City Complex	7,164	6,945	97%	360	37	9.3%
Elementary	4,900	4,890	123%	203	61	23.1%
Middle	1,293	1,361	105%	63	7	10.0%
High School	2,071	2,458	119%	89	25	21.9%
Total, Waipahu Complex	8,264	8,709	105%	355	93	20.8%
Elementary	4,229	3,596	80%	183	42	18.7%
Middle	1,821	1,833	101%	63	8	11.3%
High School	2,190	2,411	110%	82	27	24.8%
Subtotal, Mililani	8,240	7,840	95%	328	77	19.0%
Elementary	13,554	12,403	92%	604	129	17.6%
Middle	4,119	4,215	102%	172	22	11.3%
High School	5,995	6,876	115%	267	56	17.3%
Total, Central Oahu	23,668	23,494	99%	1,043	207	16.6%

Source: State of Hawaii Public School current enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004."

It should be noted that impact fees cannot be used to address the existing deficiencies, such as replacing portable classrooms with permanent buildings or addressing overcrowding in existing facilities. As with all impact fee revenue, impact fee revenue collected in the Central Oahu case study area would need to be utilized for new school facilities located within the case study area.

Impact Fee Schedule

The land cost schedule in Table 44 reflects the Ewa/Central Oahu area student generation rates and the state-wide provision of acres per student. The total cost of land will vary based on market rates; however, DOE has utilized a land value assumption of \$350,000 per acre for Central Oahu in recent Fair Share analyses, which will be utilized for illustrative purposes in this analysis. Based on the assumed cost per acre, the land cost component of the impact fee would range from \$3,028 for multi-family units to \$4,606 for single-family units.

Table 44
EWA/CENTRAL OAHU LAND COST SCHEDULE

	Students/ Unit	Acres/ Student	Acres/ Unit	Cost/ Acre*	Fee/ Unit
Elementary	0.3373	0.0156	0.00526	\$350,000	\$1,841
Middle School	0.1143	0.0110	0.00126	\$350,000	\$441
High School	0.2171	0.0306	0.00664	\$350,000	\$2,324
Total, Single-Family**			0.01316		\$4,606
Elementary	0.2361	0.0156	0.00368	\$350,000	\$1,288
Middle School	0.1018	0.0110	0.00112	\$350,000	\$392
High School	0.1257	0.0306	0.00385	\$350,000	\$1,348
Total, Multi-Family			0.00865		\$3,028

* Cost per acre assumed for illustrative purposes

** includes single-family detached, single-family attached and duplex units

Source: Students per unit from Table 41; acres per student from Table 26; cost per acre assumed.

As discussed earlier, new development should not be charged for a higher level of service than is being provided to existing development. In this study, the level of service is measured by the percent of classrooms that are in permanent structures, as opposed to portable buildings. The state-wide cost per student is based on “brick and mortar” school construction, not on the much lower cost of portable buildings. The state-wide cost per student should be multiplied by the percent of classrooms in permanent structures in Central Oahu schools to derive the adjusted cost per student station that reflects the existing level of service in the case study area. The adjusted construction cost per student is shown in Table 45.

Table 45
CENTRAL OAHU ADJUSTED CONSTRUCTION COST PER STUDENT

Grade Level	Building Cost/ Student	% Perm. Classrooms	Adj. Cost/ Student
Elementary	\$35,357	82.4%	\$29,135
Middle	\$36,097	88.7%	\$32,004
High	\$64,780	82.7%	\$53,549

Source: Construction cost from Table 30; share of permanent classrooms from Table 43.

The construction cost per dwelling unit for Central Oahu development is based on the Ewa/Central Oahu student generation rate and the adjusted Central Oahu construction cost per student. The Central Oahu area construction cost factor is the same as Honolulu. The school construction cost per dwelling unit is shown in Table 46. The cost per unit for Central Oahu is higher than the state-wide average (see Table 32), because of the Ewa/Central Oahu area’s higher student generation rate.

Table 46
CENTRAL OAHU SCHOOL CONSTRUCTION COST PER DWELLING UNIT

	Students/ Unit	Adj. Cost/ Student	Cost/ Unit
Elementary	0.3373	\$29,135	\$9,827
Middle School	0.1143	\$32,004	\$3,658
High School	0.2171	\$53,549	\$11,625
Total, Single Family*			\$25,110
Elementary	0.2361	\$29,135	\$6,879
Middle School	0.1018	\$32,004	\$3,258
High School	0.1257	\$53,549	\$6,731
Total, Multi-Family			\$16,868

* includes single-family detached, single-family attached and duplex units
Source: Students per unit from Table 41; cost per student from Table 30.

As with the state-wide calculation (pages 47-50), the construction cost per dwelling unit must be adjusted to reflect the capital funding and debt funding credits. The credit for all areas of the state is the same as calculated state-wide (see Table 38). The net impact fee schedule for Central Oahu is shown in Table 47. The fee schedule combines the land and construction elements and subtracts the credit per unit.

Table 47
CENTRAL OAHU MAXIMUM IMPACT FEE SCHEDULE

Unit Type	Single-Family	Multi-Family
Fee in-Lieu of Land*	\$4,606	\$3,028
Construction Cost per Unit	\$25,110	\$16,868
Revenue Credit per Unit	\$2,786	\$1,428
Maximum Impact Fee Per Unit	\$22,324	\$15,440
Total Contribution per Unit	\$26,930	\$18,468

* based on assumed average land cost of \$350,000 per acre
Source: Land fee in-lieu per unit from Table 44; construction cost per unit from Table 46; credit per unit from Table 38.

Demand for New School Facilities

Based on expected development, DOE forecast the need for seven new elementary schools, three new middle schools and two new high schools in Central Oahu by 2025 as part of the *Central Oahu Sustainable Communities Plan*. As part of the planning process in Central Oahu and developer fair-share agreements, one elementary school has been constructed in Mililani Ike, and site requirements have been established for four additional elementary schools, two middle schools and two high schools.

Central Oahu is expected to experience moderate growth through 2025. The *Central Oahu Sustainable Communities Plan* anticipates that the population will grow from 149,000 people in 2000 to over 173,000 in 2025.¹⁰ In order to accommodate the projected growth through 2025, the *Sustainable Communities Plan* anticipates the construction of 11,000 new housing units, or approximately 450 units per year. However, higher rates of growth are possible depending on local economic conditions and housing demand, with absorption rates of more than 1,000 units per year possible as experienced during the 1990 to 1995 period.

The two planned developments included in this case study contain a large amount of development for the Central Oahu Plan area. Castle & Cooke's Koa Ridge project calls for a mix of approximately 6,200 single- and multi-family homes. Gentry's Waiawa development plan includes several phases with a total of 12,680 single- and multi-family homes. The Koa Ridge project is still in the planning phase and has not received all of the regulatory approval; the Waiawa development has been approved with initial occupancy expected in 2009.

Table 48 illustrates the necessary new school facilities related to planned development in Waiawa and Koa Ridge based on student generation rates per unit calculated in this report. It is expected that the developments in Waiawa and Koa Ridge would likely generate 10,543 students. The total number of new schools needed to accommodate the students would vary based on the designed school capacity. However, it is expected that the Waiawa development would need five elementary schools, three middle schools, and one or two high schools. New schools in Koa Ridge would include two elementary schools, one middle school and one small high school. It should be noted that the forecast need for new school facilities does not account for existing deficiencies in neighboring districts, since such facilities could not be constructed from impact fee funds if the deficiency is due to existing development.

Table 48
CENTRAL OAHU DEMAND FOR SCHOOL FACILITIES

School	Planned Units		Students/Unit		New Students	Students Per School	New Schools
	Single-Family	Multi-Family	Single-Family	Multi-Family			
Elementary	6,090	6,590	0.3373	0.2361	3,610	550	7
Middle School	6,090	6,590	0.1143	0.1018	1,367	600	2
High School	6,090	6,590	0.2171	0.1257	2,151	1,000	2
Subtotal, Waiawa	6,090	6,590			7,128		11
Elementary	2,640	3,560	0.3373	0.2361	1,731	550	3
Middle School	2,640	3,560	0.1143	0.1018	664	600	1
High School	2,640	3,560	0.2171	0.1257	1,021	1,000	1
Subtotal, Koa Ridge	2,640	3,560			3,416		5
Total	8,730	10,150			10,543		16

Source: New units based on development plans, share of single-family and multi-family based on proportion of units in early phases of developments; students per unit from Table 41; new demand a factor of total units times student/unit; students per school based on current DOE school facility design standards; new schools based on total need divided by students per school.

¹⁰*Central Oahu Plan*, Chapter 2.1.

Table 49 shows the total number of acres necessary for new schools based on the demand for new school facilities. Based on the land component calculations updated in this report, Waiawa would need 137 acres and Koa Ridge would require 66 acres to accommodate demand for new schools related to new residential construction. Based on the total acres required to accommodate new student demand, the total cost of land component is estimated to be \$70.9 million. The total cost of land is based on the land cost assumption of \$350,000 per acre utilized in developing the land component of the impact fee schedule for Central Oahu; the actual value of land would need to be determined through appraisals of the market value of an improved school site.

**Table 49
CENTRAL OAHU SCHOOL LAND NEEDS**

Development	New Students	Acres per Student	Total Acres	Cost per Acre	Total Cost
Elementary	3,610	0.0156	56	\$350,000	\$19,710,906
Middle School	1,367	0.0110	15	\$350,000	\$5,262,754
High School	2,151	0.0306	66	\$350,000	\$23,031,876
Subtotal, Waiawa	7,128		137		\$48,005,536
Elementary	1,731	0.0156	27	\$350,000	\$9,451,194
Middle School	664	0.0110	7	\$350,000	\$2,557,016
High School	1,021	0.0306	31	\$350,000	\$10,931,012
Subtotal, Koa Ridge	3,416		66		\$22,939,222
Total	10,543		203		\$70,944,758

Source: New students from Table 48; acres per student from Table 25; cost per acre based on \$350,000 per acre.

The total estimated cost of construction per unit calculated based on recent school construction costs would be \$387.4 million, as shown in Table 50.

**Table 50
CENTRAL OAHU SCHOOL CONSTRUCTION NEEDS**

Development	New Students	Cost per Student	Total Cost
Elementary	3,610	\$29,135	\$105,178,982
Middle School	1,367	\$32,004	\$43,747,836
High School	2,151	\$53,549	\$115,157,232
Subtotal, Waiawa	7,128		\$264,084,049
Elementary	1,731	\$27,382	\$47,397,913
Middle School	664	\$32,004	\$21,255,777
High School	1,021	\$53,549	\$54,654,037
Subtotal, Koa Ridge	3,416		\$123,307,727
Total	10,543		\$387,391,776

Source: New students from Table 48; construction cost per student from Table 45.

Based on the anticipated student enrollment, land cost and construction cost, the total capital cost per student in Central Oahu would be \$43,472, as shown in Table 51.

Table 51
CENTRAL OAHU NET CAPITAL COST PER STUDENT

Land Cost	\$70,944,758
Construction Cost	\$387,391,776
Total Capital Cost	\$458,336,534
Anticipated Students	10,543
Cost per Student	\$43,472

Source: Land cost from Table 49; construction cost from Table 50; anticipated students from Table 48.

Comparison with Existing Fair Share Contributions

A comparison of the Fair Share-based developer contribution and the impact fee calculation are shown in Table 52. The land component for the impact fee would cover the full cost of land, whereas the current Fair Share calculation covers only 56.5 percent of the land component. As with the current Fair Share calculation, a developer would have the option of paying an impact fee for land based on the fair market value of suitable land or provide sites for new school facilities. For the school construction component, 90.8 percent of the estimated cost of facility construction would be covered by the impact fee schedule calculated for Central Oahu, while the current Fair Share calculation for the construction cost component would cover only 9.2 percent of the cost of new facilities. The impact fee construction cost schedule calculated in this report is based on the most current available cost, student generation rate and tax credit data and represents the maximum fee that could be charged, while the construction cost component of the existing Fair Share contribution represents only half of the original net construction cost calculated in the 2001 report.

Table 52
CENTRAL OAHU FAIR SHARE COMPARISON

Unit Type	Units	Current Fair Share Calc.			Impact Fee		
		Acres	Land Cost	Construction	Acres	Land Cost	Construction
Single-Family	6,090	54.7	\$19,145,000	\$15,474,690	80.1	\$28,050,540	\$135,953,160
Multi-Family	6,590	23.5	\$8,225,000	\$6,570,230	57.0	\$19,954,520	\$101,749,600
Total, Waiawa	12,680	78.2	\$27,370,000	\$22,044,920	137.1	\$48,005,060	\$237,702,760
Single-Family	2,640	23.7	\$8,295,000	\$6,708,240	34.7	\$12,159,840	\$58,935,360
Multi-Family	3,560	12.7	\$4,445,000	\$3,549,320	30.8	\$10,779,680	\$54,966,400
Total, Koa Ridge	6,200	36.4	\$12,740,000	\$10,257,560	65.5	\$22,939,520	\$113,901,760
Total	18,880	114.6	\$40,110,000	\$32,302,480	202.7	\$70,944,580	\$351,604,520

Source: Current Fair Share agreement from State of Hawaii Department of Education, Facilities Development Branch, April 10, 2006; land impact fee calculation based on total units by type and acres/unit or fee/unit from Table 44; construction share of fee based on total units by type, construction fee less credit per unit for Central Oahu from Table 47.

The calculations for each development in Table 52 reflects the total fees at build-out. To date, only one developer has negotiated agreements with DOE for their Fair Share contribution for initial phases of their developments. The Koa Ridge development Fair Share contribution agreement will not be negotiated until the development has gone through the State Land Use Commission.

The Waiawa development has received State approval and has negotiated a Fair Share agreement with DOE. The agreement requires the developer to provide 52.4 acres for school sites or make a fee-in-lieu payment equal to the fair market value of such lands, and also requires an additional 31.6 acres to be made available for purchase by DOE at fair market value. In addition to the land contribution, the developer has agreed to a construction contribution of \$997 per multi-family unit and \$2,541 per single-family unit, payable upon completion and sale of each unit. In order to account for future construction cost increases, the developer has agreed to a fee escalation clause that increases the construction contribution fee for each unit after January 2006 by the year-over-year change in the Honolulu Area Consumer Price Index issued by the Bureau of Labor Statistics.

Under an impact fee system, DOE could collect significantly more money from development to offset the cost of new school construction. An impact fee would apply equally to all development in the target areas, regardless of the need for a development to get State Land Use Commission approval and potentially inconsistent application of negotiated Fair Share agreements.

Chapter 6: Ewa Case Study

This second case study area was conducted in order to demonstrate how an impact fee could be applied to areas where new “non-greenfield” development is occurring. For this study, non-greenfield development is new residential development occurring on scattered sites among existing developments. Such development may include individual units in older neighborhoods or large residential projects adjacent to existing development. The key characteristic of the non-greenfield growth areas, or “school impact districts,” is that new development essentially shares the existing and new facilities with existing housing units.

There are several areas of the state where scattered site development in areas with existing development may contribute to increased enrollment and the need for new school facilities. Such areas include the Campbell and Kapolei high school complex areas in the Ewa area of Oahu, the Wailuku/Kahului area on Maui and the Kau area of Hawaii.

The Ewa area was chosen as a focus for the second case study because it is a representative example of a non-greenfield area. Overall, the two Ewa high school complexes, Campbell and Kapolei, are both projected to have significant housing development and a future need for new schools. In addition, both the Campbell and Kapolei complexes contain areas that were developed prior to 2000, existing school facilities, and scattered new residential development.

The Ewa case study area provides a broad range of types of development, including large, contiguous “greenfield”-like projects, smaller scattered development projects, redevelopment and infill in established residential area, and resort residential development. Any area suitable for the non-greenfield approach to school impact fees will present the same kinds of issues that arise from the fact that new development will be sharing school facilities with existing development. These issues include existing deficiencies or excess capacity, as well as the potential for some existing capacity that is currently utilized to become available in the future to serve new development as student enrollment from existing housing declines.

This section develops a model non-greenfield methodology through an analysis of the Ewa case study area in order to address the issues that will be confronted when establishing school impact districts in suitable non-greenfield areas.

Figure 4
EWA PLANNING AREA



Study Area

On Oahu, Ewa refers to part of the leeward coast area of the island; however, for planning purposes, the City and County of Honolulu defines Ewa as the southwest corner of the island. The Ewa area's planning boundaries are illustrated in Figure 4. The area's eastern boundary is defined by the West Loch of Pearl Harbor and Kunia Road, with the northern boundary defined by the urban growth boundary that follows the H-1 Freeway and Farrington Highway to the ocean. The study area includes Campbell Industrial Park, Makakilo, Ewa Beach, Kapolei, Ko Olina and the former Barber's Point U.S. Air Force base.

Historically, the Ewa area was important to the state's sugar industry as well as support center for the U.S. military. The Campbell Industrial Park opened in the early 1960s, followed by residential growth in Makakilo and Ewa Beach. In 1977, the Honolulu City Council designated the Ewa area as the location for a Secondary Urban Center for Oahu to be centered in the Kapolei area. Since 1990 the area has experienced rapid development, and is expected to continue its rapid growth trend through 2030, as shown in Table 53.

Table 53
EWA PLANNING AREA GROWTH, 1990-2030

Year	Population	Annual Growth
1990	42,931	NA
2000	66,452	4.5%
2005	84,355	4.9%
2010	95,665	2.5%
2020	140,313	3.9%
2030	182,628	2.7%

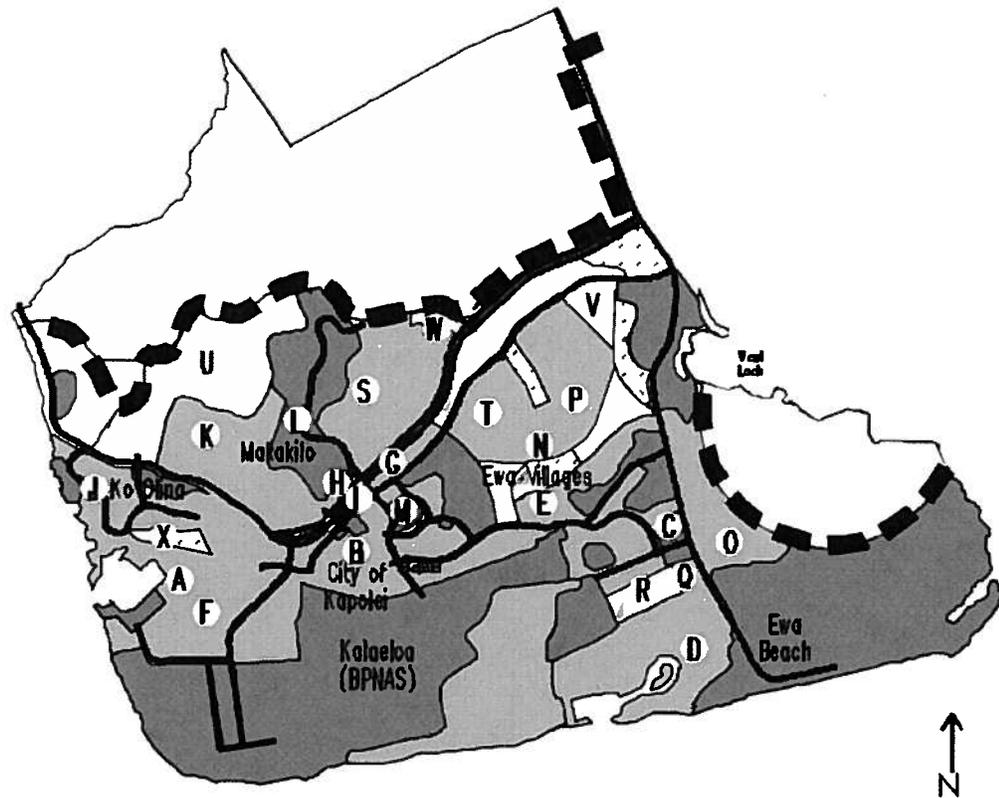
Source: City and County of Honolulu Planning Department, October 27, 2006.

Planned development in the area is illustrated in Figure 5. In addition to the development of new neighborhoods and communities, additional development within existing areas will continue in the future. According to Honolulu City/County planning staff, future development will include more than 57,000 housing units. Major future developments include East Kapolei, Department of Hawaii Homelands, Ewa Makai, Kapolei West and Makaiwa Hills. The existing developments currently under development include Gentry Ewa Makai, Ocean Pointe, City of Kapolei, Villages of Kapolei, Makakilo Extension, and Ko Olina. The old Naval Air Station housing is also being converted to civilian use.

Some areas within the case study area, such as the area north of Ewa Villages, may ultimately be suitable for the "greenfield" approach used in the Central Oahu case study. There may be other large areas of greenfield development, such as Makawa Hills, where because of topography, children are likely to attend at least high schools that are located in developed areas, so that the greenfield approach would not be appropriate. Resort residential development in some areas, such as Ko Olina, may need to be excluded from the impact fee on the grounds that it is not likely to generate school children.

The areas that are determined to be suitable for “greenfield” impact fees may be different enough that it is determined that separate analysis should be used to develop different fees. This analysis develops an impact fee schedule for the entire Ewa area, which includes the enrollment areas for the Kapolei and Campbell complex areas.

**Figure 5
EWA AREA EXISTING AND PLANNED DEVELOPMENT**



LEGEND

Phase I (1995–2005)

Previously Approved

- A Barbers Point Harbor
- B City of Kapolei
- C Ewa by Gentry
- D Ewa Marina
- E Ewa Villages
- F Kapolei Business Park
- G Kapolei Knolls
- H Kapolei Mauka
- I Kapolei Shopping Center
- J Ko Olina
- K Makaiwa Hills
- L Makakilo
- M Villages of Kapolei

Proposed

- N DHHL
- O Fairways Residential
- P East Kapolei (Schuler)
- Q Lualani Commercial
- R Lualani Residential
- S Makakilo Extension
- T HFDC (State Land Bank)

Phase II (2006–2015)

- U Makaiwa Hills
- V Kapolei East (Campbell)
- W Kapolei North
- X Kapolei LDA
- P East Kapolei (Schuler)
- T HFDC State Land Bank
- R Lualani Residential

Phase III (2016 and Beyond)

- T HFDC (State Land Bank)
- V Kapolei East (Campbell)
- X Kapolei LDA

- Non-Urban Areas
- Existing Urban Areas
- Urban Expansion 1995–2005
- Urban Expansion 2006–2015
- Urban Expansion 2016 and Beyond
- ▬ Urban Growth Boundary

Service and Facility Standards

Service and facility standards in Ewa should meet the service standards established by the Department of Education for both site size and school construction. Ideally, school sites should meet the design guidelines established by the DOE. However, in developing the impact fee charged for new development, the existing level of service for the area in which the greenfield developments are to occur must be considered in order to satisfy the legal requirement that new development not pay for a higher level of service than existing development.

The impact fee for the Ewa area is based on localized student generation rates. The analysis of student generation rates includes examining the 2000 U.S. Census student generation rates for the area that includes Ewa and Central Oahu, and comparing that to actual student generation in 2000 and 2006 for the Ewa planning area. The local generation rates are compared with student generation rates for the Ewa planning area by age of the housing unit and recent student generation rates for new development compiled by DOE in order to determine if the new development generates a similar number of new students as existing development.

Actual student generation rates in Ewa can be determined based on public school enrollment in the two complex areas that comprise the Ewa case study area. As shown in Table 54, the actual student generation rate for all types of housing in Ewa was 0.537 per unit. The actual rate is higher than both the current DOE assumption utilized in the current Fair Share calculation (0.412 for all housing) and the state-wide rate calculated based on U.S. Census data (0.422 for all housing). The higher actual student generation rate in Ewa compared to state-wide averages is likely the result of a predominance of single-family housing, fewer vacation homes and development that is predominately occupied by full-time residents and families. On the other hand, the actual Ewa student generation rate is lower than the Census data for the Ewa/Central Oahu area (0.630 for all housing), which is one reason that the sample Census data needs to be calibrated to actual conditions.

Table 54
EWA STUDENT GENERATION RATE, 2000

Campbell Complex Enrollment	7,665
Kapolei Complex Enrollment	3,525
Total Enrollment, 2000	11,190
Housing Units, 2000	20,854
Student Generation Rate	0.5366

Source: School enrollment from DOE; housing units from Honolulu Department of Planning and Permitting, Planning Division, "General Demographic Characteristics: 2000-Ewa."

To develop the current student generation rates in the Ewa case study area, the expected public school students based on the number of estimated dwelling units in 2006 and the student generation rates derived from the 2000 U.S. Census sample data are compared to the actual public school enrollment in the Campbell and Kapolei complexes for the current school year. As Table 55 shows, the Census multipliers under-estimate elementary enrollment and over-

predict middle school enrollment, due primarily to the differences between definitions of grade levels, as discussed in the state-wide analysis.

**Table 55
EWA AREA EXPECTED AND ACTUAL STUDENTS, 2006**

Housing Type/ Grade Level	2006 Units	Student Generation Rates	Expected Students	Actual Students	Adjust- ment Factors
Single-Family:*					
Elementary	15,548	0.2935	4,563		
Middle	15,548	0.1838	2,858		
High	15,548	0.2148	3,340		
Multi-Family:					
Elementary	9,868	0.2054	2,027		
Middle	9,868	0.1638	1,616		
High	9,868	0.1244	1,228		
All Dwelling Units:					
Elementary			6,590	7,574	1.1493
Middle			4,474	2,781	0.6216
High			4,568	4,616	1.0105
Total			15,632	14,971	

* includes single-family detached, single-family attached and duplex units

Source: Total 2006 units based on 2000 units plus new unit permits from City/County of Honolulu Department of Planning, *Annual Report, "Status of Large Private Housing Projects,"* 2001 to 2005; new units allocated to single-family and multi-family based on allocation of 2000 units (61.2% single-family and 38.8% multi-family); student generation rates from Table 40; actual enrollment from Hawaii Department of Education.

The student generation rates for the Ewa/Central Oahu sample data have been calibrated by adjusting them by the factors calculated in the previous table, as shown in Table 56. These are the same student generation rates used for the Central Oahu case study.

**Table 56
EWA/CENTRAL OAHU CALIBRATED STUDENT GENERATION RATES**

	2000 Students/ Unit	Adjust- ment Factor	Calibrated Students/ Unit
Elementary	0.2935	1.1493	0.3373
Middle School	0.1838	0.6216	0.1143
High School	0.2148	1.0105	0.2171
Total, Single-Family*	0.6921		0.6687
Elementary	0.2054	1.1493	0.2361
Middle School	0.1638	0.6216	0.1018
High School	0.1244	1.0105	0.1257
Total, Multi-Family	0.4936		0.4636
All Housing Types	0.6301	0.9348	0.5890

* includes single-family detached, single-family attached and duplex units

Source: 2000 students per unit from Table 40; adjustment factors from Table 55.

DOE has surveyed new development and matched student enrollment by address in several Ewa area developments in order to establish a student generation rate for new development in the Ewa area. As shown in Table 57, the DOE data provides further evidence in support of the calibrated student generation rate calculated in Table 56. The student generation rates for the Ewa case study area will be based on the calibrated rates.

Table 57
EWA AREA NEW DEVELOPMENT STUDENT GENERATION RATES

Development	Total Units	Enrollment	Generation Rate
West Loch	1,593	793	0.4978
Ewa by Gentry (above Iroquois Rd.)	1,501	906	0.6036
Ewa by Gentry (below Iroquois Rd.)	892	650	0.7287
Total	3,986	2,349	0.5893

Source: State of Hawaii Department of Education, Information Technology Services, October 2006.

The consultants were originally expecting that development in non-greenfield areas might have less net impact than one would expect by looking at student generation rates for new units, because students generation rates for older units would be declining and freeing up some capacity that could be utilized by students from new units. In fact, the data on student generation rates by housing unit age for the Ewa/Central Oahu sample area, presented in Table 42 in the Central Oahu case study chapter, show that older dwelling units (more than ten years old) actually have somewhat higher student generation rates than newer units. In addition, the data presented above show that the average student generation rate for all units in the Ewa area actually increased from 0.537 students per unit in 2000 to 0.589 students per unit in 2006.

Some members of the Working Group expressed concern that the student generation rates are reflective of the early years of a development, when there are many young families with school-aged children, and that long-term student generation rates would be lower as families age in the units. While this student generation “hump” may occur in certain residential developments, it is not reflected in student generation rates determined from larger areas, as the foregoing analysis has demonstrated.

Existing Ewa School Facilities

As previously mentioned, the Ewa case study area includes the Campbell and Kapolei High School complex enrollment areas. The inventory of school facilities, current enrollment and current design capacity for each school in the Ewa complexes are shown in Table 58. In total, each complex is near total capacity based on current enrollment and design capacity. Both of the Ewa area high schools and one of the middle schools are above capacity. There is considerably more variation in the enrollment and capacity available in elementary schools. However, since elementary schools serve much smaller geographic areas than middle or high schools, it likely would not be feasible to utilize available elementary school classroom space in an already developed part of a high school complex area to accommodate students from new housing development in a different area.

It should be noted that impact fees cannot be used to address the existing deficiencies, such as replacing portable classrooms with permanent buildings or addressing overcrowding in existing facilities. As with all impact fee revenue, impact fee revenue collected in the Ewa case study area would need to be utilized for new school facilities located within the case study area.

Table 58
EWA SCHOOL FACILITY INVENTORY

School	Capacity 05-06	Enroll 05-06	% of Exist Cap.	Classrooms		
				Perm.	Portable	% Port.
Ewa Beach	611	665	109%	31	1	3.1%
Ewa Elem	844	933	111%	39	1	2.5%
Holomua	1,185	1,442	122%	40	8	16.7%
Iroquois Point	935	563	60%	36	19	34.5%
Kaimiloa	729	679	93%	28	14	33.3%
Ocean Pointe ('07)*	na	na	na	na	na	na
Pohakea	681	551	81%	30	6	16.7%
Ilima Inter	1,230	1,201	98%	59	6	9.2%
Ewa Makai ('09)	na	na	na	na	na	na
Campbell High	2,199	2,283	104%	107	13	10.8%
Total, Campbell Complex	8,414	8,317	99%	370	68	15.5%
Barbers Point	636	529	83%	54	27	33.3%
Kapolei Elem	1,291	1,126	87%	36	7	16.3%
Makakilo	566	509	90%	38	12	24.0%
Mauka Lani	669	577	86%	34	5	12.8%
Kapolei II Elem ('10)	na	na	na	na	na	na
Kapolei Middle	1,501	1,580	105%	41	10	19.6%
Kapolei High	1,953	2,333	119%	63	7	10.0%
Total, Kapolei Complex	6,616	6,654	101%	266	68	20.4%
Elementary	8,147	7,574	93%	366	100	21.5%
Middle	2,731	2,781	102%	100	16	13.8%
High School	4,152	4,616	111%	170	20	10.5%
Total, Ewa	15,030	14,971	100%	636	136	17.6%

*Ocean Pointe will open as Keoneula Elementary School in January 2007.

Source: State of Hawaii Public School capacity and current enrollment from Appendix H.

Impact Fee Schedule

As with the greenfield impact fee, the impact fee calculation for the Ewa case study utilizes Ewa/Central Oahu student generation rates and level of service, and local real estate and construction costs in the Ewa area, to determine the land and construction impact fee schedule.

The land dedication requirements and illustrative fees-in-lieu for the Ewa case study are the same as for the Central Oahu case study, since both case studies use the same Ewa/Central

Oahu student generation rates and state-wide acres per student ratios. The schedule is presented in Table 44.

In order to develop the construction cost schedule for Ewa, the state-wide cost per student must be adjusted by local student generation rates and level of service. The Ewa area construction cost factor is the same as Honolulu.

As discussed earlier, new development should not be charged for a higher level of service than is being provided to existing development. In this study, the level of service is measured by the percent of classrooms that are in permanent structures, as opposed to portable buildings. The state-wide cost per student is based on “brick and mortar” school construction, not on the much lower cost of portable buildings. The state-wide cost per student should be multiplied by the percent of classrooms in permanent structures in Ewa complex schools to derive the adjusted cost per student station that reflects the existing level of service in the Ewa case study area. The adjusted construction cost per student is shown in Table 59.

Table 59
EWA ADJUSTED CONSTRUCTION COST PER STUDENT

Grade Level	Cost/ Student	% Perm. Classrooms	Adj. Cost/ Student
Elementary	\$35,357	78.5%	\$27,770
Middle	\$36,097	86.2%	\$31,118
High	\$64,780	89.5%	\$57,961

Source: Construction cost per student from Table 30; percent of classrooms in permanent buildings from Table 58.

The construction cost per student per dwelling unit for the Ewa case study area is based on the local Ewa/Central Oahu student generation rates and the adjusted construction per student. The Ewa school construction cost per dwelling unit is shown in Table 60. As with the Central Oahu case study, the cost per unit for Ewa is higher than the state-wide average (see Table 32), because of the Ewa/Central Oahu area’s higher student generation rate.

Table 60
EWA SCHOOL CONSTRUCTION COST PER DWELLING UNIT

	Students/ Unit	Adjusted Cost/ Student	Cost/Unit
Elementary	0.3373	\$27,770	\$9,367
Middle School	0.1143	\$31,118	\$3,557
High School	0.2171	\$57,961	\$12,583
Total, Single Family*			\$25,507
Elementary	0.2361	\$27,770	\$6,556
Middle School	0.1018	\$31,118	\$3,168
High School	0.1257	\$57,961	\$7,286
Total, Multi-Family			\$17,010

* includes single-family detached, single-family attached and duplex units

Source: Students per unit from Table 56; adjusted cost per student from Table 59.

As with the state-wide net cost calculation (see pages 51-54), the construction cost per dwelling unit must be adjusted to reflect the capital funding and debt funding credits. The credit for all areas of the state is the same as calculated state-wide (see Table 38). The net impact fee schedule for the Ewa case study is shown in Table 61. The fee schedule combines the land and construction elements and subtracts the credit per unit.

**Table 61
EWA MAXIMUM IMPACT FEE SCHEDULE**

Unit Type	Single-Family	Multi-Family
Fee in-Lieu of Land*	\$4,606	\$3,028
Construction Cost per Unit	\$25,507	\$17,010
Revenue Credit per Unit	\$2,786	\$1,428
Maximum Impact Fee Per Unit	\$22,721	\$15,582
Total Contribution per Unit	\$27,327	\$18,610

* illustrative fee-in-lieu based on assumed average land cost of \$350,000 per acre
Source: Fee-in-lieu from Table 44; construction cost from Table 60; credit from Table 38.

For developments with prior Fair Share contributions or agreements, an exemption or credit based on the developer's prior contributions of land and cash would be necessary. DOE has negotiated and settled Fair Share contributions and agreements for land and/or cash from several Ewa area developments. The existing agreements include the following:

- o Gentry Ewa Makai--18 acres for school site;
- o Ocean Pointe--12 acres for school site;
- o Kapolei Knolls--\$850 per single-family unit; and
- o Mehana--5.5 acres and \$2,541 per single-family unit and \$997 per multi-family unit.

The developer of Ko Olina has set aside six acres for a school site; however, the school site was not required by DOE. DOE is currently negotiating Fair Share agreements with Campbell Estate for the West Kapolei project and has received a preparation notice in anticipation of an environmental impact statement for the Makaiwa Hills project.

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Appendix A: Act 246 Excerpts

This report has been prepared to support the deliberations of the School Impact Fee Working Group established by the 2005 Hawaii State Legislature. Act 246, Session Laws of 2005, set forth the intent of the project as follows:

As residential development continues to proceed in the State of Hawaii at a steady pace to accommodate the growth of Kamaaina families and the influx of newcomers, it becomes increasingly important that adequate infrastructure be developed to service this new construction. While this includes such obvious elements as roads, water, sewage, telephone, cable television and internet, and electricity, it also includes what is arguably the most important element, especially as regards the future – school facilities.

To date, fair share contributions have been collected by the department of education from individual development firms to defray a portion of the costs their new developments will have on the department of education. These resources, often in the form of cash and donated real estate, have traditionally been used to either improve and expand existing school facilities or to build altogether new facilities.

Both parties, the Department of Education (DOE) and the development community, would like to achieve a greater level of predictability to these arrangements. To this end, several impact fee measures were introduced during the 2004 and 2005 legislative sessions. It is the consensus of the stakeholders at this time, however, that more information needs to be gathered and more planning done to arrive at an equitable solution satisfactory to all concerned parties.

In 2001, the local planning organization Group 70, International and Duncan Associates prepared a report entitled “School Fair Share Contribution Study” which examined the existing department of education practice of assessing fair share contributions. Another report completed in 1992 entitled “Impact Fees in Hawaii: Implementing the State Law”, provided some insight into the use of impact fees for public facilities. These reports can serve as a basis upon which to build; however, they both need to be updated and in certain instances expanded.

The purpose of this Act is to establish a school impact fee working group to prepare the scope of work for:

(1) An updated overview of alternative financing methods for construction of new and expanding existing educational facilities, including analysis of how school districts accommodate growth in student population and redistribution of student population;

(2) A needs assessment study using Central Oahu as the case study; and

(3) Development of specific recommendations, based on the research and needs assessment, to implement methods for financing new or expanding existing department of education educational facilities, which may include but not be limited to proposed:

(A) Legislation;

(B) County ordinances; and

(C) Agency and commission rules and regulations.

The Act established the membership of a ten-member School Impact Fee Working Group, and designated the State Auditor's Office to provide staff support. It set forth the following tasks for the Working Group:

(1) Examine the background of the salient issues, which shall include but not necessarily be limited to an investigation and evaluation of:

(A) The 2001 Group 70, International and Duncan Associates report entitled "School Fair Share Contribution Study" and its relevancy today;

(B) The 1992 study entitled "Impact Fees in Hawaii: Implementing the State Law," and its relevancy today;

(C) The differing school facility infrastructure needs posed by:

(i) Infill and new development;

(ii) Condominium, duplex, detached single-family homes, and other types of construction; and

(iii) The varied market prices targeted by differing types of developments;

(D) Various funding mechanisms and other best practices utilized by other jurisdictions nation-wide;

(E) Current practices engaged in by the department of education to assess and collect fair-share contributions and any other relevant means of resource acquisition;

(F) Potential means of funding, including:

(i) Impact fees assessed through calculations of proportionate shares of overall development costs; and

(ii) Any other means as may be deemed appropriate by the working group; and

(G) How to improve the Department of Education projections for future facilities to be better aligned with various county plans and priorities;

(2) Conduct a case study, using Gentry, Waiawa and Koa Ridge planned developments in central Oahu, on how these issues and proposals may affect a specific, contiguous geographic area that is slated for ongoing, complex, and varied development which will probably result in the need for increased department of education facility capacity. The case study shall include a "needs assessment" which shall at a minimum include the following:

- (A) Developing service and facility standards;*
 - (B) Identifying and projecting needs for capital facility capacity;*
 - (C) Defining current deficiencies or excess capacity in existing capital facilities;*
 - (D) Separating the capital costs of new growth and development from existing capital needs;*
 - (E) Estimating capital costs on a per-unit-of-demand;*
 - (F) Apportioning the capital costs of new development to various types of land use;*
 - (G) Calculating credits for past and future tax payments toward capital facility capacity; and*
 - (H) Developing legislation, ordinances, and rules or regulations containing policies and procedures for impact fee assessment, collection, administration and appeals; and*
- (3) Provide the legislature, counties, and other interested public and private entities with measurable, specific deliverables which may include but not necessarily be limited to:*
- (A) New or revised statutes;*
 - (B) New or revised ordinances;*
 - (C) New or revised department of education procedures for consideration and possible approval by the board of education.*

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Appendix B: Draft School Impact Fee Act-Alt. 1

Using “Tailored” Student Generation Rates for Each New School Impact District

Section X. SCHOOL IMPACT FEES

(a) Findings

- (1) Major new residential construction can create additional demand for public school facilities and a need for more land on which to construct new school facilities.
- (2) Where this occurs, the new residential development should provide land or a pay a fee in-lieu of land dedication prior to subdivision approval, and should pay a school construction impact fee prior to building permit issuance, proportionate to their impact on the need to provide new school facilities.
- (3) A study commissioned by the State of Hawaii has identified the land dedication requirement and the net capital cost of constructing new schools that is consistent with proportionate fair-share principles.
- (4) The State of Hawaii hereby determines that school impact districts should be established for areas where new residential development will create the need to provide new school facilities, for the purpose of requiring such developments to:
 - (i) provide land for schools or pay a fee in-lieu of land proportionate to their impact, and
 - (ii) pay school construction impact fees proportionate to the need generated for new school construction.

(b) Definitions

The following words and terms, when used in this section, shall have the meaning ascribed to them, except when the context clearly indicates a different meaning.

- (1) “County” or “counties” means the City and County of Honolulu, the County of Hawaii, the County of Kauai, and the County of Maui.
- (2) “Developer” means a person, corporation, organization, partnership, association, or other legal entity constructing, erecting, enlarging, altering, or engaging in any development activity.
- (3) “Dwelling Unit” means a room or rooms connected together, constituting an independent housekeeping unit for a family containing a single kitchen.

- (4) “Hawaii School Impact Fee Study” means the study prepared by Group 70 International and Duncan Associates for the School Impact Fee Working Group, dated January 2007, or a subsequent similar report.
- (5) “School impact district” means a geographic area designated by the State Board of Education as either a greenfield school impact district or a non-greenfield school impact district.
 - (A) “Greenfield school impact district” is a largely undeveloped, formerly agricultural area where anticipated growth will create the need for new schools within the next ten years that will be located within the area and will primarily serve new housing units within the area.
 - (B) “Non-Greenfield school impact district” is an area that already has some existing residential development where anticipated growth will create the need for new schools or expanded schools within the next ten years.
- (6) “Multi-family” means any dwelling unit other than a single-family unit as herein defined.
- (7) “Owner” means the owner of record of real property or the owner’s authorized agent.
- (8) “Plat” means the map or drawing on which a developer’s plan of subdivision is presented and which he submits for approval.
- (9) “School facilities” means the facilities owned or operated by the Department of Education, or the facilities included in the Department of Education capital budget and/or capital facilities plan.
- (10) “Single-family” means a detached dwelling unit not connected to any other dwelling unit, or a detached building containing two dwelling units.

(c) Applicability and Exemptions

- (1) *Applicability of Land Dedication Requirement.* Except as provided below, any person or person(s) who seeks to develop residential land by applying to a county for the issuance of a subdivision approval within a designated school impact district shall be required to dedicate land for school facilities or pay a fee in lieu of dedicating that land to the Department of Education before final subdivision approval.
- (2) *Applicability of School Impact Fees.* Except as provided below, any person or person(s) who seeks to develop residential land within a designated school impact district by applying to any county for a building permit shall be required to pay a school impact fee. Assessment of impact fees shall be a condition

precedent to the issuance of a building permit and shall be paid in full to the Department of Education before issuance of the permit.

- (3) *Exemptions.* The following shall be exempt from the provisions of this section:
- (A) Any form of housing permanently dedicated exclusively for senior citizens, defined as 55 years of age or over, with the necessary covenants or declarations of restrictions recorded on the property;
 - (B) All nonresidential development; and
 - (C) Any development with an executed developer agreement with the Department of Education for the contribution of school sites and/or payment of fees for school land or school construction.

(d) Designation of School Impact Districts

- (1) *Decision by Board of Education.* The Board of Education shall designate a school impact district only after holding a public hearing. A written analysis prepared by the Department of Education supporting the designation of the school impact district as required in this subsection shall be made available to the public by the time public notice of the public hearing is required to be provided in accordance with the Board's administrative rules or applicable law, but in no event shall the analysis report be made available for public review less than two weeks prior to the public hearing. Notice of the public hearing shall at a minimum be posted in a newspaper of general circulation in the area proposed for designation. The notice shall include a map showing the location and general boundaries of the proposed school impact district and the date, time and place of the public hearing.
- (2) *Greenfield School Impact District Analysis.* Prior to the designation of a greenfield school impact district, the Department of Education shall prepare a written analysis that contains the following.
- (A) A map designating the boundaries of the area, with sufficient clarity to identify the included properties.
 - (B) A finding that existing residential development in the area is non-existent or insignificant.
 - (C) Analysis to support the need for the construction of an elementary school in the area within the next ten years, based on anticipated development in the area, and the ultimate need for a high school to be located within the area to primarily serve the anticipated housing in the area.

- (D) Analysis to support appropriate student generation rates by housing type and grade level that are representative of the type of development anticipated in the area.
 - (E) Analysis to identify the percentages of existing student stations at the elementary school, middle school and high school levels that are located in permanent structures, as opposed to portable buildings, in surrounding high school complexes.
 - (F) Analysis to determine the average value per acre of improved land in the area suitable for school construction, after construction of typical subdivision improvements such as roads, drainage and utilities.
- (3) *Non-Greenfield School Impact District Analysis.* Prior to the designation of a non-greenfield school impact district, the Department of Education shall prepare a written analysis that contains the following.
- (A) A map designating the boundaries of the area, which will include one or more high school complexes, with sufficient clarity to identify the included properties.
 - (B) Analysis to support the need to construct new or expand existing school facilities in the area within the next ten years to accommodate projected growth in the area.
 - (C) Analysis to determine appropriate student generation rates by housing type and grade level that are representative of the type of development anticipated in the area.
 - (D) Analysis to identify the percentages of existing student stations at the elementary school, middle school and high school levels that are located in permanent structures, as opposed to portable buildings, for the existing high school complex(es) within the school impact district.
 - (E) Calculation of the current level of service in the area, which shall be the ratio of current student capacity at all grade levels to the current enrollment at all grade levels, provided that the ratio shall not exceed one.
 - (F) Analysis to determine the average value per acre of improved land in the area suitable for school construction, after typical subdivision improvements such as roads, drainage and utilities.

(e) School Land or Fee In-lieu Required

The procedure for determining whether the dedication of land is required or a payment of a fee in-lieu is required for new schooling facilities is as follows:

- (1) *Proposal of Owner.* At the time of filing an application for any residential subdivision containing fifty or more acres of land, the owner or developer of the property, as a part of the filing, shall designate the area proposed to be dedicated for one or more schools, as appropriate, on the plat submitted and provide a copy of the application to the Department of Education.
- (2) *Land Shall be Usable.* When land is proposed to be dedicated for the purpose of providing a school site, it shall be land that is usable and suitably located for such purpose. The Department of Education shall determine whether a particular piece of land is usable.
- (3) *Action by the Department of Education.* Within sixty days of the acceptance of an application for a residential subdivision containing fifty or more acres, the Department of Education shall determine whether to require a dedication of land, the payment of a fee in-lieu thereof, or a combination of both. Only payment of a fee in-lieu shall be required in subdivisions containing less than fifty acres.
- (4) *Dedication Procedure.* When dedication is required, the land shall be conveyed to the State of Hawaii prior to final subdivision approval.
- (5) *Fee In-lieu Procedure.* When the payment of a fee in-lieu is required, the fee in-lieu shall be paid prior to final subdivision approval.
- (6) *Criteria for Determination.* Whether the Department of Education determines to require land dedication or the payment of a fee in-lieu, or a combination of both, shall be guided by the following criteria:
 - (A) The topography, geology, access, and location of the land in the development available for dedication.
 - (B) The size and shape of the development and the land available for dedication.
 - (C) The location of existing and/or other planned or proposed school facilities.
- (7) *Appeals.* The determination of the Superintendent of Education as to whether land shall be dedicated, whether a proposed dedication is usable land, or whether a fee in-lieu shall be paid, or a combination of both, may be appealed to the Board of Education. The Board of Education shall hear testimony at a public hearing before rendering a decision. The decision of the Board of Education shall be final.

(f) Determination of the Amount of Land or the Fee In-lieu

- (1) *Determination of the Amount of Land to be Dedicated.* The maximum required size of the tract of land to be dedicated by the developer shall be determined using the following formula:

(elementary school student generation rate per unit x 0.1056 acres/student + x middle school student generation rate per unit x 0.0110 acres/student + high school student generation rate per unit x 0.0306 acres/student) x number of dwelling units to be provided for in the project.

- (2) *Determination of the Amount of the Fee In-lieu.* The dollar amount of the fee in-lieu shall be determined using the following formula:

[acres of land calculated according to subsection (f)(1)] x [the average cost per acre of land in the development determined pursuant to subsection (f)(3)].

- (3) *Determination of Average Cost per Acre*

- (A) The fee in-lieu of land dedication for residential developments of fifty units or more shall be based on the value of the improved land, after typical subdivision improvements such as roads, drainage and utilities. A M.A.I. appraiser who is selected and paid for by the developer shall determine the value of the land. If the Department of Education does not agree with the developers appraisal the Department of Education may engage another M.A.I. appraiser at its own expense, and the value shall be an amount equal to the average of the two appraisals. If either party does not accept the average of the two appraisals, a third appraisal shall be obtained, with the cost of such third appraisal being shared equally by the Department of Education and the developer. The first two appraisers shall select the third appraiser, and the third appraisal shall be binding on both parties.

- (B) Residential subdivisions of less than fifty units shall have the option to pay a standard fee in-lieu based on an average land value determined for the area pursuant to subsection (d)(2)(F) or subsection (d)(3)(F). Alternatively, developers of such subdivisions may choose to determine the value based on an appraisal pursuant to the standards of subsection (f)(3)(A) above.

(g) School Construction Impact Fee Calculation

- (1) *Cost Districts.* The state shall be divided into the following twenty-six (26) geographically limited cost districts. The location of the cost districts is illustrated in Exhibit A [Appendix I of this report to be used as this exhibit].

Cost District	School District	Cost Factor
Honolulu	Honolulu	1.00
Ewa	Leeward/Central	1.00
Wahiawa	Central	1.05
Waialua	Central	1.10
Koolaupoko	Windward	1.00
Koolauloa	Windward	1.10
Waianae	Leeward	1.10
Hilo	Hawaii	1.15
Puna	Hawaii	1.20
Kona	Hawaii	1.20
Hamakua	Hawaii	1.20
South Kohala	Hawaii	1.20
North Kohala	Hawaii	1.25
Pohakuloa	Hawaii	1.25
Kau	Hawaii	1.30
Wailuku	Maui	1.15
Makawao	Maui	1.25
Lahaina	Maui	1.30
Hana	Maui	1.35
Molokai	Molokai	1.30
Lanai	Lanai	1.35
Lihue	Kauai	1.15
Koloa	Kauai	1.20
Kawaihau	Kauai	1.20
Waimea	Kauai	1.25
Hanalei	Kauai	1.25

- (2) *Costs per Student.* School construction impact fees shall be based on the following costs per student in the Honolulu assessment district. The cost per student in other assessment districts shall be the cost per student in the Honolulu assessment district multiplied by the appropriate cost factor in subsection (g)(1).
- (A) Elementary school cost per student in the Honolulu assessment district is \$35,357.
- (B) Middle school cost per student in the Honolulu assessment district is \$36,097.
- (C) High school cost per student in the Honolulu assessment district is \$64,780.
- (3) *Cost per Dwelling Unit.* The school construction costs per dwelling unit for single-family and multi-family housing in each designated school impact district shall be calculated according to the following formula, where the costs per student station are determined in subsection (g)(2), student generation rates are as determined in subsections (d)(2)(D) or (d)(3)(C), percentages of student stations

in permanent buildings are as determined in subsections (d)(2)(E) or (d)(3)(D), and the current level of service as determined in subsection (d)(3)(E) for non-greenfield districts (in greenfield districts, the current level of service shall be one).

[(elementary school student generation rate per unit) x (elementary school cost per student) x (percentage of existing elementary school student stations in permanent buildings)

+

(middle school student generation rate per unit) x (middle school cost per student) x (percentage of existing middle school student stations in permanent buildings)

+

(high school student generation rate per unit) x (high school cost per student) x (percentage of existing high school student stations in permanent buildings)]

x

(the current level of service)

- (4) *Revenue Credit per Unit.* The following revenue credits shall be subtracted from the school construction costs per dwelling unit determined in subsection (g)(3).

(A) Single-family dwelling unit: \$2,786.

(B) Multi-family dwelling unit: \$1,428.

- (5) *Construction Impact Fee Calculation.* The impact fees per dwelling unit shall be 30 percent¹¹ of the amounts calculated according to the following formula.

[Cost per unit from subsection (g)(3)] – [revenue credit per unit from subsection (g)(4)]

(h) Accounting and Expenditure Requirements

- (1) *Benefit Districts Established.* Each designated school impact district shall be a separate benefit district. Fees in lieu of school land dedication collected within each benefit district shall be spent only for the acquisition of school sites within the same benefit district. School impact fees collected within each benefit

¹¹ Suggested by Working Group, which recommends that the percentage not exceed 40%

district shall be spent only for the expansion of existing school or construction of new schools located within the same benefit district.

- (2) *Use of Dedicated Land.* Land dedicated by the developer shall be used only as a site for the construction of a new school or for the expansion of existing school facilities. If the land is sold the proceeds shall be used to acquire land for school facilities in the same school impact district.
- (3) *Use of the Fees.* Fees paid in-lieu of land dedication and school construction impact fees funds shall only be used for the following purposes:
 - (A) Acquisition of land for school purposes, including but not limited to, surveying, appraisals, and associated legal fees;
 - (B) School construction that expands the student capacity of existing schools or adds student capacity in new school, including, but are not limited to, planning, engineering, architectural, permitting, financing, and administrative expenses, and any other capital equipment expenses pertaining to educational facilities.

Fees shall not be used for the maintenance or operation of existing schools, or for administrative expenses. Fees may not be used to acquire, construct or locate portable buildings. Fees may not be used to replace an existing school facility, either on the same site or on a different site. In the event of the closure, demolition or conversion of an existing permanent DOE facility within a school impact district that has the effect of reducing student capacity, an amount of new student capacity in permanent buildings equivalent to the lost capacity shall be funded with non-school impact fee revenue.

- (4) *Time Limit for Expenditure.* Impact fee and fees in-lieu shall be expended or encumbered within ten (10) years of the date of collection. Fees shall be considered spent or encumbered on a first-in/first-out basis.

(i) Refunds

- (1) If a fee in-lieu of land dedication or construction impact fee is not expended or encumbered within ten years of the date of collection, the Department of Education shall notify the current owner of the property for which the fee was paid of the right to a refund. Notice of the right to a refund, including the amount of the refund and the procedure for applying for and receiving the refund, shall be sent or served in writing to the present owners of the property within thirty (30) days of the date the refund becomes due. The sending by regular mail of the notices to all present owners of record shall be sufficient to satisfy the requirement of notice.
- (2) Application for a refund shall be submitted to the Department of Education within one year of the date on which the Department of Education issues a

notice of the right to a refund. Any refund not applied for within one year of the date of the notice shall be retained and expended as specified in this section.

- (3) Following receipt of an application for refund, the Department of Education shall determine whether a refund is due to the applicant. If the application is approved, the impact fees paid, along with any interest accrued, shall be refunded to the applicant, provided that the Department of Education may retain two percent of the refund amount to cover the cost of administering the refund. Such payment shall be made within 90 days of the filing of a complete application for refund.

(j) Credits for Land Dedication/Fee-in-Lieu

- (1) *Credits Available.* Any person subject to the land dedication or fee in-lieu requirements pursuant to this section may apply for credit for any similar dedication or payment accepted and received by the Department of Education for the same development subject to this section.
- (2) *Present Value Basis.* Any credit provided for under this subsection shall be based on the present value of the dedication or payment.
- (3) *Credits Limited.* Credits for contributions prior to the effective date of this section shall be based on the present value, however, the credited amount shall not exceed that value of the dedication or fee in-lieu required under this section.
- (4) *Excess Credits.* If a dedication is proposed by a developer and accepted by the Department of Education after the effective date of this section, and it exceeds the dedication requirements for the development, the Department of Education shall execute with the developer an agreement to provide reimbursement for the excess land dedication from the fees in-lieu collected from other developers within the same school impact. In no event shall any such reimbursements exceed the amount of the fee-in-lieu revenue available in the account for that school impact.

(k) Credits for Construction Impact Fees

- (1) *Credits Available.* Any applicant subject to the school construction impact fee requirements pursuant to this section may apply for credit for any similar contribution, payment or construction of public school facilities accepted and received by the Department of Education for the same development subject to this section. No credit shall be authorized against the school construction impact fees for dedication of land or payment of a fee in-lieu of land dedication.
- (2) *Credits Limited.* Credits for contributions, payments or construction made prior to the effective date of this section shall be provided if the development for which the contribution, payment or construction was made has not been completed. The current owner of the property for which such contribution,

payment or construction was made as a condition of development approval shall file an application for credit within one year of the effective date of this section. If the application is not made within one year following the effective date of this section, no credit shall be provided. The application for credit shall be submitted and reviewed as provided in this section. The amount of the credit for a contribution, payment or construction made prior to the effective date of this section shall be the current value of the contribution, payment or construction, less the total amount of school impact fees that would have been owed for the building permits already issued for the project had those permits been subject to the fees specified in subsection (g). The current value shall be determined using the “Honolulu Construction Cost Index: High-Rise Building” maintained by the Hawaii State Department of Business, Economic Development and Tourism, or an equivalent state-wide or national index if such index is discontinued. Credits for payments or contributions prior to the effective date of this section shall not exceed the value of the impact fee required under this section.

- (3) *Use of Credits.* A credit may be applied only against school construction impact fees that would otherwise be due for building permits issued within the development for which the payment or contribution was required as a condition of development approval. The Department of Education shall maintain an accounting of the amount of the credit applicable to the development, and shall reduce the amount of the credit by the amount of the school impact fees that would otherwise be due for each building permit issued in the development. After the credit balance is exhausted, no additional credits shall be applied to subsequent building permits issued within the development.
- (4) *Excess Credits.* If private construction of school facilities is proposed by a developer and accepted by the Department of Education after the effective date of this section, and the value of the proposed construction exceeds the total impact fees that would be due from the development, the Department of Education shall execute with the developer an agreement to provide reimbursement for the excess credit from the impact fees collected from other developers within the same school impact. In no event shall any such reimbursements exceed the amount of the fee-in-lieu revenue available in the account for that school impact.

(l) Updates

- (1) Periodically, the Department of Education may prepare an analysis to update the average land cost in an impact fee district without updating all of the elements in a comprehensive fashion as required in subsection (l)(2) below.
- (2) Periodically, but at least every five years, the Department of Education shall prepare an analysis to update all the following:
 - (A) any school impact district analyses prepared pursuant to subsection (d),

- (B) the state-wide acres per student ratios set forth in subsection (f)(1),
 - (C) the state-wide average costs per student set forth in subsection (g)(2),
and
 - (D) the state-wide revenue credits per unit set forth in subsection (g)(4).
- (3) The updated provisions shall go into effect following approval by the State Board of Education at a public hearing complying with the requirements of this section. The written analysis prepared by the Department of Education shall be made available to the public at least by the time public notice of the public hearing is required to be provided by the Board's administrative rules or applicable law, but in no event shall the analysis report be provided less than two weeks prior to the public hearing. In the event of the update of the average land cost for a school impact district, notice of the public hearing shall be posted in a newspaper of general circulation in the affected school impact district. In the event of a comprehensive update, notice of the public hearing shall at a minimum be posted in a newspaper of general circulation in all areas with existing and/or proposed school impact districts. The notice shall include a map showing the location and general boundaries of the existing and any proposed school impact districts and the date, time and place of the public hearing.

Appendix C: Draft School Impact Fee Act-Alt. 2

Using “Uniform” State-Wide Land Dedication and Construction Impact Fees

Section X. SCHOOL IMPACT FEES

(a) Findings

- (1) Major new residential construction can create additional demand for public school facilities and a need for more land on which to construct new school facilities.
- (2) Where this occurs, the new residential development should provide land or a pay a fee in-lieu of land dedication prior to subdivision approval, and should pay a school construction impact fee prior to building permit issuance, proportionate to their impact on the need to provide new school facilities.
- (3) A study commissioned by the State of Hawaii has identified the land dedication requirement and the net capital cost of constructing new schools that is consistent with proportionate fair-share principles.
- (4) The State of Hawaii hereby determines that school impact districts should be established for areas where new residential development will create the need to provide new school facilities, for the purpose of requiring such developments to:
 - (i) provide land for schools or pay a fee in-lieu of land proportionate to their impact, and
 - (ii) pay school construction impact fees proportionate to the need generated for new school construction.

(b) Definitions

The following words and terms, when used in this section, shall have the meaning ascribed to them, except when the context clearly indicates a different meaning.

- (1) “County” or “counties” means the City and County of Honolulu, the County of Hawaii, the County of Kauai, and the County of Maui.
- (2) “Developer” means a person, corporation, organization, partnership, association, or other legal entity constructing, erecting, enlarging, altering, or engaging in any development activity.
- (3) “Dwelling Unit” means a room or rooms connected together, constituting an independent housekeeping unit for a family containing a single kitchen.

- (4) “Hawaii School Impact Fee Study” means the study prepared by Group 70 International and Duncan Associates for the School Impact Fee Working Group, dated January 2007, or a subsequent similar report.
- (5) “School impact district” means a geographic area designated by the State Board of Education as either a greenfield school impact district or a non-greenfield school impact district.
 - (A) “Greenfield school impact district” is a largely undeveloped, formerly agricultural area where anticipated growth will create the need for new schools within the next ten years that will be located within the area and will primarily serve new housing units within the area.
 - (B) “Non-Greenfield school impact district” is an area that already has some existing residential development where anticipated growth will create the need for new schools or expanded schools within the next ten years.
- (6) “Multi-family” means any dwelling unit other than a single-family unit as herein defined.
- (7) “Owner” means the owner of record of real property or the owner’s authorized agent.
- (8) “Plat” means the map or drawing on which a developer’s plan of subdivision is presented and which he submits for approval.
- (9) “School facilities” means the facilities owned or operated by the Department of Education, or the facilities included in the Department of Education capital budget and/or capital facilities plan.
- (10) “Single-family” means a detached dwelling unit not connected to any other dwelling unit, or a detached building containing two dwelling units.

(c) Applicability and Exemptions

- (1) *Applicability of Land Dedication Requirement.* Except as provided below, any person or person(s) who seeks to develop residential land by applying to a county for the issuance of a subdivision approval within a designated school impact district shall be required to dedicate land for school facilities or pay a fee in lieu of dedicating that land to the Department of Education before final subdivision approval.
- (2) *Applicability of School Impact Fees.* Except as provided below, any person or person(s) who seeks to develop residential land within a designated school impact district by applying to any county for a building permit shall be required to pay a school impact fee. Assessment of impact fees shall be a condition

precedent to the issuance of a building permit and shall be paid in full to the Department of Education before issuance of the permit.

- (3) *Exemptions.* The following shall be exempt from the provisions of this section:
 - (A) Any form of housing permanently dedicated exclusively for senior citizens, defined as 55 years of age or over, with the necessary covenants or declarations of restrictions recorded on the property;
 - (B) All nonresidential development; and
 - (C) Any development with an executed developer agreement with the Department of Education for the contribution of school sites and/or payment of fees for school land or school construction.

(d) Designation of School Impact Districts

- (1) *Decision by Board of Education.* The Board of Education shall designate a school impact district only after holding a public hearing. A written analysis prepared by the Department of Education supporting the designation of the school impact district as required in this subsection shall be made available to the public by the time public notice of the public hearing is required to be provided by the Board's administrative rules or applicable law, but in no event shall the analysis report be made available for public review less than two weeks prior to the public hearing. Notice of the public hearing shall at a minimum be posted in a newspaper of general circulation in the area proposed for designation. The notice shall include a map showing the location and general boundaries of the proposed school impact district and the date, time and place of the public hearing.
- (2) *Greenfield School Impact District Analysis.* Prior to the designation of a greenfield school impact district, the Department of Education shall prepare a written analysis that contains the following.
 - (A) A map designating the boundaries of the area, with sufficient clarity to identify the included properties.
 - (B) A finding that existing residential development in the area is non-existent or insignificant.
 - (C) Analysis to support the need for the construction of an elementary school in the area within the next ten years, based on anticipated development in the area, and the ultimate need for a high school to be located within the area to primarily serve the anticipated housing in the area.

- (D) Analysis to determine the average value per acre of improved land in the area suitable for school construction, after construction of typical subdivision improvements such as roads, drainage and utilities.
- (3) *Non-Greenfield School Impact District Analysis.* Prior to the designation of a non-greenfield school impact district, the Department of Education shall prepare a written analysis that contains the following.
- (A) A map designating the boundaries of the area, which will include one or more high school complexes, with sufficient clarity to identify the included properties.
 - (B) Analysis to support the need to construct new or expand existing school facilities in the area within the next ten years to accommodate projected growth in the area.
 - (C) Analysis to support the conclusion that 80 percent of the student generation rates by housing type, as derived for the Ewa area in the *Hawaii School Impact Fee Study* or as updated pursuant to subsection (l) does not over-estimate the impact of the type of development anticipated in the area. In the event that the analysis indicates that the impact of residential development in the proposed school impact district is less than 80 percent of the Ewa student generation rates, the land dedication requirements of subsection (f)(1) shall be reduced proportionately and the net cost recovery percentage of subsection (g)(2) shall not exceed the percentage of the Ewa area student generation rates determined by the analysis.
 - (D) Analysis to determine the average value per acre of improved land in the area suitable for school construction, after typical subdivision improvements such as roads, drainage and utilities.

(e) School Land or Fee In-lieu Required

The procedure for determining whether the dedication of land is required or a payment of a fee in-lieu is required for new schooling facilities is as follows:

- (1) *Proposal of Owner.* At the time of filing an application for any residential subdivision containing fifty or more acres of land, the owner or developer of the property, as a part of the filing, shall designate the area proposed to be dedicated for one or more schools, as appropriate, on the plat submitted and provide a copy of the application to the Department of Education.
- (2) *Land Shall be Usable.* When land is proposed to be dedicated for the purpose of providing a school site, it shall be land that is usable and suitably located for such purpose. The Department of Education shall determine whether a particular piece of land is usable.

- (3) *Action by the Department of Education.* Within sixty days of the acceptance of an application for a residential subdivision containing fifty or more acres, the Department of Education shall determine whether to require a dedication of land, the payment of a fee in-lieu thereof, or a combination of both. Only payment of a fee in-lieu shall be required in subdivisions containing less than fifty acres.
- (4) *Dedication Procedure.* When dedication is required, the land shall be conveyed to the State of Hawaii prior to final subdivision approval.
- (5) *Fee In-lieu Procedure.* When the payment of a fee in-lieu is required, the fee in-lieu shall be paid prior to final subdivision approval.
- (6) *Criteria for Determination.* Whether the Department of Education determines to require land dedication or the payment of a fee in-lieu, or a combination of both, shall be guided by the following criteria:
 - (A) The topography, geology, access, and location of the land in the development available for dedication.
 - (B) The size and shape of the development and the land available for dedication.
 - (C) The location of existing and/or other planned or proposed school facilities.
- (7) *Appeals.* The determination of the Superintendent of Education as to whether land shall be dedicated, whether a proposed dedication is usable land, or whether a fee in-lieu shall be paid, or a combination of both, may be appealed to the Board of Education. The Board of Education shall hear testimony at a public hearing before rendering a decision. The decision of the Board of Education shall be final.

(f) Determination of the Amount of Land or the Fee In-lieu

- (1) *Determination of the Amount of Land to be Dedicated.* The size of the tract of land to be dedicated by the developer shall be determined based on the following ratios:
 - (A) 0.01053 acres per single-family dwelling unit; and
 - (B) 0.00692 acres per multi-family dwelling unit.
- (2) *Determination of the Amount of the Fee In-lieu.* The dollar amount of the fee in-lieu shall be determined using the following formula:

[acres of land calculated according to subsection (f)(1)] x [the average cost per acre of land in the development determined pursuant to subsection (f)(3)].

(3) *Determination of Average Cost per Acre*

- (A) The fee in-lieu of land dedication for residential subdivisions of fifty units or more shall be based on the value of the improved land, after typical subdivision improvements such as roads, drainage and utilities. A M.A.I. appraiser who is selected and paid for by the developer shall determine the value of the land. If the Department of Education does not agree with the developers appraisal the Department of Education may engage another M.A.I. appraiser at its own expense, and the value shall be an amount equal to the average of the two appraisals. If either party does not accept the average of the two appraisals, a third appraisal shall be obtained, with the cost of such third appraisal being shared equally by the Department of Education and the developer. The first two appraisers shall select the third appraiser, and the third appraisal shall be binding on both parties.
- (B) Residential subdivisions of less than fifty units shall have the option to pay a standard fee in-lieu based on an average land value determined for the area pursuant to subsection (d)(2)(D) or subsection (d)(3)(D). Alternatively, developers of such subdivisions may choose to determine the value based on an appraisal pursuant to the standards of subsection (f)(3)(A) above.

(g) School Construction Impact Fee Calculation

- (1) *Cost Districts.* The state shall be divided into twenty-six (26) geographically limited cost districts. The locations of the cost districts are illustrated in Exhibit A [Appendix I of this report to be used as this exhibit].
- (2) *Net Cost Recovery.* In every school impact district where school construction impact fees are imposed pursuant to subsection (d), fees shall be assessed at 30 percent¹² of the base fee amounts set forth in subsection (g)(3) below.
- (3) *Base Fee Schedule.* The impact fees shall be the percentage specified in subsection (g)(2) times the following base fees per dwelling unit for the cost district in which the school impact district is located. The base fees set forth below shall be updated periodically by the Board of Education pursuant to the requirements of subsection (l).

¹² Suggested by Working Group, which recommends that the percentage not exceed 40%

Cost District	Cost Factor	Single-Family	Multi-Family
Honolulu	1.00	\$22,721	\$15,582
Ewa	1.00	\$22,721	\$15,582
Wahiawa	1.05	\$23,857	\$16,361
Waialua	1.10	\$24,993	\$17,140
Koolaupoko	1.00	\$22,721	\$15,582
Koolauloa	1.10	\$24,993	\$17,140
Waianae	1.10	\$24,993	\$17,140
Hilo	1.15	\$26,129	\$17,919
Puna	1.20	\$27,265	\$18,698
Kona	1.20	\$27,265	\$18,698
Hamakua	1.20	\$27,265	\$18,698
South Kohala	1.20	\$27,265	\$18,698
North Kohala	1.25	\$28,401	\$19,478
Pohakuloa	1.25	\$28,401	\$19,478
Kau	1.30	\$29,537	\$20,257
Wailuku	1.15	\$26,129	\$17,919
Makawao	1.25	\$28,401	\$19,478
Lahaina	1.30	\$29,537	\$20,257
Hana	1.35	\$30,673	\$21,036
Molokai	1.30	\$29,537	\$20,257
Lanai	1.35	\$30,673	\$21,036
Lihue	1.15	\$26,129	\$17,919
Koloa	1.20	\$27,265	\$18,698
Kawaihau	1.20	\$27,265	\$18,698
Waimea	1.25	\$28,401	\$19,478
Hanalei	1.25	\$28,401	\$19,478

(h) Accounting and Expenditure Requirements

- (1) *Benefit Districts Established.* Each designated school impact district shall be a separate benefit district. Fees in lieu of school land dedication collected within each benefit district shall be spent only for the acquisition of school sites within the same benefit district. School impact fees collected within each benefit district shall be spent only for the expansion of existing school or construction of new schools located within the same benefit district.
- (2) *Use of Dedicated Land.* Land dedicated by the developer shall be used only as a site for the construction of a new school or for the expansion of existing school facilities. If the land is sold the proceeds shall be used to acquire land for school facilities in the same school impact district.
- (3) *Use of the Fees.* Fees paid in-lieu of land dedication and school construction impact fees funds shall only be used for the following purposes:
 - (A) Acquisition of land for school purposes, including but not limited to, surveying, appraisals, and associated legal fees;
 - (B) School construction that expands the student capacity of existing schools or adds student capacity in new school, including, but are not limited to, planning, engineering, architectural, permitting, financing,

and administrative expenses, and any other capital equipment expenses pertaining to educational facilities.

Fees shall not be used for the maintenance or operation of existing schools, or for administrative expenses. Fees may not be used to acquire, construct or locate portable buildings. Fees may not be used to replace an existing school facility, either on the same site or on a different site. In the event of the closure, demolition or conversion of an existing permanent DOE facility within a school impact district that has the effect of reducing student capacity, an amount of new student capacity in permanent buildings equivalent to the lost capacity shall be funded with non-school impact fee revenue.

- (4) *Time Limit for Expenditure.* Impact fee and fees in-lieu shall be expended or encumbered within ten (10) years of the date of collection. Fees shall be considered spent or encumbered on a first-in/first-out basis.

(i) Refunds

- (1) If a fee in-lieu of land dedication or construction impact fee is not expended or encumbered within ten years of the date of collection, the Department of Education shall notify the current owner of the property for which the fee was paid of the right to a refund. Notice of the right to a refund, including the amount of the refund and the procedure for applying for and receiving the refund, shall be sent or served in writing to the present owners of the property within thirty (30) days of the date on which the the refund becomes due. The sending by regular mail of the notices to all present owners of record shall be sufficient to satisfy the requirement of notice.
- (2) Application for a refund shall be submitted to the Department of Education within one year of the date on which the Department of Education issues a notice of the right to a refund. Any refund not applied for within one year of the date of the notice shall be retained and expended as specified in this section.
- (3) Following receipt of an application for refund, the Department of Education shall determine whether a refund is due to the applicant. If the application is approved, the impact fees paid, along with any interest accrued, shall be refunded to the applicant, provided that the Department of Education may retain two percent of the refund amount to cover the cost of administering the refund. Such payment shall be made within 90 days of the filing of a complete application for refund.

(j) Credits for Land Dedication/Fee-in-Lieu

- (1) *Credits Available.* Any person subject to the land dedication or fee in-lieu requirements pursuant to this section may apply for credit for any similar dedication or payment accepted and received by the Department of Education for the same development subject to this section.

- (2) *Present Value Basis.* Any credit provided for under this subsection shall be based on the present value of the dedication or payment.
- (3) *Credits Limited.* Credits for contributions prior to the effective date of this section shall be based on the present value, however, the credited amount shall not exceed that value of the dedication or fee in-lieu required under this section.
- (4) *Excess Credits.* If a dedication is proposed by a developer and accepted by the Department of Education after the effective date of this section, and it exceeds the dedication requirements for the development, the Department of Education shall execute with the developer an agreement to provide reimbursement for the excess land dedication from the fees in-lieu collected from other developers within the same school impact district. In no event shall any such reimbursement exceed the amount of fee-in-lieu revenue available in the account for that school impact district.

(k) Credits for Construction Impact Fees

- (1) *Credits Available.* Any applicant subject to the school construction impact fee requirements pursuant to this section may apply for credit for any similar contribution, payment or construction of public school facilities accepted and received by the Department of Education for the same development subject to this section. No credit shall be authorized against the school construction impact fees for dedication of land or payment of a fee in-lieu of land dedication.
- (2) *Credits Limited.* Credits for contributions, payments or construction made prior to the effective date of this section shall be provided if the development for which the contribution, payment or construction was made has not been completed. The current owner of the property for which such contribution, payment or construction was made as a condition of development approval shall file an application for credit within one year of the effective date of this section. If the application is not made within one year following the effective date of this section, no credit shall be provided. The application for credit shall be submitted and reviewed as provided in this section. The amount of the credit for a contribution, payment or construction made prior to the effective date of this section shall be the current value of the contribution, payment or construction, less the total amount of school impact fees that would have been owed for the building permits already issued for the project had those permits been subject to the fees specified in subsection (g). The current value shall be determined using the “Honolulu Construction Cost Index: High-Rise Building” maintained by the Hawaii State Department of Business, Economic Development and Tourism, or an equivalent state-wide or national index if such index is discontinued. Credits for payments or contributions prior to the effective date of this section shall not exceed the value of the impact fee required under this section.

- (3) *Use of Credits.* A credit may be applied only against school construction impact fees that would otherwise be due for building permits issued within the development for which the payment or contribution was required as a condition of development approval. The Department of Education shall maintain an accounting of the amount of the credit applicable to the development, and shall reduce the amount of the credit by the amount of the school impact fees that would otherwise be due for each building permit issued in the development. After the credit balance is exhausted, no additional credits shall be applied to subsequent building permits issued within the development.
- (4) *Excess Credits.* If private construction of school facilities is proposed by a developer and accepted by the Department of Education after the effective date of this section, and the value of the proposed construction exceeds the total impact fees that would be due from the development, the Department of Education shall execute with the developer an agreement to provide reimbursement for the excess credit from the impact fees collected from other developers within the same school impact district. In no event shall any such reimbursement exceed the amount of fee-in-lieu revenue available in the account for that school impact district.

(l) Updates

- (1) Periodically, the Department of Education may prepare an analysis to update the average land cost in an impact fee district without updating all of the elements in a comprehensive fashion as required in subsection (l)(2) below.
- (2) Periodically, but at least every five years, the Department of Education shall prepare an analysis to update all the following:
 - (A) school impact district analyses prepared pursuant to subsection (d),
 - (B) the Ewa area acres per unit ratios, 80 percent of which are set forth in subsection (f)(1),
 - (C) the Ewa area base fee schedule set forth in subsection (g)(3),
 - (D) the Ewa area student generation rates referenced in subsection (d)(3)(C), and
 - (E) the state-wide students per acre by grade level, the state-wide construction cost per student by grade level and the state-wide credit per unit by housing type on which the Ewa analysis is based.
- (3) The updated provisions shall go into effect following approval by the State Board of Education at a public hearing complying with the requirements of this section. The written analysis prepared by the Department of Education shall be made available to the public at least by the time public notice of the public hearing is required to be provided by the Board's administrative rules or

applicable law, but in no event shall the analysis report be provided less than two weeks prior to the public hearing. In the event of the update of the average land cost for a school impact district, notice of the public hearing shall at a minimum be posted in a newspaper of general circulation in the affected school impact district. In the event of a comprehensive update, notice of the public hearing shall be posted in a newspaper of general circulation in all areas with existing and/or proposed school impact districts. The notice shall include a map showing the location and general boundaries of the existing and any proposed school impact districts and the date, time and place of the public hearing.

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Appendix D: Legal Framework

This section describes the legal framework for development exactions and impact fees.¹³ The evolution of regulatory practices and case law is described, from early forms of exactions through to the new legal environment in the wake of recent Supreme Court decisions.

Early Exactions

Early exactions for schools, parks and off-site facilities potentially serving more than the subdivision or project on which they are levied fell into two categories: land dedication requirements and negotiated exactions. Land dedication requirements ultimately raised practical, legal, and policy problems; for example, communities often wound up with large inventories of small parcels that were inefficient to develop and expensive to maintain if developed, and ultimately had to buy the parkland or school sites that they needed. As a matter of policy, land dedications for facilities such as trails sometimes fell unevenly on landowners especially when a community might have a plan for a park, a school, or a major roadway affecting the site of a proposed projects. In such cases, communities sometimes required dedication of the site as a condition of rezoning or subdivision approval, raising issues of equity in public policy and equal protection under the law. See, for example, *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 114 S. Ct. 2309 (1994), discussed below.

The next generation of exactions for parks, schools and off-site improvements added a layer of fees in-lieu of dedication (often called simply “fees in-lieu”). All development was made subject to the exaction requirement, but the local government could in appropriate cases substitute a fee equal to a calculated or stipulated value of the land that would otherwise be dedicated.

Building on the base of “fees in-lieu” and on the long practice in some communities of charging substantial fees for the privilege of connecting to water and sewer lines, some communities began imposing calculated impact fees on all new development. This approach resolves most of the policy and equity questions at the local level and, if carefully done, falls squarely within the legal guidelines established by the U.S. Supreme Court and several state courts.

The law related to impact fees has evolved from litigation over local regulatory measures involving dedication requirements, fees imposed in-lieu of dedication, and impact fees, all of which are collectively called “exactions.” The first reported “impact fee” systems were developed in Florida to create a system charge for roads, similar to the common system buy-in charges for water and sewer systems. However, such fees were more difficult to implement than similar fees for utility services for two reasons--first, road fees related to a general governmental service rather than to an enterprise that happened to be run by the government; second, there was no specific, controllable event (like the physical connection to the water system) which could be conditioned upon payment of the fee, except for the approval of a development or

¹³ This section was prepared by Duncan Associates’ Eric Damian Kelly, Esq., FAICP, a nationally-recognized land use attorney and past-president of the American Planning Association. Given the lack of significant legal developments in the impact fee field since it was originally drafted, it is substantially the same as it appeared in the 2001 *School Fair Share Contribution Study*.

subdivision or the later approval of a building permit or certificate of occupancy. That distinction becomes more important later in this analysis, as it approaches more sophisticated and complex issues of impact fee law. The early principles of that law, however, were applicable to all types of impact fees.

State Court Rulings

The Florida courts developed a detailed series of legal guidelines for impact fees in the state. The Florida cases established law as well as policy that have guided other courts and even legislatures in addressing the issue. The landmark case concerning impact fees is *Contractors & Builders Assoc. of Pinellas County v. City of Dunedin*, 326 So.2d 314 (Fla 1976). In that case the Florida court struck down a water and wastewater capital expansion fee, but in doing so it gave guidelines for designing an acceptable fee system. Those guidelines were threefold: the fee to be charged may not exceed the reasonable cost to the system of absorbing the new users; the fees must be reserved for the purpose for which they are charged; the fees must actually be used for the designated purpose and used in an area which will directly benefit (or absorb the impacts from) the development on which the fees are imposed.

In *Hollywood, Inc. v. Broward County*, 440 So.2d 352 (1983), a park dedication/fee-in-lieu system was upheld when the County was able to show that the requirement of three acres per thousand residents was not unreasonable, that the money would be spent within a reasonable amount of time and that the expenditure would benefit the residents of the platted area.

A Florida court upheld a fee system in Palm Beach County in *Homebuilders and Contractors Assoc. of Palm Beach County v. Board of County Commissioners*,¹⁴ finding that it passed the tests set out in the *Dunedin* and *Hollywood, Inc.* cases. The Palm Beach County fee was a road fee based on a complex formula related to traffic generation and road construction costs. The fee was allocated to a road zone of about six square miles which included the proposed development, and it was to be used specifically to build roads.

The Florida cases remain important and are often cited in litigation and articles. They established the impact fee policy that has guided other courts in considering the issue of impact fees and that has guided communities that have developed impact fee legislation in a number of states.

What is interesting about these new state statutes is that they have largely followed the tests evolving from the Florida line of cases. Almost all of them require a plan of some sort. The most common requirement is for a capital improvements plan or program, although some use the phrase “capital facilities plan.” A couple of them actually require a land use plan as the basis for the facilities plan. Most contain requirements for the computation of the fees, based on the actual costs of the facilities; some include detailed specifications about what planning and management charges can be included. Several prohibit the use of the fees to cure existing deficiencies in the system or to upgrade the level of service in developed parts of a community. All require that the fees be segregated for actual use for the purpose for which they are

¹⁴*Homebuilders and Contractors Assoc. of Palm Beach County v. Board of County Commissioners*, 446 So.2d 140 (Fla. App. 1983).

collected. Virtually all require the fees to be refunded if not actually expended within a given time period.

One of the most interesting of the recent state court cases came out of Utah, where Salt Lake County imposed a drainage fee on a school district. The school district argued that the fee was a local tax assessment, from which it would be exempt. The county argued that the fee was an “impact fee.” The court ruled that the fee was an impact fee and that the school district had to pay it. *Salt Lake County v. Board of Education of Granite School District*, 808 P.2d 1056 (Utah 1991). The issues in the case predated impact fee legislation passed in Utah while the case was pending. Thus, it is one more of a significant number of cases upholding impact fees without specific enabling legislation for them.

Rulings of the U.S. Supreme Court

The most important recent legal development regarding development fees is the decision of the U.S. Supreme Court in *Dolan v. City of Tigard*, 114 S. Ct. 2309 (1994). In that case, the Court held that Tigard, Oregon’s, requirement that Florence Dolan dedicate land to the city for use as a floodway, a greenway and a bike path amounted to an unconstitutional taking of her land. The case arose when Dolan applied for a building permit to expand an existing hardware and plumbing supply store from 9,000 square feet to 17,000 square feet and to pave a 39-car parking lot. The project conformed with existing zoning, but the city imposed the exactions as conditions on the issuance of a building permit.

This was the first exactions case to be decided by the Court since *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987). The Nollans wanted to demolish an existing single-family dwelling and replace it with another, larger single-family dwelling on valuable beachfront property. Their proposal conformed with local zoning and subdivision regulations, but it also required approval under the State’s coastal zone regulatory program. The Coastal Commission was willing to approve the building permit, but it conditioned issuance of the permit on the dedication of a trail across the Nollans’ beach, connecting into a larger trail system. In that case, the U.S. Supreme Court created the “rational nexus” test, suggesting that there was in fact no “rational nexus,” or reasonable connection between the proposal to replace one house with another and the need for additional trails in the area.

In *Dolan*, the Supreme Court expanded upon the rational nexus test, adding to it a requirement that there be a “rough proportionality” between the impact of a proposed development and the burden of the exaction imposed on it. In *Dolan*, there clearly was a rational nexus--the expansion of a commercial enterprise is bound to lead to some increase in runoff and some increase in traffic, probably even in bicycle and pedestrian traffic. Thus, *Tigard* satisfied the basic requirement of the *Nollan* test. The Supreme Court sought more.

The City of Tigard’s goal in seeking trail dedication was to develop a trail network as part of its transportation system. That is a perfectly reasonable public goal. The problem was not with the goal. The problem was with its implementation. The City did not seek an impact fee. It wanted land. The amount of land it wanted had nothing to do with the probable trail usage of customers of the hardware store. It was not even based on the probable traffic generation of customers of the hardware store. That might have provided a reasonable basis for dedication, if the town had argued that it had a public policy of encouraging at least XX percent of all trips

to be by bicycle or foot and that some bicycle and foot traffic would thus be imputed to every traffic generator. That is not what the City did, however--at least not initially. What it did was to map its trails. The Dolans' hardware store lay along a mapped trail. The city needed the land to link up the trail. The amount of land and the route of the land that the city sought in the dedication was based on the trail routing and design, not on traffic impact.

Tigard's city staff ultimately computed some traffic generation figures for the hardware store and even argued that some trips might be by bicycle. The argument failed, as it should have. All of that figuring was spurious. There is every indication that the city would have sought precisely the same exaction for the trail if the hardware store expansion had been 1/10 the proposed size or twice the proposed size. The city wanted that land, because it provided a key link in the trail--regardless of the extent of the impact of the proposed development.

The Supreme Court has not invalidated all forms of exactions. In *Dolan*, it simply clarified its earlier holding in *Nollan*, adding to it a requirement that exactions should bear a "rough proportionality" between the exaction and the impact of the proposed development. The Court suggested that the calculation of proportionality should be based on an "individualized determination." That is exactly what an impact fee system does. An impact fee system takes the individualized facts of a proposed development and computes the estimated traffic impact of that development (an individualized determination) and then bases the fee on that computation (giving us something that is actually better than a "rough" proportionality). Although critics of the *Dolan* decision have argued that it can be interpreted as requiring a complete impact study of every development, there is nothing in the Court's language to indicate that. In fact, given the anti-regulatory bias of some members of the Court, it seems likely that they would find the simplicity of an impact fee system far preferable to a regulation that required complex impact assessments of every project.

School Exactions and Fees

The leading case on exactions and schools is *Jordan v. Village of Menomonee Falls*, 28 Wis. 2d 608, 137 N.W.2d 442 (1965), appeal dismissed, 385 U.S. 4 (1966). That case involved a challenge to a \$5,000 fee in-lieu of dedication assessed on a development; the fee was to be used to acquire park and school sites. The court held:

We conclude that a required dedication of land for school, park or recreational sites as a condition for approval of the subdivision plat should be upheld as a valid exercise of police power if the evidence reasonably establishes that the municipality will be required to provide more land for schools, parks and playgrounds as a result of approval of the subdivision. 137 N.W. 2d at 448.

The Florida Supreme Court held that a \$448 per unit school impact fee met the "rational nexus" test but failed a "proportionality" test. *St. Johns County v. Northeast Florida Builders Ass'n Inc.*, 583 So. 2d 635 (Fla. 1991). Both the "rational nexus" and "proportionality" tests are discussed below. Note that the "proportionality" test in this case pre-dated *Dolan*, discussed below, but was basically a precursor to *Dolan* and was entirely consistent with the holding of the Supreme Court in that later case.

A California court upheld the application of a school development fee levied against a private college when it built a business school. *Loyola Marymount Univ. v. Los Angeles Unified Sch. Dist.*, 53 Cal. Rptr. 2d 424 (1996). The issue in the case was one of construction, turning on whether the business school was a “commercial” development under the ordinance or whether it fell under a school or governmental exemption from the fees; the court agreed with the county in applying the ordinance to the project.

Candid Enters., Inc. v. Grossmont Union High Sch. Dist., 39 Cal. 3d 878, 705 P.2d 876 218 Cal. Rptr. 303 (1985) upheld school impact fees in response to a challenge urging that California’s State school finance act implicitly preempted such a financing mechanism. Another California case upheld the imposition of impact fees on a retirement home development. *McClain W. No. 1 v. San Diego County*, 194 Cal. Rptr. 594 (1983).

The Colorado Supreme Court struck down school impact fees levied in Boulder and Douglas Counties in *Board of County Commissioners of Douglas Co., Colo. v. Homebuilders Ass’n of Metropolitan Denver*, 929 P.2d 691 (Colo. 1996). The case turned on issues of statutory construction and was entirely consistent with Colorado’s long history of narrow construction of county powers. Specifically, Colorado law authorizes counties to levy certain development charges related to schools and, under an amendment to the State’s school finance act, prohibits others. These fees clearly fell outside the scope of the statutory authority. Although the decision was nominally a split decision (4-3), the dissent actually focused on a narrow issue; the dissent argued that the fees had been within the scope of county powers for a short period, before the amendment to the school finance act, which even the dissent tacitly acknowledged barred the fees.

State Mandates

Most of the alternative financing options described in the following appendix (the exceptions are the Mello-Roos special districts and the real estate transfer tax) rely on the authority of local government to regulate the development of land. It is control over the approval of subdivisions and the issuance of building permits that gives local governments the power to condition such approvals on the payment of a fee or the dedication of land. School districts generally are independent of cities and counties and consequently must rely on cities and counties to do this for them.

The likelihood of financial cooperation between school districts and other branches of local government is greatly enhanced when they share the same geographic boundaries. In Florida, school districts are coterminous with counties, and 12 counties have adopted school impact fees. The only county in Colorado that has adopted adequate public facility standards for schools, Douglas County, is served by a single school district.

Local governments that are served by a multitude of school districts, or that are only a small part of a much larger district, tend to be less likely to cooperate with them, if for no other reason than the logistical problems involved. This is the case in many parts of the country, and may help explain why school impact fees are relatively rare compared to the types of facilities directly provided by cities and counties.

State legislative mandates provide one way to encourage such cooperation. In California, State law authorizes school districts to levy development fees, and requires cities and counties to

require compliance before issuing building permits. In Washington, State law not only authorizes school impact fees, but also requires local governments to take the need for school facilities into consideration when reviewing development proposals. It is no accident that these two states, along with Florida, lead the country in the adoption of school impact fees.

In Hawaii, of course, the school district is a State agency. The State Legislature could mandate that developers pay school impact fees, or individual counties could enact school impact fee ordinances under the authority of the State law to enact impact fee ordinances. The Hawaii impact fee enabling act authorizes counties to adopt impact fees for any “types of public facility capital improvement specifically identified in a county comprehensive plan or a facility needs assessment study.” To date, the only use of this authority has been the adoption in 2002 of a road impact fee by the City and County of Honolulu for the Ewa region.

Appendix E: School Capital Financing Alternatives

This section of the report explores potential alternative financing techniques to help fund school capital costs in Hawaii.¹⁵ Local governments in the U.S. have used several different mechanisms to secure developer contributions for school facility funding. These include:

- land dedication requirements,
- negotiated developer exactions,
- adequate public facility (APF) requirements,
- impact fees,
- development taxes,
- special districts, and
- real estate transfer taxes.

Land dedication requirements are the oldest and most common form of developer exaction for schools. Negotiated exactions have not been widely used for school facilities, and although commonly employed by local governments across the nation for other facilities, this method of developer exaction has been placed under a cloud of legal uncertainty by recent U.S. Supreme Court decisions. APF requirements can sometimes have the same result as negotiated exactions, although they operate under a much more rigorous framework of level-of-service standards, monitoring and technical analysis.

Impact fees and development taxes are the most direct methods of charging new development for its contribution to the need for new school facilities. A major distinction between them is that development taxes can be assessed on both residential and nonresidential development, whereas school impact fees are generally assessed only on new residential development.

Special districts have been used extensively in California to fund public school construction in particular growth areas. And real estate transfer taxes, while not exclusively charged on new construction, are an increasingly popular funding alternative for school construction.

Land Dedication Requirements

Land dedication requirements are among the oldest type of development exaction used in the United States. They are also the most commonly-used method of development exactions for school facilities.

Prior to the advent of zoning and subdivision controls in the 1920s, developers typically made only minimal improvements to their projects. By the 1940s, it had become widely accepted that developers would provide all public improvements within a subdivision that were designed to serve that subdivision.

¹⁵ This is an updated version of the analysis presented in the 2001 *School Fair Share Contribution Study*. Most of the new material is in the “impact fee” section.

The first tools by which local governments could require new development to shoulder some of the burden placed on off-site public facilities were devised during the development boom following World War II. Local governments, experiencing difficulty funding parks and schools needed to serve new residents through traditional tax-supported bond issues, began to require mandatory dedication of park and school sites. For smaller subdivisions and those with unsuitable sites, fees in lieu of land dedication were required.

The fees in-lieu of dedication are superficially similar to impact fees, and in fact are a direct precursor of impact fees. The distinction lies in the manner in which the fee is assessed and the purposes of the fee. "In lieu" fees are based on land costs only and are ill-suited for public services not requiring extensive amounts of land. Impact fees, on the other hand, are designed to cover total capital facility costs and may be applied to a wider variety of services.

Mandatory park or school dedication requirements with in-lieu fee provisions typically apply only to residential subdivisions, and are based on the number of dwelling units proposed. Requirements based on a percentage of site area have been overturned by the courts, since they do not recognize the differing service demands created by low and high density developments. Land dedication usually is required at the subdivision stage of the development process.

Land dedication exactions have the advantage of being closely related to on-site needs created by new development. They have a long history of use and are generally accepted as legitimate exercises of local police power. They are also relatively simple to administer and treat all residential subdivisions similarly.

A major drawback, however, is that they only cover the cost of land and make no contribution toward the cost of new capital improvements required by new development. In addition, since they are generally administered through the subdivision ordinance, developments not requiring land subdivision are exempted from the requirements.

Negotiated Exactions

Exactions are generally defined as the private provision of land or facilities to serve public infrastructure needs created by new development, made as a condition of development approval. Monetary or in-kind exactions, other than for land or on-site facilities, are generally the result of open-ended negotiations between the developer and the local government, rather than from the application of a previously defined methodology. They may be imposed at any stage of the development process, particularly during requests for regulatory approvals, such as zoning, special permits or planned unit developments, where the local governing body has broad discretionary authority. Such exactions typically involve public improvements in close proximity to the development.

While negotiated exactions are standard procedure in many communities, they are tightly regulated in some states. In North Carolina and Virginia, for example, State government has authorized two kinds of zoning districts, general use districts and conditional use districts. Local governments cannot require developer contributions as a condition of granting general use zoning, and can accept proffers only when conditional use zoning is requested. In Virginia, jurisdictions that have not been expressly granted conditional zoning authority are severely limited by the types of proffers that may legally be accepted.

In comparison with land dedication requirements, negotiated exactions have the advantage that they may cover the capital cost of public facilities in addition to land costs. In addition, since such exactions are based on the specifics of an individual development proposal, they can address public facility improvement needs, such as driveway turning lanes, that are directly related to the development.

A drawback of negotiated exactions is that they lack the attributes of predictability and equity that gained park and school land dedication requirements their early and wide acceptance. The amount of the exaction may depend on accidents of geography, such as the amount of land owned by a developer that happens to correlate with right-of-way needs, or on the political or bargaining skill of the applicant. Small developments, although they may cumulatively result in the need for significant capital improvements, often escape such exaction requirements because individually they are not capable of making significant contributions. Developers often feel that they are victims of extortion. Negotiations are often time-consuming and expensive for both the developer and the local permitting authority. Finally, in light of recent U.S. Supreme Court decisions, negotiated exactions are becoming increasingly difficult to defend against constitutional challenges.

Adequate Public Facility Requirements

Adequate public facility (APF) requirements, also known as “concurrency requirements,” are intended to ensure that off-site facilities are available as impacts occur from new development. APF requirements are a means of preventing premature development in remote areas where facilities are inadequate, or of controlling the pace of development in areas where facilities are congested. If existing public facilities are not adequate to accommodate the development, the developer will have several options: reduce the density of the project, wait for facilities to be improved, finance the needed improvements or select a different site.

APF requirements are a formal mechanism used to enforce one of the most fundamental tenets of land use planning—that development should not be permitted where it can not be adequately accommodated by critical public facilities and services. While land development regulations have historically been used as a means of ensuring that residents and end users of a development project can be adequately served by community facilities, adequate public facility regulations go further, by ensuring that new development will not cause an unacceptable decline in service for existing area residents.

APF regulations are most defensible in the context of a long-range plan for the provision of major public facilities. They are not designed to be a means of preventing growth, or of requiring developers to construct major system facilities having community-wide benefit. In the event that a developer offers to construct or contribute a portion of the cost of such a facility in order to have it in place earlier than would be possible with existing funding sources, reimbursement agreements, pro rata agreements or other mechanisms should be used to ensure that the developer is not forced to contribute a disproportionate share of the cost.

APF regulations should be based on quantifiable standards that can be measured, mapped and monitored. This necessitates background studies to ensure that such standards are realistic and maintainable. Second, the regulations should be backed by a capital improvements plan (CIP) that identifies projects and funding sources to meet these standards. Third, development review

procedures should involve the issuance of a “certificate of adequate facilities” after analysis of a proposed project’s impacts and mitigation. Fourth, service levels should be monitored over time to ensure that public facilities are keeping pace with development.

Florida has pioneered a form of adequate public facility regulations known as “concurrency.” Under the provisions of the Local Government Comprehensive Planning and Land Development Regulation Act (Chapter 163 of the Florida Statutes), cities and counties must adopt “adequate facilities” regulations requiring that all future development be served by infrastructure operating at or above adopted levels of service. According to the provisions of the Act and its accompanying administrative rules (9J-5 and 9J-24), no new development can be permitted unless it is first determined that public facilities are in place at the time the facilities are needed for the development. However, schools were not included in the list of facilities for which concurrency was mandated in Florida until passage of SB 360 in 2005.

The 1990 Washington State Growth Management Act and the 1991 amendment to the Act require local governments in that state to make appropriate provisions for schools in reviewing development proposals, and grant counties and cities the authority to impose school impact fees. King County, the most populous county in the state, established concurrency standards and impact fees for public school districts in 1991. The School Mitigation and Impact Fees ordinance was codified as Chapter 21A.43 of the King County Code. The key code provisions include the following:

- o The formation of a School Technical Review Committee;
- o Annual County Council reviews;
- o An impact fee program; and
- o Concurrency.

The purpose of concurrency, as defined by the King County Code, is to ensure that school districts have sufficient capacity to accommodate student populations generated by new residential development. For this reason, a finding of concurrency must be made for all preliminary residential plats, preliminary planned unit developments, site plan approvals for mobile home parks, requests for multi-family zoning and building permits for multi-family projects. If it is determined that school capacity will not be available at the time development impacts occur, the proposal may be denied or mandatory phasing or other mitigation may be required. The King County system entails coordination with 11 independent school districts.¹⁶

Some of the advantages of school APF or concurrency programs include the following:

- o They can be used to pace development to match desired levels of service.
- o They can help direct development to areas where existing school capacity is available.
- o They provide a structure and resources for implementation of the community’s CIP.

Some of the disadvantages of APF or concurrency programs include the following:

¹⁶ King County Department of Development and Environmental Services, “DDES Customer Information Bulletin #46,” January 2006.

- Such programs require systems of data collection and monitoring.
- They can cause some over-building during the initial implementation period from fear that available capacity will be consumed.
- Such programs may create a bias in favor of large projects that are able to marshal resources and manage their timing.

Special Districts

A type of special district, known as Mello-Roos, has been widely used in California to finance new school construction. This use of the special district technique was a response to (a) limited property tax funding due to Proposition 13 and (b) a desire for an alternative to high up-front lump sum payments in the form of school impact fees. Proposition 13 was enacted in California in 1978. With the new cap on property taxes, public agencies found their ability to finance new projects to be severely limited. Senator Henry Mello and Assemblyman Mike Roos facilitated the passage of the Community Facilities District Act in 1982, which enabled local governments and developers to create Community Facility Districts (also known as Mello-Roos Districts) for the purpose of selling tax-exempt bonds to raise money for public improvements.

Establishment of a new Mello-Roos District requires a two-thirds margin of qualified voters in the district. Upon approval, a Mello-Roos District has all the legal privileges of a legally sanctioned government body. A Mello-Roos District has the legal right to implement severe penalties and foreclosure priorities in the event the payment of district assessment fees is delinquent. District assessments are levied in the form of special charges on the owner's property tax bill.

Mello-Roos Districts can levy assessment fees on undeveloped land, as well as developed residential, commercial, industrial, and religious properties within the District. The assessments to be levied on the taxable property within the District are based on lot size or square footage of the home and the benefits expected to be received by each parcel from the various public improvements to be financed with the proceeds of the district bonds.

The City of Antioch, California, established a Mello-Roos assessment program in a developing part of the community to fund the building of eight new schools and a park to serve the area. Bonds were sold finance these costs, and the special taxes collected are used to make the bond payments or pay directly for the facilities. Construction on the first school began in 1992, and construction on the eighth and final school began in 2004. Since 1995, there has been an option allowing the Mello-Roos tax to be paid off early by the homeowner.¹⁷

If a builder's project is subject to Mello-Roos, the per unit cost could be built into the pricing of the home, as would be the case if the financing tool was an impact fee, rather than the same amount being financed through annual district assessments. But builders don't generally deal with the Mello-Roos obligation this way, primarily because the interest rates for financing Mello-Roos levies as general obligation bonds are low. Such bonds are exempt from both State and Federal income taxes on the interest they earn, and therefore are sold to investors as

¹⁷ <http://www.ci.antioch.ca.us/CityGov/Finance/MelloRoos/default.htm>, accessed on December 16, 2006

tax-free municipal bonds, with interest rates at about half the going rate for residential mortgage loans. For example, if the lump sum per unit amount of a Mello-Roos bond obligation was \$11,000, the annual interest as a general obligation bond might cost the homeowner \$846 at 4.5% annual interest rate as a municipal bond. However, the very same amount could cost \$1,205 at 9% interest financed at regular market rates.

The special district financing mechanism represented by California's Mello-Roos Districts is not entirely appropriate for Hawaii school finance, since Hawaii has a state-wide school district and does not need to create a special purpose governmental entity to escape property tax limitations such as those imposed by California's Proposition 13. However, one of the key features of the Mello-Roos District may be applicable to Hawaii. This feature is the ability to allow the school construction cost obligation of a new residence to be paid in annual installments over an extended period of time.

Thus, while Mello-Roos special districts are not needed in Hawaii to escape property tax limitations on the issuance of government bonds, they do offer the concept of the extended payment option that could be incorporated into any impact fee or development tax system. However, since impact fees, unlike district taxes, cannot generally be pledged to retire bonds, the extended payment option is less appropriate than it is for special districts.

Real Estate Transfer Taxes

Another school funding alternative is a real estate transfer tax. A real estate transfer tax is not a property tax, but is an excise tax on the privilege of selling property. Like the other financing alternatives under consideration, a real estate transfer tax would have to be authorized by the State Legislature. Real estate transfer taxes are increasingly being turned to as an alternative to development fees or taxes as a means of financing school construction in growing areas of the country.

Thirty-five states plus Washington, D.C. impose a real estate transfer tax; California, Louisiana and Ohio permit local governments to impose and collect real estate transfer taxes. Localities in Delaware, Maryland, Michigan, New Jersey, Pennsylvania, Washington and West Virginia may impose a local transfer tax in addition to the State transfer tax. The amount of transfer tax ranges from a low of 0.01 percent in Colorado to a high of 2.2 percent in Washington D.C. Most state real estate transfer tax rates are lower than 0.5 percent of the value of the transfer.¹⁸ Local governments that have a transfer tax charge more varied rates.

In some cases, modifications to the flat percentage rate have been made to make the tax more progressive and to encourage affordable housing. Hawaii enacted a sliding scale for the transfer tax under Act 156 in the 2005 Legislative Session. The State's sliding scale is based on the amount of the conveyance:

- o 0.10% (0.15% for single-family or condominium residences that do not qualify for a homeowner's exemption) on amounts up to \$600,000;

¹⁸ Federation of Tax Administrators, *FTA Bulletin*, "State Real Estate Transfer Taxes," February 16, 2006.

- o 0.20% (0.25% for non-exempt) on the amounts from \$600,000 up to \$1,000,000; or
- o 0.30% (0.35% for non-exempt) on amounts in excess of \$1,000,000.

Real estate transfer taxes can obviously be used to fund many other things besides school construction. Hawaii dedicates a portion of the State transfer tax to the land conservation fund and rental housing trust fund.

Some advantages of the real estate transfer tax over impact fees or development taxes include significantly greater revenue potential and less dependence on building cycles, since the resale of existing real estate is subject to the tax. Like the development tax, the real estate transfer tax to fund schools could be charged on both residential and nonresidential development, whereas school impact fees are generally charged only on residential development. Like the development tax, the real estate transfer tax has the disadvantage of bearing the tax label. It also lacks the dedicated nature of an impact fee and could be used to fund a variety of things other than new school construction.

Impact Fees

Impact fees were pioneered by local governments in the absence of explicit state enabling legislation. Consequently, such fees were originally defended as an exercise of local government's broad "police power" to protect the health, safety and welfare of the community.

The courts gradually developed guidelines for constitutionally valid impact fees, based on a "rational nexus" that must exist between the regulatory fee or exaction and the activity that is being regulated. The standards set by court cases generally require that an impact fee meet a two-part test:

- 1) The need for new facilities must be created by new development; and
- 2) The expenditure of impact fee revenues must provide benefit to the fee-paying development.

Impact fees for various types of developments should be proportional to the impact of each development on the need to construct additional or expanded facilities. The fees do not have to recover the full cost, but if the fees are reduced by a percentage from the full cost, the percentage reduction should apply evenly to all types of developments.

Texas adopted the first general impact fee enabling act in 1987. To date, 27 states have adopted impact fee enabling legislation for other than water and wastewater fees (Table 62). These acts have tended to embody the constitutional standards that have been developed by the courts.

**Figure 6
IMPACT FEE ENABLING ACTS**

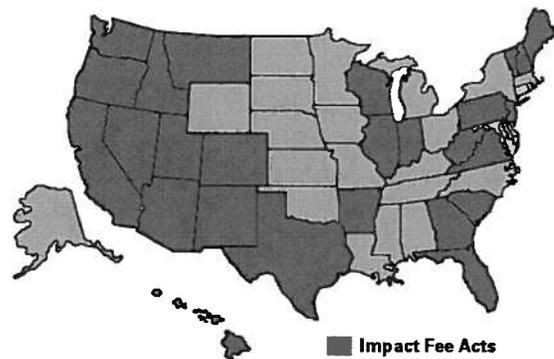


Table 62
STATE IMPACT FEE ENABLING ACTS

State	Year	Citation
Arizona	1988	Ariz. Rev. Stat. Ann., § 9-463.05 (cities), § 11-1102 et seq. (counties)
Arkansas	2003	Arkansas Code, § 14-56-103 (cities only)
California	1989	Cal. Gov't Code, § 66000 et seq. (mitigation fee act); § 66477 (Quimby Act for park dedication/fee-in-lieu); § 17620 et. seq. (school fees)
Colorado	2001	Colo. Rev. Stat., § 29-20-104.5; § 29-1-801804 (earmarking requirements); § 22-54-102 (school fee prohibition)
Florida	2006	Fla. Stat., § 163.31801
Georgia	1990	Ga. Code Ann., § 36-71-1 et seq.
Hawaii	1992	Haw. Rev. Stat., § 46-141 et seq.; § 264-121 et seq.
Idaho	1992	Idaho Code, § 67-8201 et seq.
Illinois	1987	605 Ill. Comp. Stat. Ann., § 5/5-901 et seq.
Indiana	1991	Ind. Code Ann., § 36-7-4-1300 et seq.
Maine	1988	Me. Rev. State. Ann., Title 30-A, § 4354
Montana	2005	Montana Code Annotated, Title 7, Chapter 6, Part 16
Nevada	1989	Nev. Rev. Stat., § 278B
New Hampshire	1991	N.H. Rev. Stat. Ann., § 674:21
New Jersey	1989	N.J. Perm. Stat., § 27:1C-1 et seq.; § 40:55D-42
New Mexico	1993	New Mexico Stat. Ann., § 5-8-1 et seq.
Oregon	1991	Or. Rev. State, § 223.297 et seq.
Pennsylvania	1990	Pa. Stat. Ann., Title 53, § 10502-A et seq.
Rhode Island	2000	General Laws of Rhode Island, §45-22.4
South Carolina	1999	Code of Laws of S.C., § 6-1-910 et seq.
Texas	1987	Tex. Local Gov't Code Ann., Title 12, § 395.001 et seq.
Utah	1995	Utah Code, § 11-36-101 et. seq.
Vermont	1989	Vt. Stat. Ann., Title 24, § 5200 et seq.
Virginia	1990	Va. Code Ann., § 15.2-2317 et seq.
Washington	1991	Wash. Rev. Code Ann., § 82.02.050 et seq.
West Virginia	1990	W. Va. Code, § 7-20-1 et seq.
Wisconsin	1993	Wis. Stats., § 66.0617

In some states, such as Maryland, Tennessee and North Carolina, impact fees and development taxes are generally authorized for individual jurisdictions through special acts of the legislature. In Tennessee, mayor-aldermanic charter cities have very broad home-rule powers of taxation and specific grants of authority for fees, which have been interpreted as including the authority to levy impact fees. Although Tennessee does not have a general enabling act, 13 counties and 15 cities have enacted impact fees or adequate facilities taxes, based either on home-rule authority or special local acts.

One of the things that most enabling acts do is restrict the types of facilities for which impact fees may be imposed. The types of facilities that are eligible for impact fees in the various state acts are listed in Table 63. It is noteworthy that only eight states authorize school impact fees. School impact fees are found almost exclusively in Florida, California, Washington and Maryland (where they are authorized in some counties by special acts of the legislature). School impact fees tend to be high fees that are imposed only on residential development and face

political opposition from homebuilder and realtor organizations; as a result, many states prohibit the imposition of school impact fees.

Table 63
FACILITIES ELIGIBLE FOR IMPACT FEES

State	Roads	Water	Sewer	Storm Water	Parks	Fire	Police	Library	Solid Waste	School
Arizona (cities)	■	■	■	■	■	■	■	■	■	
Arizona (counties)	■	■	■		■	■	■			
Arkansas (cities)	■	■	■	■	■	■	■	■		
California	■	■	■	■	■	■	■	■	■	■
Colorado	■	■	■	■	■	■	■	■	■	
Florida	■	■	■	■	■	■	■	■	■	■
Georgia	■	■	■	■	■	■	■	■		
Hawaii	■	■	■	■	■	■	■	■	■	■
Idaho	■	■	■	■	■	■	■			
Illinois	■									
Indiana	■	■	■	■	■	■	■	■	■	
Maine	■	■	■		■	■	■	■	■	
Montana	■	■	■	■	■	■	■	■	■	
Nevada	■	■	■	■	■	■	■	■	■	
New Hampshire	■	■	■	■	■	■	■	■	■	■
New Jersey	■	■	■	■	■	■	■	■	■	
New Mexico	■	■	■	■	■	■	■	■	■	
Oregon	■	■	■	■	■	■	■	■	■	
Pennsylvania	■									
Rhode Island	■	■	■	■	■	■	■	■	■	■
South Carolina	■	■	■	■	■	■	■	■	■	
Texas (cities)	■	■	■	■	■	■	■	■	■	
Utah	■	■	■	■	■	■	■	■	■	
Vermont	■	■	■	■	■	■	■	■	■	■
Virginia	■									
Washington	■	■	■	■	■	■	■	■	■	■
West Virginia	■	■	■	■	■	■	■	■	■	■
Wisconsin (cities)	■	■	■	■	■	■	■	■	■	

Florida can now be said to have an impact fee enabling act, although local governments in Florida have long had their authority to impose impact fees confirmed by the courts. The “Florida Impact Fee Act,” which became effective on June 14, 2006, imposes several minor requirements on local governments adopting or amending impact fee ordinances. The fees must be based on the most “recent and localized” data, administrative charges may not exceed actual administrative costs, and notice must be provided at least 90 days prior to the effective date of an impact fee ordinance. Local governments, however, remain concerned that a future legislature will impose more onerous restrictions.

A review of the state enabling acts reveals that, outside of the general principles of rational nexus and rough proportionality laid down by the courts, there is little agreement about what form state regulation should take. Selected characteristics of state impact fee enabling acts are summarized in Table 64. The first column, showing the length of the various acts, illustrates that enabling acts range from brief grants of authority and statements of general principles

(Arizona, Arkansas, Florida, Maine, Vermont, Wisconsin) to the exhaustive, confusing and conflicting provisions of California's legislation.

About one-third of the enabling acts allow impact fees to be collected at any time during the development process. Most of the others provide that impact fees cannot be collected prior to the building permit or certificate of occupancy.

One of the least settled issues in impact fee practice is whether or how impact fees should be reduced to account for past or future revenues that will be generated by new development and potentially used to the same types of capital improvements for which the impact fees are imposed. State enabling acts provide little consensus or guidance on this matter. A majority of existing state enabling acts require that at least consideration be given to revenue credits, but a minority are completely silent on this issue.

A majority of state acts require that impact fee revenues be spent within a specified number of years or be refunded to the fee payer. These requirements range from five to 15 years, with six years being the most common.

Several states, following Texas' early lead, have imposed a rather onerous recalculation requirement, which mandates that the local government recalculate the impact fees after completion of the capital improvements plan, then refund any excess collected if actual costs were less than projected costs. This provision was in the original Texas act and was copied almost verbatim in several other acts. Texas has since repealed the provision.

Another type of provision pioneered by the Texas act stipulates that fees are assessed at platting rather than at the time of construction. In the Texas act, the fee schedule in effect at time of platting is the maximum fee that may be charged to development within the subdivision, regardless of when development actually occurs. Two other states have this same provision, while another four lock the fee in for one to four years.

While about half of the acts are silent on the issue of waivers or exemptions, the other half explicitly authorize local governments to waive impact fees for certain types of projects. Most of them limit waivers to affordable housing or, to a lesser extent, economic development projects. Of the acts that authorize waivers, about half require that the local government reimburse the impact fee fund from some other, non-impact fee revenue source.

The final column in Table 64 indicates the frequency within which the fees must be updated. Most acts are silent on this issue. Of the less than one-third that require periodic updates, every five years is the most common requirement.

**Table 64
SELECTED ENABLING ACT CHARACTERISTICS**

State	Length (Word Count)	Time to Collect	Explicit Rev. Credit Reqm't	Spend- ing Time Limit	Recalc, Reqm't	Assess Locks Fee	Explicit Waivers	Waiver Funding Req'd?	Update Fre- quency
Arizona	1,068	anytime	yes	none	no	no	none	n/a	none
Arkansas	1,634	cert occ	no	7 yrs	no	no	none	n/a	none
California	22,907	bldg pmt	no	5 yrs	no	no	none	n/a	none
Colorado	3,980	anytime	no	none	no	no	afford hsg	no	none
Florida	307	anytime	no	none	no	no	none	n/a	none
Georgia	3,757	bldg pmt	yes	6 yrs	no	1/2 yrs	econ devt	yes	none
Hawaii	2,017	bldg pmt	yes	6 yrs	no	no	none	n/a	none
Idaho	7,124	bldg pmt	yes	10 yrs	no	1 yr	afford hsg	yes	5 yrs
Illinois	5,670	bldg/CO	yes	5 yrs	no	no	none	n/a	5 yrs
Indiana	9,705	bldg pmt	yes	6 yrs	no	3 yrs	afford hsg	no	5 yrs
Maine	465	anytime	no	none	yes	no	none	n/a	none
Montana	1,809	bldg pmt	yes	none	no	no	none	n/a	none
Nevada	4,685	bldg pmt	no	10 yrs	yes	no	schools	no	3 yrs
New Hamp.	2,356	cert occ	no	6 yrs	no	no	none	n/a	none
New Jersey	8,670	bldg pmt	no	none	no	no	none	n/a	none
New Mexico	6,575	bldg pmt	no	7 yrs	yes	4 yrs	afford hsg	unclear	5 yrs
Oregon	4,111	anytime	no	none	no	no	none	n/a	none
Pennsylvania	6,115	bldg pmt	yes	none	yes	no	afford/other	no	none
Rhode Island	1,942	cert occ	no	8 yrs	no	no	general	no	none
S. Carolina	4,571	bldg pmt	yes	5 yrs	no	forever	afford hsg	yes	none
Texas	8,641	bldg pmt	yes	10 yrs	no	forever	afford hsg	no	5 yrs
Utah	4,818	anytime	yes	6 yrs	no	no	afford hsg	yes	none
Vermont	1,229	anytime	no	6 yrs	yes	no	general	no	none
Virginia	1,893	cert occ	yes	15 yrs	yes	forever	none	n/a	2 yrs
Washington	2,064	anytime	yes	6 yrs	no	no	general	yes	none
West Virginia	3,105	anytime	yes	6 yrs	no	no	general	yes	none
Wisconsin	1,167	bldg pmt	no	7 yrs	no	no	afford hsg	no	none

Hawaii's impact fee enabling act, adopted in 1992, authorizes counties to adopt impact fees for all "types of public facility capital improvements specifically identified in a county comprehensive plan or a facility needs assessment study." The only use of this authority to-date has been by the City and County of Honolulu, which adopted a road impact fee ordinance for the Ewa area of Oahu. Hawaii's legislature recently removed the restriction that previously allowed only counties with a population of greater than 500,000 to impose impact fees for State highways (Senate Bill 2901 was effective on July 1, 2006).

School impact fees have been explicitly authorized in California since 1987, when the legislature passed AB 2926, authorizing school districts to levy a development fee on all new construction for the purpose of paying their share of school building construction. The school district, upon adoption of such a fee, must notify city and county building officials, who must then require proof that such fees have been paid before issuing building permits. The fee is levied based on

the square footage of construction. The maximum fees are established by law and are adjusted annually for inflation. In January 2006, the maximum fees were raised to \$2.63 per square foot for residential buildings and \$0.42 per square foot for commercial buildings.

The California impact fee act is unique in that it specifically anticipates the imposition of school impact fees on nonresidential development. It requires that, if school fees are to be assessed on nonresidential development, the school district must first conduct a study of the impact of the increased number of employees on the need for school facilities. No other state impact fee act specifically addresses this issue.

The consultant team is not aware of any adopted school impact fee outside of California that applies to nonresidential development. The reason is that it is more difficult to establish the link between commercial development and the need for new school capacity. For example, while an employee of a manufacturing facility may have children that go to public school, the employee may not live in the same school district where the factory is located. This would be less of a problem in Hawaii, where districts are large and geographically isolated. In addition, a school impact fee that charges both residential and nonresidential development must find a way to allocate school costs between the residential units where the children live and the employment centers where their parents work.

Unlike developer exactions that typically address only on-site or nearby facilities, impact fees can be used to cover the broad range of capital facilities required to serve new development. Impact fees are more predictable and equitable than informal systems of negotiated exactions and are likely to generate considerably more revenue. Impact fees can also be used to fund a wider variety of services and types of facilities than is possible with exactions.

The primary strengths of impact fees include applicability to a wide range of public facilities, ability to recover the full net costs of growth-related infrastructure, proportionality to impacts, predictability for both the public and private sectors and acceptability due to a clear linkage with the needs of new development. Their limitations include the necessity for detailed studies and accounting procedures, inability to fund operating or deficiency costs, dependence on growth cycles and lack of bonding capability.

The requirement that impact fees be spent to benefit the fee-paying development is typically met by earmarking revenues for expenditure in the zone in which they are collected. If impact fees cannot be used to finance bonds, enough fees must accumulate before construction on a project can begin. The requirement that fee revenues be spent within a reasonable period of time following fee payment imposes an additional constraint. However, proper design of benefit zones, provisions for pooling revenues from adjacent zones and supplementing impact fee revenues with funds from other sources can overcome obstacles to successful fee implementation.

Development Taxes

Development taxes, which are also called impact, excise or privilege taxes, are special taxes levied on development. Development taxes are a special type of excise tax, which in general refers to any tax that is not an ad valorem tax or an income tax. Development taxes are local taxes imposed on the business or occupation of real estate development in general (or a part of

that business) in order to raise monies to pay for the added costs that development imposes on the community.

Because they are an exercise of the taxing power, rather than the police power, development taxes must be specifically authorized by state law. Most states reserve the right to levy excise taxes to the state government. In the 1960s, home rule cities in California became the first in the nation to assess development taxes. Several other states, including Colorado and Arizona, authorize municipalities to impose excise taxes, and some communities in those states have used this authority to impose development excise taxes on the occupation of building.

Development taxes differ from ad valorem property taxes in several important ways. They are not taxes on property at all, but taxes on the exercise of an occupation. They are therefore generally not subject to constitutional and statutory requirements of uniform real property taxation. They are seldom based directly on the value of a property; they are usually calculated based on some measure of the amount of construction itself, such as building square feet. When development taxes are directly based on the value of real property, they have sometimes been held to be unconstitutional ad valorem taxes, and have been overturned. Finally, unpaid ad valorem property taxes are generally secured by a lien on the property, while payment of the excise tax is not secured by a lien. Instead, it is usually collected at the time of building permit issuance.

Development taxes also differ from impact fees in important ways. First, they are primarily a tool for raising revenue, as opposed to a land use regulation designed to finance facilities for specific developments. Second, they do not have to be earmarked or segregated or accounted for separately from general revenues. Third, they can be used to pay for operations and maintenance of facilities, as well as for their construction. Fourth, they generally do not need to be based on either general or specific studies to document a reasonable relationship of burdens and benefits. For all of these reasons, the excise tax mechanism offers municipalities substantially more flexibility in raising revenues to cover the costs of development.

Perhaps most importantly, development taxes are adopted pursuant to municipal taxation powers, and not police powers. As a result, they are generally not subject to the body of law dealing with the limits of police power regulations and exactions. Court-defined standards for “nexus,” “reasonable relationships,” and “rough proportionality” generally do not apply. While development taxes must be rationally related to a corporate purpose, that is generally easy to show, since revenues are generally needed from somewhere to fund public facilities made necessary by the new development activity subject to the tax.

Development taxes are not without disadvantages. In spite of the fact that they are not subject to the strict nexus/rational relationship test, studies may still need to be compiled. Generally, it is good practice to calibrate development taxes carefully, based on the types of expenses that they are intended to cover. In addition, the adoption of new taxes is generally more unpopular than the adoption of new development fees or special assessments, even though the practical results and burdens of the different tools may be the same.

Development taxes tend to be more popular than other kinds of taxes because they are levied on new construction rather than existing development. However, re-roofing, remodeling and alterations to existing structures may also be subject to such a tax. Remodeling activities may

account for over one-third of total building permit valuation even in rapidly-growing communities.

Impact Fees Versus Development Taxes

Impact fees and development excise taxes are different mechanisms for achieving the same broad goal of shifting more of the cost of growth onto the developments creating the need for expanded infrastructure. The key differences between the two may be summarized as the “legitimacy and predictability” of impact fees versus the “flexibility and simplicity” of development excise taxes.

Impact fees have a certain legitimacy that derives from the strong, required linkage between the amount of the fee and the actual costs required to serve the new development with new or expanded capital facilities. Their legitimacy also derives from the even-handed treatment of all development projects according to their impacts. This sense of fairness is reinforced by the fact that developers who are required to make improvements for the same type of facilities as a condition of development approval must be given credit against their impact fees for the value of the improvements. Finally, the constitutional standards developed by the courts to ensure that local governments do not abuse their regulatory authority over development provide developers an assurance that the local government must treat them fairly or end up in court.

These characteristics may lead developers to prefer impact fees over development taxes, even when the impact fees are higher than the development taxes would be. Duncan Associates has worked with municipalities to develop both impact fee and development tax alternatives. Generally, the development tax alternative spreads the cost of facilities over both residential and nonresidential development and results in a lower fee for residential development than an impact fee if the impact fee for such facilities cannot be charged to nonresidential development. In one community it had been assumed that the residential homebuilders would prefer a lower development tax to the higher impact fee. Surprisingly, the homebuilders association expressed a strong preference for the higher impact fee. Their reasoning was that even if the development tax was initially calculated in the same manner as an impact fee, it lacked the safeguards that would prevent future governing bodies from arbitrarily increasing the tax.

The impact fee approach is generally indicated for facilities that, by their nature, are the subject of regulatory exactions that should be creditable against the impact fees. Developers, for example, are often required to oversize water and sewer lines and drainage facilities, and to construct or widen internal or adjacent arterial streets. These types of required improvements benefit the community at large, and developers should not be required to provide such improvements and pay development charges intended to fund the same types of improvements, without some credits or other form of compensation. School facilities, however, do not fall in this category, because developers are rarely required to construct schools.

While legitimacy and predictability may be the major advantage of impact fees, development excise taxes would provide much more flexibility and are simpler to develop, administer and update. Detailed studies would not have to be performed to determine the appropriate amount of the tax, development taxes would not have to be segregated from other revenue sources, and revenues could fund maintenance as well as capital costs.

While the differences between impact fees and development excise taxes seem fairly clear in their typical manifestation, things get murkier when development taxes are calculated and assessed in ways that are virtually identical to impact fees. Most case law on the distinction between impact fees and development taxes has involved impact fees being struck down by the courts as an unlawful tax. It is unclear how the courts would look upon a development excise tax that in most respects functions like an impact fee. One legal observer advises municipalities considering adoption of an excise tax on the business of development to take pains to ensure that the fee is not interpreted by the court as being an impact fee, by, for example, avoiding earmarking the revenues collected.

One community that has designed a development tax that looks very much like an impact fee is the City of Boulder. In 1996, the City commissioned a study that used impact fee methodologies to calculate the maximum fees for a wide variety of public facilities, but adopted them as a Development Excise Tax (DET). The DET, which was most recently updated in 2004, has most of the other trappings of an impact fee, including the earmarking of revenues for capital facilities, segregating funds according to the type of facility and a provision for credit against the tax for required developer contributions.

The more a development tax is designed to function like an impact fee, the more it loses the advantages of the development tax approach. It is not clear, for example, what advantage there is to the City of Boulder to adopting what appears to be an impact fee as a development excise tax. Since this approach takes the risk that the courts may decide it is an impact fee after all, it would appear the more prudent course to develop an excise tax that takes advantage of not having to comply with all of the requirements attendant to impact fees.

One reason for choosing development taxes over impact fees for certain facilities would be to promote housing affordability. Impact fees for schools, parks, libraries and cultural facilities, for example, must generally be assessed only on residential development. The cost of these facilities could be addressed with a much lower development tax that applied to nonresidential as well as residential development. Another situation favoring a development tax would be a facility like stormwater drainage for which there may be inadequate data to support defensible impact fee calculations. Finally, a development tax can be more easily designed to be progressive by being assessed per square foot of residential development, without the burden of having to show how the impacts of the development are directly related to the size of the dwelling.

In summary, impact fees and development excise taxes have very different characteristics, and one should not try to get the advantages of both. The impact fee approach has the advantages of legitimacy and predictability that come from the constitutional requirements for detailed studies to determine attributable costs, earmarking of funds, expenditure only for capital expansion, provision of credits for required developer contributions, etc. In contrast, the development excise tax approach offers the advantages of flexibility and simplicity that come with the use of the taxing authority. Consequently, the development tax approach, if forthrightly done, is generally immune from legal challenge, does not require detailed studies, is simpler to administer and update, and can be used to promote goals, such as affordable housing or progressive taxation, that are more difficult to address within an impact fee framework.

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Appendix F: New School Construction Schedule

Table 65
NEW SCHOOL CONSTRUCTION SCHEDULE, 2006-2015

School	Complex Area	District	Year
Ewa Makai Middle	Campbell-Kapolei-Waianae	Leeward	2006
Kapolei Makai Elementary	Campbell-Kapolei-Waianae	Leeward	2007
Koa Ridge Elementary	Nanakuli-Pearl City-Waipahu	Leeward	2008
Koa Ridge Middle	Nanakuli-Pearl City-Waipahu	Leeward	2008
Central Oahu High	Nanakuli-Pearl City-Waipahu	Leeward	2008
Waiawa Elementary	Nanakuli-Pearl City-Waipahu	Leeward	2009
Lahaina III Elementary	Hana-Lahainaluna-Lanai-Molokai	Maui	2009
Wailuku II Elementary	Baldwin-Kekaulike-Maui	Maui	2010
Kakaako Elementary	McKinley-Roosevelt	Honolulu	2010
Waimea Elementary (New)	Honokaa-Kealakehe-Kohala-Konawaena	Hawaii	2010
HLIP Oahu		Honolulu	2011
Kihei High	Baldwin-Kekaulike-Maui	Maui	2011
Waiawa Middle	Nanakuli-Pearl City-Waipahu	Leeward	2011
Royal Kunia Elementary	Nanakuli-Pearl City-Waipahu	Leeward	2011
Central Maui Middle	Baldwin-Kekaulike-Maui	Maui	2012
Ko Olina Elementary	Campbell-Kapolei-Waianae	Leeward	2012
Waiawa Elementary II	Nanakuli-Pearl City-Waipahu	Leeward	2013
Koa Ridge Elementary II	Nanakuli-Pearl City-Waipahu	Leeward	2013
Kealakehe II Elementary	Honokaa-Kealakehe-Kohala-Konawaena	Hawaii	2013
East Kapolei Elementary	Campbell-Kapolei-Waianae	Leeward	2013
East Kapolei Middle	Campbell-Kapolei-Waianae	Leeward	2014
East Kapolei High	Campbell-Kapolei-Waianae	Leeward	2014
Central Oahu High II	Nanakuli-Pearl City-Waipahu	Leeward	2014
Lihue II Elementary	Kapaa-Kauai-Waimea	Kauai	2014
Waiawa Middle II	Nanakuli-Pearl City-Waipahu	Leeward	2015
Waiawa Elementary III	Nanakuli-Pearl City-Waipahu	Leeward	2015

Source: Hawaii Department of Education, 2005-07 Biennium Budget and Six Year CIP Plan.

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Appendix G: Trend Data, 1990-2006

Table 66
ENROLLMENT AND HOUSING TRENDS, 1990-2006

Census Year	School Year	Elementary/Secondary School Enrollment					Sch Age (5-17 yr)	Total Housing	Occup. Housing
		Regular	Chartr	Ttl DOE	Private	Total			
1990	1989/1990	169,193	0	169,193	33,448	202,641	196,903	389,563	356,296
1991	1990/1991	171,056	0	171,056	33,584	204,640			
1992	1991/1992	174,249	0	174,249	33,289	207,538			
1993	1992/1993	176,923	0	176,923	33,108	210,031			
1994	1993/1994	179,876	0	179,876	33,577	213,453			
1995	1994/1995	182,456	708	183,164	33,534	216,698			
1996	1995/1996	185,835	746	186,581	33,042	219,623			
1997	1996/1997	187,641	844	188,485	32,550	221,035			
1998	1997/1998	188,473	808	189,281	32,566	221,847			
1999	1998/1999	186,560	835	187,395	32,358	219,753			
2000	1999/2000	184,252	784	185,036	33,062	218,098	217,604	460,542	403,240
2001	2000/2001	182,179	1,341	183,520	33,694	217,214		466,300	
2002	2001/2002	180,563	3,066	183,629	33,226	216,855		470,792	
2003	2002/2003	179,448	3,350	182,798	34,815	217,613		476,380	
2004	2003/2004	177,932	4,502	182,434	34,998	217,432	210,004	482,873	
2005	2004/2005	176,730	5,167	181,897	35,981	217,878	208,744	491,071	
2006	2005/2006	175,759	5,596	181,355	35,981	217,336		502,285	

Source: Enrollment from Hawaii Department of Education, *2005 Superintendent's 16th Annual Report*, 2005, Table 1; school-aged children 5-17 years old from 1990 and 2000 U.S. Census and from U.S. Census Bureau, *American Community Survey*, 2004 and 2005; total housing from 1990 and 2000 U.S. Census and U.S. Census Bureau, housing estimates as of July 1; occupied housing units for 1990 and 2000 U.S. Census.

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Appendix H: School Inventory

Table 67
DISTRICT INVENTORY SUMMARY

District	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
					Perm.	Port.	% Port.
Elementary	20,682	16,339	14,985	(1,354)	1,206	12	1.0%
Middle	7,714	6,271	5,580	(691)	442	9	2.0%
High	9,755	9,679	8,400	(1,279)	519	19	3.5%
Total, Honolulu	38,151	32,289	28,965	(3,324)	2,167	40	1.8%
Elementary	20,854	17,884	16,716	(1,168)	1,009	166	14.1%
Middle	6,300	5,764	5,424	(340)	273	36	11.7%
High	9,088	9,567	8,939	(628)	428	68	13.7%
Total, Central	36,242	33,215	31,079	(2,136)	1,710	270	13.6%
Elementary	11,733	9,408	8,687	(721)	614	91	12.9%
Middle	3,421	2,094	1,721	(373)	164	1	0.6%
High	4,174	3,779	2,879	(900)	212	21	9.0%
Other	1,551	1,879	1,728	(151)	75	25	25.0%
Total, Windward	20,879	17,160	15,015	(2,145)	1,065	138	11.5%
Elementary	23,225	21,057	23,047	1,990	1,004	236	19.0%
Middle	5,979	6,243	6,928	685	277	31	10.1%
High	11,022	12,511	12,196	(315)	537	74	12.1%
Total, Leeward	40,226	39,811	42,171	2,360	1,818	341	15.8%
Elementary	12,785	11,000	12,798	1,798	582	150	20.5%
Middle	6,648	4,931	4,638	(293)	317	49	13.4%
High	9,091	8,066	7,512	(554)	450	76	14.4%
Other	1,330	598	683	85	67	10	13.0%
Total, Hawaii	29,854	24,595	25,631	1,036	1,416	285	16.8%
Elementary	10,757	9,393	10,440	1,047	457	149	24.6%
Middle	4,288	4,313	4,235	(78)	182	53	22.6%
High	5,188	6,112	5,483	(629)	215	74	25.6%
Other	2,041	972	730	(242)	86	30	25.9%
Total, Maui	22,274	20,790	20,888	98	940	306	24.6%
Elementary	5,634	4,238	4,332	94	249	70	21.9%
Middle	2,886	2,131	1,875	(256)	143	5	3.4%
High	3,617	3,226	2,591	(635)	166	37	18.2%
Total, Kauai	12,137	9,595	8,798	(797)	558	112	16.7%
Elementary	105,670	89,319	91,005	1,686	5,121	874	14.6%
Middle	37,236	31,747	30,401	(1,346)	1,798	184	9.3%
High	51,935	52,940	48,000	(4,940)	2,527	369	12.7%
Other	4,922	3,449	3,141	(308)	228	65	22.2%
Total, All Districts	199,763	177,455	172,547	(4,908)	9,674	1,492	13.4%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004."

**Table 68
HONOLULU DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Kaahumanu	Elem	716	557	503	(54)	34	3	8.1%
Kaiulani	Elem	416	414	411	(3)	30	0	0.0%
Kauluwela	Elem	508	398	334	(64)	28	0	0.0%
Lanakila	Elem	520	288	281	(7)	31	0	0.0%
Likelike	Elem	509	455	470	15	30	0	0.0%
Royal	Elem	411	388	373	(15)	23	0	0.0%
Central Middle	Middle	709	489	369	(120)	43	0	0.0%
Mckinley High	High	2,191	1,945	1,665	(280)	105	10	8.7%
Total, McKinley Complex		5,980	4,934	4,406	(528)	324	13	3.9%
Anuenue	Elem	461	354	279	(75)	25	0	0.0%
Lincoln	Elem	647	449	419	(30)	35	0	0.0%
Maemae	Elem	744	724	635	(89)	37	0	0.0%
Manoa	Elem	692	635	609	(26)	39	0	0.0%
Noelani	Elem	473	526	476	(50)	20	3	13.0%
Nuuuanu	Elem	352	389	313	(76)	16	1	5.9%
Pauoa	Elem	543	440	415	(25)	30	0	0.0%
Kawananakoa	Middle	960	815	714	(101)	48	0	0.0%
Stevenson Middle	Middle	833	604	533	(71)	49	1	2.0%
Roosevelt High	High	1,506	1,672	1,481	(191)	76	1	1.3%
Total, Roosevelt Complex		7,211	6,608	5,874	(734)	375	6	1.6%
Ala Wai	Elem	590	473	402	(71)	34	3	8.1%
Aliiolani	Elem	427	276	244	(32)	31	0	0.0%
Hokulani	Elem	438	409	372	(37)	22	0	0.0%
Jefferson	Elem	603	474	342	(132)	42	0	0.0%
Kuhio	Elem	439	337	355	18	24	0	0.0%
Lunalilo	Elem	692	579	570	(9)	37	0	0.0%
Palolo	Elem	450	262	265	3	39	0	0.0%
Waialae	Elem	542	na	na	0	30	0	0.0%
Jarrett Middle	Middle	634	314	255	(59)	41	0	0.0%
Washington Middle	Middle	1,008	1,066	764	(302)	54	0	0.0%
Kaimuki High	High	1,478	1,297	1,163	(134)	82	4	4.7%
Total, Kaimuki Complex		7,301	5,487	4,732	(755)	436	7	1.6%
Kahala	Elem	577	538	540	2	32	0	0.0%
Liholiho	Elem	450	333	330	(3)	27	0	0.0%
Liliuokalani	Elem	267	123	99	(24)	24	0	0.0%
Waikiki	Elem	426	346	383	37	24	0	0.0%
Wilson	Elem	531	607	575	(32)	28	0	0.0%
Kaimuki Middle	Middle	994	744	704	(40)	69	0	0.0%

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Kalani High	High	1,220	1,161	1,021	(140)	71	0	0.0%
Total, Kalani Complex		4,465	3,852	3,652	(200)	275	0	0.0%
Fern	Elem	589	555	507	(48)	33	0	0.0%
Kaewai	Elem	404	250	222	(28)	30	0	0.0%
Kalihi	Elem	496	210	189	(21)	31	0	0.0%
Kalihi-Kai	Elem	876	706	598	(108)	45	0	0.0%
Kalihi-Uka	Elem	381	252	207	(45)	25	0	0.0%
Kalihi-Waena	Elem	601	556	509	(47)	33	0	0.0%
Kapalama	Elem	680	728	686	(42)	37	0	0.0%
Linapuni	Elem	231	205	220	15	16	0	0.0%
Puuhale	Elem	450	355	291	(64)	26	2	7.1%
Dole Middle	Middle	745	769	696	(73)	49	2	3.9%
Kalakaua Middle	Middle	1,071	1,009	926	(83)	48	6	11.1%
Farrington High	High	2,339	2,579	2,220	(359)	126	3	2.3%
Total, Farrington Complex		8,863	8,174	7,271	(903)	499	13	2.5%
Aina Haina	Elem	578	458	555	97	35	0	0.0%
Hahaione	Elem	577	436	335	(101)	36	0	0.0%
Kamiloiki	Elem	646	400	314	(86)	32	0	0.0%
Koko Head	Elem	543	293	217	(76)	37	0	0.0%
Wailupe Valley	Elem	208	161	140	(21)	18	0	0.0%
Niu Valley Middle	Middle	760	461	619	158	41	0	0.0%
Kaiser High	High	1,021	1,025	850	(175)	59	1	1.7%
Total, Kaiser Complex		4,333	3,234	3,030	(204)	258	1	0.4%
Elementary		20,682	16,339	14,985	(1,354)	1,206	12	1.0%
Middle		7,714	6,271	5,580	(691)	442	9	2.0%
High		9,755	9,679	8,400	(1,279)	519	19	3.5%
Total, Honolulu District		38,151	32,289	28,965	(3,324)	2,167	40	1.8%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004," schools in *italics* are public school facilities owned by the State that have been converted to charter schools.

**Table 69
CENTRAL DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Aiea	Elem	na	390	327	na	na	na	na
Alvah Scott	Elem	727	567	556	(11)	40	2	4.8%
Pearl Ridge	Elem	560	576	609	33	22	6	21.4%
Waimalu	Elem	797	617	601	(16)	30	13	30.2%
Webling	Elem	496	526	544	18	26	0	0.0%
Aiea Inter	Middle	973	577	538	(39)	43	0	0.0%
Aiea High	High	1,531	1,280	1,143	(137)	73	0	0.0%
Subtotal, Aiea		5,084	4,533	4,318	(215)	234	21	8.2%
Moanalua Elem	Elem	715	690	732	42	28	8	22.2%
Red Hill	Elem	669	467	399	(68)	30	3	9.1%
Salt Lake	Elem	855	789	796	7	39	6	13.3%
Shafter	Elem	278	205	225	20	20	0	0.0%
Moanalua Inter	Middle	772	831	706	(125)	35	6	14.6%
Moanalua High	High	1,640	2,016	1,822	(194)	75	12	13.8%
Subtotal, Moanalua		4,929	4,998	4,680	(318)	227	35	13.4%
Aliamanu	Elem	878	766	800	34	40	6	13.0%
Hickam	Elem	750	792	928	136	31	9	22.5%
Makalapa	Elem	671	612	577	(35)	27	9	25.0%
Mokulele	Elem	670	508	492	(16)	30	4	11.8%
Nimitz	Elem	729	553	523	(30)	40	0	0.0%
Pearl Harbor	Elem	751	617	641	24	40	2	4.8%
Pearl Harbor Kai	Elem	705	639	760	121	38	0	0.0%
Aliamanu Inter	Middle	1,121	880	799	(81)	44	6	12.0%
Radford High	High	1,581	1,343	1,257	(86)	72	9	11.1%
Subtotal, Pearl Harbor		7,856	6,710	6,777	67	362	45	11.1%
Hale Kula	Elem	901	479	584	105	40	14	25.9%
Helemano	Elem	566	594	593	(1)	25	14	35.9%
Iliahi	Elem	486	435	426	(9)	30	0	0.0%
Kaala	Elem	430	429	497	68	30	1	3.2%
Solomon	Elem	1,098	743	917	174	42	19	31.1%
Wahiawa	Elem	568	409	443	34	40	2	4.8%
Wheeler	Elem	868	658	591	(67)	45	2	4.3%
Wahiawa Middle	Middle	842	957	829	(128)	47	9	16.1%
Wheeler Middle	Middle	771	562	546	(16)	41	7	14.6%
Leilehua High	High	1,227	1,878	1,628	(250)	78	11	12.4%
Subtotal, Leilehua		7,757	7,144	7,054	(90)	418	79	15.9%
Kipapa	Elem	798	615	694	79	32	12	27.3%

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Mililani Ike	Elem	728	685	816	131	36	0	0.0%
Mililani-Mauka	Elem	866	1,872	1,996	124	43	6	12.2%
Mililani-Uka	Elem	1,039	760	786	26	40	12	23.1%
Mililani-Waena	Elem	798	598	657	59	32	12	27.3%
Mililani Middle	Middle	1,821	932	596	(336)	63	8	11.3%
Mililani High	High	2,190	2,421	2,542	121	82	27	24.8%
Subtotal, Mililani		8,240	7,883	8,087	204	328	77	19.0%
Haleiwa	Elem	348	225	188	(37)	31	0	0.0%
Waialua	Elem	600	513	550	37	29	4	12.1%
Waialua Inter/High	High	919	677	515	(162)	48	9	15.8%
Subtotal, Waialua		1,867	1,415	1,253	(162)	108	13	10.7%
Elementary		20,854	17,884	16,716	(1,168)	1,009	166	14.1%
Middle		6,300	5,764	5,424	(340)	273	36	11.7%
High School		9,088	9,567	8,939	(628)	428	68	13.7%
Total, Central District		36,242	33,215	31,079	(2,136)	1,710	270	13.6%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004."

**Table 70
LEEWARD DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Ewa Beach	Elem	611	665	514	(151)	31	1	3.1%
Ewa Elem	Elem	844	933	891	(42)	39	1	2.5%
Holomua	Elem	1,185	1,442	1,887	445	40	8	16.7%
Iroquois Point	Elem	935	563	423	(140)	36	19	34.5%
Kaimiloa	Elem	729	679	776	97	28	14	33.3%
Ocean Pointe	Elem	725	na	1,079	na	na	na	na
Pohakea	Elem	681	551	706	155	30	6	16.7%
Ilima Inter	Middle	1,230	1,201	1,335	134	59	6	9.2%
Ewa Makai	Middle	na	na	814	na	na	na	na
Campbell High	High	2,199	2,283	2,535	252	107	13	10.8%
Total, Campbell Complex		9,139	8,317	10,960	2,643	370	68	15.5%
Barbers Point	Elem	636	529	501	(28)	40	0	0.0%
Kapolei Elem	Elem	1,291	1,126	1,682	556	37	13	26.0%
Makakilo	Elem	566	509	578	69	30	0	0.0%
Mauka Lani	Elem	669	577	643	66	16	17	51.5%
Kapolei Middle	Middle	1,501	1,580	1,754	174	56	3	5.1%
Kapolei High	High	1,953	2,333	2,554	221	98	0	0.0%
Total, Kapolei Complex		6,616	6,654	7,712	1,058	277	33	10.6%
Kamaile	Elem	729	649	594	(55)	31	9	22.5%
Leihoku	Elem	855	737	705	(32)	38	13	25.5%
Maili	Elem	868	807	842	35	34	15	30.6%
Makaha	Elem	776	597	564	(33)	30	14	31.8%
Waianae	Elem	846	591	504	(87)	41	9	18.0%
Waianae Inter	Middle	1,041	1,131	948	(183)	53	8	13.1%
Waianae High	High	1,802	2,068	1,777	(291)	81	28	25.7%
Total, Waianae Complex		6,917	6,580	5,934	(646)	308	96	23.8%
Nanaikapono	Elem	1,134	964	919	(45)	58	0	0.0%
Nanakuli Elem	Elem	681	511	424	(87)	24	10	29.4%
Nanakuli High/Inter	High	1,163	1,303	1,074	(229)	66	4	5.7%
Total, Nanakuli Complex		2,978	2,778	2,417	(361)	148	14	8.6%
Kanoelani	Elem	774	834	796	(38)	26	14	35.0%
Lehua	Elem	578	397	445	48	30	0	0.0%
Manana	Elem	461	378	321	(57)	22	0	0.0%
Momilani	Elem	334	405	385	(20)	16	0	0.0%
Palisades	Elem	474	338	257	(81)	33	0	0.0%
Pearl City Elem	Elem	625	333	298	(35)	37	0	0.0%
Pearl City Highlands	Elem	474	547	767	220	30	0	0.0%

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Waiau	Elem	705	608	529	(79)	24	12	33.3%
Highlands Inter	Middle	1,005	1,011	925	(86)	46	7	13.2%
Pearl City High	High	1,734	1,980	1,832	(148)	96	4	4.0%
Total, Pearl City Complex		7,164	6,831	6,555	(276)	360	37	9.3%
August Ahrens	Elem	1,479	1,270	1,266	(4)	54	27	33.3%
Honowai	Elem	787	791	841	50	36	7	16.3%
Kaleiopuu	Elem	970	967	1,132	165	38	12	24.0%
Waikele	Elem	796	724	720	(4)	34	5	12.8%
Waipahu	Elem	868	1,035	1,058	23	41	10	19.6%
Waipahu Inter	Middle	1,293	1,320	1,152	(168)	63	7	10.0%
Waipahu High	High	2,071	2,544	2,424	(120)	89	25	21.9%
Total, Waipahu Complex		8,264	8,651	8,593	(58)	355	93	20.8%
Elementary		23,225	21,057	23,047	1,990	1,004	236	19.0%
Middle		5,979	6,243	6,928	685	277	31	10.1%
High		11,022	12,511	12,196	(315)	537	74	12.1%
Total, Leeward District		40,226	39,811	42,171	2,360	1,818	341	15.8%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004."

**Table 71
WINDWARD DISTRICT INVENTORY**

School	Type	Capacity	Enroll			Classrooms		
			05-06	10-11	Increase	Perm.	Port.	% Port.
Enchanted Lake	Elem	601	373	382	9	36	0	0.0%
Kaelepulu	Elem	288	179	195	16	16	1	5.9%
Keolu	Elem	278	181	163	(18)	26	0	0.0%
Maunawili	Elem	509	419	437	18	30	0	0.0%
Olomana	Elem	185	202	194	(8)	0	12	100.0%
Pope	Elem	383	279	258	(21)	26	0	0.0%
Waimanalo Int/Elem	Middle	816	537	475	(62)	44	0	0.0%
Kailua High	High	1,253	972	815	(157)	77	0	0.0%
Total, Kailua Complex		4,313	3,142	2,919	(223)	255	13	4.9%
Aikahi	Elem	584	580	531	(49)	30	2	6.3%
Kailua Elem	Elem	578	444	439	(5)	31	0	0.0%
Kainalu	Elem	723	536	484	(52)	40	5	11.1%
<i>Lanikai</i>	Elem	359	331	330	(1)	15	4	21.1%
Mokapu	Elem	982	759	677	(82)	41	9	18.0%
Kailua Inter	Middle	1,475	793	622	(171)	62	0	0.0%
Kalaheo High	High	1,246	1,060	809	(251)	60	0	0.0%
Total, Kalaheo Complex		5,947	4,503	3,892	(611)	279	20	6.7%
Ahuimanu	Elem	507	437	394	(43)	22	6	21.4%
Heeia	Elem	672	533	511	(22)	36	3	7.7%
Kahaluu	Elem	394	207	198	(9)	24	0	0.0%
Kaneohe	Elem	634	630	610	(20)	35	0	0.0%
Kapunahala	Elem	590	612	631	19	30	0	0.0%
Parker	Elem	647	362	272	(90)	42	0	0.0%
Puohala	Elem	543	279	162	(117)	30	0	0.0%
Waiahole	Elem	231	99	86	(13)	11	2	15.4%
King Inter	Middle	1,130	764	624	(140)	58	1	1.7%
Castle High	High	1,675	1,747	1,255	(492)	75	21	21.9%
Total, Castle Complex		7,023	5,670	4,743	(927)	363	33	8.3%
Hauula	Elem	451	262	200	(62)	22	5	18.5%
Kaaawa	Elem	162	142	113	(29)	4	11	73.3%
Kahuku	Elem	474	572	516	(56)	28	0	0.0%
Laie	Elem	566	599	548	(51)	32	13	28.9%
Sunset Beach	Elem	393	391	356	(35)	7	18	72.0%
Kahuku High/Iner	Other	1,551	1,879	1,728	(151)	75	25	25.0%
Total, Kahuku Complex		3,597	3,845	3,461	(384)	168	72	30.0%
Elementary		11,733	9,408	8,687	(721)	614	91	12.9%
Middle		3,421	2,094	1,721	(373)	164	1	0.6%
High		4,174	3,779	2,879	(900)	212	21	9.0%
Other		1,551	1,879	1,728	(151)	75	25	25.0%
Total, Windward District		20,878	17,160	15,015	(2,145)	1,065	138	11.5%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004," schools in *italics* are public school facilities owned by the State that have been converted to charter schools.

**Table 72
HAWAII DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Honokaa Elem	Elem	415	366	408	42	19	4	17.4%
Waikoloa	Elem	624	566	738	172	32	0	0.0%
Waimea Elem	Elem	671	638	908	270	34	2	5.6%
Paauiilo Elem/Inter	Middle	312	241	239	(2)	15	2	11.8%
<i>Waimea Middle</i>	Middle	384	516	565	49	15	9	37.5%
Honokaa High/Inter	High	818	835	885	50	45	9	16.7%
Subtotal, Honokaa		3,224	3,162	3,743	581	160	26	14.0%
Holualoa	Elem	427	448	623	175	9	15	62.5%
Kahakai	Elem	819	618	703	85	35	7	16.7%
Kealakehe Elem	Elem	960	960	1,118	158	33	20	37.7%
Kealakehe Inter	Middle	1,055	965	874	(91)	48	8	14.3%
Kealakehe High	High	1,480	1,530	1,395	(135)	73	2	2.7%
Subtotal, Kealakehe		4,741	4,521	4,713	192	198	52	20.8%
Kohala Elem	Elem	474	409	439	30	19	6	24.0%
Kohala Middle	Middle	289	214	214	0	13	3	18.8%
Kohala High	High	460	285	279	(6)	23	1	4.2%
Subtotal, Kohala		1,223	908	932	24	55	10	15.4%
Honaunau	Elem	357	124	158	34	11	12	52.2%
Hookena	Elem	278	133	153	20	12	10	45.5%
Konawaena Elem	Elem	658	573	609	36	33	0	0.0%
Konawaena Middle	Middle	710	446	399	(47)	30	5	14.3%
Konawaena High	High	1,107	929	786	(143)	54	16	22.9%
Ke Kula	Other	196	146	260	114	1	9	90.0%
Subtotal, Konawaena		3,306	2,351	2,365	14	141	52	26.9%
Desilva	Elem	255	346	325	(21)	18	1	5.3%
Haaheo	Elem	104	161	128	(33)	8	5	38.5%
Hilo Union	Elem	648	520	518	(2)	33	2	5.7%
Kapiolani	Elem	510	407	339	(68)	31	0	0.0%
Kaumana	Elem	289	502	579	77	13	6	31.6%
Keaukaha	Elem	543	250	260	10	19	8	29.6%
Hilo Inter	Middle	1,145	637	570	(67)	61	0	0.0%
Kalaniana'ole	Middle	864	371	276	(95)	46	0	0.0%
Hilo High	High	1,426	1,558	1,408	(150)	77	5	6.1%
Subtotal, Hilo		5,784	4,752	4,403	(349)	306	27	8.1%
Laupahoehoe	Other	456	225	196	(29)	28	0	0.0%

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Waiakea Elem	Elem	833	815	1,083	268	43	6	12.2%
Waiakeawaena	Elem	786	695	812	117	37	4	9.8%
Waiakea Inter	Middle	1,058	908	882	(26)	44	8	15.4%
Waiakea High	High	1,918	1,312	1,341	29	74	32	30.2%
Subtotal, Waiakea		4,595	3,730	4,118	388	198	50	20.2%
Naalehu	Elem	268	358	429	71	18	8	30.8%
Kau-Pahala	Other	678	227	227	0	38	1	2.6%
Subtotal, Kau		946	585	656	71	56	9	13.8%
Keaau Elem	Elem	900	743	821	78	45	0	0.0%
Mt. View	Elem	762	419	577	158	33	11	25.0%
Keaau Middle	Middle	831	633	619	(14)	45	14	23.7%
Keaau High	High	1,178	867	852	(15)	59	0	0.0%
Subtotal, Keaau		3,671	2,662	2,869	207	182	25	12.1%
Keonepoko	Elem	580	610	714	104	32	3	8.6%
Pahoa Elem	Elem	624	339	356	17	15	20	57.1%
Pahoa High/Inter	High	704	750	566	(184)	45	11	19.6%
Subtotal, Pahoa		1,908	1,699	1,636	(63)	92	34	27.0%
Elementary		12,785	11,000	12,798	1,798	582	150	20.5%
Middle		6,648	4,931	4,638	(293)	317	49	13.4%
High		9,091	8,066	7,512	(554)	450	76	14.4%
Other		1,330	598	683	85	67	10	13.0%
Total, Hawaii District		29,854	24,595	25,631	1,036	1,416	285	16.8%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004," schools in *italics* are public school facilities owned by the State that have been converted to charter schools.

**Table 73
MAUI DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Keanae	Elem	46	0	0	0	4	0	0.0%
Hana High/Elem	Other	552	356	222	(134)	21	8	27.6%
Total, Hana Complex		598	356	222	(134)	25	8	24.2%
Kamehameha III	Elem	669	744	1,077	333	23	11	32.4%
Nahienaena	Elem	681	649	653	4	31	7	18.4%
Lahaina Inter	Middle	596	578	490	(88)	27	10	27.0%
Lahainaluna High	High	794	1,033	796	(237)	34	12	26.1%
Total, Lahainaluna Complex		2,740	3,004	3,016	12	115	40	25.8%
Waihee	Elem	751	850	1,021	171	32	10	23.8%
Wailuku	Elem	1,132	953	1,324	371	51	9	15.0%
Iao Inter	Middle	945	830	1,053	223	39	7	15.2%
Baldwin High	High	1,542	1,574	1,776	202	61	24	28.2%
Total, Baldwin Complex		4,370	4,207	5,174	967	183	50	21.5%
Haiku	Elem	428	421	286	(135)	13	14	51.9%
Kula	Elem	565	439	334	(105)	19	12	38.7%
Makawao	Elem	579	469	386	(83)	26	11	29.7%
Paia	Elem	300	195	152	(43)	20	0	0.0%
Pukalani	Elem	555	457	352	(105)	24	11	31.4%
Kalama Inter	Middle	1,118	945	600	(345)	49	11	18.3%
King Kekaulike High	High	1,339	1,388	782	(606)	63	9	12.5%
Total, Kekaulike Complex		4,884	4,314	2,892	(1,422)	214	68	24.1%
Kahului	Elem	936	865	897	32	38	13	25.5%
Kamalii	Elem	853	703	765	62	39	0	0.0%
Kihei Elem	Elem	957	810	845	35	40	15	27.3%
Lihikai	Elem	1,074	1,102	1,026	(76)	32	23	41.8%
Maui Lani	Elem	na	na	546	546	na	na	na
Lokelani Inter	Middle	621	762	807	45	25	13	34.2%
Maui-Waena Inter	Middle	1,008	1,017	1,112	95	42	12	22.2%
Maui High	High	1,513	1,709	1,861	152	57	29	33.7%
Total, Maui Complex		6,962	6,968	7,859	891	273	105	27.8%
Elementary		9,526	8,657	9,664	1,007	392	136	25.8%
Middle		4,288	4,132	4,062	(70)	182	53	22.6%
High		5,188	5,704	5,215	(489)	215	74	25.6%
Other		552	356	222	(134)	21	8	27.6%
Subtotal, Maui		19,554	18,849	19,163	314	810	271	25.1%

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Kaunakakai	Elem	464	218	218	0	24	2	7.7%
Kilohana	Elem	210	98	87	(11)	17	1	5.6%
<i>Kualapuu</i>	Elem	437	363	420	57	14	9	39.1%
Maunaloa	Elem	120	57	51	(6)	10	1	9.1%
Subtotal, Molokai Elementary		1,231	736	776	40	65	13	16.7%
Molokai Inter/High	Other	936	589	441	(148)	35	13	27.1%
Total, Molokai		2,167	1,325	1,217	(108)	100	26	20.6%
Lanai High/Elem	Other	553	616	508	(108)	30	9	23.1%
Total, Lanai		553	616	508	(108)	30	9	23.1%
Elementary		10,757	9,393	10,440	1,047	457	149	24.6%
Middle		4,288	4,313	4,235	(78)	182	53	22.6%
High		5,188	6,112	5,483	(629)	215	74	25.6%
Other		2,041	972	730	(242)	86	30	25.9%
Total, Maui District		22,274	20,790	20,888	98	940	306	24.6%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004," schools in *italics* are public school facilities owned by the State that have been converted to charter schools.

**Table 74
KAUAI DISTRICT INVENTORY**

School	Type	Capacity	Enroll 05-06	Enroll 10-11	Increase	Classrooms		
						Perm.	Port.	% Port.
Hanalei	Elem	277	217	202	(15)	8	6	42.9%
Kapaa	Elem	1,268	872	893	21	53	21	28.4%
Kilauea	Elem	358	335	343	8	15	7	31.8%
Kapaa Middle	Middle	946	719	620	(99)	49	2	3.9%
Kapaa High	High	1,166	1,108	894	(214)	53	14	20.9%
Total, Kapaa Complex		4,015	3,251	2,952	(299)	178	50	21.9%
Kaumualii	Elem	707	532	431	(101)	39	5	11.4%
Koloa	Elem	358	175	203	28	15	10	40.0%
Wilcox	Elem	1,039	888	964	76	45	10	18.2%
Kamakahahelei Middle	Middle	1,271	926	844	(82)	60	0	0.0%
Kauai High	High	1,493	1,290	1,074	(216)	65	18	21.7%
Total, Kauai Complex		4,868	3,811	3,516	(295)	224	43	16.1%
Eleele	Elem	520	464	451	(13)	25	5	16.7%
Kalaheo	Elem	634	503	589	86	26	5	16.1%
Kekaha	Elem	404	233	240	7	20	1	4.8%
Niihau	Elem	69	19	16	(3)	3	0	0.0%
Waimea Canyon	Middle	669	486	411	(75)	34	3	8.1%
Waimea High	High	958	828	623	(205)	48	5	9.4%
Total, Waimea Complex		3,254	2,533	2,330	(203)	156	19	10.9%
Elementary		5,634	4,238	4,332	94	249	70	21.9%
Middle		2,886	2,131	1,875	(256)	143	5	3.4%
High		3,617	3,226	2,591	(635)	166	37	18.2%
Total, Kauai District		12,137	9,595	8,798	(797)	558	112	16.7%

Source: State of Hawaii Public School Facilities current enrollment and projected enrollment from Hawaii Department of Education (DOE), Facilities Development Branch, June 2006; school capacity from "Student Capacity and Enrollment Comparison, 2004-05," and classroom data from DOE "Classroom Report, 2004."

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Appendix I: Construction Cost Districts

**Figure 7
OAHU CONSTRUCTION COST DISTRICTS**

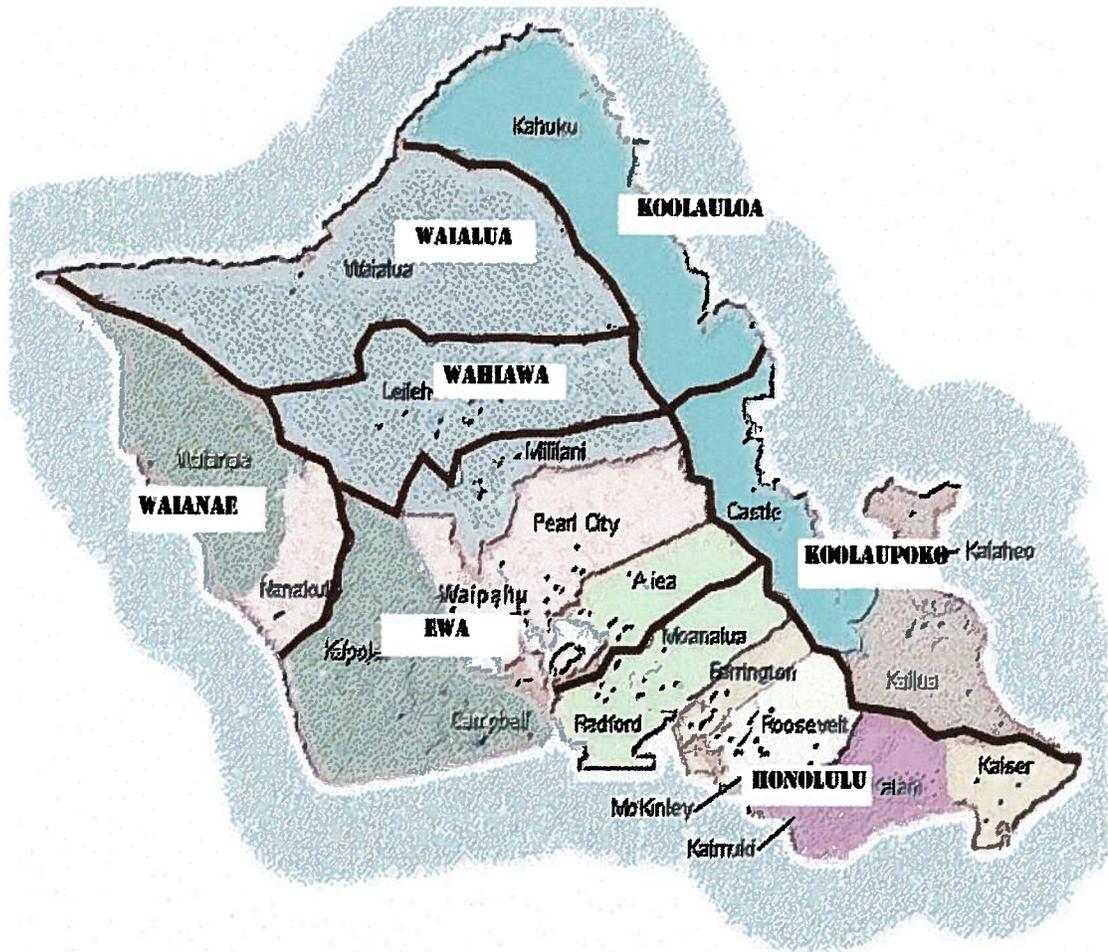


Figure 8
HAWAII CONSTRUCTION COST DISTRICTS

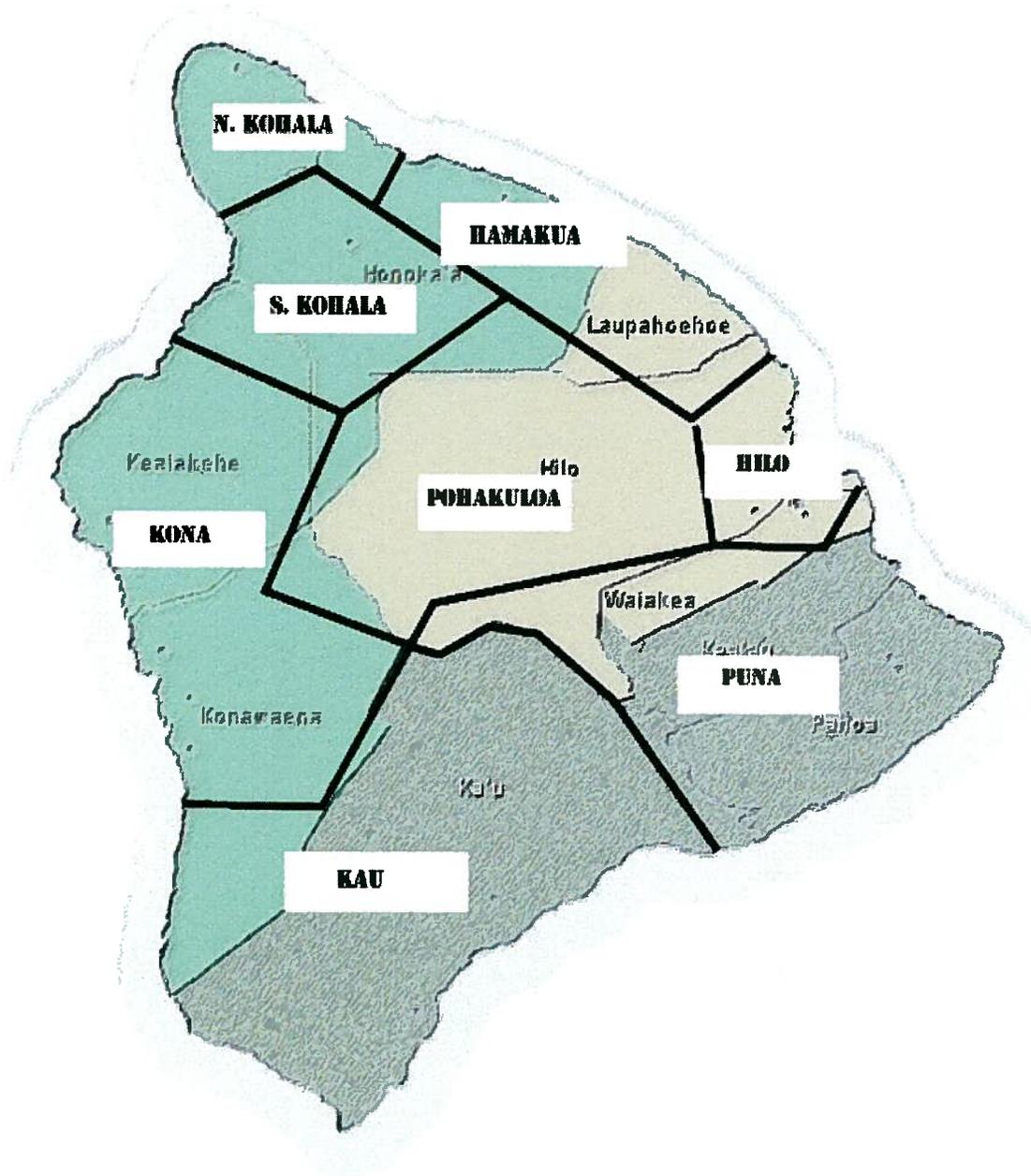


Figure 9
MAUI CONSTRUCTION COST DISTRICTS

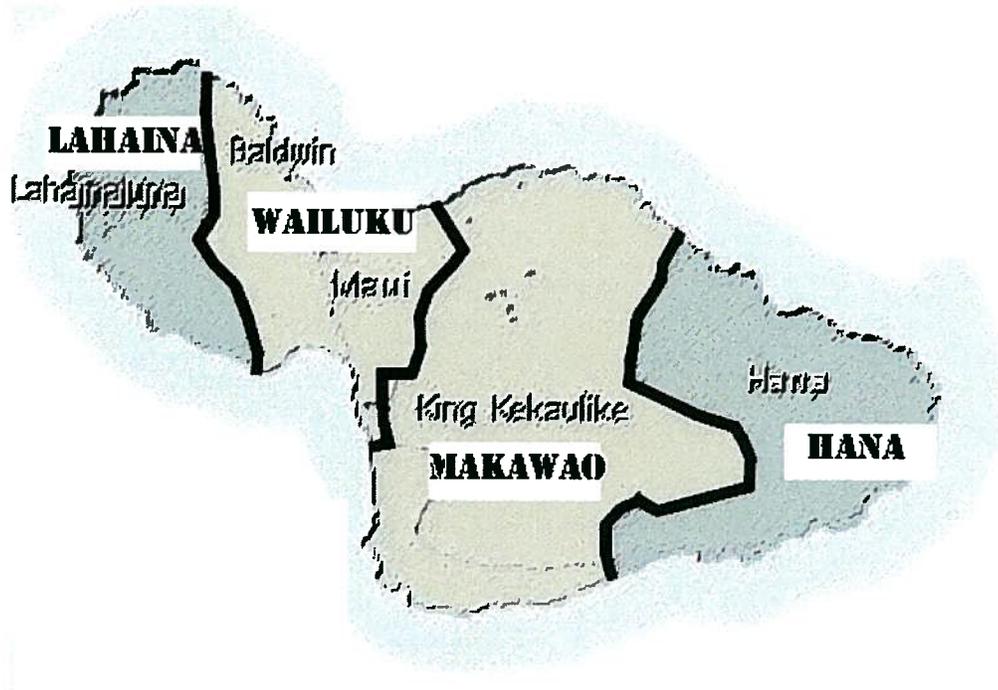


Figure 10
KAUAI CONSTRUCTION COST DISTRICTS

