Description of Electric Energy Use in Commercial Buildings in the Pacific Northwest: 1992 Supplement

End-Use Load and Consumer Assessment Program (ELCAP)

RECEIVED

JAN 10 1995

OSTI

*This document is a product of the
Energy Resources Development
and Implementation Process:*

Define Situation →

Identify Alternatives

Select Strategies

Implement Strategies

Evaluate Performance

Energy Resources Development and Implementation Process

The flow chart below illustrates how the Energy Resources Program works. Broadly speaking, the program has two primary functions—resource planning and resource management. The first three blocks in the chart cover most of the planning tasks.

What Are the Needs of Our Customers?

To define the overall situation, BPA first assesses what the energy needs of customer utilities are likely to be over a 20-year planning horizon. Projections are developed and published jointly with the Northwest Power Planning Council. Also part of this initial step are forecasts of how much energy is available from existing Federal resources. BPA then compares demand and supply estimates in a regional Loads and Resources Study, also known as the "White Book."

Define Picture/Situation

Customer/Public Involvement

LOAD FORECAST
LOAD/RESOURCE
STUDY

What Choices Do We Have to Meet those Needs?

The second step is to identify all the available alternatives for meeting customer needs. BPA develops Resource Supply Forecasts for both generation and conservation resources. These studies also consider such factors as environmental and regulatory constraints, new technologies, and public opinion. Other efforts include examining opportunities for coordinating hydro system operations with Canada and arranging power purchases and transfers with Canadian and Southwest utilities.

Identify Alternatives

Customer/Public Involvement

ANALYSIS OF
RESOURCE SUPPLY
ALTERNATIVES

How Can We BEST Meet those Needs?

Step three involves weighing the available alternatives and their consequences to arrive at the most appropriate and cost-effective resource mix for the short-term. Developing the Resource Program is a public review process in which BPA's customer utilities and other interested parties have an opportunity to influence resource decisions. The process focuses on a 2-year planning period—i.e., the 1990 Resource Program covers 1992-1993.

Select Strategies

Customer/Public Involvement

RESOURCE
PROGRAM

What Are We Doing to Meet Customer Needs?

From planning and strategy BPA then moves to step four—meeting customer power needs. Based upon the policies and directives in the Resource Program, managers draw up an overall plan to capture the conservation available in the region's homes, factories, and offices. This results in many programs and projects, ranging from about 25 to 40 in any year. In the past, BPA teams have designed and managed most conservation programs. Now utilities and other power producers are sponsoring their own programs with BPA support.

Bonneville is responsible for planning and acquiring generating resources—both conventional and renewable resources. Another part of step four is BPA's oversight function—seeing that BPA gets value from contracts for generated power.

Implement Strategies

Customer/Public Involvement

PROGRAM DESIGN
AND
IMPLEMENTATION

How Well Did We Meet those Needs?

Finally, in step five BPA looks at how well it is doing its job. It is agency policy to evaluate all programs. Evaluation provides a means of comparing initial objectives with actual results. It is essential for verifying the energy savings from conservation programs and understanding the quality of our actions to acquire the energy.

Evaluate Performance

Customer/Public Involvement

EVALUATION

DESCRIPTION OF ELECTRIC ENERGY USE IN
COMMERCIAL BUILDINGS IN
THE PACIFIC NORTHWEST

1992 SUPPLEMENT

PREPARED FOR
BONNEVILLE POWER ADMINISTRATION

By

Z. Todd Taylor

July 1992

Prepared by
Pacific Northwest Laboratory
Richland, Washington 99352
under a Related Services Agreement
with the U.S. Department of Energy
Contract DE-AC06-76RLO 1830

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

FOREWORD

In December, 1989 Bonneville published Description of Electric Energy Use in Commercial Buildings in the Pacific Northwest, a summary report on the data collected from commercial buildings metered under the End-Use Load and Consumer Assessment Program (ELCAP), for the period 1986 through 1988. Average monthly and annual electric end-use intensities (EUIs, kWh/ft²) and average load shapes were presented for nine building types and seven or eight end uses, as well as building totals.

This document is a supplement to that report. An additional two and one-half years' data (October 1988 through June 1991) have been collected since the original report, resulting in increased numbers of buildings available for analysis. Additionally, some analytical techniques used in the previous report have been improved and some minor bugs corrected. **This supplement differs from the original in the following ways:**

- *Increased sample sizes.* The availability of 2½ additional years' data resulted in significantly more buildings available for averaging than in the original report. While no new buildings were added to the sample, buildings which previously had too much missing data to compute monthly and annual averages now have sufficient data to be included in the summaries.
- *Improved analytical techniques.* Because many buildings have packaged HVAC systems that provide all three major HVAC functions (heating, cooling, ventilation), it is often not possible to collect data for the individual functions separately. The analytical technique used to disaggregate the mixed HVAC data into its heating, cooling, and ventilation parts has been improved and is described in Appendix A of this supplement.
- *Corrected aggregation techniques.* Some minor errors in the procedure for averaging load shapes across buildings have been corrected. These are described in Appendix B.
- *Eliminated building types.* The previous document reported average EUIs for nine building types. However, sample sizes for the School, University, Hotel, and Other building types were too small to produce meaningful averages. These building types have been eliminated from this supplement.
- *Eliminated "split" plots.* Section 9 of the original report attempted to show how EUIs varied as a function of three characteristics--floor area, vintage, and primary heating fuel. However, subsample sizes were too small to convey meaningful information. EUIs split by characteristic variables have been eliminated from this supplement.
- *Included Btu/square foot.* Several EUI plots now include dual axes to show results in Btu/ft² as well as kWh/ft².

- *Data available on disks.* The data behind the charts and tables are now available in an electronic medium.

A word of caution... **This sample of commercial buildings cannot be considered statistically representative of the region.** Although this supplement is based on samples considerably larger than in the original report, the overall sample is still too small for rigorous statistical inferences to be drawn in most cases. The estimates of average EUIs in this report, although better than in the original, should be considered indicative only and are best interpreted with careful consideration of the specific biases in the ELCAP/REMP sample.

Comments regarding the interpretation of data in this supplement and suggestions for additional useful data summaries or modifications to the existing summaries should be directed to:

Ms. Diane Hollister
Bonneville Power Administration
P.O. Box 3621 - RPEE
Portland, Oregon 97208
(503) 230-4372

CONTENTS

SUMMARY OF FINDINGS	viii
USING THIS SUPPLEMENT	xiv
SECTIONS 1 THROUGH 4	(omitted)
SECTION 5--DISTRIBUTIONS OF KEY CHARACTERISTICS INFLUENCING COMMERCIAL ELECTRICITY USE	5-1
SECTION 6--OVERVIEW OF DATA	(omitted)
SECTION 7--ANNUAL END USE INTENSITIES	7-1
SECTION 8--ANNUAL END USE INTENSITIES AND SHARES - VARIATION ACROSS SITES	8-1
SECTION 9--ANNUAL END USE INTENSITIES - VARIATION BY KEY CHARACTERISTICS	(omitted)
SECTION 10--MONTHLY END USE INTENSITIES	10-1
SECTION 11--MONTHLY END USE INTENSITIES AND SHARES - VARIATION ACROSS SITES	11-1
SECTION 12--HOURLY LOAD SHAPES	12-1
APPENDIX A--CHANGES TO THE MIXED HVAC DISAGGREGATION METHODOLOGY	A-1
APPENDIX B--CORRECTIONS TO THE AGGREGATION METHODOLOGIES ...	B-1
APPENDIX C--MONTHLY/ANNUAL LOAD TABLES	C-1
APPENDIX D--PRINTOUTS OF DATA CORRESPONDING TO FIGURES IN THIS REPORT	D-1

TABLES

1	Subsample Sizes for Annual EUIs in Original (Old) and Revised (New) Reports	xii
C.1	Key to End-Use Abbreviations and Definitions of End Uses	C-4
C.2	End Use Intensity Statistics (kWh/ft ²) - Offices	C-6
C.3	End Use Intensity Statistics (kWh/ft ²) - Retails	C-10
C.4	End Use Intensity Statistics (kWh/ft ²) - Groceries	C-14
C.5	End Use Intensity Statistics (kWh/ft ²) - Restaurants	C-18
C.6	End Use Intensity Statistics (kWh/ft ²) - Warehouses	C-22

FIGURES

5.1	Distribution of Sample by Floor Area	5-5
5.2	Distribution of Sample by Primary Heating Fuel	5-6
5.3	Distribution of Sample by Vintage	5-8
7.1	Mean Annual EUIs - Building Total	7-9
7.2	Mean Annual EUIs - Interior Lighting	7-9
7.3	Mean Annual EUIs - Exterior Lighting	7-10
7.4	Mean Annual EUIs - Hot Water	7-10
7.5	Mean Annual EUIs - Heating	7-11
7.6	Mean Annual EUIs - Cooling	7-11
7.7	Mean Annual EUIs - Ventilation and Auxiliaries	7-12
7.8	Mean Annual EUIs - Food Preparation and Refrigeration	7-12
7.9	Mean Annual EUIs - Other Loads	7-13
7.10	Mean Annual EUIs - Other w/ Food Preparation and Refrigeration	7-13
8.2	Annual EUIs - Building Total	8-8
8.3a	Annual EUIs - Interior Lighting	8-9
8.3b	Annual End Use Shares - Interior Lighting	8-9
8.4a	Annual EUIs - Exterior Lighting	8-10
8.4b	Annual End Use Shares - Exterior Lighting	8-10
8.5a	Annual EUIs - Hot Water	8-11
8.5b	Annual End Use Shares - Hot Water	8-11
8.6a	Annual EUIs - Heating	8-12
8.6b	Annual End Use Shares - Heating	8-12
8.7a	Annual EUIs - Cooling	8-13
8.7b	Annual End Use Shares - Cooling	8-13
8.8a	Annual EUIs - Ventilation and Auxiliaries	8-14
8.8b	Annual End Use Shares - Ventilation and Auxiliaries	8-14
8.9a	Annual EUIs - Food Preparation and Refrigeration	8-15
8.9b	Annual End Use Shares - Food Preparation and Refrigeration	8-15
8.10a	Annual EUIs - Other Loads	8-16
8.10b	Annual End Use Shares - Other Loads	8-16
8.11a	Annual EUIs - Other w/ Food Preparation and Refrigeration	8-17
8.11b	Annual End Use Shares - Other w/ Food Preparation and Refrigeration	8-17
10.1a	Monthly EUIs - Building Total	10-8
10.1b	Monthly Adjusted EUIs - Building Total	10-9
10.2a	Monthly EUIs - Interior Lighting	10-10
10.2b	Monthly Adjusted EUIs - Interior Lighting	10-11
10.3a	Monthly EUIs - Exterior Lighting	10-12
10.3b	Monthly Adjusted EUIs - Exterior Lighting	10-13
10.4a	Monthly EUIs - Hot Water	10-14
10.4b	Monthly Adjusted EUIs - Hot Water	10-15

FIGURES, cont'd

10.5a	Monthly EUIs - Heating	10-16
10.5b	Monthly Adjusted EUIs - Heating	10-17
10.6a	Monthly EUIs - Cooling	10-18
10.6b	Monthly Adjusted EUIs - Cooling	10-19
10.7a	Monthly EUIs - Ventilation and Auxiliaries	10-20
10.7b	Monthly Adjusted EUIs - Ventilation and Auxiliaries	10-21
10.8a	Monthly EUIs - Food Preparation and Refrigeration	10-22
10.8b	Monthly Adjusted EUIs - Food Preparation and Refrigeration	10-23
10.9a	Monthly EUIs - Other Loads	10-24
10.9b	Monthly Adjusted EUIs - Other Loads	10-25
10.10a	Monthly EUIs - Other w/ Food Preparation and Refrigeration	10-26
10.10b	Monthly Adjusted EUIs - Other w/ Food Preparation and Refrigeration	10-27
11.1	Variability of Monthly EUIs - Building Total	11-6
11.2a	Variability of Monthly EUIs - Interior Lighting	11-7
11.2b	Variability of Monthly Shares - Interior Lighting	11-8
11.3a	Variability of Monthly EUIs - Exterior Lighting	11-9
11.3b	Variability of Monthly Shares - Exterior Lighting	11-10
11.4a	Variability of Monthly EUIs - Hot Water	11-11
11.4b	Variability of Monthly Shares - Hot Water	11-12
11.5a	Variability of Monthly EUIs - Heating	11-13
11.5b	Variability of Monthly Shares - Heating	11-14
11.6a	Variability of Monthly EUIs - Cooling	11-15
11.6b	Variability of Monthly Shares - Cooling	11-16
11.7a	Variability of Monthly EUIs - Ventilation and Auxiliaries	11-17
11.7b	Variability of Monthly Shares - Ventilation and Auxiliaries	11-18
11.8a	Variability of Monthly EUIs - Food Preparation and Refrigeration	11-19
11.8b	Variability of Monthly Shares - Food Preparation and Refrigeration	11-20
11.9a	Variability of Monthly EUIs - Other Loads	11-21
11.9b	Variability of Monthly Shares - Other Loads	11-22
11.10a	Variability of Monthly EUIs - Other w/ Food Preparation and Refrigeration	11-23
11.10b	Variability of Monthly Shares - Other w/ Food Preparation and Refrigeration	11-24
12.1a	Average Weekday Load Shapes - Building Total	12-14
12.1b	Average Weekend Load Shapes - Building Total	12-15
12.2a	Average Weekday Load Shapes - Interior Lighting	12-16
12.2b	Average Weekend Load Shapes - Interior Lighting	12-17
12.3a	Average Weekday Load Shapes - Exterior Lighting	12-18
12.3b	Average Weekend Load Shapes - Exterior Lighting	12-19
12.4a	Average Weekday Load Shapes - Hot Water	12-20
12.4b	Average Weekend Load Shapes - Hot Water	12-21

FIGURES, cont'd

12.5a	Average Weekday Load Shapes - Refrigeration	12-22
12.6b	Average Weekend Load Shapes - Refrigeration	12-23
12.6a	Average Weekday Load Shapes - Food Preparation	12-24
12.6b	Average Weekend Load Shapes - Food Preparation	12-25
12.7a	Average Weekday Load Shapes - Other Loads	12-12
12.7b	Average Weekend Load Shapes - Other Loads	12-13
12.8a	Winter Weekday Load Shapes - Total HVAC	12-26
12.8b	Winter Weekend Load Shapes - Total HVAC	12-27
12.8c	Spring Weekday Load Shapes - Total HVAC	12-28
12.8d	Spring Weekend Load Shapes - Total HVAC	12-29
12.8e	Summer Weekday Load Shapes - Total HVAC	12-30
12.8f	Summer Weekend Load Shapes - Total HVAC	12-31
12.8g	Autumn Weekday Load Shapes - Total HVAC	12-32
12.8h	Autumn Weekend Load Shapes - Total HVAC	12-33
D.1	Printout of Data From Figures 7.1 Through 7.9	D-2
D.2	Printout of Data From Figures 8.2 Through 8.11b	D-3
D.3	Printout of Data From Figures 10.1a Through 10.10b	D-7
D.4	Printout of Data From Figures 11.1 Through 11.10b	D-10
D.5	Printout of Data From Figures 12.1a Through 12.8h	D-13

SUMMARY OF FINDINGS

Introduction

This document is a supplement to Description of Electric Energy Use in Commercial Buildings in the Pacific Northwest, a summary of data collected under Bonneville's End-Use Load and Consumer Assessment Program (ELCAP) and published in December, 1989. In the interim, an additional two and one-half years' data have been collected from that sample of buildings, resulting in significantly more buildings with enough data available for analysis. The purpose of this supplement is to present new mean end-use intensities (EUIs, kWh/ft²) based on the larger samples. Although many of the new EUIs differ from those of the original report, rarely are the differences significant, especially considering the large variability among commercial buildings. A few differences that might be of particular interest to readers involved in regional power planning, forecasting, and conservation acquisition activities are discussed later.

Background

ELCAP/REMP

The data in this document were collected as part of Bonneville's End-Use Load and Consumer Assessment Program (ELCAP), which was recently replaced by the Regional End-Use Metering Program (REMP). ELCAP/REMP involves several studies of end-use loads in residential and commercial buildings in the Pacific Northwest. The purpose of ELCAP/REMP is to measure energy consumption of specific end uses: refrigeration, water heating, space heating and cooling, etc. This is done by metering various end uses in homes and businesses in the northwest. ELCAP/REMP has metered residential and commercial end uses on a continual hourly basis since 1984, although data collection from most buildings did not begin until 1986 or 1987.

Commercial Base Study

This document summarizes data collected from the Commercial Base Study, a study within ELCAP/REMP designed to develop a basic characterization of end-use loads and conservation potential in Pacific Northwest commercial buildings. The Base study consists of two samples, both confined to the service area of Seattle City Light. The first sample is intended to be representative of the building population at large. The second consists of buildings constructed after implementation of the 1980 Seattle Energy Code, which imposed a stringent set of energy conservation construction requirements.

The Base Study sample was drawn from a list of commercial buildings identified by tax records and stratified by building type and size (floor area). As designed, the sample covered ten building types and three size categories. However, project budget cuts during implementation of the metering study truncated the sample, introducing a bias toward smaller buildings (there are no large buildings in the metered sample) and resulting in smaller subsamples within each building type category. (See End-Use Load and Conservation Assessment Program--Commercial Sector Sample Design (BPA, 1984) for additional information on the original sample design; see the original version of this document for a more detailed explanation of the actual metered sample.)

Business Activity

Public records available for selecting a sample of buildings are generally based on individual structures. However, it is common for a single structure to contain multiple businesses with different activities. An office building, for example, may have a small delicatessen in its lobby, or a shoe store and a barber shop may share space in a small "strip mall." In this report (and the original) these businesses are referred to as "sites" and their loads were metered and reported separately. This provides for more homogenous reported building types and increases the subsample sizes.

Building Types and End-Uses

- End-use loads for five building types are presented in this document: **Office, Retail, Grocery, Restaurant, and Warehouse.**
- For each, average loads from six end uses as well as building total loads are summarized: **Interior lighting, exterior lighting, hot water, heating, cooling, and ventilation/auxiliary HVAC.**
- For the grocery, restaurant, and warehouse types, two additional end uses are reported: **Food preparation/refrigeration and other miscellaneous loads.**
- Food prep/refrigeration and other are combined into a **single miscellaneous end use** for offices and retails.

As described in the original report, some of these end uses are not always metered separately but are analytically derived for each site by correlating mixed data channels with measured weather variables and/or inventories of connected equipment.

End-Use Intensities (EUIs)

Average loads are presented as end use intensities (EUIs), which have units of kilowatt-hours per square foot. Both annual averages and averages by month are shown in this document. It is important to understand that these averages include only **electric** energy consumption and represent only the subset of buildings in the sample that have the end uses. That is, a building with no electric heat does *not* contribute an electric heating load of zero to

the average. The EUIs are to be interpreted as the average consumption of a given electric end use *when that end use is present in a building*.

A different unit of measure, average power density (watts per square foot), is used to show cross-building average load *shapes*. When examining shapes, it is not energy (kWh) but power (kW) that is significant.

Key Observations

The purpose of this document is not to interpret the data summaries as they relate to the many forecasting, planning, and conservation activities in the region, but rather to make available an encyclopedia of information on commercial end-use loads for use by practitioners in the various disciplines. Nonetheless, there are a few observations that warrant special mention. These are discussed in two sections--one for general observations and another for observed changes between the data summaries of the original report and this supplement.

General. These observations are highlighted explicitly because they either summarize the results in a broad way or are likely to be of interest to numerous readers.

- **Groceries use more electricity per square foot annually than any other building type: 67 kWh/ft².** Restaurants are second, at a level equal to about 87% that of groceries. The next highest building type, offices, consume only 31% that of groceries.
- Annual **exterior lighting** EUIs range from 15% to 30% of interior lighting EUIs for office, retail, and grocery sites.
- With the exception of warehouses, **annual heating EUIs are smaller than lighting and miscellaneous EUIs**, suggesting that internal heat gains are supplying a substantial fraction of buildings' heating needs.
- Annual **"plug loads"** in **offices**, largely comprised of office electronics, are about one-third the magnitude of lighting EUIs and account for roughly **12% of total building consumption**.
- **Annual cooling EUIs are of similar magnitude to those of heating** and are close to the levels assumed in regional commercial load forecasts.
- **EUIs for ventilation and auxiliary HVAC equipment are large** compared to the sum of heating and cooling. In offices, ventilation/auxiliary EUIs are roughly 75% of the sum of heating and cooling; in retails and groceries, they are about two-thirds of the sum of heating and cooling.

- The **variation in annual EUIs between buildings**, as indicated by the standard deviation, for most end uses and building types, **is large**: close to one or two times the mean load. This large variation suggests that substantial additional information could be gained by a careful analysis of individual building functions, schedules, and installed equipment.
- **Winter building total loads** are higher than summer loads in **offices** and **retails**. **Restaurants** are clearly summer dominated, although winter months do have higher loads than spring or fall. **Warehouses** are strongly dominated by winter loads, showing the greatest seasonal variation among the building types.
- **Weekday interior lighting load shapes for all building types exhibit a hat-like shape** (constant nighttime loads and constant daytime loads with relatively sharp transitions between the two in the mornings and evenings). The greatest ratio of daytime to nighttime power levels is observed in **warehouses**, which vary by 70% above and below the mean power level. **Office** and **retail** buildings show slightly lower ratios. **Grocery** lighting load shapes are nearly flat, varying by no more than about 25% above and below the mean.
- **Office winter profiles** show a strong morning peak in HVAC loads, indicative of **widespread thermostat setback behavior**. In contrast, the **grocery total HVAC load is almost flat**, indicative of the 24-hour operating schedules of many grocery stores. The other building types exhibit some evidence of nighttime thermostat setbacks, but none has the large morning spike.
- **Office weekday HVAC profiles** in spring and fall seasons show smaller morning warm-up loads. Higher afternoon loads are also observed, suggesting coincident heating and cooling in the sample. **Summer HVAC peaks** for all building types occur between 4:00 PM and 8:00 PM.

Changes from previous report. The availability of 2½ additional years' data has significantly increased subsample sizes throughout this report. Table 1 shows these changes in sample sizes for the annual EUI summaries. Changes in samples sizes for monthly loads are similar. In some cases the number of sites available to compute average energy consumption has more than doubled. Therefore, ***the majority of EUI differences from the original report are likely due to the increased sample sizes.*** The new report includes more buildings, averaged over a longer period of time and is expected to provide more credible estimates of typical end-use loads. However, several observations related to changes in annual (Sections 7 and 8) and monthly (Sections 10 and 11) EUIs are briefly discussed since they might warrant additional investigation.

- *Have office lighting loads dropped over time?* The office lighting EUI has dropped 10% from the original report. The sample size increased from 14 to 19, meaning five

Table 1 - Subsample Sizes for Annual EUIs in Original (Old) and Revised (New) Reports

	Office		Retail		Grocery		Restaurant		Warehouse	
	Old	New	Old	New	Old	New	Old	New	Old	New
Bldg Total	14	18	17	20	6	11	6	11	12	14
Int Lighting	14	19	10	20	4	12	6	12	9	14
Ext Lighting	12	14	7	14	5	12	4	9	8	13
Hot Water	13	17	9	17	5	8	5	9	8	12
Heating	13	19	7	17	7	12	5	8	8	13
Cooling	14	18	7	14	7	11	6	10	5	11
Vent/Aux	13	17	9	15	4	10	6	11	7	10
Food & Refer					4	10	5	11	6	11
Other					4	11	5	10	6	10
Oth w/F&R	13	19	10	18						

additional sites are now included in the average. However, by examining the variability of this load across buildings (Section 8), it is seen that the standard deviation is about 60% of the mean EUI. It is not safe to conclude that lighting levels are dropping with time without additional investigation.

- *Did heating loads increase with the additional years' data?* With the exception of warehouses, every building type showed an increased heating load relative to the original report. Loads for offices increased 36%, retails 74%, groceries 11%, and restaurants 148%. Although sample sizes have changed significantly, the preponderance of buildings showing increased loads is convincing. Although the 1989 and 1990 winters, which were not included in the original report, had considerably more very cold days than the previous several years, additional investigation is required to determine whether or not the weather is a significant contributor to the increased heating loads.
- *Are restaurants exhausting more air?* Except for restaurants, which showed an increase of 84% relative to the original report, cooling loads for all building types

either decreased or increased only slightly. Combined with the observation that restaurant heating loads, ventilation loads, and food preparation loads all increased, this seems to suggest that the additional restaurants in the updated sample are using a considerable level of exhaust ventilation.

USING THIS SUPPLEMENT

To facilitate comparison of this supplement with the original report and cross-referencing with that document's explanatory material, figure numbers and page numbers from this point forward correspond to the original report. Because their contents are either unchanged or are superseded by this supplement's summary of findings, Sections 1 through 4, 6, and 9 of the original report have been omitted from this supplement. Similarly, explanatory material at the beginning of the various sections has been omitted. Consequently, page numbers do not flow sequentially.

SECTIONS 1 THROUGH 4

(These sections intentionally omitted.)

**SECTION 5--DISTRIBUTIONS OF KEY CHARACTERISTICS INFLUENCING
COMMERCIAL ELECTRICITY USE**

FIGURE 5.1
Distribution of Sample by Floor Area

(ELCAP COM PADS June 1991 / sampleorder 2.0 / 071392)

FIGURE 5.2

Distribution of Sample by Primary Heating Fuel

FIGURE 5.3

Distribution of Sample by Vintage

(ELCAP COM PADS June 1991 / samplehist 2.0 / 07/13/92)

SECTION 6--OVERVIEW OF DATA

(This section intentionally omitted.)

SECTION 7--ANNUAL END USE INTENSITIES

FIGURE 7.1

FIGURE 7.2

Note: Btu axis based on 3413 Btu/kWh

FIGURE 7.3

Mean Annual EUIs - Exterior Lighting

FIGURE 7.4

Mean Annual EUIs - Hot Water

Note: Btu axis based on 3413 Btu/kWh

FIGURE 7.5

Mean Annual EUIs - Heating

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

FIGURE 7.6

Mean Annual EUIs - Cooling

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

Note: Btu axis based on 3413 Btu/kWh

FIGURE 7.7

Mean Annual EUIs - Ventilation & Auxiliaries

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

FIGURE 7.8

Mean Annual EUIs - Food Preparation & Refrigeration

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

Note: Btu axis based on 3413 Btu/kWh

FIGURE 7.9

Mean Annual EUIs - Other Loads

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

FIGURE 7.10

Mean Annual EUIs - Other w/ Food Preparation & Refrigeration

(ELCAP COM PADS June 1991 / euiannbar 2.0 / 06/24/92)

Note: Btu axis based on 3413 Btu/kWh

**SECTION 8--ANNUAL END USE INTENSITIES AND SHARES - VARIATION ACROSS
SITES**

FIGURE 8.2

FIGURE 8.3a

FIGURE 8.3b

FIGURE 8.4a

FIGURE 8.4b

FIGURE 8.5a

FIGURE 8.5b

FIGURE 8.6a

FIGURE 8.6b

FIGURE 8.7a

FIGURE 8.7b

FIGURE 8.8a

FIGURE 8.8b

FIGURE 8.9a

FIGURE 8.9b

FIGURE 8.10a

FIGURE 8.10b

FIGURE 8.11a

Annual EUIs - Other w/ Food Preparation & Refrigeration

FIGURE 8.11b

Annual End Use Shares - Other w/ Food Preparation & Refrigeration

**SECTION 9--ANNUAL END USE INTENSITIES - VARIATION BY KEY
CHARACTERISTICS**

(This section intentionally omitted.)

SECTION 10--MONTHLY END USE INTENSITIES

FIGURE 10.1a
Monthly EUIs - Building Total

(ELCAP COM PADS June 1991 / autumn 2.0 / 07/13/92)

FIGURE 10.1b
Monthly Adjusted EUIs - Building Total

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.2a
Monthly EUIs - Interior Lighting

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.2b
Monthly Adjusted EUIs - Interior Lighting

FIGURE 10.3a
Monthly EUIs - Exterior Lighting

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.3b
Monthly Adjusted EUIs - Exterior Lighting

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.4a
Monthly EUIs - Hot Water

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.4b
Monthly Adjusted EUIs - Hot Water

FIGURE 10.5a
Monthly EUIs - Heating

(ELCAP COM PADS June 1991 / outseason 2.0 / 07/13/92)

FIGURE 10.5b
Monthly Adjusted EUIs - Heating

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.6a
Monthly EUIs - Cooling

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.6b
Monthly Adjusted EUIs - Cooling

(ELCAP COM PADS June 1991 / euiseason 2.0 / 07/13/92)

FIGURE 10.7a
Monthly EUIs - Ventilation & Auxiliaries

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.7b
Monthly Adjusted EUIs - Ventilation & Auxiliaries

FIGURE 10.8a
Monthly EUIs - Food Preparation & Refrigeration

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.8b
Monthly Adjusted EUIs - Food Preparation & Refrigeration

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.9a
Monthly EUIs - Other Loads

(ELCAP COM PADS June 1991 / euisason 2.0 / 07/13/92)

FIGURE 10.9b
Monthly Adjusted EUIs - Other Loads

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.10a
Monthly EUIs - Other w/ Food Preparation & Refrigeration

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 10.10b
Monthly Adjusted EUIs - Other w/ Food Preparation & Refrigeration

**SECTION 11--MONTHLY END USE INTENSITIES AND SHARES - VARIATION
ACROSS SITES**

FIGURE 11.1
Variability of Monthly EUIs - Building Total

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 11.2a
Variability of Monthly EUIs - Interior Lighting

(ELCAP COM PADS June 1991 / outseason 2.0 / 07/13/92)

FIGURE 11.2b
Variability of Monthly Shares - Interior Lighting

(ELCAP COM PADS June 1991 / eulseason 2.0 / 07/13/92)

FIGURE 11.3a
Variability of Monthly EULs - Exterior Lighting

(ELCAP COM PADS June 1991 / eulseason 2.0 / 071392)

FIGURE 11.10a

Variability of Monthly EUIs - Other w/ Food Preparation & Refrigeration

FIGURE 11.10b

Variability of Monthly Shares - Other w/ Food Preparation & Refrigeration

SECTION 12--HOURLY LOAD SHAPES

FIGURE 12.1a

Average Weekday Load Shapes - Building Total

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.1b
Average Weekend Load Shapes - Building Total

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.2a
Average Weekday Load Shapes - Interior Lighting

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.2b

Average Weekend Load Shapes - Interior Lighting

FIGURE 12.3a

Average Weekday Load Shapes - Exterior Lighting

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.3b
Average Weekend Load Shapes - Exterior Lighting

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.4a
Average Weekday Load Shapes - Hot Water

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.4b
Average Weekend Load Shapes - Hot Water

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.5a

Average Weekday Load Shapes - Refrigeration

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.5b
Average Weekend Load Shapes - Refrigeration

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.6a

Average Weekday Load Shapes - Food Preparation

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.6b

Average Weekend Load Shapes - Food Preparation

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.7a
Average Weekday Load Shapes - Other Loads

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8a

Winter Weekday Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8b
Winter Weekend Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8c
Spring Weekday Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8d
Spring Weekend Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8e
Summer Weekday Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8f
Summer Weekend Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8g
Autumn Weekday Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

FIGURE 12.8h
Autumn Weekend Load Shapes - Total HVAC

(ELCAP COM PADS June 1991 / plotshape 2.0 / 06/24/92)

APPENDIX A--CHANGES TO THE MIXED HVAC DISAGGREGATION METHODOLOGY

(This appendix does not correspond to Appendix A of the original report)

APPENDIX A--CHANGES TO THE MIXED HVAC DISAGGREGATION METHODOLOGY

Background

When a building contains packaged HVAC equipment, it is generally difficult to measure heating, cooling, and ventilation energies separately. In such a case, all these functions are served by a single electrical feed. Because the ELCAP/REMP metering protocol limited the placement of measuring devices to the buildings' electrical panels, the study collects data from a number of mixed HVAC channels. Appendix E of the original report describes a procedure used to analytically disaggregate mixed HVAC data into its heating, cooling, and ventilation components. That procedure has been modified slightly to provide improved isolation of the individual HVAC components for this supplement.

The previous procedure correlated *hourly* mixed HVAC loads with *daily* average outdoor temperatures. Each hour of day was examined separately to discern the outdoor temperature at which building operation switched from heating operation to cooling operation. For example, the 1 AM data from all days were correlated with the average outdoor temperature for all days. Daily temperatures were used based on the assumption that building mass effects would be better captured. A building's heating load at 11 PM, for example, may be strongly dependent on the temperatures earlier in the day. However, recent investigations have shown that the analytical disaggregation procedure yields cleaner end use splits when the hourly HVAC data are correlated with coincident hourly temperatures.

The New HVAC Disaggregation Procedure

The new procedure is considerably less complex than the previous one. Rather than computing the heating, cooling, and ventilation fractions day by day, each hour can be examined in isolation and the component energies assigned directly. A side benefit is that the resulting disaggregated end uses are available in hourly form. Previously, the component data were available only as daily averages, requiring a different algorithm for aggregating to monthly and annual levels.

As in the previous methodology, the hourly mixed HVAC data are split into two groups representing work days and nonwork days. The disaggregation process is applied to each group separately.

Consider the graph in Figure A.1. All the mixed HVAC data collected at a particular hour (in this example, noon) are plotted against the coincident outdoor temperatures. Operating on a single hour at a time allows the procedure to account for scheduled changes in building occupancy, thermostat settings, and ventilation strategies. A curve is fit to the data

using the lowess (locally-weighted regression scatter plot smoothing) procedure.

The fitted curve represents, for the noon hour, the expected mixed HVAC load at any given outdoor temperature. The outdoor temperature at which the curve reaches its minimum is the "balance temperature," or the temperature at which the building changes from heating to cooling operation. As the temperature drops below T_{bal} , the rising mixed HVAC load represents heating. Likewise, at temperatures above T_{bal} the load represents cooling. The y-axis point corresponding to T_{bal} depicts the base energy consumption during periods requiring neither heating nor cooling. It is assumed to represent the energy consumed by fans and other auxiliary equipment (pumps, controls, etc.).

For mixed HVAC data that lie to the left of T_{bal} , any consumption in excess of Q_{vent} is assigned to the disaggregated heating end use. Likewise, to the right of T_{bal} any consumption in excess of Q_{vent} is assigned to disaggregated cooling.

Figure A.1 - Illustration of HVAC Disaggregation Process

APPENDIX B--CORRECTIONS TO THE AGGREGATION METHODOLOGIES

(This appendix does not correspond to Appendix B of the original report)

APPENDIX B--CORRECTIONS TO THE AGGREGATION METHODOLOGIES

Profile Aggregations

The original report describes in detail the methodologies used to aggregate the hourly electric end-use data to monthly and annual averages and to average seasonal profiles. Appendix D of the that report contained an incomplete description of the profile averaging process.

Figure D.3 of the original report shows four primary steps required to convert hourly data from multiple buildings to a class average profile: (1) For each site, average across days by day of week. This results, for each site, in a single average profile for each combination of year, month, and day of week. (2) Average across day of week, by day type. This results, for each site, in an average profile for each combination of year, month, and day type. (3) Average across years. The result for each site is a profile for each of 12 average months by day type. (4) Average across months. The final step produces a single profile for each day type representing the average year or season.

Missing from that description is an averaging across sites that takes place between steps three and four. Cross-building average profiles are developed for each combination of month and day type prior to aggregating months into seasons or years.

Erratum

On page D-7 of the original report, the second paragraph speaks of upper-case subscripts on "M." The subscripts apply to "E."

APPENDIX C--MONTHLY/ANNUAL LOAD TABLES

(This appendix corresponds to Appendix C of the original report)

TABLE C.1
Key to End-Use Abbreviations and Definitions of End Uses

Mnemonic	Description
blt	Building Total - all energy consumed by the site for any purpose
hea	Heating - only that which could be measured in pure form; may or may not constitute all heating energy for a building
phe	Electrical Proxy for Heat - generally a fan or control circuit on a nonelectric space heater
col	Cooling - only that which could be measured in pure form; may or may not constitute all cooling energy for a building
vnt	Ventilation - only that which could be measured in pure form; may or may not constitute all ventilation energy for a building
aux	HVAC Auxiliaries - includes control circuits, pumps, etc. which could be measured in pure form; may or may not constitute all auxiliary energy for a building
mix	Mixed HVAC - any mixture of heating, cooling, ventilation, and/or auxiliaries on a single circuit. If other nonHVAC end uses are present on the circuit, and constitute more than 5% of connected capacity, the circuit will be monitored as mixed general (<i>gen</i>), not mixed HVAC
ilt	Interior Lighting - only that which could be measured in pure form; may or may not constitute all lighting energy for a building
olt	Exterior Lighting - such as security lights, parking lot illumination, lighted signs
rfr	Refrigeration - such as all refrigerated cases and storage areas
h2o	Water Heating - energy consumed for domestic water heating
pwe	Electrical Proxy for H2O - generally a control circuit or other small electric load on a nonelectric water heater
plg	Receptacles - energy consumed by common wall plug circuits
elv	Vertical Transport - such as elevators, escalators, and dumbwaiters
foo	Food Preparation - stoves, ovens, grills, mixers, slicers, etc.
mtr	Material Handling - equipment such as conveyor belts and assembly lines
dat	Data Processing - any computer equipment on dedicated circuits; may or may not include all computers in a building
rec	Recreation - equipment such as exercise machines
san	Sanitation - equipment such as dishwashers
lab	Laboratory - general laboratory equipment, including photography

TABLE C.1
Key to End-Use Abbreviations and Definitions of End Uses

Mnemonic	Description
shp	Shop - equipment such as saws and drills
gen	Mixed General - all energy consumed on mixed circuits with a mixture of other end uses. If more than 95% of connected capacity is HVAC equipment, the circuit will be monitored as mixed HVAC (<i>mix</i>), not mixed general
unk	Unknown - any untraceable circuit
sp1	Specialty 1 - reserved for special functions of buildings
sp2-5	Specialty 2 through 5
tch	Total HVAC - the sum of <i>hea</i> , <i>col</i> , <i>vnt</i> , <i>aux</i> , and <i>mix</i>
tcl	Total Lighting - the sum of <i>ilt</i> and <i>olt</i>
tco	Total Other - equal to <i>blt</i> minus the sum of <i>tch</i> and <i>tcl</i>
dhe	Heating - the sum of <i>hea</i> and analytically derived fractions of <i>mix</i> and <i>gen</i>
dco	Cooling - the sum of <i>col</i> and analytically derived fractions of <i>mix</i> and <i>gen</i>
dvn	Ventilation - the sum of <i>vnt</i> and analytically derived fractions of <i>mix</i> and <i>gen</i>
dau	Auxiliaries - the sum of <i>aux</i> and analytically derived fractions of <i>mix</i> and <i>gen</i> (not used)
dot	Other Loads - all loads except HVAC, lighting, hot water, refrigeration, and food preparation
dil	Interior Lights - the sum of <i>ilt</i> and an analytically derived fraction of <i>gen</i>
dol	Exterior Lights - the sum of <i>olt</i> and an analytically derived fraction of <i>gen</i>
dh2	Hot Water - the sum of <i>h2o</i> and an analytically derived fraction of <i>gen</i>
drf	Refrigeration - the sum of <i>rfr</i> and an analytically derived fraction of <i>gen</i>
dfo	Food Preparation - the sum of <i>foo</i> and an analytically derived fraction of <i>gen</i>
dva	Ventilation and Auxiliaries - the sum of <i>dvn</i> and <i>dau</i>
dff	Food Preparation and Refrigeration - the sum of <i>dfo</i> and <i>drf</i>
dof	Other with Food Preparation and Refrigeration - all loads except HVAC, lighting, and hot water

TABLE C.2
End Use Intensity Statistics (kWh/ft²) - Offices

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
blt	n	18	18	18	18	18	18	18	18	18	18	18	18	18
	Mean	2.140	2.010	1.760	1.623	1.511	1.601	1.636	1.690	1.534	1.512	1.706	2.143	20.855
	Median	2.215	2.185	1.738	1.644	1.554	1.599	1.622	1.674	1.494	1.534	1.584	2.113	21.733
	Std Dev	1.042	0.967	0.846	0.786	0.714	0.746	0.715	0.748	0.644	0.648	0.779	1.119	9.417
hea	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.415	0.375	0.248	0.174	0.075	0.032	0.019	0.018	0.028	0.085	0.217	0.457	2.133
	Median	0.169	0.220	0.082	0.061	0.033	0.019	0.007	0.006	0.018	0.028	0.060	0.226	0.939
	Std Dev	0.476	0.424	0.286	0.219	0.090	0.041	0.030	0.028	0.037	0.102	0.256	0.531	2.371
phe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
col	n	7	7	7	7	7	7	7	7	7	7	7	7	7
	Mean	0.158	0.091	0.113	0.138	0.182	0.308	0.371	0.419	0.267	0.145	0.108	0.174	2.485
	Median	0.080	0.081	0.089	0.110	0.116	0.310	0.374	0.506	0.214	0.107	0.095	0.077	1.920
	Std Dev	0.256	0.089	0.120	0.093	0.120	0.169	0.197	0.237	0.181	0.129	0.097	0.286	1.628
vnt	n	9	10	10	10	9	9	9	9	9	9	9	9	9
	Mean	0.143	0.142	0.132	0.149	0.167	0.148	0.162	0.159	0.156	0.149	0.151	0.145	1.838
	Median	0.033	0.039	0.036	0.033	0.020	0.027	0.039	0.035	0.031	0.024	0.034	0.032	0.426
	Std Dev	0.289	0.301	0.280	0.326	0.388	0.306	0.332	0.320	0.326	0.318	0.330	0.305	3.865
aux	n	7	7	7	7	7	7	7	7	7	7	7	7	7
	Mean	0.041	0.038	0.038	0.046	0.057	0.088	0.104	0.105	0.075	0.041	0.037	0.043	0.714
	Median	0.029	0.028	0.025	0.052	0.087	0.102	0.121	0.111	0.093	0.049	0.024	0.028	0.966
	Std Dev	0.040	0.034	0.031	0.034	0.043	0.071	0.085	0.087	0.060	0.031	0.034	0.047	0.545
mix	n	13	13	13	13	13	13	13	13	13	13	13	13	13
	Mean	0.685	0.604	0.450	0.402	0.412	0.503	0.571	0.605	0.453	0.373	0.460	0.686	6.204
	Median	0.479	0.382	0.257	0.375	0.443	0.428	0.503	0.541	0.375	0.312	0.278	0.491	5.471
	Std Dev	0.494	0.448	0.331	0.255	0.224	0.250	0.265	0.274	0.195	0.235	0.383	0.521	3.524
ilt	n	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.546	0.549	0.554	0.556	0.544	0.553	0.526	0.536	0.537	0.547	0.532	0.540	6.520
	Median	0.459	0.441	0.435	0.486	0.496	0.517	0.425	0.483	0.492	0.504	0.447	0.464	5.823
	Std Dev	0.355	0.341	0.357	0.352	0.359	0.358	0.348	0.347	0.339	0.345	0.346	0.351	4.184
olt	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.206	0.196	0.189	0.165	0.154	0.146	0.142	0.143	0.150	0.167	0.193	0.204	2.053
	Median	0.174	0.161	0.150	0.139	0.133	0.127	0.125	0.129	0.136	0.145	0.182	0.187	1.859
	Std Dev	0.164	0.150	0.157	0.125	0.117	0.112	0.111	0.110	0.114	0.138	0.149	0.157	1.589
rft	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.009	0.009	0.008	0.113
	Median	0.004	0.004	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.051
	Std Dev	0.012	0.012	0.013	0.013	0.013	0.014	0.014	0.015	0.015	0.013	0.013	0.012	0.159
h2o	n	16	16	16	16	16	16	16	16	16	16	16	16	16
	Mean	0.041	0.040	0.040	0.037	0.037	0.034	0.032	0.031	0.033	0.036	0.038	0.040	0.438
	Median	0.031	0.032	0.030	0.029	0.028	0.027	0.026	0.024	0.025	0.027	0.030	0.031	0.342
	Std Dev	0.031	0.030	0.031	0.028	0.029	0.027	0.024	0.025	0.025	0.029	0.031	0.032	0.340
pwe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
plg	n	17	17	17	17	17	17	17	17	17	17	17	17	17
	Mean	0.115	0.117	0.109	0.108	0.103	0.109	0.104	0.106	0.106	0.108	0.105	0.109	1.297
	Median	0.105	0.104	0.099	0.101	0.097	0.099	0.094	0.092	0.090	0.091	0.092	0.102	1.149
	Std Dev	0.056	0.067	0.056	0.054	0.061	0.064	0.065	0.067	0.066	0.061	0.058	0.050	0.698
elv	n	5	5	5	5	5	5	5	5	5	5	5	5	5
	Mean	0.031	0.032	0.032	0.032	0.032	0.033	0.029	0.030	0.030	0.030	0.030	0.031	0.373
	Median	0.037	0.038	0.039	0.039	0.038	0.039	0.034	0.038	0.037	0.038	0.036	0.037	0.455
	Std Dev	0.016	0.016	0.016	0.016	0.017	0.017	0.014	0.016	0.015	0.016	0.016	0.016	0.190

TABLE C.2
End Use Intensity Statistics (kWh/ft²) - Offices, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
foo	n	13	13	13	13	13	13	13	13	13	13	13	13	13
	Mean	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.110
	Median	0.005	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.005	0.005	0.051
	Std Dev	0.009	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.106
mtr	n	3	3	3	3	3	3	3	3	3	3	3	3	3
	Mean	0.004	0.005	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.037
	Median	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.023
	Std Dev	0.005	0.007	0.006	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.040
dat	n	13	13	13	13	13	13	13	13	13	13	13	13	13
	Mean	0.078	0.076	0.076	0.078	0.079	0.079	0.078	0.074	0.075	0.078	0.075	0.078	0.925
	Median	0.061	0.061	0.049	0.062	0.062	0.062	0.063	0.061	0.061	0.061	0.061	0.060	0.736
	Std Dev	0.112	0.102	0.105	0.105	0.105	0.106	0.105	0.098	0.104	0.111	0.112	0.112	1.273
rec	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
san	n	5	5	5	5	5	5	5	5	5	5	5	5	5
	Mean	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013
	Median	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
	Std Dev	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011
lab	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.006	0.005	0.007	0.006	0.006	0.007	0.006	0.007	0.006	0.006	0.007	0.007	0.077
	Median	0.006	0.005	0.007	0.006	0.006	0.007	0.006	0.007	0.006	0.006	0.007	0.007	0.077
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
shp	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
	Median	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
	Std Dev	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
gen	n	15	15	15	15	15	15	15	15	15	15	15	15	15
	Mean	0.228	0.234	0.219	0.201	0.178	0.171	0.163	0.170	0.166	0.190	0.210	0.227	2.356
	Median	0.168	0.158	0.150	0.170	0.162	0.151	0.157	0.148	0.155	0.161	0.167	0.167	1.935
	Std Dev	0.268	0.261	0.228	0.190	0.161	0.144	0.133	0.147	0.138	0.179	0.228	0.275	2.305
unk	n	7	7	7	7	7	7	7	7	7	7	7	7	7
	Mean	0.004	0.005	0.005	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.053
	Median	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
	Std Dev	0.006	0.007	0.007	0.007	0.007	0.009	0.008	0.009	0.007	0.006	0.006	0.006	0.084
sp1	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.018	0.018	0.017	0.017	0.017	0.017	0.019	0.018	0.018	0.019	0.018	0.020	0.218
	Median	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.005	0.005	0.005	0.053
	Std Dev	0.038	0.038	0.036	0.036	0.033	0.034	0.041	0.038	0.038	0.041	0.036	0.044	0.454
sp2	n	9	9	9	9	9	9	9	9	9	9	9	9	9
	Mean	0.025	0.026	0.026	0.026	0.026	0.025	0.025	0.022	0.022	0.022	0.024	0.027	0.295
	Median	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
	Std Dev	0.048	0.051	0.049	0.049	0.050	0.049	0.049	0.040	0.040	0.041	0.046	0.051	0.562
sp3	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp4	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp5	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.2
End Use Intensity Statistics (kWh/ft²) - Offices, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
tch	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.859	0.761	0.576	0.530	0.486	0.573	0.624	0.660	0.509	0.433	0.561	0.903	7.470
	Median	0.969	0.831	0.598	0.564	0.443	0.524	0.653	0.659	0.484	0.359	0.645	0.903	7.718
	Std Dev	0.557	0.508	0.370	0.352	0.321	0.318	0.308	0.319	0.254	0.261	0.376	0.631	4.073
tcl	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.688	0.682	0.679	0.650	0.641	0.643	0.622	0.634	0.638	0.662	0.666	0.673	7.875
	Median	0.559	0.581	0.550	0.568	0.543	0.530	0.516	0.538	0.543	0.562	0.553	0.467	6.399
	Std Dev	0.467	0.445	0.456	0.405	0.422	0.422	0.425	0.425	0.421	0.440	0.449	0.458	5.209
tco	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.384	0.382	0.368	0.369	0.345	0.340	0.323	0.325	0.324	0.343	0.358	0.369	4.229
	Median	0.293	0.285	0.277	0.303	0.313	0.317	0.299	0.284	0.286	0.291	0.291	0.304	3.634
	Std Dev	0.289	0.289	0.256	0.227	0.205	0.184	0.171	0.175	0.169	0.195	0.251	0.298	2.647
dhe	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.618	0.526	0.340	0.222	0.105	0.045	0.029	0.026	0.042	0.123	0.336	0.595	2.992
	Median	0.789	0.590	0.401	0.206	0.079	0.032	0.019	0.013	0.027	0.078	0.291	0.672	3.370
	Std Dev	0.495	0.445	0.289	0.225	0.098	0.049	0.035	0.030	0.047	0.117	0.303	0.488	2.463
dco	n 18	18	18	18	18	18	18	18	18	18	18	18	18	18
	Mean	0.055	0.036	0.054	0.097	0.166	0.301	0.369	0.420	0.250	0.100	0.041	0.063	1.964
	Median	0.006	0.008	0.017	0.058	0.102	0.254	0.364	0.407	0.205	0.057	0.017	0.007	1.533
	Std Dev	0.116	0.058	0.085	0.088	0.121	0.194	0.198	0.249	0.154	0.099	0.057	0.145	1.392
dvu	n 17	18	18	18	17	17	17	17	17	17	17	17	17	17
	Mean	0.274	0.288	0.275	0.276	0.264	0.259	0.265	0.269	0.258	0.254	0.261	0.274	3.180
	Median	0.169	0.169	0.166	0.166	0.165	0.182	0.177	0.184	0.176	0.158	0.155	0.167	2.040
	Std Dev	0.247	0.256	0.239	0.261	0.287	0.240	0.254	0.245	0.249	0.247	0.262	0.254	3.025
dau	n 8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.110	0.106	0.096	0.092	0.092	0.113	0.125	0.131	0.101	0.082	0.095	0.115	1.259
	Median	0.069	0.071	0.068	0.071	0.087	0.120	0.139	0.137	0.107	0.061	0.069	0.067	1.030
	Std Dev	0.164	0.163	0.134	0.106	0.082	0.076	0.082	0.082	0.064	0.091	0.133	0.171	1.251
dot	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.207	0.217	0.201	0.202	0.194	0.200	0.195	0.191	0.192	0.198	0.193	0.202	2.390
	Median	0.185	0.186	0.198	0.159	0.155	0.170	0.165	0.166	0.167	0.182	0.190	0.168	2.212
	Std Dev	0.119	0.140	0.116	0.119	0.119	0.117	0.115	0.111	0.115	0.116	0.114	0.118	1.393
dil	n 19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.580	0.582	0.585	0.585	0.572	0.579	0.551	0.561	0.563	0.577	0.564	0.571	6.869
	Median	0.465	0.446	0.435	0.491	0.507	0.522	0.466	0.489	0.500	0.510	0.447	0.467	5.891
	Std Dev	0.359	0.343	0.358	0.354	0.360	0.359	0.349	0.347	0.340	0.346	0.349	0.353	4.199
dol	n 14	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.208	0.199	0.192	0.167	0.156	0.148	0.144	0.144	0.152	0.169	0.195	0.206	2.078
	Median	0.174	0.161	0.150	0.139	0.136	0.127	0.125	0.129	0.136	0.145	0.182	0.187	1.865
	Std Dev	0.165	0.151	0.157	0.126	0.117	0.113	0.112	0.111	0.114	0.138	0.150	0.157	1.594
dh2	n 17	17	17	17	17	17	17	17	17	17	17	17	17	17
	Mean	0.039	0.039	0.038	0.036	0.035	0.033	0.031	0.030	0.032	0.035	0.037	0.038	0.423
	Median	0.031	0.032	0.029	0.029	0.027	0.025	0.025	0.024	0.024	0.027	0.030	0.031	0.333
	Std Dev	0.031	0.030	0.031	0.028	0.029	0.027	0.024	0.025	0.025	0.029	0.031	0.031	0.338
drf	n 8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.019	0.018	0.018	0.019	0.018	0.017	0.017	0.017	0.018	0.018	0.018	0.019	0.215
	Median	0.015	0.015	0.014	0.014	0.012	0.012	0.011	0.013	0.013	0.014	0.015	0.015	0.161
	Std Dev	0.018	0.017	0.016	0.018	0.017	0.016	0.017	0.016	0.016	0.017	0.017	0.018	0.202
dfo	n 14	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.012	0.011	0.011	0.012	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.138
	Median	0.010	0.009	0.008	0.008	0.008	0.008	0.008	0.009	0.008	0.010	0.009	0.009	0.100
	Std Dev	0.010	0.008	0.008	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.113
dva	n 17	18	18	18	17	17	17	17	17	17	17	17	17	17
	Mean	0.325	0.335	0.318	0.317	0.308	0.315	0.324	0.331	0.306	0.290	0.306	0.329	3.773
	Median	0.173	0.171	0.166	0.167	0.165	0.189	0.195	0.202	0.178	0.161	0.155	0.174	2.058
	Std Dev	0.294	0.298	0.269	0.282	0.312	0.284	0.290	0.281	0.272	0.259	0.291	0.304	3.373

TABLE C.2
End Use Intensity Statistics (kWh/ft²) - Offices, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
dff	n	15	15	15	15	15	15	15	15	15	15	15	15	15
	Mean	0.021	0.020	0.020	0.021	0.020	0.020	0.019	0.020	0.020	0.021	0.021	0.021	0.244
	Median	0.017	0.018	0.018	0.018	0.017	0.014	0.012	0.015	0.016	0.018	0.018	0.017	0.212
	Std Dev	0.022	0.020	0.019	0.022	0.021	0.021	0.021	0.020	0.020	0.021	0.021	0.023	0.251
dof	n	19	19	19	19	19	19	19	19	19	19	19	19	19
	Mean	0.223	0.233	0.216	0.218	0.209	0.215	0.212	0.207	0.207	0.214	0.209	0.218	2.580
	Median	0.212	0.213	0.208	0.202	0.199	0.201	0.198	0.194	0.200	0.205	0.201	0.207	2.326
	Std Dev	0.117	0.137	0.114	0.118	0.119	0.117	0.116	0.111	0.114	0.114	0.114	0.117	1.380

TABLE C.3
End Use Intensity Statistics (kWh/ft²) - Retails

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
blt	n	21	21	21	20	20	20	20	20	21	21	20	20	20
	Mean	1.357	1.289	1.200	1.081	1.029	1.100	1.129	1.112	1.027	1.040	1.126	1.293	13.743
	Median	1.250	1.226	1.208	1.037	1.016	1.068	1.036	1.029	0.923	0.991	1.039	1.225	13.542
	Std Dev	0.554	0.498	0.474	0.409	0.409	0.460	0.496	0.522	0.453	0.394	0.458	0.523	5.134
hea	n	18	18	18	17	17	17	17	17	18	18	17	17	17
	Mean	0.252	0.220	0.153	0.056	0.021	0.008	0.005	0.005	0.010	0.040	0.101	0.179	0.919
	Median	0.083	0.084	0.034	0.015	0.004	0.001	0.002	0.002	0.004	0.012	0.031	0.063	0.305
	Std Dev	0.326	0.292	0.205	0.079	0.032	0.014	0.009	0.008	0.014	0.054	0.156	0.238	1.206
phe	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.004	0.004	0.003	0.001	0.001	0.002	0.003	0.003	0.002	0.001	0.002	0.003	0.029
	Median	0.004	0.004	0.003	0.001	0.001	0.002	0.003	0.003	0.002	0.001	0.002	0.003	0.029
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
col	n	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.019	0.023	0.015	0.044	0.110	0.213	0.280	0.305	0.189	0.064	0.028	0.022	1.318
	Median	0.009	0.015	0.015	0.022	0.082	0.176	0.268	0.285	0.194	0.044	0.018	0.011	1.079
	Std Dev	0.033	0.027	0.013	0.053	0.108	0.213	0.265	0.293	0.167	0.065	0.041	0.036	1.251
vnt	n	10	10	10	10	10	10	10	10	10	10	10	10	10
	Mean	0.070	0.073	0.074	0.077	0.083	0.091	0.096	0.093	0.091	0.087	0.079	0.074	0.988
	Median	0.016	0.030	0.037	0.034	0.041	0.035	0.038	0.026	0.022	0.026	0.024	0.023	0.358
	Std Dev	0.099	0.096	0.092	0.090	0.093	0.106	0.112	0.111	0.111	0.105	0.102	0.099	1.190
aux	n	9	9	9	8	7	8	8	8	9	9	8	8	7
	Mean	0.012	0.012	0.011	0.016	0.028	0.033	0.041	0.044	0.034	0.018	0.013	0.012	0.319
	Median	0.002	0.003	0.003	0.004	0.008	0.006	0.006	0.007	0.004	0.004	0.002	0.002	0.072
	Std Dev	0.030	0.029	0.028	0.037	0.055	0.064	0.076	0.081	0.072	0.041	0.032	0.032	0.619
mix	n	11	11	11	11	11	11	11	11	11	11	11	11	11
	Mean	0.284	0.238	0.181	0.125	0.111	0.149	0.218	0.228	0.151	0.110	0.162	0.278	2.234
	Median	0.149	0.152	0.111	0.144	0.105	0.155	0.284	0.302	0.157	0.126	0.087	0.134	2.445
	Std Dev	0.274	0.221	0.186	0.113	0.096	0.126	0.171	0.175	0.129	0.090	0.177	0.268	1.742
ilt	n	21	21	21	20	20	20	20	20	21	21	20	20	20
	Mean	0.556	0.557	0.554	0.560	0.536	0.537	0.518	0.509	0.506	0.528	0.535	0.552	6.502
	Median	0.604	0.562	0.544	0.592	0.570	0.587	0.573	0.533	0.515	0.525	0.574	0.566	7.117
	Std Dev	0.288	0.277	0.274	0.278	0.284	0.276	0.264	0.267	0.270	0.270	0.272	0.281	3.291
olt	n	14	14	14	14	14	14	14	14	14	14	13	13	13
	Mean	0.096	0.091	0.084	0.078	0.074	0.073	0.068	0.068	0.071	0.078	0.093	0.108	1.037
	Median	0.080	0.068	0.058	0.049	0.049	0.046	0.048	0.060	0.061	0.062	0.094	0.108	0.843
	Std Dev	0.081	0.074	0.071	0.072	0.066	0.073	0.065	0.061	0.063	0.077	0.074	0.080	0.833
rfn	n	4	5	5	5	3	4	4	4	4	4	4	4	3
	Mean	0.031	0.025	0.025	0.024	0.039	0.030	0.031	0.031	0.031	0.032	0.031	0.031	0.486
	Median	0.020	0.007	0.007	0.008	0.034	0.022	0.022	0.022	0.021	0.021	0.020	0.020	0.405
	Std Dev	0.036	0.034	0.035	0.032	0.033	0.033	0.035	0.035	0.035	0.037	0.037	0.037	0.437
h2o	n	18	18	18	17	17	17	17	17	18	18	17	17	17
	Mean	0.068	0.072	0.074	0.066	0.060	0.057	0.051	0.043	0.045	0.059	0.066	0.071	0.733
	Median	0.017	0.017	0.017	0.012	0.013	0.012	0.010	0.011	0.011	0.014	0.014	0.016	0.157
	Std Dev	0.145	0.152	0.163	0.148	0.133	0.127	0.112	0.085	0.092	0.133	0.149	0.164	1.622
pwe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
plg	n	21	21	21	20	20	20	20	20	21	21	20	20	20
	Mean	0.063	0.065	0.064	0.055	0.048	0.051	0.048	0.049	0.062	0.065	0.051	0.057	0.628
	Median	0.036	0.036	0.040	0.037	0.032	0.032	0.035	0.036	0.032	0.032	0.034	0.039	0.394
	Std Dev	0.052	0.054	0.051	0.038	0.037	0.037	0.030	0.034	0.071	0.073	0.036	0.041	0.428
elv	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.022	0.021	0.022	0.021	0.021	0.022	0.021	0.022	0.022	0.022	0.022	0.025	0.263
	Median	0.022	0.021	0.022	0.021	0.021	0.022	0.021	0.022	0.022	0.022	0.022	0.025	0.263
	Std Dev	0.010	0.009	0.010	0.010	0.009	0.010	0.010	0.010	0.011	0.010	0.009	0.011	0.120

TABLE C.3
End Use Intensity Statistics (kWh/ft²) - Retails, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
foo	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.067	0.067	0.067	0.070	0.070	0.071	0.070	0.070	0.069	0.070	0.071	0.072	0.836
	Median	0.067	0.067	0.067	0.070	0.070	0.071	0.070	0.070	0.069	0.070	0.071	0.072	0.836
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mtr	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.009
	Median	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.009
	Std Dev	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.005
dat	n	11	11	11	10	10	10	10	10	10	10	10	10	10
	Mean	0.039	0.040	0.042	0.041	0.042	0.041	0.042	0.042	0.041	0.041	0.039	0.040	0.485
	Median	0.017	0.018	0.018	0.018	0.018	0.014	0.021	0.022	0.019	0.019	0.018	0.018	0.215
	Std Dev	0.038	0.038	0.040	0.043	0.045	0.047	0.044	0.043	0.044	0.043	0.042	0.043	0.515
rec	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
san	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.144	0.143	0.142	0.133	0.122	0.132	0.119	0.122	0.130	0.143	0.147	0.163	1.640
	Median	0.144	0.143	0.142	0.133	0.122	0.132	0.119	0.122	0.130	0.143	0.147	0.163	1.640
	Std Dev	0.158	0.160	0.143	0.139	0.146	0.148	0.125	0.146	0.147	0.175	0.181	0.201	1.867
lab	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
shp	n	5	5	5	5	5	5	5	5	5	5	5	5	5
	Mean	0.170	0.092	0.127	0.121	0.078	0.116	0.103	0.096	0.096	0.103	0.149	0.152	1.405
	Median	0.073	0.065	0.066	0.071	0.064	0.063	0.061	0.059	0.050	0.058	0.059	0.068	0.753
	Std Dev	0.205	0.073	0.127	0.125	0.067	0.132	0.101	0.097	0.099	0.102	0.196	0.193	1.476
gen	n	14	15	15	14	13	13	13	13	14	14	13	13	13
	Mean	0.139	0.128	0.129	0.126	0.122	0.131	0.136	0.137	0.128	0.133	0.147	0.144	1.644
	Median	0.067	0.060	0.059	0.056	0.053	0.056	0.059	0.049	0.049	0.055	0.060	0.059	0.692
	Std Dev	0.288	0.274	0.272	0.273	0.263	0.288	0.301	0.318	0.299	0.305	0.326	0.302	3.593
unk	n	8	8	8	8	8	8	8	8	8	8	7	7	7
	Mean	0.016	0.012	0.005	0.005	0.003	0.002	0.003	0.003	0.003	0.010	0.009	0.017	0.094
	Median	0.003	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.010	0.010	0.082
	Std Dev	0.034	0.027	0.007	0.007	0.004	0.004	0.004	0.004	0.004	0.019	0.010	0.023	0.122
sp1	n	10	10	10	10	10	10	10	10	10	10	10	10	10
	Mean	0.090	0.094	0.113	0.094	0.091	0.096	0.071	0.054	0.059	0.088	0.083	0.081	1.013
	Median	0.006	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.007	0.007	0.067
	Std Dev	0.248	0.264	0.322	0.259	0.255	0.267	0.190	0.132	0.149	0.239	0.222	0.216	2.761
sp2	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.026
	Median	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.026
	Std Dev	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.003	0.037
sp3	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.019	0.021	0.016	0.015	0.015	0.014	0.015	0.014	0.014	0.017	0.017	0.019	0.195
	Median	0.019	0.021	0.016	0.015	0.015	0.014	0.015	0.014	0.014	0.017	0.017	0.019	0.195
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp4	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp5	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.3
End Use Intensity Statistics (kWh/ft²) - Retails, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
tch	n	21	21	21	20	20	20	20	20	21	21	20	20	20
	Mean	0.407	0.352	0.260	0.171	0.165	0.225	0.293	0.311	0.215	0.164	0.226	0.345	3.060
	Median	0.235	0.223	0.227	0.172	0.143	0.199	0.291	0.310	0.173	0.147	0.207	0.244	3.046
	Std Dev	0.344	0.299	0.221	0.121	0.138	0.223	0.278	0.300	0.222	0.133	0.181	0.284	1.949
tc1	n	21	21	21	21	21	21	21	21	21	21	20	20	20
	Mean	0.614	0.609	0.596	0.577	0.551	0.558	0.537	0.529	0.542	0.579	0.588	0.610	7.097
	Median	0.651	0.650	0.668	0.565	0.557	0.567	0.545	0.536	0.527	0.546	0.599	0.602	7.232
	Std Dev	0.297	0.286	0.277	0.295	0.307	0.303	0.288	0.296	0.290	0.278	0.271	0.282	3.327
tco	n	21	21	21	21	21	21	21	21	21	21	20	20	20
	Mean	0.277	0.281	0.293	0.263	0.239	0.251	0.234	0.207	0.209	0.256	0.246	0.264	3.050
	Median	0.175	0.192	0.204	0.190	0.160	0.160	0.191	0.173	0.173	0.190	0.169	0.172	2.142
	Std Dev	0.269	0.286	0.303	0.263	0.267	0.273	0.218	0.169	0.167	0.240	0.255	0.281	2.964
dhe	n	18	19	19	18	18	18	18	18	19	19	17	17	17
	Mean	0.380	0.310	0.216	0.089	0.035	0.015	0.012	0.012	0.016	0.058	0.168	0.306	1.530
	Median	0.261	0.121	0.094	0.032	0.009	0.005	0.002	0.002	0.005	0.016	0.036	0.108	0.403
	Std Dev	0.369	0.316	0.236	0.106	0.047	0.026	0.026	0.027	0.024	0.071	0.189	0.302	1.608
dco	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.013	0.017	0.013	0.039	0.094	0.188	0.277	0.301	0.180	0.059	0.020	0.016	1.224
	Median	0.004	0.006	0.006	0.019	0.076	0.150	0.237	0.259	0.169	0.040	0.006	0.004	0.932
	Std Dev	0.026	0.024	0.014	0.048	0.094	0.170	0.203	0.217	0.140	0.057	0.033	0.029	1.001
dvu	n	17	17	17	17	17	17	17	17	17	17	17	17	17
	Mean	0.078	0.078	0.077	0.075	0.077	0.084	0.091	0.089	0.085	0.082	0.078	0.079	0.973
	Median	0.046	0.047	0.054	0.059	0.056	0.051	0.059	0.053	0.049	0.054	0.064	0.045	0.698
	Std Dev	0.078	0.076	0.074	0.072	0.074	0.084	0.089	0.088	0.088	0.083	0.081	0.079	0.945
dau	n	10	10	10	9	8	9	9	9	10	10	9	9	8
	Mean	0.017	0.016	0.016	0.019	0.029	0.034	0.040	0.043	0.034	0.020	0.016	0.015	0.341
	Median	0.002	0.003	0.003	0.005	0.011	0.009	0.010	0.011	0.006	0.005	0.002	0.002	0.113
	Std Dev	0.032	0.029	0.030	0.035	0.051	0.060	0.071	0.075	0.068	0.039	0.031	0.031	0.576
dot	n	21	21	21	20	20	20	20	20	20	20	20	20	20
	Mean	0.194	0.177	0.192	0.173	0.150	0.165	0.149	0.139	0.141	0.164	0.172	0.183	1.980
	Median	0.123	0.139	0.141	0.118	0.104	0.095	0.097	0.107	0.098	0.099	0.091	0.109	1.277
	Std Dev	0.224	0.208	0.248	0.208	0.199	0.214	0.158	0.125	0.136	0.194	0.209	0.212	2.295
dil	n	21	21	21	20	20	20	20	20	21	21	20	20	20
	Mean	0.567	0.567	0.568	0.568	0.545	0.546	0.527	0.516	0.514	0.536	0.544	0.562	6.616
	Median	0.604	0.562	0.544	0.592	0.570	0.607	0.590	0.560	0.515	0.525	0.574	0.566	7.117
	Std Dev	0.291	0.281	0.280	0.281	0.288	0.279	0.268	0.270	0.273	0.273	0.276	0.284	3.334
dol	n	15	15	15	15	15	15	15	15	15	15	14	14	14
	Mean	0.093	0.088	0.082	0.075	0.072	0.071	0.066	0.066	0.069	0.076	0.090	0.104	1.002
	Median	0.061	0.056	0.052	0.046	0.044	0.038	0.041	0.054	0.056	0.053	0.079	0.105	0.713
	Std Dev	0.079	0.071	0.069	0.070	0.065	0.071	0.063	0.059	0.061	0.074	0.072	0.078	0.811
dh2	n	18	18	18	17	17	17	17	17	18	18	17	17	17
	Mean	0.069	0.072	0.074	0.066	0.060	0.057	0.052	0.043	0.045	0.059	0.066	0.071	0.735
	Median	0.017	0.017	0.017	0.012	0.013	0.012	0.010	0.011	0.011	0.014	0.014	0.016	0.157
	Std Dev	0.145	0.152	0.163	0.148	0.133	0.127	0.112	0.085	0.092	0.133	0.149	0.164	1.621
drf	n	5	6	6	5	3	4	4	4	5	5	4	4	3
	Mean	0.028	0.023	0.023	0.024	0.039	0.030	0.031	0.031	0.026	0.027	0.031	0.031	0.486
	Median	0.017	0.011	0.011	0.008	0.034	0.022	0.022	0.022	0.009	0.009	0.020	0.020	0.405
	Std Dev	0.032	0.031	0.031	0.032	0.033	0.033	0.035	0.035	0.033	0.033	0.037	0.037	0.437
dfo	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.067	0.067	0.067	0.070	0.070	0.071	0.070	0.070	0.069	0.070	0.071	0.072	0.836
	Median	0.067	0.067	0.067	0.070	0.070	0.071	0.070	0.070	0.069	0.070	0.071	0.072	0.836
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
dva	n	17	16	17	16	15	16	16	16	17	17	16	16	15
	Mean	0.087	0.083	0.087	0.090	0.097	0.109	0.119	0.119	0.105	0.093	0.092	0.092	1.190
	Median	0.070	0.058	0.067	0.061	0.056	0.059	0.069	0.072	0.056	0.060	0.069	0.064	0.757
	Std Dev	0.093	0.093	0.087	0.091	0.106	0.119	0.130	0.133	0.128	0.104	0.095	0.094	1.292

TABLE C.3
End Use Intensity Statistics (kWh/ft²) - Retails, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
dff	n	5	6	6	5	3	4	4	4	5	5	4	4	3
	Mean	0.042	0.035	0.035	0.038	0.062	0.048	0.049	0.049	0.040	0.041	0.049	0.049	0.766
	Median	0.017	0.011	0.011	0.008	0.073	0.042	0.044	0.044	0.009	0.009	0.045	0.044	0.958
	Std Dev	0.046	0.045	0.046	0.049	0.049	0.051	0.051	0.051	0.048	0.048	0.052	0.052	0.598
dof	n	20	20	21	20	18	19	19	19	19	19	19	19	18
	Mean	0.214	0.189	0.214	0.195	0.169	0.197	0.172	0.156	0.158	0.182	0.191	0.202	2.051
	Median	0.145	0.141	0.143	0.141	0.129	0.142	0.142	0.142	0.141	0.144	0.141	0.146	1.656
	Std Dev	0.222	0.210	0.257	0.223	0.204	0.235	0.162	0.120	0.132	0.192	0.207	0.210	2.232

TABLE C.4
End Use Intensity Statistics (kWh/ft²) - Groceries

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
blt	n	12	12	13	14	12	12	12	12	11	12	13	12	11
	Mean	5.583	5.496	5.309	5.950	5.438	5.677	5.938	6.107	5.704	5.570	6.122	5.699	66.805
	Median	5.993	5.929	5.670	5.979	5.624	5.717	5.853	6.008	5.605	5.890	6.233	6.135	66.597
	Std Dev	2.156	2.102	1.940	2.713	1.957	2.054	2.156	1.943	1.912	1.625	2.703	2.025	23.747
hea	n	8	8	9	10	8	8	8	8	8	8	8	8	8
	Mean	0.369	0.327	0.207	0.158	0.046	0.041	0.022	0.020	0.038	0.105	0.172	0.388	1.897
	Median	0.358	0.284	0.092	0.071	0.011	0.004	0.002	0.003	0.005	0.057	0.093	0.453	1.570
	Std Dev	0.368	0.314	0.240	0.193	0.060	0.076	0.050	0.045	0.062	0.132	0.211	0.342	1.962
phe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
col	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.087	0.087	0.072	0.081	0.112	0.251	0.397	0.373	0.273	0.060	0.041	0.099	1.941
	Median	0.088	0.069	0.062	0.088	0.052	0.100	0.106	0.124	0.157	0.061	0.023	0.128	1.268
	Std Dev	0.070	0.103	0.078	0.065	0.152	0.353	0.636	0.563	0.299	0.052	0.050	0.064	2.032
vnt	n	8	8	9	9	8	8	8	8	8	8	9	8	8
	Mean	0.155	0.152	0.147	0.151	0.167	0.202	0.220	0.225	0.209	0.188	0.170	0.152	2.158
	Median	0.163	0.163	0.166	0.183	0.184	0.252	0.289	0.290	0.253	0.211	0.183	0.149	2.558
	Std Dev	0.082	0.085	0.086	0.098	0.106	0.119	0.127	0.132	0.118	0.103	0.085	0.079	1.199
aux	n	5	5	5	5	5	5	5	5	4	5	5	5	4
	Mean	0.004	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.004	0.023
	Median	0.003	0.003	0.003	0.003	0.002	0.001	0.003	0.003	0.002	0.002	0.003	0.003	0.026
	Std Dev	0.004	0.003	0.003	0.003	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.004	0.018
mix	n	9	9	9	10	9	9	9	9	9	9	10	9	9
	Mean	0.478	0.435	0.303	0.312	0.308	0.441	0.579	0.627	0.408	0.210	0.268	0.521	4.865
	Median	0.242	0.281	0.256	0.140	0.160	0.199	0.331	0.311	0.226	0.106	0.126	0.262	2.949
	Std Dev	0.681	0.558	0.337	0.364	0.409	0.513	0.616	0.684	0.482	0.259	0.369	0.756	5.924
ilt	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	1.176	1.184	1.174	1.366	1.189	1.170	1.180	1.176	1.152	1.243	1.348	1.211	14.290
	Median	1.224	1.326	1.206	1.357	1.283	1.274	1.220	1.273	1.205	1.332	1.404	1.355	14.877
	Std Dev	0.622	0.628	0.606	0.779	0.606	0.590	0.560	0.469	0.462	0.531	0.686	0.575	6.668
olt	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	0.268	0.243	0.217	0.369	0.199	0.187	0.189	0.190	0.206	0.230	0.507	0.265	2.674
	Median	0.196	0.193	0.161	0.172	0.145	0.135	0.137	0.144	0.168	0.186	0.217	0.200	2.019
	Std Dev	0.213	0.188	0.183	0.656	0.171	0.165	0.173	0.157	0.161	0.172	0.928	0.196	2.107
rfn	n	11	11	13	13	11	11	11	11	11	11	12	11	11
	Mean	2.573	2.602	2.689	2.736	2.858	2.948	3.042	3.078	2.938	2.895	2.723	2.628	33.760
	Median	2.441	2.462	2.813	2.585	2.545	2.654	2.685	2.748	2.522	2.504	2.462	2.431	30.686
	Std Dev	1.193	1.217	1.122	1.059	1.209	1.229	1.240	1.111	1.121	1.077	0.977	1.111	13.701
h2o	n	8	8	9	10	8	8	8	8	8	8	9	8	8
	Mean	0.243	0.244	0.215	0.208	0.224	0.203	0.197	0.185	0.196	0.207	0.211	0.233	2.615
	Median	0.140	0.150	0.145	0.140	0.140	0.134	0.123	0.113	0.116	0.122	0.137	0.142	1.588
	Std Dev	0.180	0.189	0.181	0.172	0.185	0.157	0.156	0.148	0.161	0.167	0.157	0.164	2.023
pwe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
plg	n	12	12	13	14	12	12	12	12	11	12	13	12	11
	Mean	0.125	0.126	0.105	0.185	0.111	0.127	0.124	0.127	0.136	0.125	0.197	0.127	1.583
	Median	0.091	0.091	0.067	0.094	0.097	0.105	0.105	0.105	0.107	0.091	0.116	0.096	1.383
	Std Dev	0.122	0.127	0.086	0.299	0.095	0.125	0.122	0.120	0.118	0.119	0.279	0.120	1.325
elv	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.005
	Median	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.005
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.4
End Use Intensity Statistics (kWh/ft²) - Groceries, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
foo	n	10	10	11	12	10	10	10	10	9	10	11	10	9
	Mean	0.340	0.330	0.312	0.415	0.382	0.373	0.381	0.388	0.415	0.380	0.446	0.350	4.841
	Median	0.170	0.168	0.161	0.171	0.218	0.163	0.146	0.147	0.194	0.182	0.258	0.194	2.338
	Std Dev	0.326	0.328	0.329	0.454	0.371	0.389	0.403	0.409	0.418	0.390	0.431	0.320	4.332
mtr	n	9	9	10	11	9	9	9	9	8	9	10	9	8
	Mean	0.029	0.030	0.028	0.064	0.031	0.032	0.031	0.031	0.032	0.031	0.059	0.031	0.387
	Median	0.024	0.025	0.021	0.024	0.022	0.022	0.022	0.021	0.023	0.024	0.026	0.025	0.292
	Std Dev	0.027	0.028	0.029	0.122	0.030	0.030	0.029	0.029	0.031	0.029	0.092	0.026	0.364
dat	n	9	9	10	11	9	9	9	9	8	9	10	9	8
	Mean	0.129	0.129	0.132	0.129	0.125	0.126	0.125	0.128	0.126	0.132	0.124	0.137	1.498
	Median	0.066	0.066	0.084	0.065	0.064	0.064	0.064	0.065	0.053	0.065	0.054	0.066	0.566
	Std Dev	0.146	0.148	0.146	0.145	0.144	0.145	0.145	0.143	0.154	0.150	0.146	0.155	1.890
rec	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
san	n	6	6	6	6	6	6	6	6	6	6	6	6	6
	Mean	0.006	0.005	0.008	0.007	0.005	0.004	0.004	0.005	0.005	0.005	0.005	0.007	0.064
	Median	0.005	0.003	0.004	0.004	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.005	0.053
	Std Dev	0.005	0.006	0.008	0.007	0.006	0.005	0.005	0.005	0.006	0.006	0.007	0.007	0.067
lab	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
shp	n	0	0	0	1	0	0	0	0	0	0	1	0	0
	Mean	NA	NA	NA	0.014	NA	NA	NA	NA	NA	NA	0.015	NA	NA
	Median	NA	NA	NA	0.014	NA	NA	NA	NA	NA	NA	0.015	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gen	n	9	9	9	10	9	9	9	9	9	9	10	9	9
	Mean	0.179	0.189	0.179	0.193	0.171	0.176	0.176	0.172	0.181	0.183	0.186	0.177	2.146
	Median	0.037	0.038	0.042	0.134	0.029	0.035	0.036	0.035	0.049	0.039	0.118	0.039	0.386
	Std Dev	0.210	0.226	0.207	0.202	0.205	0.204	0.203	0.192	0.190	0.206	0.194	0.197	2.443
unk	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.025	0.026	0.026	0.025	0.025	0.024	0.026	0.025	0.027	0.026	0.025	0.025	0.304
	Median	0.024	0.025	0.025	0.024	0.024	0.023	0.022	0.020	0.025	0.025	0.024	0.024	0.285
	Std Dev	0.029	0.030	0.030	0.029	0.029	0.028	0.030	0.030	0.031	0.029	0.029	0.029	0.352
sp1	n	8	8	9	10	8	8	8	8	7	8	9	8	7
	Mean	0.014	0.012	0.012	0.028	0.010	0.010	0.010	0.010	0.011	0.011	0.013	0.014	0.145
	Median	0.006	0.002	0.003	0.006	0.002	0.002	0.002	0.003	0.002	0.005	0.005	0.005	0.031
	Std Dev	0.019	0.020	0.018	0.054	0.017	0.018	0.016	0.017	0.018	0.018	0.017	0.019	0.231
sp2	n	3	3	3	3	3	3	3	3	2	3	3	3	2
	Mean	0.003	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.001	0.005	0.005	0.004	0.013
	Median	0.001	0.000	0.000	0.003	0.002	0.002	0.002	0.003	0.001	0.003	0.002	0.003	0.013
	Std Dev	0.005	0.006	0.006	0.005	0.006	0.007	0.007	0.006	0.002	0.006	0.006	0.005	0.015
sp3	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.242	0.225	0.239	0.265	0.273	0.291	0.308	0.283	0.278	0.299	0.278	0.253	3.236
	Median	0.242	0.225	0.239	0.265	0.273	0.291	0.308	0.283	0.278	0.299	0.278	0.253	3.236
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp4	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp5	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.4
End Use Intensity Statistics (kWh/ft²) - Groceries, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
tch	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	0.717	0.632	0.427	0.421	0.369	0.548	0.700	0.724	0.523	0.346	0.419	0.746	6.581
	Median	0.694	0.605	0.323	0.325	0.304	0.461	0.498	0.524	0.468	0.275	0.265	0.640	5.835
	Std Dev	0.646	0.519	0.328	0.377	0.339	0.413	0.534	0.576	0.391	0.246	0.367	0.689	4.780
tcl	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	1.273	1.249	1.191	1.563	1.116	1.193	1.203	1.225	1.167	1.272	1.685	1.304	14.704
	Median	1.143	1.206	1.187	1.165	1.032	1.138	1.225	1.124	0.977	1.175	1.281	1.289	13.604
	Std Dev	0.597	0.585	0.557	1.341	0.596	0.554	0.540	0.494	0.544	0.516	1.508	0.523	6.297
tco	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	2.837	2.872	2.825	3.035	2.609	2.931	2.973	2.981	2.816	2.897	3.088	2.804	34.216
	Median	2.594	2.400	2.421	2.693	1.852	2.396	2.465	2.274	2.196	2.347	2.672	2.194	28.959
	Std Dev	1.729	1.692	1.665	1.867	2.117	1.931	1.956	1.934	2.038	1.802	1.702	1.680	21.513
dhe	n	12	12	13	14	12	12	12	12	12	12	12	12	12
	Mean	0.459	0.397	0.225	0.136	0.039	0.032	0.018	0.016	0.028	0.077	0.215	0.498	2.136
	Median	0.424	0.362	0.170	0.072	0.012	0.007	0.003	0.003	0.005	0.042	0.186	0.438	2.150
	Std Dev	0.474	0.404	0.239	0.169	0.051	0.062	0.041	0.037	0.052	0.111	0.227	0.537	2.134
dco	n	11	11	11	11	11	11	11	11	11	11	11	11	11
	Mean	0.046	0.043	0.052	0.091	0.165	0.317	0.481	0.511	0.290	0.073	0.032	0.052	2.167
	Median	0.003	0.012	0.012	0.082	0.142	0.155	0.255	0.235	0.169	0.081	0.017	0.019	1.921
	Std Dev	0.064	0.071	0.063	0.099	0.181	0.309	0.479	0.499	0.294	0.066	0.046	0.064	1.903
dvu	n	11	11	12	12	11	11	11	11	11	11	12	11	11
	Mean	0.230	0.219	0.205	0.205	0.236	0.270	0.287	0.292	0.267	0.236	0.224	0.228	2.930
	Median	0.235	0.236	0.209	0.213	0.235	0.264	0.285	0.290	0.272	0.248	0.228	0.236	3.189
	Std Dev	0.170	0.151	0.145	0.160	0.184	0.196	0.196	0.198	0.183	0.158	0.149	0.172	2.052
dau	n	5	5	5	5	5	5	5	5	4	5	5	5	4
	Mean	0.004	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.004	0.023
	Median	0.003	0.003	0.003	0.003	0.002	0.001	0.003	0.003	0.002	0.002	0.003	0.003	0.026
	Std Dev	0.004	0.003	0.003	0.003	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.004	0.018
dot	n	12	12	13	14	12	12	12	12	11	12	13	12	11
	Mean	0.319	0.318	0.286	0.413	0.297	0.318	0.316	0.321	0.332	0.322	0.407	0.320	3.871
	Median	0.279	0.277	0.252	0.239	0.214	0.224	0.229	0.239	0.234	0.235	0.292	0.280	2.944
	Std Dev	0.237	0.238	0.180	0.448	0.203	0.234	0.232	0.224	0.233	0.230	0.377	0.228	2.759
dil	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	1.178	1.185	1.175	1.372	1.190	1.171	1.182	1.177	1.153	1.245	1.355	1.213	14.308
	Median	1.224	1.326	1.206	1.357	1.283	1.274	1.220	1.273	1.205	1.332	1.404	1.355	14.877
	Std Dev	0.620	0.626	0.603	0.789	0.604	0.588	0.558	0.466	0.459	0.528	0.699	0.572	6.640
dol	n	12	12	13	14	12	12	12	12	12	12	13	12	12
	Mean	0.278	0.253	0.225	0.377	0.208	0.196	0.198	0.199	0.216	0.240	0.517	0.275	2.788
	Median	0.196	0.193	0.161	0.172	0.145	0.135	0.137	0.144	0.168	0.186	0.217	0.200	2.019
	Std Dev	0.234	0.210	0.201	0.659	0.189	0.184	0.191	0.175	0.180	0.193	0.929	0.215	2.344
dh2	n	8	8	9	10	8	8	8	8	8	8	9	8	8
	Mean	0.243	0.244	0.215	0.208	0.224	0.203	0.197	0.185	0.196	0.207	0.211	0.233	2.615
	Median	0.140	0.150	0.145	0.140	0.140	0.134	0.123	0.113	0.116	0.122	0.137	0.142	1.588
	Std Dev	0.180	0.189	0.181	0.172	0.185	0.157	0.156	0.148	0.161	0.167	0.157	0.164	2.023
drf	n	11	11	13	13	11	11	11	11	11	11	12	11	11
	Mean	2.616	2.647	2.728	2.786	2.901	2.987	3.081	3.117	2.977	2.933	2.777	2.669	34.259
	Median	2.441	2.462	2.813	2.585	2.545	2.654	2.685	2.748	2.522	2.504	2.490	2.431	30.686
	Std Dev	1.254	1.280	1.180	1.119	1.276	1.286	1.300	1.178	1.189	1.139	1.031	1.170	14.474
dfo	n	11	11	12	13	11	11	11	11	10	11	12	11	10
	Mean	0.309	0.300	0.286	0.383	0.348	0.340	0.347	0.353	0.374	0.346	0.409	0.318	4.362
	Median	0.142	0.140	0.151	0.145	0.184	0.120	0.102	0.100	0.156	0.171	0.224	0.185	2.092
	Std Dev	0.326	0.327	0.326	0.450	0.370	0.385	0.399	0.404	0.414	0.386	0.430	0.322	4.357
dva	n	11	11	12	12	11	11	11	11	10	11	12	11	10
	Mean	0.231	0.222	0.207	0.206	0.237	0.276	0.295	0.299	0.259	0.243	0.225	0.230	2.828
	Median	0.239	0.240	0.209	0.213	0.235	0.264	0.285	0.290	0.258	0.250	0.229	0.240	2.876
	Std Dev	0.170	0.152	0.146	0.160	0.184	0.201	0.204	0.204	0.191	0.163	0.149	0.172	2.132

TABLE C.4
End Use Intensity Statistics (kWh/ft²) - Groceries, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
dff	n	11	11	13	13	11	11	11	11	10	11	12	11	10
	Mean	2.871	2.896	2.983	3.123	3.185	3.268	3.369	3.471	3.339	3.229	3.135	2.934	37.264
	Median	2.581	2.632	2.815	2.741	2.779	2.769	2.812	2.848	2.771	2.676	3.016	2.615	32.356
	Std Dev	1.350	1.373	1.275	1.230	1.412	1.431	1.445	1.335	1.415	1.271	1.134	1.256	16.753
dof	n	11	11	13	13	11	11	11	11	10	11	12	11	10
	Mean	3.158	3.209	3.280	3.525	3.497	3.583	3.636	3.743	3.618	3.501	3.503	3.186	40.751
	Median	3.088	3.114	3.138	3.320	3.329	3.312	3.350	3.414	3.167	3.204	3.467	3.120	36.815
	Std Dev	1.405	1.434	1.333	1.401	1.435	1.444	1.455	1.333	1.420	1.283	1.252	1.295	17.131

TABLE C.5
End Use Intensity Statistics (kWh/ft²) - Restaurants

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
blt	n	12	11	11	11	11	11	12	12	12	12	12	12	11
	Mean	4.870	4.636	4.591	4.676	4.739	5.184	5.463	5.620	5.208	4.892	4.573	4.694	58.006
	Median	4.372	4.357	4.199	4.040	3.914	4.400	4.917	5.019	4.241	4.318	4.213	4.326	50.378
	Std Dev	2.108	2.018	1.931	2.005	2.058	2.299	2.370	2.414	2.329	1.999	1.948	1.931	25.362
hea	n	5	4	4	4	4	4	5	5	5	5	5	5	4
	Mean	0.646	0.527	0.383	0.216	0.121	0.122	0.081	0.122	0.113	0.120	0.234	0.490	3.392
	Median	0.632	0.365	0.274	0.143	0.007	0.006	0.000	0.003	0.002	0.011	0.074	0.178	1.895
	Std Dev	0.613	0.638	0.462	0.267	0.231	0.236	0.180	0.269	0.249	0.247	0.325	0.591	4.422
phe	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.120	0.123	0.132	0.175	0.182	0.117	0.112	0.110	0.120	0.116	0.125	0.116	1.549
	Median	0.120	0.123	0.132	0.175	0.182	0.117	0.112	0.110	0.120	0.116	0.125	0.116	1.549
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
col	n	5	4	4	4	4	4	5	5	5	5	5	5	4
	Mean	0.315	0.412	0.413	0.624	0.844	1.332	1.190	1.283	1.016	0.534	0.348	0.298	9.708
	Median	0.059	0.155	0.152	0.375	0.639	1.171	0.835	0.833	0.610	0.254	0.096	0.040	6.802
	Std Dev	0.548	0.620	0.627	0.770	0.897	1.275	1.333	1.484	1.221	0.757	0.585	0.536	10.872
vnt	n	10	9	9	9	9	9	10	10	10	10	10	10	9
	Mean	0.293	0.317	0.314	0.321	0.334	0.348	0.339	0.333	0.320	0.322	0.311	0.302	3.997
	Median	0.263	0.264	0.259	0.263	0.313	0.314	0.280	0.276	0.270	0.277	0.292	0.303	3.513
	Std Dev	0.246	0.256	0.256	0.253	0.248	0.247	0.267	0.250	0.259	0.259	0.258	0.255	3.064
aux	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.007	0.006	0.009	0.013	0.020	0.037	0.052	0.042	0.023	0.013	0.008	0.006	0.239
	Median	0.007	0.006	0.009	0.013	0.020	0.037	0.052	0.042	0.023	0.013	0.008	0.006	0.239
	Std Dev	0.008	0.009	0.005	0.000	0.010	0.035	0.056	0.042	0.014	0.001	0.006	0.008	0.120
mix	n	7	6	6	7	7	7	8	8	8	8	8	7	6
	Mean	0.573	0.591	0.516	0.464	0.566	0.827	0.920	1.143	0.796	0.466	0.392	0.585	7.671
	Median	0.464	0.456	0.388	0.413	0.596	0.826	0.879	1.255	0.742	0.498	0.268	0.509	7.024
	Std Dev	0.563	0.499	0.461	0.332	0.312	0.443	0.501	0.522	0.489	0.314	0.372	0.556	4.961
ilt	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	0.816	0.776	0.807	0.806	0.808	0.825	0.837	0.841	0.828	0.860	0.830	0.795	9.540
	Median	0.912	0.913	0.924	0.901	0.828	0.869	0.870	0.879	0.885	0.897	0.866	0.869	10.447
	Std Dev	0.493	0.491	0.489	0.497	0.516	0.524	0.518	0.521	0.511	0.507	0.498	0.482	6.009
olt	n	10	9	9	10	10	10	11	11	11	11	11	10	9
	Mean	0.403	0.320	0.296	0.282	0.249	0.234	0.277	0.304	0.326	0.362	0.394	0.378	3.250
	Median	0.263	0.230	0.228	0.217	0.198	0.190	0.187	0.196	0.220	0.247	0.250	0.235	2.487
	Std Dev	0.345	0.264	0.229	0.200	0.161	0.155	0.201	0.247	0.248	0.294	0.309	0.330	2.516
rfn	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	0.699	0.695	0.704	0.707	0.746	0.804	0.844	0.856	0.818	0.809	0.736	0.693	8.997
	Median	0.730	0.566	0.557	0.578	0.652	0.671	0.814	0.818	0.832	0.789	0.740	0.720	7.693
	Std Dev	0.400	0.434	0.418	0.409	0.409	0.460	0.460	0.459	0.431	0.414	0.422	0.398	5.166
h2o	n	10	9	9	9	9	9	10	10	10	10	10	10	9
	Mean	0.347	0.355	0.365	0.352	0.334	0.318	0.281	0.275	0.280	0.305	0.309	0.322	3.959
	Median	0.175	0.153	0.269	0.266	0.329	0.298	0.218	0.205	0.213	0.253	0.159	0.170	2.949
	Std Dev	0.332	0.342	0.327	0.307	0.281	0.260	0.234	0.231	0.236	0.252	0.287	0.304	3.433
pwe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
plg	n	12	11	11	11	11	11	12	12	12	12	12	12	11
	Mean	0.177	0.187	0.197	0.198	0.200	0.217	0.207	0.204	0.197	0.206	0.188	0.183	2.486
	Median	0.124	0.121	0.122	0.120	0.127	0.134	0.134	0.127	0.091	0.124	0.118	0.117	1.664
	Std Dev	0.204	0.201	0.207	0.206	0.212	0.231	0.235	0.232	0.235	0.237	0.220	0.218	2.634
elv	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Median	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.5
End Use Intensity Statistics (kWh/ft²) - Restaurants, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
foo	n	11	10	10	10	10	10	11	11	11	11	11	11	10
	Mean	1.048	0.992	0.994	1.024	1.054	1.065	1.105	1.095	1.104	1.072	1.043	1.026	12.353
	Median	0.737	0.589	0.594	0.612	0.656	0.663	0.808	0.772	0.785	0.772	0.753	0.744	7.545
	Std Dev	1.199	1.213	1.170	1.164	1.186	1.191	1.121	1.152	1.166	1.176	1.185	1.186	14.483
mtr	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.007	0.004	0.008	0.004	0.003	0.003	0.004	0.003	0.004	0.004	0.004	0.005	0.054
	Median	0.007	0.004	0.008	0.004	0.003	0.003	0.004	0.003	0.004	0.004	0.004	0.005	0.054
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
dat	n	4	3	3	4	4	4	5	5	5	4	4	4	3
	Mean	0.080	0.049	0.049	0.043	0.041	0.043	0.058	0.058	0.054	0.067	0.073	0.088	0.588
	Median	0.069	0.057	0.055	0.039	0.035	0.038	0.054	0.054	0.055	0.072	0.071	0.072	0.651
	Std Dev	0.072	0.043	0.044	0.038	0.039	0.039	0.048	0.049	0.053	0.050	0.058	0.084	0.512
rec	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
san	n	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.128	0.135	0.137	0.155	0.149	0.155	0.145	0.145	0.142	0.147	0.131	0.120	1.689
	Median	0.065	0.059	0.064	0.097	0.093	0.116	0.084	0.063	0.067	0.075	0.054	0.050	0.926
	Std Dev	0.160	0.175	0.174	0.182	0.172	0.169	0.172	0.185	0.180	0.179	0.162	0.149	2.045
lab	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
shp	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gen	n	10	9	9	9	9	9	10	10	10	10	10	10	9
	Mean	0.416	0.383	0.387	0.406	0.394	0.364	0.374	0.415	0.414	0.458	0.413	0.462	4.685
	Median	0.317	0.224	0.217	0.218	0.237	0.284	0.351	0.318	0.321	0.332	0.331	0.347	2.829
	Std Dev	0.395	0.392	0.403	0.445	0.425	0.349	0.320	0.394	0.401	0.461	0.379	0.478	4.838
unk	n	5	4	4	4	4	4	5	5	5	5	5	5	4
	Mean	0.028	0.019	0.023	0.017	0.013	0.014	0.011	0.011	0.016	0.021	0.028	0.027	0.194
	Median	0.017	0.011	0.011	0.011	0.011	0.011	0.006	0.006	0.015	0.017	0.017	0.017	0.128
	Std Dev	0.027	0.021	0.029	0.018	0.009	0.011	0.011	0.011	0.014	0.023	0.028	0.026	0.194
sp1	n	5	5	5	5	5	5	5	5	5	5	5	5	5
	Mean	0.034	0.034	0.033	0.035	0.030	0.031	0.032	0.031	0.030	0.031	0.031	0.033	0.385
	Median	0.012	0.011	0.011	0.011	0.008	0.011	0.011	0.011	0.010	0.010	0.011	0.012	0.129
	Std Dev	0.055	0.055	0.053	0.058	0.050	0.052	0.052	0.050	0.051	0.049	0.049	0.053	0.627
sp2	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.006	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.069
	Median	0.006	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.069
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp3	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp4	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp5	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.5
End Use Intensity Statistics (kWh/ft²) - Restaurants, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
tch	n	12	11	11	12	12	12	13	13	13	13	13	12	11
	Mean	0.982	0.923	0.824	0.799	0.908	1.216	1.296	1.494	1.166	0.779	0.709	0.915	12.169
	Median	0.893	0.823	0.808	0.734	0.821	1.119	1.055	1.412	1.067	0.883	0.732	0.759	12.662
	Std Dev	0.506	0.489	0.480	0.559	0.646	0.915	1.004	1.036	0.914	0.586	0.491	0.517	7.827
tcl	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	1.123	1.016	1.028	1.006	0.977	0.975	1.024	1.054	1.062	1.136	1.129	1.085	11.973
	Median	1.117	1.125	1.144	1.160	1.042	1.026	1.040	1.051	1.035	1.115	1.156	1.114	13.125
	Std Dev	0.705	0.618	0.586	0.581	0.558	0.557	0.607	0.634	0.640	0.688	0.683	0.685	7.009
tco	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	2.434	2.342	2.372	2.404	2.453	2.486	2.516	2.545	2.506	2.575	2.448	2.401	28.922
	Median	2.337	2.212	2.233	2.267	2.181	2.219	2.239	2.269	2.136	2.254	2.261	2.245	25.787
	Std Dev	1.398	1.413	1.288	1.268	1.289	1.295	1.276	1.285	1.319	1.285	1.358	1.383	15.953
dhe	n	9	9	8	9	9	9	10	10	10	10	10	9	8
	Mean	0.592	0.403	0.329	0.156	0.090	0.072	0.055	0.082	0.072	0.086	0.219	0.509	2.885
	Median	0.678	0.399	0.275	0.107	0.014	0.006	0.001	0.002	0.005	0.019	0.145	0.608	2.936
	Std Dev	0.496	0.453	0.337	0.187	0.157	0.161	0.132	0.196	0.179	0.174	0.254	0.483	3.157
dco	n	11	10	10	10	10	10	11	11	11	11	11	11	10
	Mean	0.149	0.182	0.192	0.324	0.501	0.897	1.014	1.198	0.852	0.369	0.179	0.145	5.792
	Median	0.018	0.032	0.061	0.142	0.318	0.666	0.835	0.921	0.540	0.187	0.072	0.025	3.918
	Std Dev	0.382	0.410	0.410	0.518	0.607	0.855	0.905	0.957	0.865	0.543	0.404	0.370	7.160
dvu	n	12	11	11	12	12	12	13	13	13	13	13	12	11
	Mean	0.427	0.436	0.429	0.430	0.444	0.451	0.427	0.443	0.422	0.438	0.410	0.443	5.498
	Median	0.361	0.426	0.429	0.346	0.330	0.355	0.310	0.294	0.295	0.283	0.258	0.360	5.213
	Std Dev	0.292	0.298	0.301	0.326	0.337	0.323	0.296	0.312	0.300	0.330	0.310	0.321	3.800
dau	n	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.007	0.006	0.009	0.013	0.020	0.037	0.052	0.042	0.023	0.013	0.008	0.006	0.239
	Median	0.007	0.006	0.009	0.013	0.020	0.037	0.052	0.042	0.023	0.013	0.008	0.006	0.239
	Std Dev	0.008	0.009	0.005	0.000	0.010	0.035	0.056	0.042	0.014	0.001	0.006	0.008	0.120
dot	n	11	10	10	11	11	11	12	12	12	11	11	11	10
	Mean	0.338	0.342	0.356	0.387	0.375	0.386	0.356	0.337	0.324	0.371	0.343	0.340	4.352
	Median	0.273	0.276	0.329	0.429	0.424	0.434	0.326	0.235	0.225	0.285	0.247	0.296	3.963
	Std Dev	0.253	0.281	0.278	0.291	0.278	0.279	0.277	0.280	0.290	0.290	0.268	0.263	3.430
dil	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	0.846	0.801	0.831	0.831	0.831	0.847	0.864	0.873	0.861	0.895	0.862	0.833	9.838
	Median	0.912	0.913	0.924	0.901	0.828	0.869	0.870	0.879	0.885	0.897	0.866	0.869	10.447
	Std Dev	0.477	0.465	0.461	0.468	0.489	0.499	0.505	0.503	0.494	0.489	0.482	0.460	5.677
dol	n	10	9	9	10	10	10	11	11	11	11	11	10	9
	Mean	0.403	0.320	0.296	0.282	0.249	0.234	0.277	0.304	0.326	0.362	0.394	0.378	3.250
	Median	0.263	0.230	0.228	0.217	0.198	0.190	0.187	0.196	0.220	0.247	0.250	0.235	2.487
	Std Dev	0.345	0.264	0.229	0.200	0.161	0.155	0.201	0.247	0.248	0.294	0.309	0.330	2.516
dh2	n	10	9	9	9	9	9	10	10	10	10	10	10	9
	Mean	0.347	0.355	0.365	0.352	0.334	0.318	0.281	0.275	0.280	0.305	0.309	0.322	3.959
	Median	0.175	0.153	0.269	0.266	0.329	0.298	0.218	0.205	0.213	0.253	0.159	0.170	2.949
	Std Dev	0.332	0.342	0.327	0.307	0.281	0.260	0.234	0.231	0.236	0.252	0.287	0.304	3.433
drf	n	13	12	12	12	12	12	13	13	13	13	13	13	12
	Mean	0.792	0.771	0.783	0.782	0.823	0.875	0.905	0.937	0.892	0.915	0.827	0.790	9.932
	Median	0.730	0.567	0.558	0.579	0.654	0.672	0.814	0.818	0.832	0.789	0.740	0.720	7.708
	Std Dev	0.527	0.550	0.543	0.511	0.506	0.552	0.525	0.553	0.512	0.559	0.543	0.528	6.453
dfo	n	11	10	10	10	10	10	11	11	11	11	11	11	10
	Mean	1.111	1.034	1.036	1.059	1.087	1.097	1.148	1.135	1.134	1.134	1.104	1.087	12.739
	Median	0.737	0.589	0.594	0.646	0.668	0.674	0.808	0.772	0.785	0.772	0.753	0.744	7.545
	Std Dev	1.185	1.187	1.142	1.145	1.170	1.175	1.127	1.157	1.179	1.163	1.171	1.173	14.269
dva	n	12	11	11	12	12	12	13	13	13	13	13	12	11
	Mean	0.428	0.437	0.430	0.433	0.448	0.457	0.435	0.450	0.426	0.440	0.411	0.444	5.542
	Median	0.367	0.438	0.442	0.358	0.350	0.392	0.401	0.366	0.329	0.295	0.262	0.367	5.367
	Std Dev	0.292	0.298	0.300	0.325	0.336	0.320	0.294	0.310	0.299	0.329	0.310	0.321	3.781

TABLE C.5
End Use Intensity Statistics (kWh/ft²) - Restaurants, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
dff	n	12	11	11	11	11	11	12	12	12	12	12	12	11
	Mean	1.771	1.661	1.670	1.681	1.747	1.805	1.900	1.917	1.878	1.909	1.796	1.742	20.820
	Median	1.498	1.426	1.448	1.523	1.533	1.555	1.632	1.575	1.583	1.574	1.500	1.475	18.313
	Std Dev	1.386	1.409	1.326	1.312	1.341	1.369	1.364	1.384	1.392	1.357	1.387	1.376	16.540
dof	n	11	10	10	11	11	11	12	12	12	11	11	11	10
	Mean	2.061	1.941	1.959	2.050	2.116	2.171	2.235	2.217	2.080	2.239	2.093	2.036	24.591
	Median	1.684	1.595	1.596	1.739	1.965	2.053	2.118	2.003	1.888	2.056	1.958	1.773	21.587
	Std Dev	1.351	1.373	1.272	1.213	1.247	1.265	1.254	1.269	1.400	1.292	1.346	1.348	16.047

TABLE C.6
End Use Intensity Statistics (kWh/ft²) - Warehouses

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
blt	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.823	0.766	0.636	0.534	0.444	0.445	0.432	0.469	0.450	0.464	0.566	0.726	6.743
	Median	0.591	0.481	0.478	0.435	0.394	0.368	0.323	0.364	0.321	0.385	0.427	0.617	4.937
	Std Dev	0.682	0.613	0.435	0.350	0.252	0.277	0.295	0.451	0.440	0.299	0.412	0.577	4.658
hea	n	9	9	9	9	9	9	9	9	9	9	9	9	9
	Mean	0.402	0.332	0.220	0.128	0.058	0.025	0.012	0.007	0.020	0.084	0.193	0.365	1.837
	Median	0.106	0.094	0.079	0.039	0.014	0.010	0.001	0.007	0.007	0.029	0.082	0.092	0.522
	Std Dev	0.551	0.479	0.330	0.208	0.085	0.035	0.016	0.008	0.029	0.136	0.286	0.490	2.470
phe	n	6	7	7	7	6	7	7	7	7	7	6	6	6
	Mean	0.006	0.007	0.005	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.005	0.027
	Median	0.004	0.004	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.023
	Std Dev	0.006	0.006	0.006	0.004	0.001	0.004	0.003	0.004	0.003	0.004	0.002	0.005	0.022
col	n	5	5	5	5	5	5	5	5	5	5	5	5	5
	Mean	0.049	0.042	0.021	0.017	0.021	0.039	0.054	0.057	0.034	0.015	0.034	0.046	0.429
	Median	0.001	0.002	0.002	0.003	0.012	0.025	0.031	0.046	0.018	0.007	0.005	0.003	0.171
	Std Dev	0.104	0.089	0.041	0.031	0.028	0.047	0.056	0.050	0.038	0.021	0.069	0.097	0.662
vnt	n	5	5	5	6	6	6	6	6	6	6	5	5	5
	Mean	0.009	0.008	0.008	0.007	0.007	0.008	0.010	0.010	0.008	0.007	0.008	0.009	0.111
	Median	0.001	0.001	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.001	0.008
	Std Dev	0.012	0.011	0.012	0.012	0.012	0.013	0.018	0.018	0.014	0.011	0.011	0.013	0.164
aux	n	7	7	7	7	7	7	7	7	7	7	7	7	7
	Mean	0.011	0.010	0.008	0.006	0.005	0.005	0.005	0.007	0.006	0.004	0.005	0.008	0.079
	Median	0.007	0.009	0.007	0.006	0.005	0.004	0.004	0.007	0.004	0.002	0.004	0.009	0.075
	Std Dev	0.015	0.012	0.009	0.006	0.004	0.004	0.004	0.006	0.006	0.004	0.005	0.007	0.076
mix	n	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.168	0.125	0.105	0.076	0.057	0.060	0.071	0.083	0.064	0.067	0.106	0.164	1.147
	Median	0.077	0.054	0.052	0.042	0.057	0.054	0.061	0.073	0.063	0.049	0.038	0.068	0.653
	Std Dev	0.175	0.123	0.097	0.071	0.038	0.044	0.051	0.049	0.038	0.052	0.114	0.178	0.892
ilt	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.251	0.257	0.226	0.222	0.207	0.222	0.209	0.238	0.235	0.207	0.204	0.205	2.678
	Median	0.146	0.147	0.149	0.157	0.143	0.148	0.141	0.143	0.141	0.148	0.140	0.141	1.730
	Std Dev	0.296	0.282	0.174	0.158	0.147	0.171	0.178	0.294	0.294	0.158	0.153	0.155	2.368
olt	n	11	11	11	11	11	11	11	11	11	11	11	11	11
	Mean	0.052	0.051	0.039	0.036	0.029	0.029	0.033	0.042	0.044	0.034	0.038	0.038	0.464
	Median	0.023	0.019	0.019	0.017	0.014	0.012	0.006	0.007	0.010	0.012	0.018	0.018	0.171
	Std Dev	0.087	0.085	0.057	0.055	0.043	0.042	0.058	0.080	0.082	0.046	0.048	0.047	0.720
rfn	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.072	0.069	0.070	0.074	0.078	0.080	0.082	0.082	0.079	0.076	0.073	0.071	0.907
	Median	0.008	0.008	0.005	0.005	0.005	0.007	0.010	0.005	0.005	0.007	0.006	0.007	0.077
	Std Dev	0.134	0.128	0.134	0.140	0.148	0.151	0.150	0.156	0.152	0.141	0.136	0.133	1.705
h2o	n	12	12	12	12	12	12	12	12	12	12	12	12	12
	Mean	0.018	0.018	0.017	0.016	0.014	0.014	0.014	0.013	0.014	0.015	0.016	0.016	0.186
	Median	0.014	0.013	0.013	0.014	0.012	0.011	0.009	0.009	0.010	0.012	0.014	0.014	0.148
	Std Dev	0.018	0.018	0.014	0.013	0.011	0.010	0.014	0.014	0.015	0.013	0.014	0.014	0.167
pwe	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
plg	n	14	14	14	14	14	14	14	14	14	14	14	14	14
	Mean	0.031	0.027	0.025	0.023	0.022	0.023	0.023	0.025	0.024	0.026	0.025	0.028	0.302
	Median	0.019	0.020	0.025	0.023	0.019	0.022	0.019	0.021	0.019	0.024	0.022	0.021	0.242
	Std Dev	0.030	0.022	0.017	0.014	0.014	0.013	0.017	0.023	0.021	0.024	0.022	0.025	0.229
elv	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.6
End Use Intensity Statistics (kWh/ft²) - Warehouses, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
foo	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.034	0.029	0.039	0.043	0.027	0.020	0.014	0.000	0.001	0.013	0.015	0.028	0.263
	Median	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.000	0.000	0.005	0.003	0.002	0.022
	Std Dev	0.066	0.057	0.076	0.084	0.052	0.037	0.026	0.001	0.001	0.019	0.027	0.055	0.497
mtr	n	4	4	4	4	4	4	4	4	4	4	4	4	4
	Mean	0.010	0.013	0.036	0.012	0.025	0.015	0.026	0.010	0.019	0.012	0.011	0.015	0.204
	Median	0.009	0.015	0.023	0.011	0.030	0.013	0.025	0.008	0.023	0.011	0.011	0.016	0.267
	Std Dev	0.012	0.011	0.042	0.013	0.019	0.015	0.022	0.012	0.013	0.012	0.011	0.014	0.136
dat	n	7	7	7	7	7	7	7	7	7	7	7	7	7
	Mean	0.015	0.014	0.014	0.012	0.012	0.011	0.011	0.011	0.009	0.011	0.012	0.014	0.147
	Median	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006	0.006	0.007	0.006	0.006	0.073
	Std Dev	0.017	0.019	0.020	0.016	0.013	0.013	0.012	0.010	0.006	0.012	0.016	0.017	0.168
rec	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
san	n	1	1	1	1	1	1	1	1	0	1	1	1	0
	Mean	0.005	0.028	0.032	0.017	0.021	0.020	0.013	0.000	NA	0.000	0.001	0.002	NA
	Median	0.005	0.028	0.032	0.017	0.021	0.020	0.013	0.000	NA	0.000	0.001	0.002	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lab	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
shp	n	7	8	8	8	7	8	8	8	8	8	7	7	7
	Mean	0.015	0.020	0.019	0.017	0.013	0.017	0.015	0.017	0.012	0.018	0.015	0.011	0.182
	Median	0.015	0.020	0.021	0.020	0.013	0.013	0.010	0.011	0.012	0.014	0.017	0.007	0.192
	Std Dev	0.014	0.016	0.014	0.013	0.013	0.018	0.016	0.020	0.012	0.020	0.012	0.012	0.175
gen	n	13	13	13	13	13	13	13	13	13	13	13	13	13
	Mean	0.057	0.068	0.064	0.055	0.050	0.050	0.049	0.050	0.048	0.050	0.049	0.054	0.645
	Median	0.020	0.028	0.026	0.021	0.015	0.014	0.017	0.016	0.012	0.018	0.017	0.024	0.226
	Std Dev	0.090	0.096	0.090	0.083	0.078	0.076	0.075	0.077	0.076	0.076	0.074	0.081	0.949
unk	n	9	9	9	9	9	9	9	9	9	9	9	9	9
	Mean	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.020
	Median	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
	Std Dev	0.006	0.006	0.005	0.005	0.003	0.002	0.001	0.002	0.002	0.002	0.003	0.006	0.043
sp1	n	8	8	8	8	8	8	8	8	8	8	8	8	8
	Mean	0.006	0.007	0.007	0.007	0.006	0.010	0.006	0.006	0.006	0.008	0.007	0.006	0.082
	Median	0.004	0.004	0.003	0.004	0.004	0.005	0.002	0.002	0.002	0.007	0.003	0.003	0.051
	Std Dev	0.007	0.008	0.007	0.007	0.007	0.012	0.007	0.008	0.008	0.008	0.007	0.007	0.083
sp2	n	3	4	4	4	3	4	5	5	5	5	3	3	3
	Mean	0.024	0.016	0.015	0.013	0.017	0.012	0.019	0.012	0.013	0.025	0.023	0.024	0.205
	Median	0.006	0.004	0.004	0.004	0.006	0.004	0.006	0.001	0.001	0.006	0.006	0.006	0.076
	Std Dev	0.035	0.027	0.025	0.021	0.024	0.019	0.023	0.022	0.024	0.030	0.034	0.033	0.276
sp3	n	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
	Median	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp4	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sp5	n	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Std Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C.6
End Use Intensity Statistics (kWh/ft²) - Warehouses, cont'd

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
tch	n 14	14	14	14	13	14	14	14	14	14	14	14	13
Mean	0.379	0.307	0.214	0.138	0.087	0.069	0.064	0.075	0.064	0.098	0.202	0.351	2.156
Median	0.225	0.160	0.152	0.086	0.084	0.054	0.056	0.068	0.054	0.068	0.115	0.216	1.437
Std Dev	0.458	0.398	0.272	0.171	0.074	0.060	0.051	0.060	0.050	0.112	0.241	0.414	2.133
tcl	n 14	14	14	14	13	14	14	14	14	14	14	14	13
Mean	0.292	0.297	0.257	0.252	0.237	0.243	0.235	0.270	0.269	0.233	0.233	0.234	3.137
Median	0.157	0.157	0.157	0.162	0.156	0.153	0.144	0.150	0.144	0.152	0.149	0.155	1.803
Std Dev	0.372	0.356	0.221	0.201	0.187	0.204	0.227	0.366	0.366	0.196	0.194	0.193	3.083
tco	n 14	14	14	14	13	14	14	14	14	14	14	14	13
Mean	0.147	0.157	0.161	0.141	0.129	0.128	0.123	0.118	0.113	0.131	0.126	0.135	1.667
Median	0.095	0.139	0.141	0.102	0.106	0.115	0.100	0.080	0.080	0.092	0.090	0.100	1.242
Std Dev	0.110	0.103	0.100	0.105	0.096	0.100	0.087	0.100	0.094	0.098	0.091	0.098	1.138
dhe	n 13	13	13	13	13	13	13	13	13	13	13	13	13
Mean	0.363	0.290	0.199	0.118	0.056	0.024	0.012	0.008	0.020	0.078	0.183	0.333	1.676
Median	0.297	0.172	0.137	0.058	0.022	0.010	0.007	0.006	0.013	0.046	0.124	0.255	1.132
Std Dev	0.464	0.403	0.276	0.176	0.074	0.031	0.014	0.009	0.025	0.115	0.242	0.417	2.094
dco	n 11	11	11	11	11	11	11	11	11	11	11	11	11
Mean	0.025	0.022	0.013	0.013	0.020	0.035	0.047	0.058	0.033	0.012	0.018	0.025	0.321
Median	0.001	0.002	0.002	0.005	0.009	0.021	0.029	0.042	0.020	0.005	0.002	0.001	0.140
Std Dev	0.074	0.064	0.031	0.025	0.029	0.039	0.047	0.048	0.034	0.017	0.050	0.069	0.493
dvu	n 11	11	11	12	12	12	12	12	12	12	11	11	11
Mean	0.041	0.056	0.047	0.030	0.023	0.026	0.031	0.031	0.027	0.035	0.033	0.036	0.430
Median	0.024	0.019	0.019	0.018	0.015	0.016	0.019	0.019	0.018	0.017	0.022	0.024	0.243
Std Dev	0.046	0.091	0.065	0.029	0.022	0.029	0.033	0.031	0.029	0.042	0.034	0.036	0.435
dau	n 7	7	7	7	7	7	7	7	7	7	7	7	7
Mean	0.011	0.010	0.008	0.006	0.005	0.005	0.005	0.007	0.006	0.004	0.005	0.009	0.081
Median	0.007	0.009	0.007	0.006	0.005	0.005	0.005	0.007	0.004	0.002	0.004	0.009	0.076
Std Dev	0.014	0.011	0.009	0.006	0.004	0.004	0.003	0.006	0.006	0.004	0.005	0.007	0.073
dot	n 11	11	11	11	11	11	11	12	11	12	11	11	10
Mean	0.067	0.070	0.074	0.057	0.059	0.055	0.059	0.063	0.058	0.063	0.055	0.059	0.633
Median	0.048	0.053	0.057	0.044	0.044	0.045	0.046	0.042	0.044	0.049	0.046	0.048	0.555
Std Dev	0.050	0.046	0.051	0.042	0.043	0.040	0.041	0.050	0.043	0.048	0.037	0.038	0.405
dil	n 14	14	14	14	14	14	14	14	14	14	14	14	14
Mean	0.263	0.271	0.239	0.235	0.220	0.234	0.220	0.250	0.247	0.218	0.215	0.218	2.828
Median	0.153	0.165	0.156	0.165	0.171	0.155	0.144	0.147	0.146	0.156	0.144	0.156	1.781
Std Dev	0.296	0.282	0.177	0.164	0.152	0.177	0.181	0.295	0.294	0.164	0.157	0.161	2.401
dol	n 13	13	13	13	13	13	13	13	13	13	13	13	13
Mean	0.048	0.047	0.037	0.034	0.028	0.027	0.031	0.038	0.040	0.032	0.035	0.035	0.431
Median	0.023	0.019	0.019	0.017	0.015	0.014	0.009	0.009	0.010	0.012	0.018	0.018	0.203
Std Dev	0.080	0.079	0.053	0.051	0.040	0.039	0.054	0.074	0.076	0.043	0.045	0.044	0.668
dh2	n 12	12	12	12	12	12	12	12	12	12	12	12	12
Mean	0.018	0.018	0.017	0.016	0.014	0.014	0.014	0.013	0.014	0.015	0.016	0.016	0.186
Median	0.014	0.013	0.013	0.014	0.012	0.011	0.009	0.009	0.010	0.012	0.014	0.014	0.148
Std Dev	0.018	0.018	0.014	0.013	0.011	0.010	0.014	0.014	0.015	0.013	0.014	0.014	0.167
drf	n 7	7	7	7	7	7	7	7	7	7	7	7	7
Mean	0.063	0.061	0.062	0.063	0.065	0.067	0.069	0.069	0.067	0.064	0.061	0.062	0.773
Median	0.008	0.009	0.008	0.009	0.010	0.012	0.019	0.008	0.009	0.014	0.011	0.009	0.122
Std Dev	0.099	0.095	0.099	0.103	0.109	0.111	0.111	0.115	0.111	0.105	0.101	0.099	1.257
dfo	n 8	8	8	8	8	8	8	8	8	8	8	8	8
Mean	0.022	0.019	0.024	0.026	0.018	0.015	0.012	0.005	0.005	0.011	0.012	0.019	0.186
Median	0.004	0.004	0.004	0.003	0.004	0.004	0.003	0.002	0.002	0.004	0.004	0.003	0.038
Std Dev	0.046	0.039	0.053	0.058	0.036	0.026	0.019	0.009	0.008	0.015	0.019	0.038	0.345
dva	n 10	10	10	11	11	11	11	11	11	11	10	10	10
Mean	0.051	0.067	0.056	0.036	0.028	0.030	0.036	0.037	0.032	0.039	0.039	0.044	0.515
Median	0.029	0.030	0.030	0.020	0.017	0.017	0.020	0.022	0.019	0.017	0.027	0.031	0.347
Std Dev	0.049	0.094	0.066	0.030	0.024	0.031	0.034	0.033	0.031	0.043	0.034	0.037	0.444

TABLE C.6
End Use Intensity Statistics (kWh/ft²) - Warehouses, cont'd

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
dff	n	11	11	11	11	11	11	11	11	11	11	11	11	11
	Mean	0.056	0.053	0.057	0.059	0.055	0.053	0.053	0.048	0.046	0.048	0.047	0.053	0.629
	Median	0.008	0.009	0.009	0.012	0.013	0.016	0.014	0.002	0.002	0.002	0.005	0.006	0.116
	Std Dev	0.088	0.083	0.089	0.093	0.092	0.092	0.093	0.098	0.094	0.088	0.084	0.085	1.058
dof	n	11	11	11	11	11	11	11	12	11	12	11	11	10
	Mean	0.099	0.101	0.106	0.089	0.093	0.089	0.094	0.105	0.102	0.103	0.087	0.090	1.067
	Median	0.052	0.053	0.059	0.045	0.046	0.047	0.048	0.044	0.045	0.050	0.048	0.054	0.576
	Std Dev	0.107	0.100	0.102	0.103	0.106	0.105	0.101	0.116	0.113	0.110	0.099	0.089	1.266

APPENDIX D--PRINTOUTS OF DATA CORRESPONDING TO FIGURES IN THIS REPORT

(This appendix doest not correspond to Appendix D of the original report)

APPENDIX D--PRINTOUTS OF DATA CORRESPONDING TO FIGURES IN THIS REPORT

The data behind the graphics in this report are available on magnetic media from the Bonneville Power Administration. To obtain these files, which contain the data in industry-standard electronic spreadsheet format, contact:

Ms. Diane Hollister
Bonneville Power Administration
P.O. Box 3621 - RPEE
Portland, Oregon 97208
(503) 230-4372

This appendix contains hard copies of those data files.

FIGURE D.1
Printout of Data From Figures 7.1 Through 7.9

	Mean Annual EUIs (kWh/sf/yr)				
	Office	Retail	Grocery	Restaurant	Warehouse
Building Total	20.855	13.743	66.805	58.006	6.743
Interior Lighting	6.869	6.616	14.308	9.838	2.828
Exterior Lighting	2.078	1.002	2.788	3.250	0.431
Hot Water	0.423	0.735	2.615	3.959	0.186
Heating	2.992	1.530	2.136	2.885	1.676
Cooling	1.964	1.224	2.167	5.792	0.321
Ventilation & Auxiliaries	3.773	1.190	2.828	5.542	0.515
Food Prep & Refr			37.264	20.820	0.629
Other Loads			3.871	4.352	0.633
Other w/ Food Prep & Refr	2.580	2.051			

	Sample size (n)				
	Office	Retail	Grocery	Restaurant	Warehouse
Building Total	18	20	11	11	14
Interior Lighting	19	20	12	12	14
Exterior Lighting	14	14	12	9	13
Hot Water	17	17	8	9	12
Heating	19	17	12	8	13
Cooling	18	14	11	10	11
Ventilation & Auxiliaries	17	15	10	11	10
Food Prep & Refr			10	11	11
Other Loads			11	10	10
Other w/ Food Prep & Refr	19	18			

FIGURE D.2

Printout of Data From Figures 8.2 Through 8.11b

Figure 8.2. Annual EUIs - Building Total
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	1.668	1.511	1.421	1.815	2.306
Upper Quartile	1.187	1.198	1.277	1.264	1.397
Median	1.042	0.985	0.997	0.869	0.732
Lower Quartile	0.686	0.757	0.822	0.704	0.475
Lower Extreme	0.377	0.317	0.230	0.341	0.188
N	18	20	11	11	14
Mean (kWh/sf)	20.855	13.743	66.805	58.006	6.743

Figure 8.3a. Annual EUIs - Interior Lighting
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.158	1.721	1.711	1.979	1.410
Upper Quartile	1.267	1.436	1.338	1.508	1.015
Median	0.858	1.076	1.040	1.062	0.630
Lower Quartile	0.555	0.546	0.535	0.467	0.539
Lower Extreme	0.156	0.205	0.344	0.277	0.236
N	19	20	12	12	14
Mean (kWh/sf)	6.869	6.616	14.308	9.838	2.828

Figure 8.3b. Annual End Use Shares - Interior Lighting
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	1.711	1.785	1.830	1.881	1.443
Upper Quartile	1.183	1.250	1.376	1.279	1.304
Median	0.978	0.963	0.949	0.871	1.062
Lower Quartile	0.742	0.717	0.539	0.703	0.649
Lower Extreme	0.365	0.174	0.294	0.372	0.525
N	18	20	11	11	14
Mean (%)	33.073	49.346	22.445	15.835	43.002

Figure 8.4a. Annual EUIs - Exterior Lighting
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	1.843	1.874	2.736	1.394	1.520
Upper Quartile	1.395	1.312	1.598	1.090	1.054
Median	0.897	0.712	0.724	0.765	0.470
Lower Quartile	0.419	0.541	0.455	0.744	0.156
Lower Extreme	0.038	0.169	0.000	0.251	0.000
N	14	14	12	9	13
Mean (kWh/sf)	2.078	1.002	2.788	3.250	0.431

Figure 8.4b. Annual End Use Shares - Exterior Lighting
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.358	2.207	2.301	1.730	1.729
Upper Quartile	1.567	1.285	1.533	1.319	1.143
Median	1.020	0.739	0.996	0.893	0.965
Lower Quartile	0.374	0.476	0.407	0.745	0.511
Lower Extreme	0.097	0.111	0.000	0.418	0.000
N	14	14	11	9	13
Mean (%)	10.242	7.384	4.104	5.531	4.219

Figure 8.5a. Annual EUIs - Hot Water
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	1.210	0.829	2.260	2.084	1.708
Upper Quartile	0.947	0.638	1.701	1.990	1.141
Median	0.789	0.214	0.607	0.745	0.796
Lower Quartile	0.540	0.151	0.498	0.324	0.426
Lower Extreme	0.076	0.022	0.126	0.000	0.249
N	17	17	8	9	12
Mean (kWh/sf)	0.423	0.735	2.615	3.959	0.186

Figure 8.5b. Annual End Use Shares - Hot Water
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	1.816	1.036	1.931	2.342	2.004
Upper Quartile	1.208	0.657	1.672	1.631	1.423
Median	0.724	0.223	0.795	0.801	0.896
Lower Quartile	0.475	0.139	0.495	0.378	0.507
Lower Extreme	0.189	0.070	0.146	0.040	0.093
N	16	17	8	8	12
Mean (%)	2.167	4.999	3.387	9.368	3.180

Figure 8.6a. Annual EUIs - Heating
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.337	3.408	2.604	1.194	2.319
Upper Quartile	1.740	1.757	1.609	1.186	1.123
Median	1.126	0.263	1.007	1.018	0.675
Lower Quartile	0.147	0.159	0.040	0.076	0.168
Lower Extreme	0.001	0.012	0.000	0.052	0.002
N	19	17	12	8	13
Mean (kWh/sf)	2.992	1.530	2.136	2.885	1.676

Figure 8.6b. Annual End Use Shares - Heating
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	3.001	3.204	2.497	2.960	2.164
Upper Quartile	1.485	1.689	1.793	2.294	1.332
Median	1.064	0.485	1.119	0.499	1.010
Lower Quartile	0.357	0.161	0.071	0.049	0.584
Lower Extreme	0.001	0.008	0.000	0.047	0.005
N	18	17	11	7	13
Mean (%)	13.845	11.525	3.298	6.555	22.723

Figure 8.7a. Annual EUIs - Cooling
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.631	2.364	2.738	1.475	0.828
Upper Quartile	1.420	1.226	1.405	0.874	0.828
Median	0.780	0.761	0.886	0.677	0.435
Lower Quartile	0.485	0.386	0.347	0.424	0.290
Lower Extreme	0.259	0.127	0.038	0.057	0.098
N	18	14	11	10	11
Mean (kWh/sf)	1.964	1.224	2.167	5.792	0.321

Figure 8.7b. Annual End Use Shares - Cooling
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.126	2.878	2.043	1.528	1.081
Upper Quartile	1.312	1.630	1.242	1.138	1.081
Median	0.891	0.893	1.079	0.788	0.551
Lower Quartile	0.551	0.364	0.400	0.566	0.150
Lower Extreme	0.393	0.165	0.167	0.182	0.127
N	17	14	10	9	11
Mean (%)	9.229	8.218	3.088	9.166	4.999

Figure 8.8a. Annual EUIs - Ventilation & Auxiliaries
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.033	2.228	1.312	1.915	2.560
Upper Quartile	1.118	1.250	1.243	1.735	1.438
Median	0.545	0.636	1.017	0.969	0.674
Lower Quartile	0.488	0.409	0.562	0.260	0.400
Lower Extreme	0.343	0.021	0.001	0.120	0.218
N	17	15	10	11	10
Mean (kWh/sf)	3.773	1.190	2.828	5.542	0.515

Figure 8.8b. Annual End Use Shares - Ventilation & Auxiliaries
Ratio of Share to Mean Share

	Office	Retail	Grocery	Rest'nt	Warehse
Upper Extreme	2.282	2.100	1.389	2.417	1.645
Upper Quartile	1.322	1.417	1.315	1.744	1.318
Median	0.859	0.755	1.081	0.685	0.525
Lower Quartile	0.573	0.393	0.847	0.341	0.282
Lower Extreme	0.485	0.042	0.847	0.139	0.141
N	16	15	10	10	10
Mean (%)	14.787	7.657	3.968	9.881	9.384

Figure 8.9a. Annual EUIs - Food Preparation & Refrigeration
Ratio of EUI (kWh/sf) to Mean EUI

	Grocery	Rest'nt	Warehse
Upper Extreme	1.604	1.680	2.303
Upper Quartile	1.541	1.292	1.603
Median	0.868	0.880	0.184
Lower Quartile	0.795	0.372	0.034
Lower Extreme	0.217	0.136	0.001
N	10	11	11
Mean (kWh/sf)	37.264	20.820	0.629

Figure 8.9b. Annual End Use Shares - Food Preparation & Ref
Ratio of Share to Mean Share

	Grocery	Rest'nt	Warehse
Upper Extreme	1.248	1.719	3.259
Upper Quartile	1.098	1.414	2.481
Median	1.011	1.078	0.377
Lower Quartile	0.910	0.556	0.105
Lower Extreme	0.766	0.321	0.003
N	10	10	11
Mean (%)	56.173	34.098	6.834

Figure 8.10a. Annual EUIs - Other Loads
Ratio of EUI (kWh/sf) to Mean EUI

	Grocery	Rest'nt	Warehse
Upper Extreme	2.562	2.494	1.798
Upper Quartile	1.511	1.612	1.299
Median	0.761	0.911	0.877
Lower Quartile	0.560	0.437	0.768
Lower Extreme	0.162	0.007	0.177
N	11	10	10
Mean (kWh/sf)	3.871	4.352	0.633

Figure 8.10b. Annual End Use Shares - Other Loads
Ratio of Share to Mean Share

	Grocery	Rest'nt	Warehse
Upper Extreme	2.059	2.699	1.825
Upper Quartile	1.473	1.306	1.417
Median	0.684	0.739	0.965
Lower Quartile	0.579	0.296	0.498
Lower Extreme	0.164	0.003	0.330
N	11	9	10
Mean (%)	5.963	9.483	10.610

Figure 8.11a. Annual EUIs - Other w/ Food Preparation & Ref
Ratio of EUI (kWh/sf) to Mean EUI

	Office	Retail
Upper Extreme	2.298	1.491
Upper Quartile	1.363	0.985
Median	0.901	0.808
Lower Quartile	0.666	0.429
Lower Extreme	0.234	0.105
N	19	18
Mean (kWh/sf)	2.580	2.051

Figure 8.11b. Annual End Use Shares - Other w/ Food Preparation and Ref
Ratio of Share to Mean Share

	Office	Retail
Upper Extreme	1.940	1.425
Upper Quartile	1.167	1.041
Median	0.916	0.690
Lower Quartile	0.644	0.532
Lower Extreme	0.194	0.149
N	18	18
Mean (%)	13.682	14.555

FIGURE D.3
Printout of Data From Figures 10.1a Through 10.10b

Figure 10.1a. Monthly EUIs - Building Total

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 1.740 kWh/sf, n=18)	2.140	2.010	1.760	1.623	1.511	1.601	1.636	1.690	1.534	1.512	1.706	2.143
Retail (Mean = 1.150 kWh/sf, n=20)	1.357	1.289	1.200	1.081	1.029	1.100	1.129	1.112	1.027	1.040	1.126	1.293
Grocery (Mean = 5.720 kWh/sf, n=11)	5.583	5.496	5.309	5.950	5.438	5.677	5.938	6.107	5.704	5.570	6.122	5.699
Restaurant (Mean = 4.930 kWh/sf, n=11)	4.870	4.636	4.591	4.676	4.739	5.184	5.463	5.620	5.208	4.892	4.573	4.694
Warehouse (Mean = 0.560 kWh/sf, n=14)	0.823	0.766	0.636	0.534	0.444	0.445	0.432	0.469	0.450	0.464	0.566	0.726

Figure 10.1b. Monthly Adjusted EUIs - Building Total

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 1.740 kWh/sf, n=18)	2.140	2.010	1.760	1.623	1.511	1.601	1.636	1.690	1.534	1.512	1.706	2.143
Retail (Mean = 1.150 kWh/sf, n=20)	1.357	1.289	1.200	1.089	1.036	1.107	1.137	1.119	1.027	1.040	1.133	1.300
Grocery (Mean = 6.130 kWh/sf, n=11)	6.073	5.985	5.879	5.950	5.928	6.167	6.428	6.596	6.266	6.059	6.004	6.189
Restaurant (Mean = 5.000 kWh/sf, n=11)	4.870	4.802	4.757	4.842	4.905	5.350	5.463	5.620	5.208	4.892	4.573	4.694
Warehouse (Mean = 0.560 kWh/sf, n=14)	0.823	0.766	0.636	0.534	0.444	0.445	0.432	0.469	0.450	0.464	0.566	0.726

Figure 10.2a. Monthly EUIs - Interior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.570 kWh/sf, n=19)	0.580	0.582	0.585	0.585	0.572	0.579	0.551	0.561	0.563	0.577	0.564	0.571
Retail (Mean = 0.550 kWh/sf, n=20)	0.567	0.567	0.568	0.568	0.545	0.546	0.527	0.516	0.514	0.536	0.544	0.562
Grocery (Mean = 1.220 kWh/sf, n=12)	1.178	1.185	1.175	1.372	1.190	1.171	1.182	1.177	1.153	1.245	1.355	1.213
Restaurant (Mean = 0.850 kWh/sf, n=12)	0.846	0.801	0.831	0.831	0.831	0.847	0.864	0.873	0.861	0.895	0.862	0.833
Warehouse (Mean = 0.240 kWh/sf, n=14)	0.263	0.271	0.239	0.235	0.220	0.234	0.220	0.250	0.247	0.218	0.215	0.218

Figure 10.2b. Monthly Adjusted EUIs - Interior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.570 kWh/sf, n=19)	0.580	0.582	0.585	0.585	0.572	0.579	0.551	0.561	0.563	0.577	0.564	0.571
Retail (Mean = 0.540 kWh/sf, n=20)	0.567	0.567	0.568	0.557	0.533	0.535	0.516	0.505	0.514	0.536	0.533	0.551
Grocery (Mean = 1.330 kWh/sf, n=12)	1.317	1.325	1.313	1.372	1.329	1.310	1.321	1.316	1.292	1.384	1.346	1.352
Restaurant (Mean = 0.870 kWh/sf, n=12)	0.846	0.849	0.879	0.879	0.880	0.895	0.864	0.873	0.861	0.895	0.862	0.833
Warehouse (Mean = 0.240 kWh/sf, n=14)	0.263	0.271	0.239	0.235	0.220	0.234	0.220	0.250	0.247	0.218	0.215	0.218

Figure 10.3a. Monthly EUIs - Exterior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.170 kWh/sf, n=14)	0.208	0.199	0.192	0.167	0.156	0.148	0.144	0.144	0.152	0.169	0.195	0.206
Retail (Mean = 0.080 kWh/sf, n=14)	0.093	0.088	0.082	0.075	0.072	0.071	0.066	0.066	0.069	0.076	0.090	0.104
Grocery (Mean = 0.270 kWh/sf, n=12)	0.278	0.253	0.225	0.377	0.208	0.196	0.198	0.199	0.216	0.240	0.517	0.275
Restaurant (Mean = 0.320 kWh/sf, n=9)	0.403	0.320	0.296	0.282	0.249	0.234	0.277	0.304	0.326	0.362	0.394	0.378
Warehouse (Mean = 0.040 kWh/sf, n=13)	0.048	0.047	0.037	0.034	0.028	0.027	0.031	0.038	0.040	0.032	0.035	0.035

Figure 10.3b. Monthly Adjusted EUIs - Exterior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.170 kWh/sf, n=14)	0.208	0.199	0.192	0.167	0.156	0.148	0.144	0.144	0.152	0.169	0.195	0.206
Retail (Mean = 0.060 kWh/sf, n=14)	0.093	0.088	0.082	0.075	0.072	0.071	0.066	0.066	0.069	0.076	0.085	0.099
Grocery (Mean = 0.420 kWh/sf, n=12)	0.468	0.442	0.427	0.377	0.397	0.385	0.387	0.388	0.405	0.429	0.490	0.464
Restaurant (Mean = 0.350 kWh/sf, n=9)	0.421	0.396	0.372	0.332	0.299	0.285	0.277	0.304	0.326	0.362	0.394	0.395
Warehouse (Mean = 0.040 kWh/sf, n=13)	0.048	0.047	0.037	0.034	0.028	0.027	0.031	0.038	0.040	0.032	0.035	0.035

Figure 10.4a. Monthly EUIs - Hot Water

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.040 kWh/sf, n=17)	0.039	0.039	0.038	0.036	0.035	0.033	0.031	0.030	0.032	0.035	0.037	0.038
Retail (Mean = 0.060 kWh/sf, n=17)	0.069	0.072	0.074	0.066	0.060	0.057	0.052	0.043	0.045	0.059	0.066	0.071
Grocery (Mean = 0.210 kWh/sf, n=8)	0.243	0.244	0.215	0.208	0.224	0.203	0.197	0.185	0.196	0.207	0.211	0.233
Restaurant (Mean = 0.320 kWh/sf, n=9)	0.347	0.355	0.365	0.352	0.334	0.318	0.281	0.275	0.280	0.305	0.309	0.322
Warehouse (Mean = 0.020 kWh/sf, n=12)	0.018	0.018	0.017	0.016	0.014	0.014	0.014	0.013	0.014	0.015	0.016	0.016

Figure 10.4b. Monthly Adjusted EUIs - Hot Water

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.040 kWh/sf, n=17)	0.039	0.039	0.038	0.036	0.035	0.033	0.031	0.030	0.032	0.035	0.037	0.038
Retail (Mean = 0.060 kWh/sf, n=17)	0.069	0.072	0.074	0.065	0.059	0.057	0.051	0.042	0.045	0.059	0.065	0.070
Grocery (Mean = 0.190 kWh/sf, n=8)	0.219	0.220	0.213	0.208	0.200	0.179	0.173	0.161	0.172	0.183	0.191	0.209
Restaurant (Mean = 0.310 kWh/sf, n=9)	0.347	0.339	0.348	0.335	0.318	0.302	0.281	0.275	0.280	0.305	0.309	0.322
Warehouse (Mean = 0.020 kWh/sf, n=12)	0.018	0.018	0.017	0.016	0.014	0.014	0.014	0.013	0.014	0.015	0.016	0.016

Figure 10.5a. Monthly EUIs - Heating

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.250 kWh/sf, n=19)	0.618	0.526	0.340	0.222	0.105	0.045	0.029	0.026	0.042	0.123	0.336	0.595
Retail (Mean = 0.130 kWh/sf, n=17)	0.380	0.310	0.216	0.089	0.035	0.015	0.012	0.012	0.016	0.058	0.168	0.306
Grocery (Mean = 0.180 kWh/sf, n=12)	0.459	0.397	0.225	0.136	0.039	0.032	0.018	0.016	0.028	0.077	0.215	0.498
Restaurant (Mean = 0.220 kWh/sf, n=8)	0.592	0.403	0.329	0.156	0.090	0.072	0.055	0.082	0.072	0.086	0.219	0.509
Warehouse (Mean = 0.140 kWh/sf, n=13)	0.363	0.290	0.199	0.118	0.056	0.024	0.012	0.008	0.020	0.078	0.183	0.333

Figure 10.5b. Monthly Adjusted EUIs - Heating

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.250 kWh/sf, n=19)	0.618	0.526	0.340	0.222	0.105	0.045	0.029	0.026	0.042	0.123	0.336	0.595
Retail (Mean = 0.150 kWh/sf, n=17)	0.376	0.310	0.216	0.110	0.055	0.036	0.032	0.032	0.016	0.058	0.186	0.323
Grocery (Mean = 0.190 kWh/sf, n=12)	0.467	0.405	0.247	0.136	0.047	0.040	0.026	0.024	0.036	0.085	0.223	0.506
Restaurant (Mean = 0.210 kWh/sf, n=8)	0.577	0.394	0.302	0.146	0.081	0.063	0.055	0.082	0.072	0.086	0.219	0.495
Warehouse (Mean = 0.140 kWh/sf, n=13)	0.363	0.290	0.199	0.118	0.056	0.024	0.012	0.008	0.020	0.078	0.183	0.333

Figure 10.6a. Monthly EUIs - Cooling

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.160 kWh/sf, n=18)	0.055	0.036	0.054	0.097	0.166	0.301	0.369	0.420	0.250	0.100	0.041	0.063
Retail (Mean = 0.100 kWh/sf, n=14)	0.013	0.017	0.013	0.039	0.094	0.188	0.277	0.301	0.180	0.059	0.020	0.016
Grocery (Mean = 0.180 kWh/sf, n=11)	0.046	0.043	0.052	0.091	0.165	0.317	0.481	0.511	0.290	0.073	0.032	0.052
Restaurant (Mean = 0.500 kWh/sf, n=10)	0.149	0.182	0.192	0.324	0.501	0.897	1.014	1.198	0.852	0.369	0.179	0.145
Warehouse (Mean = 0.030 kWh/sf, n=11)	0.025	0.022	0.013	0.013	0.020	0.035	0.047	0.058	0.033	0.012	0.018	0.025

Figure 10.6b. Monthly Adjusted EUIs - Cooling

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.160 kWh/sf, n=18)	0.055	0.036	0.054	0.097	0.166	0.301	0.369	0.420	0.250	0.100	0.041	0.063
Retail (Mean = 0.100 kWh/sf, n=14)	0.013	0.017	0.013	0.039	0.094	0.188	0.277	0.301	0.180	0.059	0.020	0.016
Grocery (Mean = 0.180 kWh/sf, n=11)	0.046	0.043	0.052	0.091	0.165	0.317	0.481	0.511	0.290	0.073	0.032	0.052
Restaurant (Mean = 0.510 kWh/sf, n=10)	0.149	0.215	0.225	0.358	0.534	0.931	1.014	1.198	0.852	0.369	0.179	0.145
Warehouse (Mean = 0.030 kWh/sf, n=11)	0.025	0.022	0.013	0.013	0.020	0.035	0.047	0.058	0.033	0.012	0.018	0.025

Figure 10.7a. Monthly EUIs - Ventilation & Auxiliaries

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.320 kWh/sf, n=17)	0.325	0.335	0.318	0.317	0.308	0.315	0.324	0.331	0.306	0.290	0.306	0.329
Retail (Mean = 0.100 kWh/sf, n=15)	0.087	0.083	0.087	0.090	0.097	0.109	0.119	0.119	0.105	0.093	0.092	0.092
Grocery (Mean = 0.240 kWh/sf, n=10)	0.231	0.222	0.207	0.206	0.237	0.276	0.295	0.299	0.259	0.243	0.225	0.230
Restaurant (Mean = 0.440 kWh/sf, n=11)	0.428	0.437	0.430	0.433	0.448	0.457	0.435	0.450	0.426	0.440	0.411	0.444
Warehouse (Mean = 0.040 kWh/sf, n=10)	0.051	0.067	0.056	0.036	0.028	0.030	0.036	0.037	0.032	0.039	0.039	0.044

Figure 10.7b. Monthly Adjusted EUIs - Ventilation & Auxiliaries

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.320 kWh/sf, n=17)	0.335	0.335	0.318	0.317	0.318	0.325	0.334	0.341	0.316	0.300	0.316	0.339
Retail (Mean = 0.100 kWh/sf, n=15)	0.087	0.085	0.087	0.085	0.093	0.104	0.114	0.114	0.105	0.093	0.086	0.086
Grocery (Mean = 0.230 kWh/sf, n=10)	0.216	0.207	0.204	0.203	0.223	0.261	0.280	0.285	0.257	0.229	0.214	0.215
Restaurant (Mean = 0.420 kWh/sf, n=11)	0.407	0.399	0.392	0.418	0.433	0.443	0.435	0.450	0.426	0.440	0.411	0.423
Warehouse (Mean = 0.040 kWh/sf, n=10)	0.048	0.064	0.053	0.036	0.028	0.030	0.036	0.037	0.032	0.039	0.037	0.042

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 3.150 kWh/sf, n=10)	2.871	2.896	2.983	3.123	3.185	3.268	3.369	3.471	3.339	3.229	3.135	2.934
Restaurant (Mean = 1.790 kWh/sf, n=11)	1.771	1.661	1.670	1.681	1.747	1.805	1.900	1.917	1.878	1.909	1.796	1.742
Warehouse (Mean = 0.050 kWh/sf, n=11)	0.056	0.053	0.057	0.059	0.055	0.053	0.053	0.048	0.046	0.048	0.047	0.053

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 3.150 kWh/sf, n=10)	2.871	2.896	2.983	3.123	3.185	3.268	3.369	3.471	3.339	3.229	3.135	2.934
Restaurant (Mean = 1.790 kWh/sf, n=11)	1.771	1.661	1.670	1.681	1.747	1.805	1.900	1.917	1.878	1.909	1.796	1.742
Warehouse (Mean = 0.050 kWh/sf, n=11)	0.056	0.053	0.057	0.059	0.055	0.053	0.053	0.048	0.046	0.048	0.047	0.053

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 3.220 kWh/sf, n=10)	2.944	2.970	3.032	3.160	3.259	3.342	3.443	3.545	3.452	3.303	3.150	3.007
Restaurant (Mean = 1.830 kWh/sf, n=11)	1.771	1.756	1.765	1.776	1.842	1.900	1.900	1.917	1.878	1.909	1.796	1.742
Warehouse (Mean = 0.050 kWh/sf, n=11)	0.056	0.053	0.057	0.059	0.055	0.053	0.053	0.048	0.046	0.048	0.047	0.053

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 3.220 kWh/sf, n=10)	2.944	2.970	3.032	3.160	3.259	3.342	3.443	3.545	3.452	3.303	3.150	3.007
Restaurant (Mean = 1.830 kWh/sf, n=11)	1.771	1.756	1.765	1.776	1.842	1.900	1.900	1.917	1.878	1.909	1.796	1.742
Warehouse (Mean = 0.050 kWh/sf, n=11)	0.056	0.053	0.057	0.059	0.055	0.053	0.053	0.048	0.046	0.048	0.047	0.053

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 0.330 kWh/sf, n=11)	0.319	0.318	0.286	0.413	0.297	0.318	0.316	0.321	0.332	0.322	0.407	0.320
Restaurant (Mean = 0.350 kWh/sf, n=10)	0.338	0.342	0.356	0.387	0.375	0.386	0.356	0.337	0.324	0.371	0.343	0.340
Warehouse (Mean = 0.060 kWh/sf, n=11)	0.067	0.070	0.074	0.087	0.059	0.055	0.059	0.063	0.058	0.063	0.055	0.059

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 0.330 kWh/sf, n=11)	0.319	0.318	0.286	0.413	0.297	0.318	0.316	0.321	0.332	0.322	0.407	0.320
Restaurant (Mean = 0.350 kWh/sf, n=10)	0.338	0.342	0.356	0.387	0.375	0.386	0.356	0.337	0.324	0.371	0.343	0.340
Warehouse (Mean = 0.060 kWh/sf, n=11)	0.067	0.070	0.074	0.087	0.059	0.055	0.059	0.063	0.058	0.063	0.055	0.059

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 0.400 kWh/sf, n=11)	0.404	0.403	0.380	0.413	0.383	0.404	0.401	0.406	0.410	0.408	0.392	0.405
Restaurant (Mean = 0.350 kWh/sf, n=10)	0.337	0.329	0.343	0.376	0.364	0.375	0.356	0.337	0.324	0.370	0.342	0.339
Warehouse (Mean = 0.070 kWh/sf, n=11)	0.075	0.078	0.082	0.065	0.067	0.063	0.067	0.063	0.064	0.063	0.064	0.067

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=0)												
Retail (Mean = NA kWh/sf, n=0)												
Grocery (Mean = 0.400 kWh/sf, n=11)	0.404	0.403	0.380	0.413	0.383	0.404	0.401	0.406	0.410	0.408	0.392	0.405
Restaurant (Mean = 0.350 kWh/sf, n=10)	0.337	0.329	0.343	0.376	0.364	0.375	0.356	0.337	0.324	0.370	0.342	0.339
Warehouse (Mean = 0.070 kWh/sf, n=11)	0.075	0.078	0.082	0.065	0.067	0.063	0.067	0.063	0.064	0.063	0.064	0.067

[illegible][illegible][illegible][illegible]

FIGURE D.4
Printout of Data From Figures 11.1 Through 11.10b

Figure 11.1. Variability of Monthly EUIs - Building Total

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 1.74 kWh/sf, n=18)	0.487	0.481	0.480	0.485	0.473	0.466	0.437	0.443	0.420	0.428	0.457	0.522
Retail (Mean = 1.15 kWh/sf, n=20)	0.408	0.387	0.395	0.378	0.397	0.418	0.439	0.469	0.441	0.378	0.407	0.405
Grocery (Mean = 5.72 kWh/sf, n=11)	0.386	0.382	0.365	0.456	0.360	0.362	0.363	0.318	0.335	0.292	0.441	0.355
Restaurant (Mean = 4.93 kWh/sf, n=11)	0.433	0.435	0.421	0.429	0.434	0.443	0.434	0.430	0.447	0.409	0.426	0.411
Warehouse (Mean = 0.56 kWh/sf, n=14)	0.829	0.799	0.684	0.656	0.568	0.623	0.682	0.962	0.979	0.644	0.727	0.794

Figure 11.2a. Variability of Monthly EUIs - Interior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.57 kWh/sf, n=19)	0.619	0.589	0.613	0.605	0.630	0.619	0.634	0.619	0.603	0.600	0.618	0.618
Retail (Mean = 0.55 kWh/sf, n=20)	0.514	0.495	0.493	0.494	0.529	0.511	0.507	0.522	0.532	0.509	0.507	0.506
Grocery (Mean = 1.22 kWh/sf, n=12)	0.526	0.528	0.513	0.575	0.508	0.502	0.472	0.396	0.398	0.425	0.516	0.472
Restaurant (Mean = 0.85 kWh/sf, n=12)	0.564	0.581	0.555	0.564	0.588	0.589	0.585	0.577	0.574	0.547	0.559	0.552
Warehouse (Mean = 0.24 kWh/sf, n=14)	1.125	1.040	0.740	0.696	0.691	0.755	0.823	1.183	1.191	0.750	0.730	0.737

Figure 11.2b. Variability of Monthly Shares - Interior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 33.9%, n=18)	0.497	0.483	0.422	0.346	0.286	0.262	0.290	0.281	0.290	0.337	0.420	0.506
Retail (Mean = 49.9%, n=20)	0.505	0.472	0.457	0.390	0.386	0.393	0.409	0.418	0.381	0.394	0.449	0.471
Grocery (Mean = 24.2%, n=11)	0.748	0.783	0.727	0.429	0.501	0.498	0.489	0.475	0.524	0.436	0.432	0.496
Restaurant (Mean = 16.2%, n=11)	0.439	0.443	0.413	0.431	0.449	0.451	0.440	0.431	0.437	0.421	0.411	0.417
Warehouse (Mean = 45.3%, n=14)	0.503	0.440	0.414	0.346	0.326	0.298	0.303	0.358	0.317	0.327	0.388	0.442

Figure 11.3a. Variability of Monthly EUIs - Exterior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.17 kWh/sf, n=14)	0.791	0.759	0.819	0.751	0.751	0.766	0.776	0.768	0.751	0.815	0.768	0.760
Retail (Mean = 0.08 kWh/sf, n=14)	0.845	0.810	0.848	0.921	0.900	0.993	0.954	0.900	0.892	0.979	0.798	0.749
Grocery (Mean = 0.27 kWh/sf, n=12)	0.840	0.830	0.892	1.747	0.906	0.940	0.966	0.878	0.833	0.805	1.798	0.782
Restaurant (Mean = 0.32 kWh/sf, n=9)	0.855	0.824	0.774	0.711	0.649	0.663	0.723	0.813	0.761	0.812	0.784	0.875
Warehouse (Mean = 0.04 kWh/sf, n=13)	1.688	1.689	1.443	1.516	1.460	1.435	1.724	1.929	1.889	1.363	1.290	1.252

Figure 11.3b. Variability of Monthly Shares - Exterior Lighting

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 10.5%, n=14)	0.770	0.729	0.706	0.772	0.949	0.785	0.790	0.779	0.737	0.679	0.695	0.751
Retail (Mean = 7.4%, n=14)	0.721	0.710	0.767	0.864	0.947	1.101	1.094	1.006	1.138	1.044	0.758	0.651
Grocery (Mean = 4.3%, n=11)	0.669	0.622	0.680	1.036	0.754	0.772	0.803	0.749	0.691	0.677	1.057	0.616
Restaurant (Mean = 6.2%, n=9)	0.529	0.486	0.463	0.420	0.428	0.448	0.477	0.549	0.461	0.528	0.487	0.546
Warehouse (Mean = 4.4%, n=13)	1.055	1.039	1.021	1.104	1.012	1.038	1.071	0.993	0.985	0.934	0.898	1.017

Figure 11.4a. Variability of Monthly EUIs - Hot Water

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.04 kWh/sf, n=17)	0.784	0.765	0.814	0.773	0.822	0.807	0.791	0.810	0.797	0.822	0.834	0.826
Retail (Mean = 0.06 kWh/sf, n=17)	2.112	2.122	2.207	2.255	2.230	2.214	2.172	1.978	2.063	2.263	2.261	2.318
Grocery (Mean = 0.21 kWh/sf, n=8)	0.743	0.774	0.841	0.830	0.824	0.773	0.794	0.800	0.818	0.807	0.743	0.702
Restaurant (Mean = 0.32 kWh/sf, n=9)	0.956	0.961	0.898	0.872	0.839	0.816	0.832	0.838	0.842	0.824	0.930	0.944
Warehouse (Mean = 0.02 kWh/sf, n=12)	0.981	1.002	0.842	0.808	0.744	0.767	1.016	1.030	1.011	0.885	0.908	0.875

Figure 11.4b. Variability of Monthly Shares - Hot Water

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 2.2%, n=16)	0.908	0.847	0.894	0.814	0.801	0.834	0.867	0.860	0.798	0.862	0.894	0.977
Retail (Mean = 5.3%, n=17)	1.501	1.523	1.649	1.834	1.921	1.977	2.040	2.100	1.977	1.831	1.653	1.599
Grocery (Mean = 3.3%, n=8)	0.630	0.685	0.757	0.804	0.706	0.675	0.694	0.706	0.705	0.724	0.716	0.571
Restaurant (Mean = 8.9%, n=8)	0.869	0.820	0.796	0.789	0.815	0.807	0.898	0.876	0.882	0.853	0.860	0.874
Warehouse (Mean = 3.4%, n=12)	1.375	0.741	0.582	0.551	0.580	0.627	0.592	0.678	0.662	0.660	0.696	0.863

Figure 11.5a. Variability of Monthly EUIs - Heating

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.25 kWh/sf, n=19)	0.801	0.846	0.849	1.013	0.939	1.091	1.203	1.179	1.108	0.952	0.901	0.820
Retail (Mean = 0.13 kWh/sf, n=17)	0.973	1.020	1.091	1.189	1.364	1.673	2.214	2.334	1.500	1.220	1.122	0.986
Grocery (Mean = 0.18 kWh/sf, n=12)	1.033	1.018	1.060	1.243	1.303	1.944	2.228	2.313	1.881	1.434	1.053	1.077
Restaurant (Mean = 0.22 kWh/sf, n=8)	0.839	1.124	1.024	1.202	1.736	2.225	2.423	2.403	2.476	2.009	1.160	0.947
Warehouse (Mean = 0.14 kWh/sf, n=13)	1.278	1.392	1.386	1.486	1.325	1.319	1.226	1.103	1.273	1.475	1.323	1.252

Figure 11.5b. Variability of Monthly Shares - Heating

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 12.5%, n=18)	0.641	0.660	0.728	0.829	1.004	1.292	1.459	1.314	1.411	1.029	0.814	0.692
Retail (Mean = 10.2%, n=17)	0.820	0.872	0.978	1.103	1.339	1.755	2.303	2.288	1.617	1.159	1.003	0.850
Grocery (Mean = 3.0%, n=11)	0.913	0.894	1.030	1.289	1.476	1.974	2.360	2.424	1.902	1.459	0.996	0.910
Restaurant (Mean = 5.9%, n=7)	0.977	1.229	1.075	1.233	1.613	1.822	1.984	2.002	2.054	1.877	1.385	1.160
Warehouse (Mean = 19.0%, n=13)	0.617	0.651	0.666	0.823	0.860	0.895	1.304	1.687	1.163	0.878	0.687	0.621

Figure 11.6a. Variability of Monthly EUIs - Cooling

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.16 kWh/sf, n=18)	2.111	1.584	1.569	0.907	0.727	0.644	0.538	0.592	0.615	0.985	1.372	2.304
Retail (Mean = 0.10 kWh/sf, n=14)	1.982	1.414	1.072	1.240	0.993	0.905	0.731	0.720	0.781	0.971	1.665	1.811
Grocery (Mean = 0.18 kWh/sf, n=11)	1.387	1.664	1.209	1.084	1.095	0.974	0.997	0.976	1.011	0.903	1.428	1.226
Restaurant (Mean = 0.50 kWh/sf, n=10)	2.568	2.250	2.134	1.595	1.211	0.952	0.893	0.799	1.015	1.473	2.257	2.558
Warehouse (Mean = 0.03 kWh/sf, n=11)	2.994	2.880	2.432	1.918	1.429	1.127	0.990	0.835	1.016	1.490	2.801	2.800

Figure 11.6b. Variability of Monthly Shares - Cooling

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 9.4%, n=17)	1.648	1.519	1.237	0.756	0.542	0.408	0.380	0.369	0.403	0.838	1.243	1.764
Retail (Mean = 7.8%, n=14)	2.097	1.443	1.086	1.148	0.882	0.743	0.580	0.534	0.639	0.847	1.713	1.931
Grocery (Mean = 2.7%, n=10)	1.461	1.811	1.326	0.971	0.922	0.784	0.807	0.793	0.727	0.896	1.640	1.281
Restaurant (Mean = 8.8%, n=9)	2.101	1.760	1.641	1.120	0.784	0.578	0.567	0.452	0.635	1.102	1.759	2.078
Warehouse (Mean = 5.0%, n=11)	2.505	2.392	1.875	1.431	1.217	0.992	0.880	0.764	0.893	1.146	2.398	2.376

Figure 11.7a. Variability of Monthly EUIs - Ventilation & Auxiliaries

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 0.32 kWh/sf, n=17)	0.904	0.889	0.847	0.892	1.013	0.901	0.895	0.848	0.888	0.893	0.951	0.924
Retail (Mean = 0.10 kWh/sf, n=15)	1.062	1.115	1.007	1.001	1.095	1.090	1.093	1.115	1.216	1.112	1.042	1.028
Grocery (Mean = 0.24 kWh/sf, n=10)	0.737	0.683	0.708	0.779	0.775	0.728	0.690	0.682	0.736	0.670	0.663	0.748
Restaurant (Mean = 0.44 kWh/sf, n=11)	0.683	0.682	0.698	0.752	0.750	0.701	0.677	0.690	0.702	0.749	0.753	0.724
Warehouse (Mean = 0.04 kWh/sf, n=10)	0.955	1.404	1.181	0.847	0.860	1.003	0.947	0.900	0.962	1.099	0.858	0.832

Figure 11.7b. Variability of Monthly Shares - Ventilation & Auxiliaries

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = 15.3%, n=16)	0.513	0.497	0.557	0.550	0.554	0.524	0.516	0.509	0.541	0.566	0.521	0.477
Retail (Mean = 7.6%, n=15)	0.985	1.007	0.865	0.780	0.804	0.815	0.787	0.794	0.866	0.860	0.853	0.894
Grocery (Mean = 4.1%, n=10)	0.569	0.538	0.573	0.645	0.631	0.589	0.570	0.567	0.597	0.570	0.597	0.575
Restaurant (Mean = 9.2%, n=10)	0.795	0.814	0.818	0.830	0.807	0.779	0.803	0.817	0.812	0.829	0.865	0.826
Warehouse (Mean = 9.0%, n=10)	1.256	1.633	1.452	1.155	0.635	0.628	1.000	1.004	0.790	1.430	0.969	1.010

Figure 11.8a. Variability of Monthly EUIs - Food Preparation & Refrigeration

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=NA)												
Retail (Mean = NA kWh/sf, n=NA)												
Grocery (Mean = 3.15 kWh/sf, n=10)	0.470	0.474	0.427	0.394	0.443	0.438	0.429	0.384	0.424	0.394	0.362	0.428
Restaurant (Mean = 1.79 kWh/sf, n=11)	0.783	0.848	0.794	0.780	0.768	0.758	0.718	0.722	0.741	0.711	0.772	0.790
Warehouse (Mean = 0.05 kWh/sf, n=11)	1.567	1.553	1.555	1.568	1.675	1.727	1.772	2.047	2.039	1.817	1.774	1.600

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA%, n=NA)												
Retail (Mean = NA%, n=NA)												
Grocery (Mean = 54.9%, n=10)	0.379	0.369	0.338	0.211	0.138	0.127	0.108	0.109	0.125	0.145	0.213	0.173
Restaurant (Mean = 34.6%, n=10)	0.494	0.536	0.457	0.453	0.449	0.444	0.411	0.421	0.419	0.407	0.487	0.511
Warehouse (Mean = 7.1%, n=11)	1.203	1.243	1.373	1.406	1.403	1.496	1.582	1.897	1.881	1.389	1.254	1.194

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA kWh/sf, n=NA)												
Retail (Mean = NA kWh/sf, n=NA)												
Grocery (Mean = 0.33 kWh/sf, n=11)	0.745	0.749	0.630	1.085	0.684	0.734	0.734	0.699	0.702	0.715	0.927	0.713
Restaurant (Mean = 0.35 kWh/sf, n=10)	0.748	0.822	0.781	0.751	0.742	0.723	0.779	0.830	0.897	0.781	0.781	0.775
Warehouse (Mean = 0.06 kWh/sf, n=11)	0.748	0.654	0.685	0.745	0.724	0.739	0.685	0.796	0.744	0.756	0.669	0.637

	January	February	March	April	May	June	July	August	September	October	November	December
Office (Mean = NA%, n=NA)												
Retail (Mean = NA%, n=NA)												
Grocery (Mean = 5.8%, n=11)	0.734	0.701	0.630	0.617	0.643	0.657	0.659	0.634	0.598	0.660	0.618	0.648
Restaurant (Mean = 9.1%, n=9)	0.925	0.923	0.926	0.876	0.904	0.951	1.029	1.132	1.226	1.047	0.991	0.924
Warehouse (Mean = 13.0%, n=11)	0.810	0.714	0.729	0.698	0.640	0.579	0.660	0.548	0.525	0.629	0.749	0.783

[illegible][illegible]

FIGURE D.5
Printout of Data From Figures 12.1a Through 12.8h

Figure 12.1a. Average Weekday Load Shapes - Building Total

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 2.656 W/sf, n=18)	1.693	1.669	1.678	1.725	1.814	2.065	2.429	3.017	3.468	3.664	3.585	3.585
Retail (mean = 1.706 W/sf, n=20)	0.834	0.806	0.797	0.822	0.853	0.969	1.139	1.403	1.825	2.295	2.458	2.584
Grocery (mean = 7.678 W/sf, n=11)	6.585	6.329	6.300	6.231	6.255	6.454	7.063	7.504	7.787	7.884	8.115	8.363
Restaurant (mean = 6.644 W/sf, n=11)	4.016	3.425	3.193	3.119	3.110	3.626	4.546	5.083	5.855	7.045	8.797	8.817
Warehouse (mean = 0.841 W/sf, n=14)	0.506	0.505	0.510	0.520	0.535	0.558	0.691	1.047	1.214	1.254	1.269	1.264
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	3.584	3.600	3.654	3.694	3.649	3.121	2.494	2.169	1.990	1.872	1.792	1.729
Grocery, cont'd.	2.632	2.694	2.709	2.690	2.629	2.241	1.943	1.837	1.665	1.224	0.983	0.910
Restaurant, cont'd.	8.399	8.394	8.383	8.428	8.530	8.549	8.468	8.456	8.478	8.325	7.814	7.183
Warehouse, cont'd.	9.028	8.939	8.738	8.732	8.615	9.178	9.162	8.848	8.043	7.421	6.587	5.527
	1.242	1.236	1.225	1.202	1.088	0.819	0.677	0.627	0.586	0.550	0.539	0.528

Figure 12.1b. Average Weekend Load Shapes - Building Total

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 1.754 W/sf, n=18)	1.659	1.646	1.652	1.671	1.706	1.740	1.751	1.720	1.747	1.800	1.802	1.799
Retail (mean = 1.25 W/sf, n=20)	0.801	0.790	0.791	0.790	0.801	0.812	0.880	1.019	1.144	1.489	1.708	1.882
Grocery (mean = 7.494 W/sf, n=11)	6.823	6.464	6.349	6.282	6.306	6.396	6.686	6.986	7.279	7.427	7.683	8.014
Restaurant (mean = 6.65 W/sf, n=11)	5.488	4.328	3.611	3.294	3.197	3.288	4.013	4.836	5.606	6.841	8.633	8.603
Warehouse (mean = 0.548 W/sf, n=14)	0.496	0.498	0.503	0.513	0.526	0.528	0.538	0.561	0.597	0.603	0.611	0.601
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	1.767	1.734	1.733	1.753	1.814	1.845	1.840	1.842	1.802	1.781	1.766	1.730
Grocery, cont'd.	1.891	1.905	1.901	1.891	1.857	1.642	1.284	1.116	1.028	0.923	0.851	0.812
Restaurant, cont'd.	8.104	8.158	8.163	8.224	8.302	8.370	8.354	8.300	8.260	8.097	7.707	7.127
Warehouse, cont'd.	8.782	8.882	8.775	8.733	8.693	9.051	9.046	8.619	7.796	7.222	6.553	5.703
	0.597	0.590	0.573	0.561	0.555	0.533	0.516	0.525	0.539	0.540	0.528	0.510

Figure 12.2a. Average Weekday Load Shapes - Interior Lighting

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.871 W/sf, n=19)	0.413	0.392	0.380	0.372	0.375	0.388	0.451	0.720	1.175	1.455	1.477	1.487
Retail (mean = 0.813 W/sf, n=20)	0.296	0.276	0.270	0.290	0.308	0.351	0.448	0.636	0.877	1.132	1.231	1.354
Grocery (mean = 1.643 W/sf, n=12)	1.255	1.144	1.129	1.126	1.128	1.160	1.401	1.579	1.705	1.733	1.777	1.924
Restaurant (mean = 1.112 W/sf, n=12)	0.681	0.530	0.359	0.323	0.327	0.525	0.695	0.841	0.980	1.210	1.437	1.595
Warehouse (mean = 0.339 W/sf, n=14)	0.107	0.102	0.102	0.109	0.116	0.126	0.220	0.431	0.543	0.586	0.611	0.619
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	1.481	1.475	1.479	1.461	1.358	1.045	0.806	0.674	0.602	0.525	0.480	0.443
Grocery, cont'd.	1.370	1.385	1.392	1.383	1.352	1.110	0.986	0.943	0.853	0.536	0.380	0.345
Restaurant, cont'd.	1.948	1.956	1.964	1.966	1.969	1.962	1.916	1.917	1.913	1.800	1.629	1.437
Warehouse, cont'd.	1.609	1.612	1.610	1.589	1.571	1.564	1.512	1.447	1.339	1.255	1.145	0.938
	0.616	0.614	0.613	0.607	0.548	0.362	0.269	0.231	0.190	0.153	0.141	0.128

Figure 12.2b. Average Weekend Load Shapes - Interior Lighting

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.441 W/sf, n=19)	0.382	0.370	0.364	0.362	0.363	0.363	0.367	0.380	0.440	0.520	0.533	0.540
Retail (mean = 0.568 W/sf, n=20)	0.268	0.262	0.260	0.262	0.269	0.279	0.295	0.361	0.493	0.758	0.900	1.033
Grocery (mean = 1.604 W/sf, n=12)	1.302	1.185	1.140	1.138	1.140	1.154	1.281	1.431	1.567	1.647	1.716	1.877
Restaurant (mean = 1.022 W/sf, n=12)	0.840	0.696	0.467	0.338	0.316	0.329	0.429	0.713	0.870	1.058	1.297	1.389
Warehouse (mean = 0.167 W/sf, n=14)	0.106	0.104	0.105	0.113	0.120	0.122	0.135	0.164	0.199	0.216	0.229	0.228
Office, cont'd.	0.535	0.529	0.521	0.516	0.506	0.467	0.447	0.439	0.430	0.414	0.401	0.387
Retail, cont'd.	1.032	1.028	1.023	1.015	0.989	0.823	0.559	0.455	0.390	0.320	0.282	0.267
Grocery, cont'd.	1.904	1.914	1.918	1.917	1.909	1.914	1.900	1.874	1.845	1.760	1.638	1.435
Restaurant, cont'd.	1.422	1.438	1.447	1.440	1.439	1.453	1.426	1.351	1.233	1.143	1.065	0.920
Warehouse, cont'd.	0.233	0.232	0.222	0.213	0.203	0.175	0.156	0.158	0.162	0.154	0.143	0.124

Figure 12.3a. Average Weekday Load Shapes - Exterior Lighting

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.235 W/sf, n=14)	0.307	0.296	0.293	0.293	0.294	0.288	0.257	0.202	0.149	0.127	0.122	0.121
Retail (mean = 0.122 W/sf, n=13)	0.128	0.120	0.115	0.113	0.112	0.109	0.092	0.082	0.080	0.095	0.102	0.104
Grocery (mean = 0.303 W/sf, n=12)	0.347	0.302	0.293	0.291	0.286	0.278	0.309	0.287	0.234	0.198	0.184	0.178
Restaurant (mean = 0.366 W/sf, n=9)	0.321	0.223	0.184	0.163	0.156	0.153	0.267	0.383	0.345	0.305	0.279	0.262
Warehouse (mean = 0.05 W/sf, n=11)	0.069	0.069	0.070	0.070	0.069	0.066	0.054	0.043	0.033	0.030	0.030	0.030
Office, cont'd.	0.120	0.120	0.125	0.138	0.184	0.241	0.280	0.305	0.325	0.363	0.355	0.337
Retail, cont'd.	0.105	0.105	0.105	0.101	0.116	0.136	0.151	0.165	0.184	0.194	0.170	0.143
Grocery, cont'd.	0.175	0.173	0.175	0.191	0.254	0.320	0.377	0.434	0.519	0.569	0.490	0.412
Restaurant, cont'd.	0.246	0.236	0.240	0.280	0.356	0.465	0.533	0.592	0.652	0.738	0.747	0.665
Warehouse, cont'd.	0.030	0.030	0.029	0.030	0.035	0.043	0.048	0.052	0.061	0.069	0.069	0.069

Figure 12.3b. Average Weekend Load Shapes - Exterior Lighting

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.231 W/sf, n=14)	0.317	0.304	0.296	0.294	0.295	0.291	0.259	0.195	0.144	0.124	0.119	0.118
Retail (mean = 0.107 W/sf, n=13)	0.129	0.121	0.115	0.114	0.113	0.109	0.090	0.071	0.061	0.059	0.061	0.062
Grocery (mean = 0.303 W/sf, n=12)	0.360	0.313	0.295	0.291	0.287	0.277	0.279	0.253	0.224	0.197	0.184	0.179
Restaurant (mean = 0.384 W/sf, n=9)	0.680	0.351	0.236	0.176	0.158	0.150	0.167	0.304	0.331	0.305	0.285	0.271
Warehouse (mean = 0.052 W/sf, n=11)	0.072	0.072	0.072	0.072	0.072	0.068	0.057	0.045	0.035	0.032	0.032	0.032
Office, cont'd.	0.117	0.116	0.120	0.129	0.169	0.219	0.254	0.286	0.321	0.361	0.355	0.336
Retail, cont'd.	0.062	0.062	0.064	0.068	0.096	0.124	0.143	0.159	0.178	0.189	0.169	0.142
Grocery, cont'd.	0.176	0.176	0.179	0.196	0.253	0.321	0.376	0.435	0.516	0.566	0.508	0.424
Restaurant, cont'd.	0.261	0.251	0.252	0.294	0.361	0.451	0.528	0.585	0.644	0.736	0.750	0.689
Warehouse, cont'd.	0.032	0.032	0.032	0.032	0.037	0.045	0.050	0.054	0.063	0.071	0.072	0.072

Figure 12.4a. Average Weekday Load Shapes - Hot Water

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.055 W/sf, n=16)	0.034	0.033	0.033	0.036	0.033	0.035	0.040	0.048	0.068	0.071	0.069	0.080
Retail (mean = 0.094 W/sf, n=17)	0.036	0.033	0.031	0.032	0.032	0.032	0.035	0.042	0.059	0.102	0.138	0.152
Grocery (mean = 0.306 W/sf, n=8)	0.139	0.086	0.076	0.077	0.089	0.115	0.170	0.183	0.231	0.307	0.394	0.434
Restaurant (mean = 0.439 W/sf, n=9)	0.233	0.138	0.102	0.091	0.088	0.113	0.185	0.206	0.494	0.591	0.661	0.691
Warehouse (mean = 0.023 W/sf, n=12)	0.015	0.015	0.014	0.015	0.015	0.016	0.020	0.027	0.032	0.031	0.029	0.030
Office, cont'd.	0.081	0.082	0.075	0.072	0.088	0.080	0.059	0.057	0.043	0.039	0.036	0.036
Retail, cont'd.	0.172	0.175	0.169	0.169	0.177	0.185	0.142	0.115	0.088	0.061	0.046	0.039
Grocery, cont'd.	0.409	0.421	0.429	0.384	0.363	0.350	0.366	0.397	0.418	0.503	0.598	0.397
Restaurant, cont'd.	0.708	0.718	0.690	0.620	0.535	0.606	0.610	0.706	0.557	0.464	0.391	0.334
Warehouse, cont'd.	0.038	0.033	0.031	0.032	0.036	0.027	0.019	0.016	0.015	0.015	0.015	0.014

Figure 12.4b. Average Weekend Load Shapes - Hot Water

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.036 W/sf, n=16)	0.034	0.032	0.034	0.036	0.035	0.035	0.036	0.035	0.038	0.037	0.039	0.044
Retail (mean = 0.066 W/sf, n=17)	0.032	0.032	0.033	0.030	0.031	0.032	0.032	0.036	0.042	0.086	0.112	0.120
Grocery (mean = 0.28 W/sf, n=8)	0.279	0.112	0.075	0.068	0.073	0.095	0.136	0.151	0.173	0.215	0.292	0.384
Restaurant (mean = 0.493 W/sf, n=9)	0.357	0.286	0.180	0.122	0.096	0.093	0.146	0.224	0.446	0.668	0.876	0.917
Warehouse (mean = 0.016 W/sf, n=12)	0.014	0.015	0.014	0.015	0.015	0.015	0.015	0.015	0.016	0.017	0.018	0.018
	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Office, cont'd.	0.040	0.039	0.036	0.038	0.037	0.037	0.037	0.038	0.036	0.033	0.034	0.034
Retail, cont'd.	0.125	0.128	0.123	0.117	0.106	0.095	0.074	0.054	0.046	0.039	0.035	0.033
Grocery, cont'd.	0.357	0.365	0.349	0.341	0.337	0.349	0.348	0.371	0.392	0.458	0.558	0.444
Restaurant, cont'd.	0.915	0.873	0.784	0.699	0.588	0.608	0.618	0.666	0.514	0.449	0.385	0.334
Warehouse, cont'd.	0.019	0.019	0.018	0.018	0.018	0.017	0.017	0.015	0.016	0.016	0.016	0.015

Figure 12.5a. Average Weekday Load Shapes - Refrigeration

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.013 W/sf, n=4)	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.014	0.014	0.014
Retail (mean = 0.043 W/sf, n=4)	0.040	0.040	0.040	0.040	0.039	0.039	0.040	0.041	0.043	0.043	0.044	0.046
Grocery (mean = 3.866 W/sf, n=11)	3.673	3.693	3.711	3.644	3.607	3.599	3.596	3.744	3.780	3.820	3.901	3.972
Restaurant (mean = 1.025 W/sf, n=12)	0.856	0.827	0.812	0.803	0.759	0.832	0.881	0.893	0.942	1.030	1.137	1.182
Warehouse (mean = 0.107 W/sf, n=4)	0.100	0.098	0.098	0.097	0.095	0.098	0.098	0.101	0.112	0.116	0.116	0.123
	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Office, cont'd.	0.014	0.015	0.015	0.015	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.012
Retail, cont'd.	0.046	0.046	0.046	0.047	0.047	0.047	0.047	0.047	0.044	0.043	0.041	0.042
Grocery, cont'd.	4.043	4.074	4.058	4.093	4.108	4.097	4.077	4.046	4.007	3.944	3.785	3.719
Restaurant, cont'd.	1.217	1.205	1.196	1.189	1.166	1.167	1.171	1.153	1.122	1.067	1.010	0.939
Warehouse, cont'd.	0.119	0.120	0.118	0.116	0.108	0.110	0.107	0.103	0.103	0.101	0.099	0.102

Figure 12.5b. Average Weekend Load Shapes - Refrigeration

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.012 W/sf, n=4)	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013
Retail (mean = 0.041 W/sf, n=4)	0.040	0.040	0.040	0.039	0.039	0.038	0.039	0.039	0.040	0.041	0.042	0.043
Grocery (mean = 3.829 W/sf, n=11)	3.730	3.740	3.746	3.681	3.645	3.621	3.581	3.671	3.712	3.716	3.794	3.886
Restaurant (mean = 1.012 W/sf, n=12)	0.930	0.870	0.838	0.830	0.823	0.827	0.847	0.870	0.916	0.983	1.096	1.124
Warehouse (mean = 0.098 W/sf, n=4)	0.099	0.097	0.098	0.097	0.094	0.097	0.097	0.096	0.097	0.097	0.096	0.099
	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Office, cont'd.	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012
Retail, cont'd.	0.042	0.043	0.043	0.044	0.044	0.043	0.044	0.043	0.042	0.040	0.040	0.040
Grocery, cont'd.	3.970	4.018	4.014	4.038	4.052	4.040	4.028	3.993	3.948	3.873	3.735	3.671
Restaurant, cont'd.	1.154	1.172	1.174	1.163	1.150	1.158	1.156	1.139	1.101	1.047	0.996	0.935
Warehouse, cont'd.	0.101	0.099	0.100	0.099	0.097	0.100	0.100	0.099	0.098	0.097	0.094	0.098

Figure 12.6a. Average Weekday Load Shapes - Food Preparation

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.014 W/sf, n=13)	0.008	0.008	0.008	0.009	0.009	0.009	0.010	0.016	0.023	0.023	0.020	0.023
Retail (mean = 0.098 W/sf, n=1)	0.018	0.017	0.016	0.017	0.018	0.022	0.029	0.123	0.162	0.188	0.205	0.166
Grocery (mean = 0.56 W/sf, n=9)	0.339	0.336	0.329	0.341	0.391	0.586	0.741	0.744	0.854	0.830	0.835	0.775
Restaurant (mean = 1.385 W/sf, n=10)	0.265	0.182	0.166	0.162	0.165	0.590	1.067	1.186	1.332	1.689	2.679	2.211
Warehouse (mean = 0.036 W/sf, n=4)	0.016	0.016	0.016	0.015	0.016	0.016	0.016	0.038	0.085	0.074	0.069	0.067
	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Office, cont'd.	0.024	0.022	0.018	0.016	0.014	0.012	0.011	0.010	0.009	0.009	0.009	0.009
Retail, cont'd.	0.173	0.173	0.171	0.174	0.173	0.161	0.135	0.089	0.050	0.024	0.020	0.018
Grocery, cont'd.	0.704	0.640	0.595	0.577	0.564	0.544	0.518	0.504	0.497	0.455	0.396	0.355
Restaurant, cont'd.	2.154	1.973	1.871	2.077	2.013	2.237	2.276	1.997	1.667	1.442	1.077	0.747
Warehouse, cont'd.	0.066	0.064	0.063	0.058	0.045	0.022	0.020	0.016	0.016	0.015	0.015	0.015

Figure 12.6b. Average Weekend Load Shapes - Food Preparation

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.009 W/sf, n=13)	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.011	0.012	0.011	0.011
Retail (mean = 0.091 W/sf, n=1)	0.018	0.017	0.017	0.018	0.019	0.020	0.022	0.075	0.166	0.189	0.209	0.175
Grocery (mean = 0.515 W/sf, n=9)	0.340	0.342	0.333	0.346	0.390	0.524	0.641	0.635	0.690	0.681	0.710	0.659
Restaurant (mean = 1.435 W/sf, n=10)	0.765	0.295	0.190	0.180	0.176	0.250	0.766	1.190	1.394	1.792	2.674	2.316
Warehouse (mean = 0.016 W/sf, n=4)	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.015	0.017	0.018
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	0.011	0.011	0.011	0.010	0.010	0.009	0.008	0.008	0.008	0.008	0.008	0.008
Grocery, cont'd.	0.183	0.187	0.183	0.171	0.145	0.120	0.090	0.059	0.038	0.025	0.020	0.018
Restaurant, cont'd.	0.624	0.597	0.569	0.553	0.538	0.524	0.495	0.489	0.478	0.444	0.397	0.352
Warehouse, cont'd.	2.254	2.188	2.069	2.073	2.083	2.276	2.315	2.029	1.697	1.483	1.138	0.839
	0.017	0.017	0.017	0.017	0.016	0.016	0.015	0.015	0.015	0.015	0.015	0.015

Figure 12.7a. Average Weekday Load Shapes - Other Loads

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.531 W/sf, n=18)	0.353	0.342	0.338	0.338	0.337	0.348	0.398	0.470	0.614	0.733	0.759	0.765
Retail (mean = 0.329 W/sf, n=18)	0.170	0.167	0.169	0.171	0.172	0.174	0.187	0.258	0.404	0.522	0.564	0.556
Grocery (mean = 0.589 W/sf, n=11)	0.496	0.475	0.475	0.475	0.478	0.493	0.572	0.640	0.638	0.633	0.640	0.649
Restaurant (mean = 0.866 W/sf, n=10)	0.567	0.498	0.447	0.437	0.431	0.468	0.531	0.634	0.758	0.811	0.923	1.075
Warehouse (mean = 0.137 W/sf, n=10)	0.088	0.087	0.086	0.084	0.084	0.086	0.096	0.154	0.181	0.200	0.206	0.206
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	0.750	0.743	0.744	0.736	0.710	0.605	0.515	0.473	0.451	0.426	0.407	0.377
Grocery, cont'd.	0.551	0.553	0.553	0.542	0.502	0.362	0.279	0.250	0.221	0.197	0.183	0.180
Restaurant, cont'd.	0.648	0.643	0.643	0.645	0.644	0.637	0.625	0.625	0.630	0.632	0.577	0.530
Warehouse, cont'd.	1.155	1.199	1.099	0.946	0.949	1.186	1.195	1.253	1.223	1.167	1.028	0.797
	0.199	0.201	0.201	0.192	0.171	0.144	0.123	0.114	0.107	0.100	0.096	0.093

Figure 12.7b. Average Weekend Load Shapes - Other Loads

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.359 W/sf, n=18)	0.349	0.339	0.333	0.334	0.332	0.338	0.344	0.338	0.343	0.359	0.380	0.387
Retail (mean = 0.2 W/sf, n=18)	0.163	0.162	0.162	0.162	0.162	0.160	0.157	0.162	0.187	0.244	0.259	0.267
Grocery (mean = 0.566 W/sf, n=11)	0.500	0.481	0.474	0.474	0.478	0.479	0.506	0.533	0.567	0.602	0.604	0.615
Restaurant (mean = 0.81 W/sf, n=10)	0.792	0.678	0.517	0.467	0.453	0.447	0.462	0.559	0.649	0.702	0.795	0.865
Warehouse (mean = 0.088 W/sf, n=11)	0.089	0.087	0.087	0.086	0.086	0.085	0.085	0.084	0.087	0.089	0.093	0.097
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	0.383	0.371	0.367	0.362	0.361	0.372	0.377	0.378	0.375	0.368	0.364	0.355
Grocery, cont'd.	0.269	0.276	0.265	0.255	0.234	0.213	0.187	0.175	0.171	0.168	0.165	0.163
Restaurant, cont'd.	0.617	0.618	0.622	0.623	0.619	0.619	0.621	0.618	0.617	0.613	0.567	0.517
Warehouse, cont'd.	0.909	0.933	0.939	0.932	0.970	1.102	1.147	1.172	1.108	1.042	0.975	0.836
	0.098	0.096	0.092	0.089	0.086	0.085	0.085	0.084	0.086	0.086	0.085	0.084

Figure 12.8a. Winter Weekday Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 1.276 W/sf, n=18)	0.940	0.990	1.039	1.135	1.274	1.687	2.126	2.523	2.285	1.889	1.548	1.347
Retail (mean = 0.503 W/sf, n=19)	0.420	0.427	0.437	0.449	0.464	0.611	0.705	0.683	0.686	0.687	0.630	0.565
Grocery (mean = 1.072 W/sf, n=11)	1.039	1.053	1.095	1.114	1.137	1.154	1.192	1.178	1.186	1.190	1.204	1.162
Restaurant (mean = 1.329 W/sf, n=11)	1.161	1.118	1.134	1.189	1.254	1.366	1.477	1.556	1.538	1.540	1.549	1.384
Warehouse (mean = 0.507 W/sf, n=12)	0.440	0.450	0.459	0.468	0.493	0.519	0.541	0.649	0.702	0.678	0.647	0.615
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	1.239	1.168	1.121	1.113	1.142	1.092	0.895	0.830	0.764	0.798	0.813	0.859
Grocery, cont'd.	0.553	0.558	0.518	0.476	0.456	0.423	0.370	0.377	0.385	0.390	0.395	0.409
Restaurant, cont'd.	1.068	1.010	0.960	0.963	0.981	0.998	1.023	1.033	1.020	1.012	0.974	0.992
Warehouse, cont'd.	1.262	1.221	1.230	1.265	1.310	1.378	1.410	1.406	1.353	1.332	1.258	1.203
	0.568	0.550	0.532	0.517	0.457	0.416	0.392	0.397	0.406	0.413	0.423	0.436

Figure 12.8b. Winter Weekend Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 1.056 W/sf, n=18)	0.981	1.030	1.055	1.087	1.166	1.213	1.253	1.313	1.336	1.257	1.172	1.070
Retail (mean = 0.467 W/sf, n=19)	0.422	0.431	0.444	0.452	0.465	0.475	0.628	0.716	0.617	0.543	0.540	0.501
Grocery (mean = 1.041 W/sf, n=11)	1.006	1.035	1.084	1.098	1.128	1.142	1.154	1.136	1.125	1.092	1.139	1.135
Restaurant (mean = 1.307 W/sf, n=11)	1.165	1.138	1.083	1.117	1.152	1.251	1.363	1.477	1.513	1.499	1.474	1.381
Warehouse (mean = 0.436 W/sf, n=12)	0.430	0.434	0.439	0.443	0.447	0.462	0.467	0.487	0.491	0.475	0.448	0.437
Office, cont'd.	0.981	0.907	0.885	0.880	0.901	0.950	0.938	0.975	0.961	0.985	1.013	1.046
Retail, cont'd.	0.464	0.438	0.426	0.417	0.419	0.405	0.382	0.390	0.402	0.401	0.409	0.420
Grocery, cont'd.	1.076	1.001	0.954	0.921	0.942	0.953	0.995	0.997	0.980	0.985	0.950	0.958
Restaurant, cont'd.	1.313	1.330	1.289	1.296	1.313	1.370	1.359	1.376	1.330	1.333	1.281	1.172
Warehouse, cont'd.	0.418	0.409	0.398	0.399	0.409	0.420	0.414	0.420	0.429	0.430	0.426	0.427

Figure 12.8c. Spring Weekday Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.823 W/sf, n=18)	0.527	0.550	0.571	0.613	0.712	0.948	1.220	1.524	1.271	1.030	0.930	0.897
Retail (mean = 0.288 W/sf, n=19)	0.199	0.204	0.210	0.216	0.225	0.265	0.371	0.372	0.355	0.392	0.361	0.332
Grocery (mean = 0.657 W/sf, n=11)	0.540	0.541	0.560	0.567	0.582	0.594	0.627	0.627	0.636	0.666	0.687	0.687
Restaurant (mean = 1.177 W/sf, n=11)	0.859	0.787	0.769	0.779	0.819	0.903	1.032	1.046	1.053	1.095	1.222	1.263
Warehouse (mean = 0.21 W/sf, n=12)	0.161	0.171	0.179	0.185	0.199	0.214	0.259	0.376	0.358	0.327	0.307	0.283
Office, cont'd.	0.897	0.914	0.955	1.005	1.037	0.927	0.705	0.588	0.498	0.481	0.470	0.489
Retail, cont'd.	0.327	0.340	0.349	0.349	0.335	0.315	0.282	0.270	0.254	0.219	0.189	0.189
Grocery, cont'd.	0.706	0.721	0.756	0.793	0.813	0.799	0.751	0.700	0.653	0.625	0.585	0.547
Restaurant, cont'd.	1.331	1.396	1.424	1.477	1.507	1.522	1.507	1.496	1.407	1.348	1.179	1.037
Warehouse, cont'd.	0.257	0.249	0.225	0.197	0.165	0.134	0.121	0.122	0.127	0.133	0.142	0.148

Figure 12.8d. Spring Weekend Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.57 W/sf, n=18)	0.532	0.555	0.580	0.615	0.648	0.683	0.726	0.725	0.704	0.655	0.605	0.574
Retail (mean = 0.255 W/sf, n=19)	0.205	0.206	0.215	0.219	0.227	0.231	0.273	0.371	0.323	0.283	0.278	0.277
Grocery (mean = 0.618 W/sf, n=11)	0.534	0.529	0.533	0.556	0.568	0.583	0.593	0.577	0.573	0.608	0.610	0.638
Restaurant (mean = 1.196 W/sf, n=11)	1.045	0.986	0.858	0.838	0.862	0.916	1.023	1.091	1.090	1.137	1.199	1.261
Warehouse (mean = 0.165 W/sf, n=12)	0.165	0.169	0.180	0.182	0.196	0.196	0.203	0.204	0.214	0.201	0.188	0.161
Office, cont'd.	0.517	0.497	0.501	0.516	0.507	0.503	0.497	0.497	0.494	0.501	0.516	0.545
Retail, cont'd.	0.268	0.271	0.280	0.288	0.295	0.285	0.269	0.235	0.217	0.197	0.202	0.205
Grocery, cont'd.	0.641	0.666	0.698	0.724	0.754	0.746	0.722	0.682	0.613	0.583	0.569	0.523
Restaurant, cont'd.	1.289	1.348	1.393	1.436	1.473	1.505	1.500	1.452	1.372	1.316	1.237	1.087
Warehouse, cont'd.	0.146	0.138	0.135	0.128	0.128	0.122	0.127	0.135	0.145	0.156	0.164	0.166

Figure 12.8e. Summer Weekday Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.993 W/sf, n=18)	0.363	0.346	0.337	0.334	0.351	0.507	0.698	0.867	1.012	1.154	1.276	1.408
Retail (mean = 0.409 W/sf, n=19)	0.162	0.150	0.140	0.136	0.134	0.139	0.200	0.239	0.324	0.407	0.470	0.541
Grocery (mean = 0.969 W/sf, n=11)	0.701	0.639	0.598	0.567	0.551	0.540	0.562	0.619	0.712	0.823	0.939	1.030
Restaurant (mean = 1.847 W/sf, n=11)	1.289	1.035	0.907	0.864	0.849	0.923	1.066	1.165	1.311	1.523	1.831	2.134
Warehouse (mean = 0.11 W/sf, n=12)	0.056	0.053	0.052	0.050	0.051	0.053	0.065	0.094	0.106	0.126	0.143	0.160
Office, cont'd.	1.553	1.679	1.828	1.954	2.004	1.736	1.266	0.993	0.740	0.546	0.471	0.406
Retail, cont'd.	0.598	0.665	0.729	0.761	0.763	0.722	0.635	0.599	0.528	0.349	0.233	0.186
Grocery, cont'd.	1.142	1.225	1.299	1.395	1.475	1.482	1.436	1.333	1.222	1.120	0.984	0.855
Restaurant, cont'd.	2.398	2.543	2.623	2.670	2.706	2.762	2.789	2.705	2.433	2.180	1.950	1.663
Warehouse, cont'd.	0.170	0.193	0.211	0.218	0.205	0.150	0.117	0.098	0.082	0.070	0.064	0.062

Figure 12.8f. Summer Weekend Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.577 W/sf, n=18)	0.360	0.346	0.338	0.335	0.337	0.357	0.434	0.468	0.512	0.569	0.622	0.680
Retail (mean = 0.335 W/sf, n=19)	0.169	0.158	0.148	0.141	0.139	0.140	0.138	0.211	0.253	0.293	0.377	0.454
Grocery (mean = 0.983 W/sf, n=11)	0.753	0.674	0.629	0.594	0.580	0.553	0.570	0.633	0.726	0.842	0.953	1.008
Restaurant (mean = 1.868 W/sf, n=11)	1.614	1.357	1.051	0.944	0.884	0.907	1.026	1.152	1.317	1.544	1.825	2.082
Warehouse (mean = 0.067 W/sf, n=12)	0.054	0.053	0.051	0.049	0.050	0.050	0.050	0.049	0.054	0.058	0.062	0.071
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	0.717	0.756	0.803	0.856	0.905	0.880	0.841	0.761	0.599	0.485	0.457	0.417
Grocery, cont'd.	0.505	0.551	0.591	0.614	0.620	0.592	0.514	0.421	0.354	0.263	0.207	0.183
Restaurant, cont'd.	1.105	1.240	1.341	1.432	1.498	1.530	1.489	1.368	1.231	1.064	0.931	0.836
Warehouse, cont'd.	2.315	2.508	2.605	2.673	2.726	2.750	2.777	2.662	2.407	2.109	1.918	1.676
	0.078	0.085	0.091	0.096	0.098	0.095	0.088	0.083	0.073	0.063	0.057	0.054

Figure 12.8g. Autumn Weekday Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.817 W/sf, n=18)	0.454	0.464	0.475	0.518	0.582	0.802	1.086	1.346	1.219	1.076	0.979	0.974
Retail (mean = 0.304 W/sf, n=19)	0.170	0.171	0.173	0.176	0.180	0.264	0.302	0.310	0.342	0.395	0.375	0.375
Grocery (mean = 0.675 W/sf, n=11)	0.567	0.575	0.577	0.578	0.584	0.592	0.618	0.622	0.616	0.635	0.667	0.710
Restaurant (mean = 1.282 W/sf, n=11)	1.003	0.870	0.825	0.821	0.830	0.898	0.992	1.034	1.109	1.206	1.311	1.410
Warehouse (mean = 0.189 W/sf, n=12)	0.139	0.145	0.149	0.156	0.163	0.176	0.199	0.268	0.274	0.265	0.254	0.246
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	1.005	1.044	1.100	1.150	1.177	1.014	0.739	0.599	0.486	0.441	0.433	0.438
Grocery, cont'd.	0.385	0.425	0.442	0.448	0.435	0.397	0.344	0.319	0.292	0.224	0.181	0.172
Restaurant, cont'd.	0.728	0.760	0.787	0.819	0.863	0.837	0.766	0.722	0.690	0.659	0.638	0.603
Warehouse, cont'd.	1.544	1.624	1.660	1.671	1.660	1.659	1.612	1.559	1.502	1.438	1.334	1.194
	0.231	0.236	0.235	0.223	0.185	0.157	0.144	0.139	0.141	0.141	0.140	0.138

Figure 12.8h. Autumn Weekend Load Shapes - Total HVAC

	Hr 1	Hr 2	Hr 3	Hr 4	Hr 5	Hr 6	Hr 7	Hr 8	Hr 9	Hr 10	Hr 11	Hr 12
Office (mean = 0.526 W/sf, n=18)	0.435	0.451	0.461	0.474	0.490	0.539	0.553	0.594	0.625	0.607	0.578	0.573
Retail (mean = 0.247 W/sf, n=19)	0.167	0.169	0.171	0.171	0.174	0.176	0.258	0.307	0.254	0.255	0.276	0.298
Grocery (mean = 0.63 W/sf, n=11)	0.567	0.555	0.563	0.561	0.579	0.580	0.601	0.597	0.606	0.594	0.602	0.626
Restaurant (mean = 1.311 W/sf, n=11)	1.183	1.045	0.895	0.842	0.838	0.876	0.994	1.022	1.079	1.165	1.309	1.450
Warehouse (mean = 0.139 W/sf, n=12)	0.126	0.127	0.130	0.138	0.139	0.141	0.151	0.160	0.161	0.156	0.146	0.140
Office, cont'd.	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	Hr 24
Retail, cont'd.	0.546	0.550	0.559	0.568	0.565	0.546	0.519	0.498	0.479	0.468	0.475	0.470
Grocery, cont'd.	0.306	0.315	0.331	0.346	0.350	0.330	0.277	0.241	0.216	0.189	0.176	0.176
Restaurant, cont'd.	0.648	0.668	0.702	0.769	0.786	0.766	0.719	0.653	0.634	0.617	0.581	0.540
Warehouse, cont'd.	1.549	1.593	1.658	1.685	1.704	1.698	1.668	1.611	1.529	1.469	1.361	1.238
	0.137	0.134	0.135	0.138	0.138	0.133	0.130	0.134	0.136	0.136	0.131	0.131