

Appendix B.1: Detailed Results

The following graphs shows baseline electric and gas forecasts by sector and segment. The following table show assumptions of gas and electric equipment, fuel shares, annual per unit energy consumption for residential end uses, and annual per square foot energy consumption for commercial end uses.

Figure B-1.1 Residential Electric Baseline Forecast 2015-2035

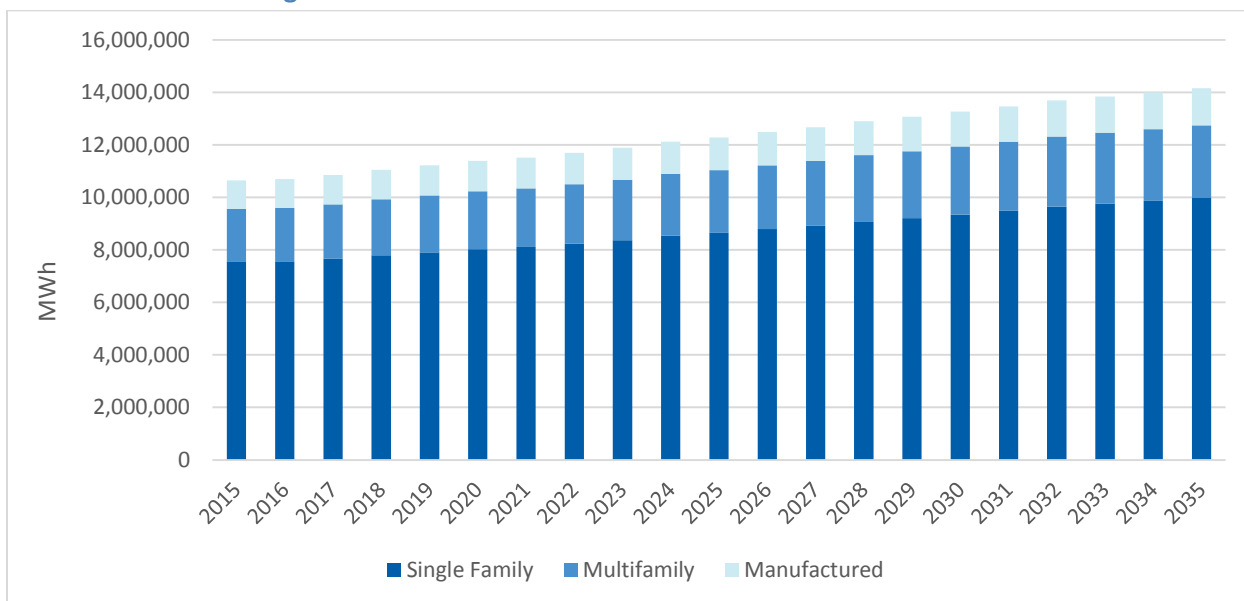


Figure B-1.2 Commercial Electric Baseline Forecast 2015-2035

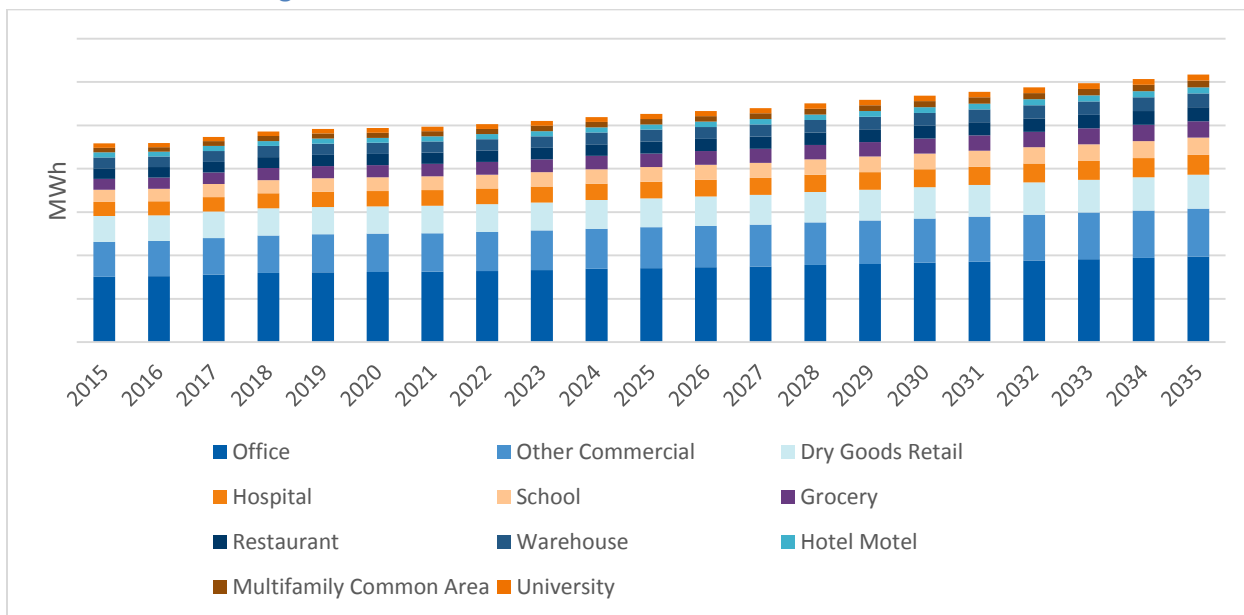




Figure B-1.3 Industrial Electric Baseline Forecast 2015-2035

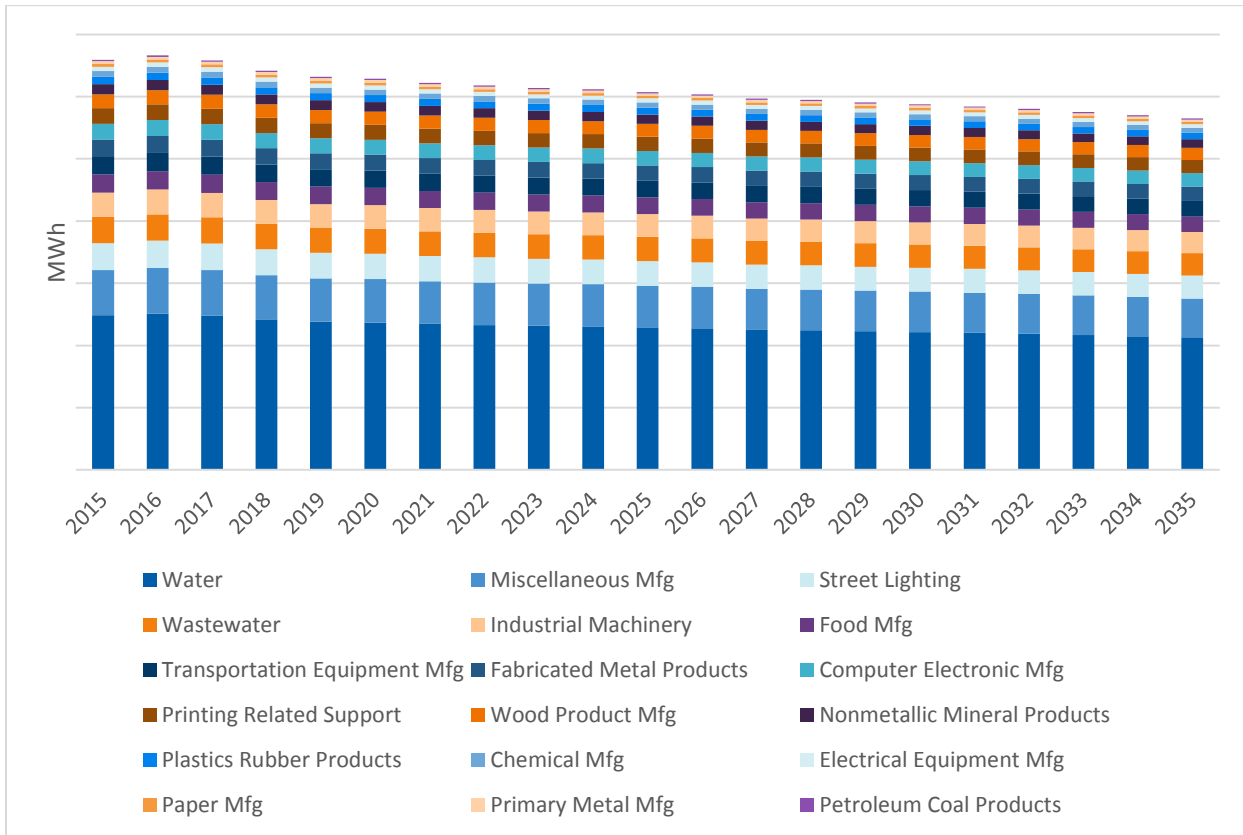


Figure B-1.4 Residential Gas Baseline Forecast 2015-2035

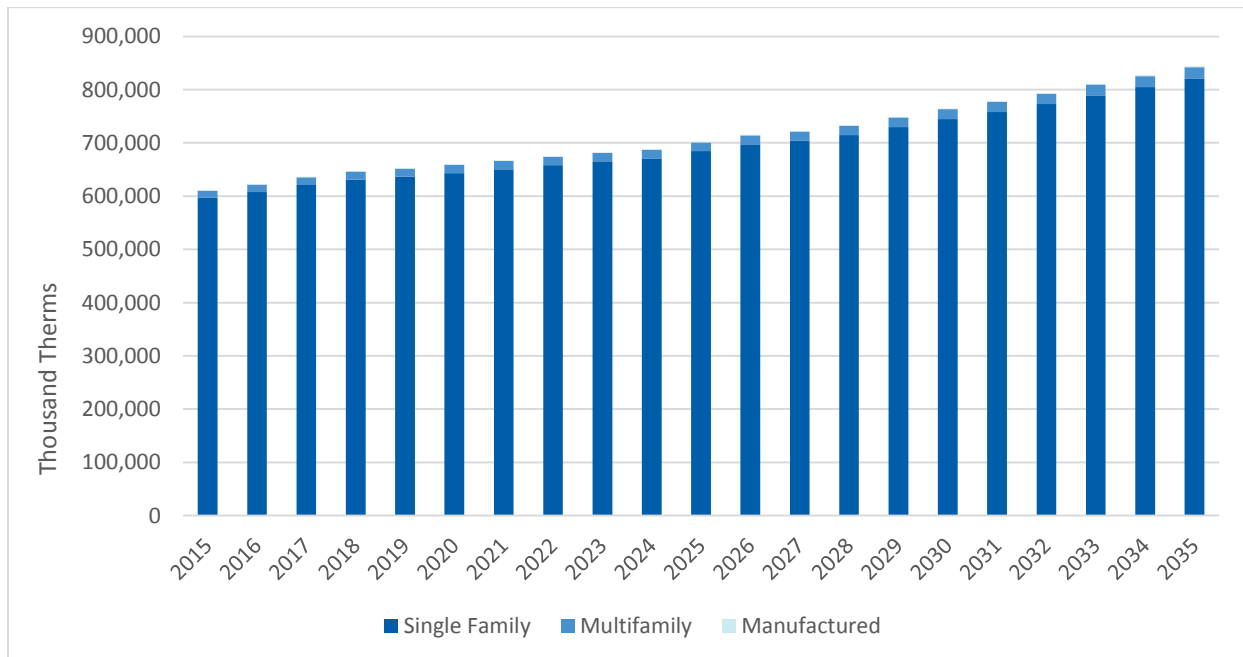


Figure B-1.5 Commercial Gas Baseline Forecast 2015-2035

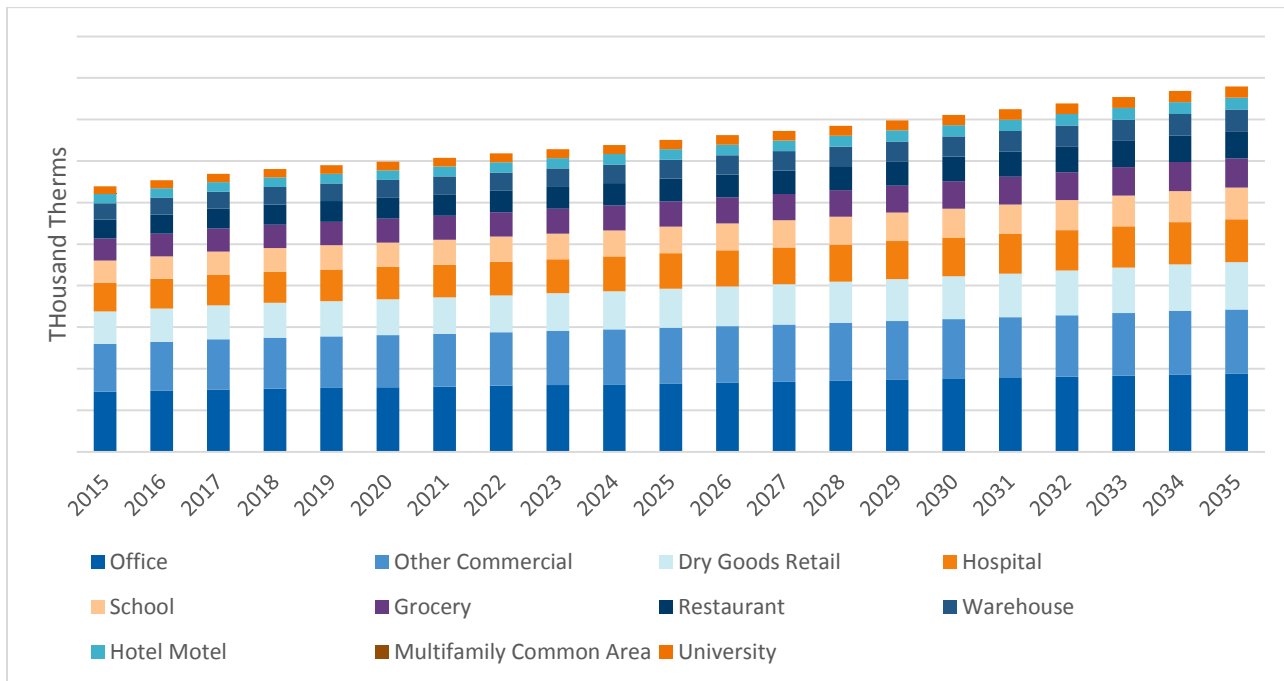


Figure B-1.6 Industrial Gas Baseline Forecast 2015-2035

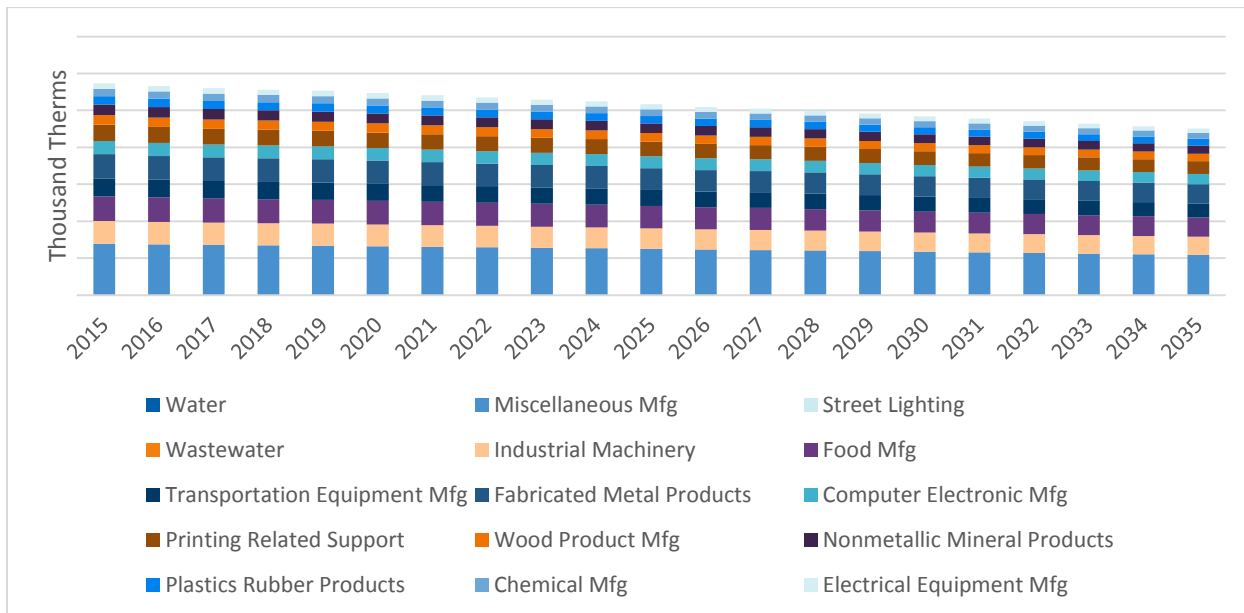




Table B-1.1 Electric Residential Saturations, Fuel Shares, and UECs

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average UEC Existing (Annual kWh)	Weighted Average UEC New (Annual kWh)
Manufactured	Air Purifier	1%	100%	489	489
Manufactured	Computer	180%	100%	195	195
Manufactured	Cooking Oven	70%	91%	105	105
Manufactured	Cooking Range	68%	90%	53	53
Manufactured	Cool Central	28%	100%	261	193
Manufactured	Cool Room	18%	100%	272	231
Manufactured	Copier	0%	100%	0	0
Manufactured	Dryer	92%	94%	783	619
Manufactured	DVD	148%	100%	22	22
Manufactured	Freezer	56%	100%	387	387
Manufactured	Heat Central	65%	75%	8,268	4,022
Manufactured	Heat Pump	23%	100%	6,510	3,258
Manufactured	Heat Room	2%	100%	9,011	4,598
Manufactured	Home Audio System	92%	100%	102	102
Manufactured	Lighting Exterior	129%	100%	49	40
Manufactured	Lighting Interior Specialty	488%	100%	32	32
Manufactured	Lighting Interior Standard	1888%	100%	20	16
Manufactured	Microwave	51%	100%	121	121
Manufactured	Monitor	72%	100%	58	58
Manufactured	Multifunction Device	98%	100%	183	183
Manufactured	Other	100%	100%	1,066	1,066
Manufactured	Plug Load Other	100%	100%	716	716
Manufactured	Printer	0%	100%	0	0
Manufactured	Refrigerator	125%	100%	516	516
Manufactured	Set Top Box	134%	100%	182	182
Manufactured	TV	136%	100%	216	216
Manufactured	TV Bigscreen	57%	100%	483	483
Manufactured	Ventilation And Circulation	65%	100%	737	737
Manufactured	Water Heat GT 55 Gal	8%	89%	4,022	1,856
Manufactured	Water Heat LE 55 Gal	92%	89%	3,766	3,716
Multifamily	Air Purifier	2%	100%	489	489
Multifamily	Computer	159%	100%	195	195
Multifamily	Cooking Oven	80%	91%	105	105
Multifamily	Cooking Range	79%	89%	53	53
Multifamily	Cool Central	11%	100%	257	225
Multifamily	Cool Room	10%	100%	100	96

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average UEC Existing (Annual kWh)	Weighted Average UEC New (Annual kWh)
Multifamily	Copier	0%	100%	0	0
Multifamily	Dryer	80%	100%	783	619
Multifamily	DVD	127%	100%	22	22
Multifamily	Freezer	14%	100%	387	387
Multifamily	Heat Central	24%	29%	5,237	3,152
Multifamily	Heat Pump	1%	100%	4,990	3,580
Multifamily	Heat Room	67%	100%	2,385	1,450
Multifamily	Home Audio System	78%	100%	102	102
Multifamily	Lighting Exterior	112%	100%	48	39
Multifamily	Lighting Interior Specialty	670%	100%	29	29
Multifamily	Lighting Interior Standard	1396%	100%	18	15
Multifamily	Microwave	69%	100%	131	131
Multifamily	Monitor	99%	100%	58	58
Multifamily	Multifunction Device	88%	100%	183	183
Multifamily	Other	100%	100%	1,066	1,066
Multifamily	Plug Load Other	100%	100%	319	319
Multifamily	Printer	0%	100%	0	0
Multifamily	Refrigerator	108%	100%	516	516
Multifamily	Set Top Box	104%	100%	182	182
Multifamily	TV	136%	100%	216	216
Multifamily	TV Bigscreen	57%	100%	483	483
Multifamily	Ventilation And Circulation	24%	100%	525	525
Multifamily	Water Heat GT 55 Gal	5%	84%	2,264	1,045
Multifamily	Water Heat LE 55 Gal	95%	84%	2,120	2,092
Single Family	Air Purifier	3%	100%	489	489
Single Family	Computer	166%	100%	195	195
Single Family	Cooking Oven	99%	83%	105	105
Single Family	Cooking Range	86%	67%	53	53
Single Family	Cool Central	32%	100%	653	440
Single Family	Cool Room	8%	100%	50	29
Single Family	Copier	0%	100%	0	0
Single Family	Dryer	99%	100%	783	619
Single Family	DVD	164%	100%	22	22
Single Family	Freezer	39%	100%	387	387
Single Family	Heat Central	72%	8%	10,839	5,060
Single Family	Heat Pump	9%	100%	7,981	4,129
Single Family	Heat Room	8%	100%	7,211	3,437



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average UEC Existing (Annual kWh)	Weighted Average UEC New (Annual kWh)
Single Family	Home Audio System	173%	100%	102	102
Single Family	Lighting Exterior	616%	100%	47	39
Single Family	Lighting Interior Specialty	1989%	100%	30	30
Single Family	Lighting Interior Standard	2620%	100%	21	17
Single Family	Microwave	84%	100%	131	131
Single Family	Monitor	88%	100%	58	58
Single Family	Multifunction Device	122%	100%	183	183
Single Family	Other	100%	100%	1,066	1,066
Single Family	Plug Load Other	100%	100%	760	760
Single Family	Pool Pump	3%	100%	2,465	746
Single Family	Printer	0%	100%	0	0
Single Family	Refrigerator	135%	100%	516	516
Single Family	Set Top Box	164%	100%	182	182
Single Family	TV	150%	100%	216	216
Single Family	TV Bigscreen	58%	100%	483	483
Single Family	Ventilation And Circulation	72%	100%	901	901
Single Family	Water Heat GT 55 Gal	13%	41%	3,715	1,714
Single Family	Water Heat LE 55 Gal	90%	41%	3,479	3,433

Table B-1.2 Residential Natural Gas Saturations, Fuel Shares, and UECs

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average UEC Existing (Annual Therms)	Weighted Average UEC New (Annual Therms)
Manufactured	Cooking Oven	79%	57%	7	7
Manufactured	Cooking Range	53%	52%	26	26
Manufactured	Dryer	75%	11%	30	24
Manufactured	Heat Central Boiler	0%	100%	336	169
Manufactured	Heat Central Furnace	87%	88%	422	210
Manufactured	Other	100%	100%	6	6
Manufactured	Water Heat GT 55 Gal	8%	55%	202	151
Manufactured	Water Heat	92%	55%	201	195

	LE 55 Gal				
Multifamily	Cooking Oven	84%	45%	7	7
Multifamily	Cooking Range	74%	54%	26	26
Multifamily	Dryer	91%	7%	30	24
Multifamily	Heat Central Boiler	2%	100%	609	380
Multifamily	Heat Central Furnace	60%	91%	350	218
Multifamily	Other	100%	100%	6	6
Multifamily	Water Heat GT 55 Gal	5%	79%	207	155
Multifamily	Water Heat LE 55 Gal	95%	79%	206	200
Single Family	Cooking Oven	99%	22%	7	7
Single Family	Cooking Range	84%	44%	26	26
Single Family	Dryer	99%	14%	30	24
Single Family	Heat Central Boiler	2%	100%	859	449
Single Family	Heat Central Furnace	89%	97%	690	342
Single Family	Other	100%	100%	6	6
Single Family	Pool Heat	3%	47%	258	258
Single Family	Water Heat GT 55 Gal	13%	84%	240	180
Single Family	Water Heat LE 55 Gal	90%	84%	239	232

Table B-1.3 Commercial Electric Saturations, Fuel Shares, and EUIs

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Dry Goods Retail	Computers	100%	100%	0.08	0.08
Dry Goods Retail	Cooling DX	48%	100%	1.89	0.93
Dry Goods Retail	Fax	100%	100%	0.01	0.01
Dry Goods Retail	Flat Screen Monitors	100%	100%	0.02	0.02
Dry Goods Retail	Freezer	100%	100%	0.00	0.00
Dry Goods Retail	Heat Pump	10%	100%	2.90	1.43
Dry Goods Retail	Lighting Exterior	100%	100%	1.11	1.11
Dry Goods Retail	Lighting Interior Fluorescent	100%	100%	6.22	0.00
Dry Goods Retail	Lighting Interior HID	100%	100%	1.11	0.00
Dry Goods Retail	Lighting Interior Other	100%	100%	0.24	6.38



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Dry Goods Retail	Lighting Interior Screw Base	100%	100%	1.61	0.00
Dry Goods Retail	Other	100%	100%	0.00	0.00
Dry Goods Retail	Other Plug Load	100%	100%	0.65	0.65
Dry Goods Retail	Photo Copiers	100%	100%	0.02	0.02
Dry Goods Retail	Printers	100%	100%	0.01	0.01
Dry Goods Retail	Refrigerator	100%	100%	0.02	0.02
Dry Goods Retail	Space Heat	78%	24%	2.02	0.45
Dry Goods Retail	Vending Machines	100%	100%	0.07	0.07
Dry Goods Retail	Ventilation and Circulation	88%	100%	2.71	2.21
Dry Goods Retail	Water Heat GT 55 Gal	100%	68%	0.29	0.13
Dry Goods Retail	Water Heat LE 55 Gal	100%	68%	0.27	0.28
Grocery	Computers	100%	100%	0.05	0.05
Grocery	Cooking	100%	56%	2.67	2.67
Grocery	Cooling DX	59%	100%	1.72	1.44
Grocery	Fax	100%	100%	0.02	0.02
Grocery	Flat Screen Monitors	100%	100%	0.01	0.01
Grocery	Freezer	100%	100%	0.00	0.00
Grocery	Heat Pump	13%	100%	4.57	1.65
Grocery	Lighting Exterior	100%	100%	1.05	1.05
Grocery	Lighting Interior Fluorescent	100%	100%	8.22	0.00
Grocery	Lighting Interior HID	100%	100%	1.32	0.00
Grocery	Lighting Interior Other	100%	100%	0.17	7.71
Grocery	Lighting Interior Screw Base	100%	100%	1.11	0.00
Grocery	Other	100%	100%	0.00	0.00
Grocery	Other Plug Load	100%	100%	0.99	0.99
Grocery	Photo Copiers	100%	100%	0.08	0.08
Grocery	Printers	100%	100%	0.01	0.01
Grocery	Refrigeration	100%	100%	20.19	20.19
Grocery	Refrigerator	100%	100%	0.06	0.06
Grocery	Space Heat	73%	11%	2.14	0.19
Grocery	Vending Machines	100%	100%	0.19	0.19
Grocery	Ventilation and Circulation	87%	100%	2.14	2.57
Grocery	Water Heat GT 55 Gal	100%	32%	0.30	0.14
Grocery	Water Heat LE 55 Gal	100%	32%	0.29	0.30
Hospital	Computers	100%	100%	0.33	0.33

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Hospital	Cooking	100%	32%	0.54	0.54
Hospital	Cooling Chillers	23%	100%	1.90	0.42
Hospital	Cooling DX	49%	100%	1.89	0.49
Hospital	Fax	100%	100%	0.00	0.00
Hospital	Flat Screen Monitors	100%	100%	0.10	0.10
Hospital	Freezer	100%	100%	0.01	0.01
Hospital	Heat Pump	7%	100%	3.63	1.54
Hospital	Lighting Exterior	100%	100%	0.58	0.58
Hospital	Lighting Interior Fluorescent	100%	100%	4.80	0.00
Hospital	Lighting Interior HID	100%	100%	0.13	0.00
Hospital	Lighting Interior Other	100%	100%	0.25	4.44
Hospital	Lighting Interior Screw Base	100%	100%	1.67	0.00
Hospital	Other	100%	100%	0.00	0.00
Hospital	Other Plug Load	100%	100%	3.53	3.53
Hospital	Photo Copiers	100%	100%	0.02	0.02
Hospital	Printers	100%	100%	0.03	0.03
Hospital	Refrigeration	100%	100%	0.44	0.44
Hospital	Refrigerator	100%	100%	0.12	0.12
Hospital	Servers	100%	100%	0.06	0.06
Hospital	Space Heat	87%	48%	1.26	0.69
Hospital	Vending Machines	100%	100%	0.05	0.05
Hospital	Ventilation and Circulation	93%	100%	5.37	4.19
Hospital	Water Heat GT 55 Gal	100%	48%	1.41	0.65
Hospital	Water Heat LE 55 Gal	100%	48%	1.32	1.37
Hotel Motel	Computers	100%	100%	0.07	0.07
Hotel Motel	Cooking	100%	8%	0.65	0.65
Hotel Motel	Cooling Chillers	27%	100%	1.67	0.45
Hotel Motel	Cooling DX	16%	100%	1.67	0.53
Hotel Motel	Fax	100%	100%	0.00	0.00
Hotel Motel	Flat Screen Monitors	100%	100%	0.02	0.02
Hotel Motel	Freezer	100%	100%	0.02	0.02
Hotel Motel	Heat Pump	27%	100%	3.80	1.94
Hotel Motel	Lighting Exterior	100%	100%	0.66	0.66
Hotel Motel	Lighting Interior Fluorescent	100%	100%	2.06	0.00
Hotel Motel	Lighting Interior HID	100%	100%	0.08	0.00
Hotel Motel	Lighting Interior	100%	100%	0.06	4.20



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
	Other				
Hotel Motel	Lighting Interior Screw Base	100%	100%	5.46	0.00
Hotel Motel	Other	100%	100%	0.00	0.00
Hotel Motel	Other Plug Load	100%	100%	0.78	0.78
Hotel Motel	Photo Copiers	100%	100%	0.01	0.01
Hotel Motel	Printers	100%	100%	0.01	0.01
Hotel Motel	Refrigeration	100%	100%	0.19	0.19
Hotel Motel	Refrigerator	100%	100%	0.22	0.22
Hotel Motel	Space Heat	57%	53%	4.01	2.55
Hotel Motel	Vending Machines	100%	100%	0.09	0.09
Hotel Motel	Ventilation and Circulation	90%	100%	3.24	2.02
Hotel Motel	Water Heat GT 55 Gal	100%	39%	1.74	0.81
Hotel Motel	Water Heat LE 55 Gal	100%	39%	1.63	1.71
Multifamily Common Area	Lighting Interior Fluorescent	100%	100%	6.47	0.00
Multifamily Common Area	Lighting Interior HID	100%	100%	0.35	0.00
Multifamily Common Area	Lighting Interior Other	100%	100%	0.07	6.46
Multifamily Common Area	Lighting Interior Screw Base	100%	100%	0.77	0.00
Office	Computers	100%	100%	0.60	0.60
Office	Cooling Chillers	23%	100%	2.14	0.67
Office	Cooling DX	39%	100%	1.53	0.54
Office	Fax	100%	100%	0.01	0.01
Office	Flat Screen Monitors	100%	100%	0.19	0.19
Office	Freezer	100%	100%	0.00	0.00
Office	Heat Pump	27%	100%	3.00	1.30
Office	Lighting Exterior	100%	100%	0.51	0.51
Office	Lighting Interior Fluorescent	100%	100%	5.11	0.00
Office	Lighting Interior HID	100%	100%	0.21	0.00
Office	Lighting Interior Other	100%	100%	0.04	3.91
Office	Lighting Interior Screw Base	100%	100%	0.67	0.00
Office	Other	100%	100%	0.00	0.00
Office	Other Plug Load	100%	100%	0.38	0.38
Office	Photo Copiers	100%	100%	0.03	0.03
Office	Printers	100%	100%	0.04	0.04

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Office	Refrigerator	100%	100%	0.05	0.05
Office	Servers	100%	100%	0.10	0.10
Office	Space Heat	56%	61%	3.21	0.66
Office	Vending Machines	100%	100%	0.09	0.09
Office	Ventilation and Circulation	85%	100%	1.53	1.29
Office	Water Heat GT 55 Gal	100%	82%	0.47	0.22
Office	Water Heat LE 55 Gal	100%	82%	0.44	0.46
Other Commercial	Computers	100%	100%	0.15	0.15
Other Commercial	Cooking	100%	53%	0.39	0.39
Other Commercial	Cooling Chillers	7%	100%	1.82	0.70
Other Commercial	Cooling DX	29%	100%	1.84	0.82
Other Commercial	Fax	100%	100%	0.02	0.02
Other Commercial	Flat Screen Monitors	100%	100%	0.05	0.05
Other Commercial	Freezer	100%	100%	0.00	0.00
Other Commercial	Heat Pump	9%	100%	3.01	1.37
Other Commercial	Lighting Exterior	100%	100%	1.23	1.23
Other Commercial	Lighting Interior Fluorescent	100%	100%	2.93	0.00
Other Commercial	Lighting Interior HID	100%	100%	1.07	0.00
Other Commercial	Lighting Interior Other	100%	100%	0.09	3.28
Other Commercial	Lighting Interior Screw Base	100%	100%	0.69	0.00
Other Commercial	Other	100%	100%	0.00	0.00
Other Commercial	Other Plug Load	100%	100%	0.58	0.58
Other Commercial	Photo Copiers	100%	100%	0.05	0.05
Other Commercial	Printers	100%	100%	0.01	0.01
Other Commercial	Refrigeration	100%	100%	0.12	0.12
Other Commercial	Refrigerator	100%	100%	0.05	0.05
Other Commercial	Servers	100%	100%	0.52	0.52
Other Commercial	Space Heat	73%	44%	2.62	0.55
Other Commercial	Vending Machines	100%	100%	0.08	0.08
Other Commercial	Ventilation and Circulation	83%	100%	2.12	1.75
Other Commercial	Water Heat GT 55 Gal	100%	60%	0.38	0.17
Other Commercial	Water Heat LE 55 Gal	100%	60%	0.36	0.37
Restaurant	Computers	100%	100%	0.13	0.13
Restaurant	Cooking	100%	18%	9.42	9.42
Restaurant	Cooling DX	51%	100%	4.12	1.54
Restaurant	Fax	100%	100%	0.02	0.02



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Restaurant	Flat Screen Monitors	100%	100%	0.04	0.04
Restaurant	Freezer	100%	100%	0.00	0.00
Restaurant	Heat Pump	14%	100%	4.88	1.93
Restaurant	Lighting Exterior	100%	100%	2.36	2.36
Restaurant	Lighting Interior Fluorescent	100%	100%	4.24	0.00
Restaurant	Lighting Interior HID	100%	100%	0.33	0.00
Restaurant	Lighting Interior Other	100%	100%	0.33	6.12
Restaurant	Lighting Interior Screw Base	100%	100%	4.67	0.00
Restaurant	Other	100%	100%	0.00	0.00
Restaurant	Other Plug Load	100%	100%	1.28	1.28
Restaurant	Photo Copiers	100%	100%	0.08	0.08
Restaurant	Printers	100%	100%	0.01	0.01
Restaurant	Refrigeration	100%	100%	5.33	5.33
Restaurant	Refrigerator	100%	100%	0.05	0.05
Restaurant	Space Heat	76%	12%	1.35	0.31
Restaurant	Ventilation and Circulation	89%	100%	3.57	2.84
Restaurant	Water Heat GT 55 Gal	100%	38%	8.85	4.01
Restaurant	Water Heat LE 55 Gal	100%	38%	8.30	8.51
School	Computers	100%	100%	0.48	0.48
School	Cooking	100%	55%	0.22	0.22
School	Cooling Chillers	25%	100%	0.37	0.16
School	Cooling DX	21%	100%	0.34	0.16
School	Fax	100%	100%	0.01	0.01
School	Flat Screen Monitors	100%	100%	0.15	0.15
School	Freezer	100%	100%	0.00	0.00
School	Heat Pump	25%	100%	2.70	1.16
School	Lighting Exterior	100%	100%	0.76	0.76
School	Lighting Interior Fluorescent	100%	100%	3.34	0.00
School	Lighting Interior HID	100%	100%	0.40	0.00
School	Lighting Interior Other	100%	100%	0.01	2.90
School	Lighting Interior Screw Base	100%	100%	0.16	0.00
School	Other	100%	100%	0.00	0.00
School	Other Plug Load	100%	100%	0.02	0.02
School	Photo Copiers	100%	100%	0.05	0.05

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
School	Printers	100%	100%	0.03	0.03
School	Refrigeration	100%	100%	0.41	0.41
School	Refrigerator	100%	100%	0.05	0.05
School	Servers	100%	100%	0.03	0.03
School	Space Heat	74%	9%	5.67	1.84
School	Vending Machines	100%	100%	0.08	0.08
School	Ventilation and Circulation	99%	100%	1.32	0.89
School	Water Heat GT 55 Gal	100%	34%	1.51	0.67
School	Water Heat LE 55 Gal	100%	34%	1.42	1.42
University	Computers	100%	100%	0.48	0.48
University	Cooking	100%	55%	0.42	0.42
University	Cooling Chillers	4%	100%	0.37	0.16
University	Cooling DX	5%	100%	0.34	0.16
University	Fax	100%	100%	0.01	0.01
University	Flat Screen Monitors	100%	100%	0.15	0.15
University	Freezer	100%	100%	0.00	0.00
University	Heat Pump	1%	100%	2.70	1.16
University	Lighting Exterior	100%	100%	0.76	0.76
University	Lighting Interior Fluorescent	100%	100%	2.60	0.00
University	Lighting Interior HID	100%	100%	0.27	0.00
University	Lighting Interior Other	100%	100%	0.03	3.00
University	Lighting Interior Screw Base	100%	100%	0.88	0.00
University	Other	100%	100%	0.00	0.00
University	Other Plug Load	100%	100%	0.02	0.02
University	Photo Copiers	100%	100%	0.05	0.05
University	Printers	100%	100%	0.03	0.03
University	Refrigeration	100%	100%	0.41	0.41
University	Refrigerator	100%	100%	0.05	0.05
University	Servers	100%	100%	0.03	0.03
University	Space Heat	95%	9%	5.67	1.84
University	Vending Machines	100%	100%	0.08	0.08
University	Ventilation and Circulation	96%	100%	1.32	0.89
University	Water Heat GT 55 Gal	100%	34%	1.51	0.67
University	Water Heat LE 55 Gal	100%	34%	1.42	1.42
Warehouse	Computers	100%	100%	0.10	0.10
Warehouse	Cooling Chillers	4%	100%	0.19	0.19



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Warehouse	Cooling DX	14%	100%	0.19	0.23
Warehouse	Fax	100%	100%	0.01	0.01
Warehouse	Flat Screen Monitors	100%	100%	0.03	0.03
Warehouse	Freezer	100%	100%	0.00	0.00
Warehouse	Heat Pump	6%	100%	0.73	0.53
Warehouse	Lighting Exterior	100%	100%	0.28	0.28
Warehouse	Lighting Interior Fluorescent	100%	100%	1.48	0.00
Warehouse	Lighting Interior HID	100%	100%	1.30	0.00
Warehouse	Lighting Interior Other	100%	100%	0.01	1.90
Warehouse	Lighting Interior Screw Base	100%	100%	0.55	0.00
Warehouse	Other	100%	100%	0.00	0.00
Warehouse	Other Plug Load	100%	100%	0.26	0.26
Warehouse	Photo Copiers	100%	100%	0.03	0.03
Warehouse	Printers	100%	100%	0.01	0.01
Warehouse	Refrigerator	100%	100%	0.02	0.02
Warehouse	Space Heat	48%	26%	1.13	0.37
Warehouse	Vending Machines	100%	100%	0.03	0.03
Warehouse	Ventilation and Circulation	52%	100%	0.58	0.56
Warehouse	Water Heat GT 55 Gal	100%	82%	0.20	0.09

Table B-1.4 Commercial Gas Saturations, Fuel Shares, and EUIs

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Dry Goods Retail	Other	100%	100%	0.000	0.000
Dry Goods Retail	Space Heat Boiler	9%	100%	0.068	0.038
Dry Goods Retail	Space Heat Furnace	83%	81%	0.102	0.057
Dry Goods Retail	Water Heat GT 55 Gal	8%	40%	0.033	0.024
Dry Goods Retail	Water Heat LE 55 Gal	92%	40%	0.029	0.029
Grocery	Cooking	100%	54%	0.194	0.194
Grocery	Other	100%	100%	0.000	0.000
Grocery	Space Heat Boiler	1%	100%	0.227	0.048

Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Grocery	Space Heat Furnace	96%	88%	0.338	0.072
Grocery	Water Heat GT 55 Gal	8%	80%	0.148	0.110
Grocery	Water Heat LE 55 Gal	92%	80%	0.130	0.132
Hospital	Cooking	100%	67%	0.037	0.037
Hospital	Other	100%	100%	0.000	0.000
Hospital	Space Heat Boiler	35%	85%	0.316	0.304
Hospital	Space Heat Furnace	56%	78%	0.469	0.461
Hospital	Water Heat GT 55 Gal	8%	64%	0.490	0.365
Hospital	Water Heat LE 55 Gal	92%	64%	0.430	0.437
Hotel Motel	Cooking	100%	98%	0.081	0.081
Hotel Motel	Other	100%	100%	0.000	0.000
Hotel Motel	Pool Heat	100%	44%	0.112	0.112
Hotel Motel	Space Heat Boiler	57%	69%	0.164	0.116
Hotel Motel	Space Heat Furnace	31%	44%	0.243	0.176
Hotel Motel	Water Heat GT 55 Gal	8%	77%	0.370	0.276
Hotel Motel	Water Heat LE 55 Gal	92%	77%	0.325	0.330
Office	Other	100%	100%	0.000	0.000
Office	Space Heat Boiler	28%	66%	0.212	0.103
Office	Space Heat Furnace	57%	41%	0.315	0.156
Office	Water Heat GT 55 Gal	8%	34%	0.042	0.031
Office	Water Heat LE 55 Gal	92%	34%	0.037	0.037
Other Commercial	Cooking	100%	49%	0.040	0.040
Other Commercial	Other	100%	100%	0.000	0.000
Other Commercial	Pool Heat	100%	13%	0.164	0.164
Other Commercial	Space Heat Boiler	25%	100%	0.140	0.070
Other Commercial	Space Heat Furnace	68%	73%	0.208	0.106
Other Commercial	Water Heat GT 55 Gal	8%	58%	0.037	0.028



Segment	End Use	Saturation	Electric Fuel Share	Weighted Average EUI (kWh/Sq Ft) Existing	Weighted Average EUI (kWh/Sq Ft) New
Other Commercial	Water Heat LE 55 Gal	92%	58%	0.033	0.033
Restaurant	Cooking	100%	82%	1.614	1.614
Restaurant	Other	100%	100%	0.000	0.000
Restaurant	Space Heat Boiler	0%	100%	0.042	0.031
Restaurant	Space Heat Furnace	92%	96%	0.062	0.046
Restaurant	Water Heat GT 55 Gal	8%	67%	0.513	0.382
Restaurant	Water Heat LE 55 Gal	92%	67%	0.450	0.457
School	Cooking	100%	46%	0.022	0.022
School	Other	100%	100%	0.000	0.000
School	Pool Heat	100%	13%	0.158	0.158
School	Space Heat Boiler	75%	98%	0.112	0.093
School	Space Heat Furnace	23%	83%	0.166	0.142
School	Water Heat GT 55 Gal	8%	79%	0.069	0.051
School	Water Heat LE 55 Gal	92%	79%	0.060	0.061
University	Cooking	100%	46%	0.049	0.049
University	Other	100%	100%	0.000	0.000
University	Pool Heat	100%	13%	0.151	0.151
University	Space Heat Boiler	75%	98%	0.224	0.187
University	Space Heat Furnace	23%	83%	0.332	0.283
University	Water Heat GT 55 Gal	8%	79%	0.117	0.087
University	Water Heat LE 55 Gal	92%	79%	0.102	0.104
Warehouse	Other	100%	100%	0.000	0.000
Warehouse	Space Heat Boiler	1%	100%	0.083	0.045
Warehouse	Space Heat Furnace	65%	84%	0.123	0.068
Warehouse	Water Heat GT 55 Gal	8%	20%	0.023	0.017
Warehouse	Water Heat LE 55 Gal	92%	20%	0.020	0.021

Table B-1.5 Industrial Electric End Use Percents by Segment

Segment	Fans	HVAC	Indirect Boiler	Lighting	Motors Other	Other	Process Aircomp	Process Cool	Process Electro Chemical	Process Heat	Process Other	Process Refrig	Pumps
Chemical Mfg	7%	7%	2%	4%	16%	3%	17%	9%	10%	5%	1%	5%	16%
Computer Electronic Mfg	4%	28%	1%	12%	8%	8%	1%	11%	1%	11%	8%	1%	7%
Electrical Equipment Mfg	5%	15%	0%	12%	10%	4%	11%	5%	0%	23%	3%	3%	10%
Fabricated Metal Products	7%	10%	0%	9%	19%	3%	8%	4%	2%	20%	3%	3%	12%
Food Mfg	3%	8%	2%	7%	17%	4%	3%	27%	0%	6%	1%	13%	7%
Industrial Machinery	6%	23%	0%	15%	18%	4%	7%	3%	0%	7%	2%	3%	11%
Misc. Mfg	5%	25%	2%	17%	20%	6%	5%	6%	0%	10%	1%	0%	3%
Nonmetallic Mineral Products	8%	6%	0%	5%	22%	3%	9%	3%	0%	22%	3%	4%	14%
Paper Mfg	15%	5%	4%	4%	30%	2%	4%	2%	1%	3%	1%	4%	24%
Petroleum Coal Products	12%	3%	1%	2%	34%	1%	14%	6%	0%	0%	0%	6%	21%
Plastics Rubber Products	7%	11%	1%	9%	20%	4%	8%	9%	0%	16%	0%	3%	13%
Primary Metal Mfg	4%	3%	0%	3%	18%	1%	4%	1%	32%	29%	1%	0%	3%
Printing Related Support	7%	19%	1%	12%	20%	6%	8%	6%	0%	3%	0%	4%	13%
Transport. Equipment Mfg	4%	19%	1%	15%	10%	5%	10%	6%	1%	13%	3%	3%	10%
Waste-water	0%	0%	0%	2%	0%	14%	66%	0%	0%	0%	0%	0%	18%
Water	10%	0%	0%	2%	10%	14%	0%	0%	0%	0%	0%	0%	64%
Wood Product Mfg	10%	5%	1%	7%	29%	4%	12%	1%	1%	7%	0%	5%	18%



Table B-1.6 Industrial Gas End Use Percents by Segment

End Use	HVAC	Indirect Boiler	Other	Process Heat	Process Other
Chemical Mfg	2%	60%	1%	28%	9%
Computer Electronic Mfg	40%	47%	3%	7%	2%
Electrical Equipment Mfg	21%	18%	2%	57%	3%
Fabricated Metal Products	15%	16%	2%	67%	0%
Food Mfg	5%	58%	0%	34%	4%
Industrial Machinery	40%	27%	1%	32%	0%
Misc. Mfg	55%	18%	0%	23%	5%
Nonmetallic Mineral Products	4%	5%	2%	87%	2%
Paper Mfg	3%	62%	3%	28%	4%
Petroleum Coal Products	1%	34%	0%	61%	5%
Plastics Rubber Products	20%	47%	3%	26%	5%
Primary Metal Mfg	6%	9%	11%	71%	3%
Printing Related Support	17%	12%	8%	62%	0%
Transport. Equipment Mfg	41%	20%	0%	36%	2%
Waste-water	0%	0%	100%	0%	0%
Water	0%	0%	100%	0%	0%
Wood Product Mfg	8%	30%	0%	58%	4%