

Resilience & Security Advisory Commission

144 N. Binkley Street, Soldotna, Alaska 99669 • (907) 714-2205 • (907) 714-2378 Fax

A Commission hosted by the Planning Department

Resilience & Security Advisory Commission (RSAC) Update

With emphasis on the Building Efficiency Work Group Efforts

Mike Salzetti August 2, 2021



Resilience & Security Advisory Commission

<u>Purpose</u>

Advise the administration & assembly on developing sustainability solutions to promote economic security, safety, self-reliance and well being.

Established

Ordinance 2020-25

Who We Are

Jennifer Pletz

(Seward, Moose Pass, Cooper Landing)

Bretwood Higman

(Seldovia, Port Graham, Homer, Kachemak City, Nanwalek)

Agam Ohn-Bar

(Anchor Point, Ninilchik, Kasilof, Clam Gulch)

Mikel Salzetti

(Sterling, Kenai, Soldotna, Kalifornsky)

Richard L. Davidson

(Sterling, Kenai, Soldotna, Kalifornsky)

Louise B. Heite

(Hope, Tyonek, Nikiski)

Randy Arndt

(At-Large)

Scott Waterman

(At-Large)

Alexandra Ravelo

(At-Large)

Emma Sulczynski

(Student Representative)

Anna DeVolld

(Student Representative)

Willy Dunne

(Assembly Liaison)



Currently...

3 active working groups

- Agriculture
- Solid Waste
- Building Efficiency



Agricultural Work Group

Land Management

- Identifying possible Land Management Code improvements
- Working on Land Use Planning (Agricultural Leases, Zoning, Land Use Designation)

Agriculture

- Promoting farmers markets
- Encouraging local produce in restaurants
- Studying shared or communal processing facilities
- Investigating long term storage solutions



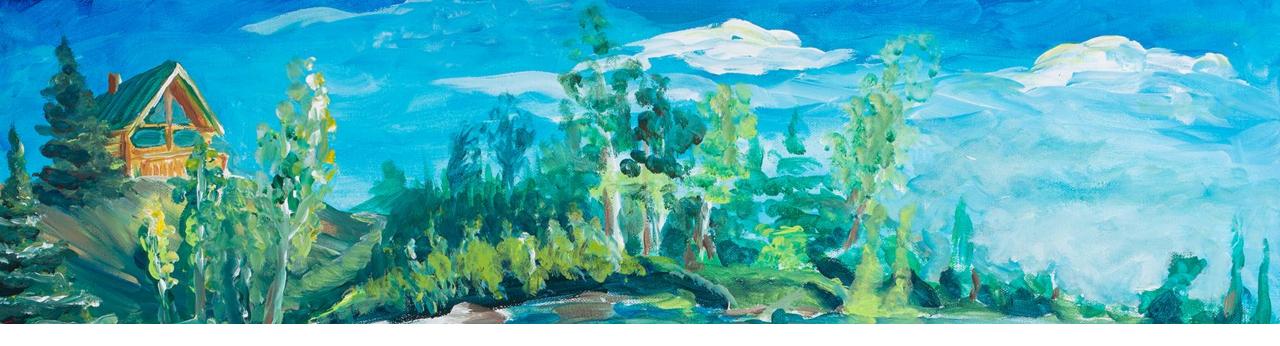
Solid Waste Work Group

Reduce volume of waste entering landfill

- Compost and biogas
- Construction material salvage

Improving the Solid Waste Code

- Inclusion of recycling definition
- Promoting resource recovery, recycling & reuse



Building Efficiency Work Group

Building Efficiency

- Collaboration & Information Acquisition
- Construct a Borough Building Energy Database
- Start Identifying Opportunities for Improvement
- Investigate Financing Options.



General Stats Bill Stats Announcements

General Stats

Facilities: 64 # Vendors: 35 # Accounts: 426 # Meters: 425 System Activity

Users: 25 # User Types: 3 # Logins - Month: 16 # Logins - YTD: 161

Edit List

Resources

Documents: 0

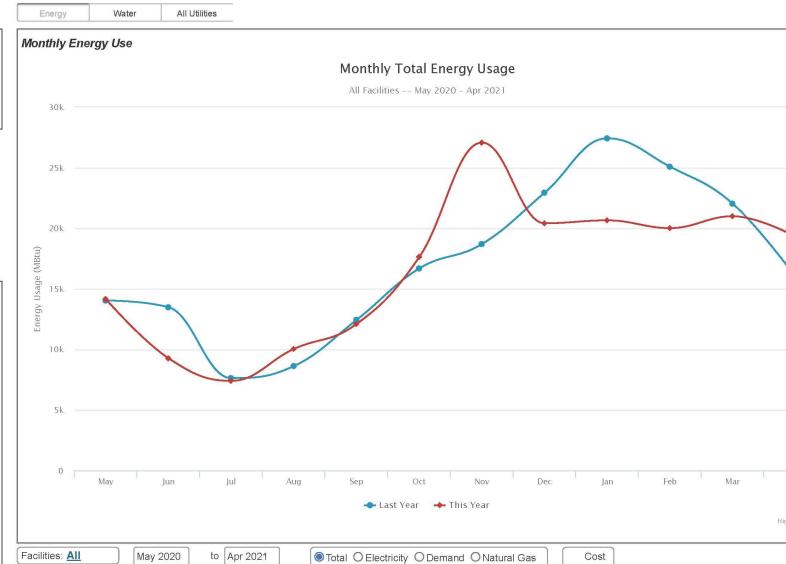
Links: 6 **# News sources:** 17

Blog articles:

Quick Links User Logins Social Media

Quick Links

- Facilities
- Vendors
- Accounts and Meters
- Utility Bills
- Energy Use Graph
- Historical Energy Use and Cost Report
- . Historical Utility Use and Cost Report
- Utility Cost Breakdown Pie Chart
- Facility Energy Use Comparison Report



	students		Annual Gas	Annual Gas	Annual electric	Annual electric			Annual Energy	Annual Fuel		Annual Energy				
	projected 2021-	Privately or	Consumption	Consumption	Consumption	Consumption		Other Fuel	Consumption	Consumption		Consumption	Energy	to	otal budget 20-	% of budget for
Service Area ▼	Building Name 🔻 Building Address 🔻 2022 🔻 Gross SF 🔻 Constructed 🔻 I	Primary Purpo 🔻 Public Owned 🔻	Dollars 🔻	CCF	Dollars 🔻	KWH 🔻	Other Fuel typ Other Fuel Co	Consumpion 🔻	MBTUH 🔻	Dollars 🔻	Annual Cost/§	per SF 🔻	Cost/stude →	Notes 💌	21 🔻	energy 🔻

Kenai Peninsula Borough Building List February, 2021

			7861																			
			students				22200000000	Annual Gas		Annual electric				22200	Annual Energy	Annual Fuel		Annual Energy				
Service Area	Building Name	Building Address	projected 2021- 2022	Gross SF	Constructed P	dana a . D	Privately or	Consumption	Annual Gas Consumption CCF	Consumption Dollars	Consumption KWH	Other Sunitons	Other Fuel Cost	Other Fuel Consumption	Consumption MBTUH	Consumption Dollars	Annual Cost/SF	Consumption per SF	Energy Cost/student	Notes	total budget 20- 21	% of budget for energy
	District Wide (portables)	DuitingAddress	2022	01033 31	Constructed P	illiary Furpose	rubiic Owned	Domars	consumption cor	Donars	Kyvri	Other ruertype	Other Fuel Cost	consumption	MOTOR	\$0	#DIV/01	ar .	#DIV/0I	Notes	**	#DIV/0I
School District	Kachemak Selo	Fritz Creek	31	5,460						\$17,898		?	?			#VALUE!	#VALUE!		#VALUE!		904,934	#VALUE!
	Soldotna Prep School (closed	0		84,755				\$2,083		\$2,722						\$4,805	\$0.06		#DIV/0I			#D1V/0I
School District	Warehouse Cooper Landing OL-US			??	77			\$21,090		\$92,304						\$113,394 \$2,210	#DIV/01 #VALUE!		#DIV/0I #DIV/0I			#DIV/0I
	Kenai Elementary			410	(1.10)			\$44,345		\$67,641						\$111,986	#DIV/0I		#DIV/0I			
	Tebughna (Tyonek)		26	25,976	67-76					\$123,587		oil	\$6,676			\$130,263	\$5.01		\$5,010.12		683,552	
	Susan B. English		50	59,208	58-72-83					\$54,239		oil	\$128,467			\$182,706	\$3.09		\$3,654.12		1,019,670	
School District School District			35 29	12,568 24,282	74-81-84 76-81			\$18,516		\$26,004		propane	\$83,390			\$109,394 \$67,988	\$8.70 \$2.80		\$3,125.54 \$2,344.41		728,261 940,606	15.02% 7.23%
School District			18	8,989	35-53-60-74-87-93			210,010		\$18,018		propane	\$21,860			\$39,878	\$4.44		\$2,215.44		381,824	
School District	Cooper Landing K-8-UD		12	8,324	72-82					\$14,911		Propane	\$11,304			\$26,215	\$3.15		\$2,184.58		329,900	7.95%
School District			80	55,277	50-62-77-81-85-97			45293		\$89,988						\$135,281	\$2.45		\$1,691.01		2,053,601	6.59%
School District	Hope Skyview Middle School	PO Box 47, Hope	308	13,500 117,101	87 88			\$94,271		\$27,107 \$321,181		Propane	\$21,310			\$48,417 \$415,452	\$3.59 \$3.55		\$1,613.89 \$1,348.87		479,308 5,418,702\$	10.10% 7.67%
	Seward Middle School		111	37,500	2006			594,271		\$85,569		oil	\$59,606			\$145,452	\$3.87		\$1,348.87		1,889,808	
	Kenai Central High School	Kenai	403	189,007	64-67-68-75-83			\$167,086		\$318,593		Oil	\$33,000			\$485,679	\$2.57		\$1,205.16		\$5,871,710	
School District	Nanwalek		75	14,832	61-77-84					\$27,081		propane	\$63,111			\$90,192	\$6.08		\$1,202.56		1,463,563	
	Seward High School		136	75,373	77-82					\$38,145		oil	\$123,979			\$162,124	\$2.15		\$1,192.09		2,396,214	
	Nikiski Middle / High School		300	117,504	87			\$69,389		\$264,195						\$333,584	\$2.84		\$1,111.95		5,000,546\$	
	Homer High School Nikiski North Star Elementan	Homer	360 184	158,200 50,000	85 87			\$88,425 \$62,551		\$308,357						\$396,782 \$193,251	\$2.51 \$3.87		\$1,102.17 \$1,050.28		5,390,775 \$3,811,954	7,36% 5,07%
	Tustumena Elementary	r	127	46,679	58-69-78-83-95			\$39,468		\$78,578						\$118,046	\$2.53		\$929.50		\$2,099,132	5.62%
	West Homer Elemtary		200	52,500	96			\$74,226		\$101,675						\$1.75,901	\$3.35		\$879.51.		\$3,619,801	4.86%
	McNeil Canyon Elementary		106	32,750	83					\$57,578		Oil	\$29,178			\$86,756	\$2.65		\$818.45		1,449,481	5.99%
		500 Sterling Hwy, Homer	169	65,556	70-78			\$36,900		\$84,702						\$121,602	\$1.85		\$719.54		2,716,204	
	Kenai Middle School Soldotna High School		345 591	85,476 154,637	72 80			\$66,533 \$107,977		\$180,711 \$303,741						\$247,244 \$411,718	\$2.89 \$2.66		\$716.65 \$696.65		\$4,867,774 \$8,069,479	5,08% 5,10%
School District		PO Box 1109	124	25,348	58-69-78-82			\$28,319		\$57,701						\$85,020	\$3.39		\$693.71		1,731,071	
	Sterling Elementary		148	33,844	58-61-63-78-83			\$37,300		\$65,294						\$102,594	\$3.03		\$693.20		2,392,596	
	Seward Elementary		186	52,199	90					\$75,062		oil	\$53,762			\$128,824	\$2.47		\$692.60			#DIV/0I
	Soldotna Elementary		212	54,177	60-62-68-75-87			\$53,145		\$85,072						\$138,217	\$2.55		\$651.97		4,011,112\$	3, 45%
	Paul Banks Elementary	1040 F. Donney Coldonna	154	33,414	64-73-84 84			\$33,244 \$37,207		\$65,886 \$98,879						\$99,130	\$2.97		\$643.70 \$450.62		3,201,088 4,885,076	3.10% 2.79%
	K-Beach Elementary Redoubt Elementary	1049 E. Poppy, Soldotna	302 230	46,935 46,639	78			\$39,052		\$64.561						\$108,613	\$2.22		\$450.62		4,293,309	
	Mountain View Elementary		338	50,000	87			\$39,612		\$100,537						\$140,149	\$2.80		\$414.64		5,355,579	
School District		Kenai	260		68			\$27,900		\$49,818						\$77,718	#VALUE!		\$298.92		\$3,503,246	2.22%
	Razdolna Elementary		88	2,948						\$23,915						\$23,915	\$8.11		\$271.76		1,137,015	
School District School District		Homer	30 121	5,405				\$1,710		\$5,845 \$24,460		al	\$1,433			\$7,555 \$25.893	\$1.40 \$4.98		\$251.83 \$213.99		654,427 \$1,726,610	
	Voznesenka Fireweed Academy	2	112	5,200	96					\$4,498		Oil	\$2,207			\$6,705	#VALUE!		\$59.87		\$1,769,880	
		705 Frontage Rd. Kenai	172	4	1949			\$1,363		\$1,047			04,207			\$2,410	#VALUE!		\$14.01		2,635,885	
School District	Connections (office) 1	143E. Park Ave, Soldotna	1289													\$0	#VALUE!		\$0.00		4,437,364	0.00%
		705 Frontage Rd. Kenai	65	12,328	1949											\$0	\$0.00		\$0.00		1,419,359	
	Marathon School (Correction	is)	10		88											\$0 \$0	#VALUE!		\$0.00		46,197 890,645	0.00%
	River City Academy Soldotna Montesson Charter		129 165	7%	60-62-68-75-87											\$0	#VALUE!		\$0.00		2,553,699	
Hospital		K 99669	100	139				\$1,859	1,685	\$2,534	9,673					\$4,393	\$3.15		Ç		2,000,000	0.000
Hospital	Binkley Medical Plaza A	K 99669		1950	0 1980			\$10,419	9,753	\$62,018	263,350					\$72,437	\$3.71					
Hospital		oldotna, AK 99669		145				\$820	634	\$4,722	18,917					\$5,542	\$3.82					
Hospital Hospital		K 99611		650				\$7,049	6,332	\$12,280	49,280					\$19,329	\$2.97					
Hospital	Central Peninsula Hospital Deede/Anderson Building A	Soldotna, AK 99669 K 99669		342530 791	1971 - 2020			\$476,640 \$8,436	560,183 7,609	\$1,337,248 \$6,884	8,629,779 24,480					\$1,813,888 \$15,320	\$5.30 \$1.94					
Hospital		oldotna AK 99669		2658				20,400	1,003	\$80,797	357,440					\$80,797	\$3.04					
Hospital	Kenai Health Center K	enai, AK 99811		1116	5			\$23,948	20,886	\$39,774	162,400					\$63,722	\$5.71					
Hospital		oldotna, AK 99669		223				\$2,176	2,007	\$4,867	14,533					\$7,043	\$3.16					
Hospital		54 N Binkley a: 99669		370 145	*			\$1,276	1,094	\$7,959	31,596					\$9,235	\$2.49					
Hospital Hospital	(ak 99669 oldotna, AK 99669		145 500				\$1,198 \$2,169	1,012 2,607	\$10,480	47,245					\$1,193 \$12,649	\$0.82 \$2.53					
Hospital		K 99669		1200				\$9,936	9,336	\$17,059	68,880					\$26,995	\$2.25					
Hospital	attached to a shop A	K 99669		134	4			\$1,199	1,015	\$5,376	20,123					\$6,575	\$4.89					
Hospital		K 99669		426				\$3,203	2,972	\$9,731	38,825					\$12,994	\$3.03					
Hospital		54 Tyee St		450				\$3,178	2,945	\$5,395	21,660					\$8,573	\$1.91					
Hospital Hospital	4-plex Cedar House	99603 99603		3100 2610	90 78					\$22,328 \$8,547	92,273 34,653	Oil	\$1,274	600		\$22,328 \$9,821	\$7.20 \$3.76					
Hospital	Homer Medical Center	AK 99603		10456	85.17			\$10.957	10.425	\$29,545	120,220	OII	21,214	000		\$40,502	\$3.87					
Hospital	South Peninsula Hospital	AK 99603		115677	75,85,99,06,09			\$227,285	218,826,074	\$752,711	3,428,320					\$979,996	\$8.47					
Total				2,447,267				2,028,748	219,466,569	6,029,737	13,433,647	0	607,557	600		\$8,666,042						



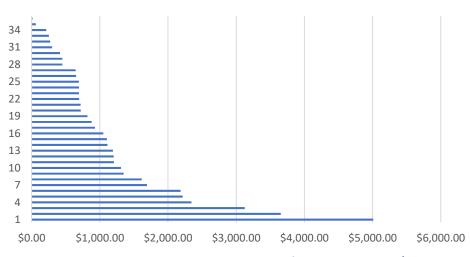
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53

Average Annual Cost/SF:

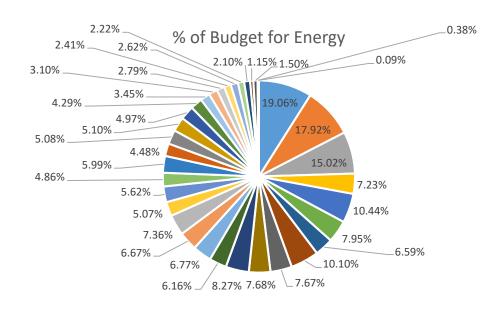
\$3.53

KPB Annual Utility Cost (excluding Borough Buildings) \$8,666,042

Energy Cost/student



Average Annual Energy Cost/Student: \$1,164



Possible Opportunities

Cost per square foot from database

Service Area	Building Name	students projected 2021-2022	Gross SF	Annual Gas Consumpti on Dollars	Annual Gas Consumption CCF	Annual electric Consumpti on Dollars	Annual electric Consumpti on KWH	Other Fuel type	Other Fuel Cost	Annual Fuel Consumption Dollars	Annual Cost/SF	Energy Cost/student	total budget 20-21	% of budget for energy
School District	Port Graham	35	12,568			\$26,004		propane	\$83,390	\$109,394	\$8.70	\$3,125.54	728,261	15.02%
South Peninsula Hospital	South Peninsula Hospital		115677	\$227,285	218,826,074	\$752,711	3,428,320			\$979,996	\$8.47			
School District	Razdolna Elementary	88	2,948			\$23,915				\$23,915	\$8.11	\$271.76	1,137,015	2.10%
South Peninsula Hospital	4-plex		3100			\$22,328	92,273			\$22,328	\$7.20			
School District	Nanwalek	75	14,832			\$27,081		propane	\$63,111	\$90,192	\$6.08	\$1,202.56	1,463,563	6.16%
Central Peninsula Hospital	Kenai Health Center		11165	\$23,948	20,886	\$39,774	162,400			\$63,722	\$5.71			
School District	Tebughna (Tyonek)	26	25,976			\$123,587		oil	\$6,676	\$130,263	\$5.01	\$5,010.12	683,552	19.06%
School District	Voznesenka	121	5,200	March Co.	San San	\$24,460		oil	\$1,433	\$25,893	\$4.98	\$213.99	\$1,726,610	1.50%
Central Peninsula Hospital	Vacant (Electric is attached to a shop		1344	\$1,199	1,015	\$5,376	20,123	-		\$6,575	\$4.89			

- School District Opportunities
 - Kenai Central High School building controls upgrade 39 year old control system
 - Nikiski Middle High Building controls 35 year old control system
 - Skyview Middle School Building controls upgrade 34 year old control system
- Opportunities Identified in Existing or Future Energy Audits or Efficiency Assessments



