



Franklin County



Hapo CENTER.

Boone Birdsell

Feb 5th 2020



AGENDA

1. Introductions

2. HAPO Center Next Steps:

- Choose a Partner that can help Co-Develop a Strategic Plan
- Understanding the HAPO Center's *Liabilities* (Funded or Unfunded)
- Understanding HAPO Center *Growth & Sustainability Needs*
- Understanding *Funding Strategies* available
- Understanding *New Energy Laws* (HB-1257) and Implications
- Understanding present conditions and questions from the utility data

3. Summary Discussions

- Estimates for Mechanical Replacement “Like for Like”
- Alternate discussions vs “Like for Like” replacement
- Understanding the ESPC Pathway moving forward

4. Q&A

Introductions to the McKinstry Team

- **Boone Birdsell-** McKinstry Sales Engineer
- **Doug Moyles-** McKinstry Project Development Director
- **Lance Funke-** Development Energy Engineer
- **Jeff Yirak-** Engineering Manager
- **Duane Hole-** Pasco Mechanical team



HAPO Center

Comprehensive Planning

2. Next Steps:

Understanding what are your:

- Current Facility Conditions and Needs?
- Unfunded/ Funded Liabilities?
- Current Strategies for Economic Growth ?
- Funding Strategies?
 - Private Funding
 - Public Funding
 - Grant Funding



Next Steps:

Understanding your Current Facility Condition (Liabilities).

Liability Matrix



Average Grade	Qty			
A	1	2%	90 % Plus	Percentage of Life Expectancy
B	2	3%	89~70 %	Percentage of Life Expectancy
C	9	16%	69~40 %	Percentage of Life Expectancy
D	17	29%	39 ~10 %	Percentage of Life Expectancy
F	29	50%	9% to PUL*	Percentage of Life Expectancy
Equipment Totals	58			

* PUL= Past Useful Life expectancy

EQUIPMENT

HAPO Center (Franklin County)

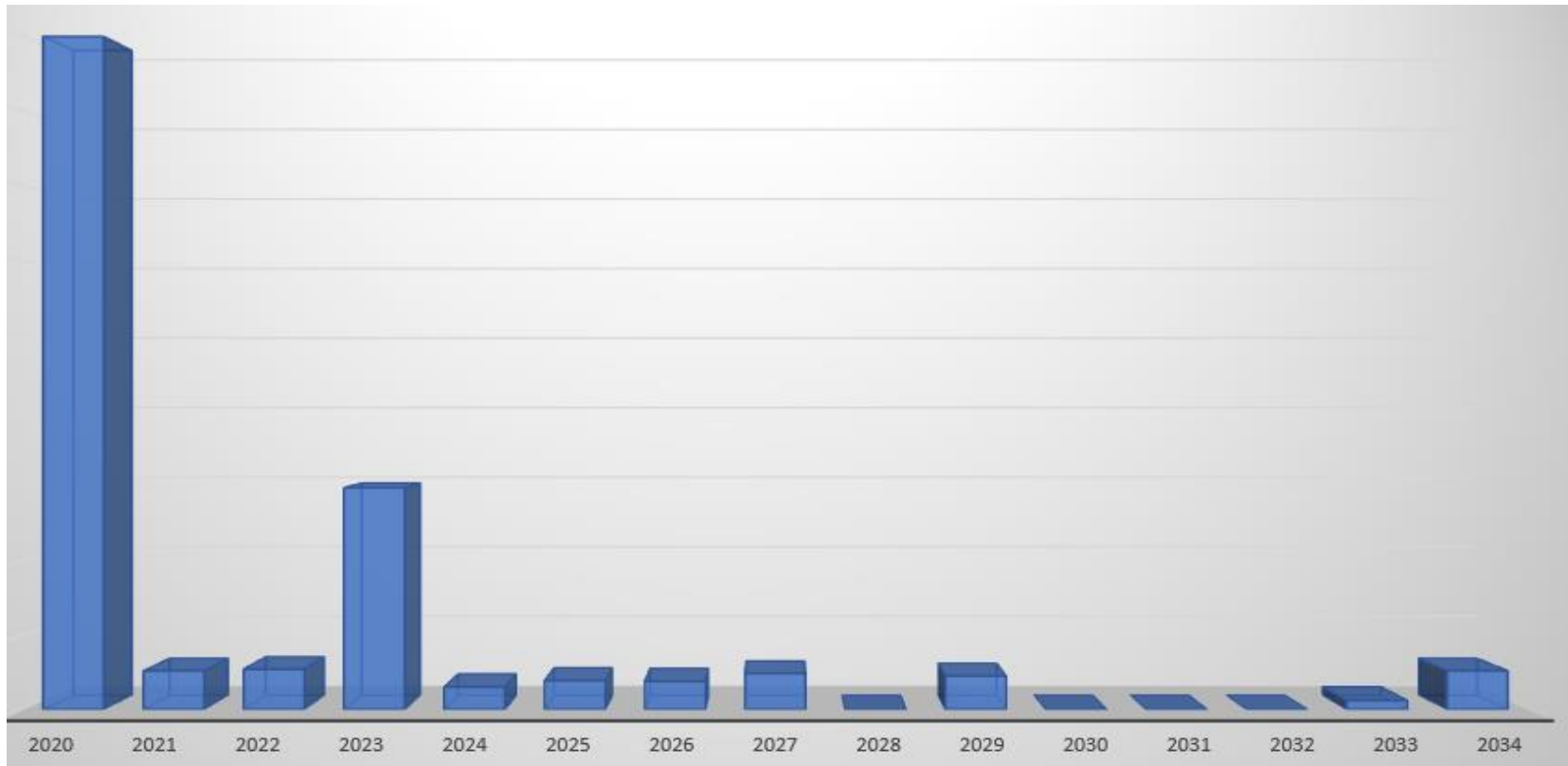
EQUIPMENT							HAPO Center (Franklin County)	
Existing Mechanical Systems								
	BUILDING	Life expectancy	Average Grade	Manufacturer	Model	Size Reference	Qty	
1	Exhibition Hall							
2	Packaed Unit (60 Ton)	24	F	Carrier	48EWW064	Tons	1	
3	Packaed Unit (60 Ton)	24	F	Carrier	48EWW064	Tons	1	
4	Packaed Unit (60 Ton)	24	F	Carrier	48EWW064	Tons	1	
5	Packaed Unit (60 Ton)	24	F	Carrier	48EWW064	Tons	1	
6	Sterling Ceiling mounted Heaters	25	D	Sterling	Various	BTU/ Hr	1	
7	Sterling Ceiling mounted Heaters	25	D	Sterling	Various	BTU/ Hr	1	
8	Water Heater (120 Gallons)	15	C	AO Smith	BTR 120 MOON000000110	Gallons	1	
9	Building Envelop issues.							
10	Lighting Various Flourescent							
11	Ice Rink							
12	Chiller for Ice Production (200 Tons)	20	F	Carrier	30GTN210-620HH	Tons	1	
13	Water Heater (120 Gallons)	15	C	AO Smith	BTR 120 MOON000000110	Gallons	1	
14	Water Heater (120 Gallons)	15	C	AO Smith	BTR 120 MOON000000110	Gallons	1	
15	Condensing Unit (7 Tons)	18	D	Carrier	38AKS008-601	Tons	1	
16	Furnace	24	C	Carrier	58PAV111	BTU/ Hr	3	
17	Generator 200KW	22	C	Olympian	Outside		1	
18	Pump 25 HP (Pump 1)	16	D	Baldor	Indoor	HP	1	
19	Pump 25 HP (Pump 2)	16	D	Baldor	Indoor	HP	1	
20	Hot Water Storage Tank (200 Gallons)	24	B	AO Smith	TJV 200A	Gallons	1	
21	Water Boiler 247,200 BYU Hr	24	B	AO Smith	HW 300 932	BTU/ Hr	1	
22	Modine Wall Heaters	20	C	Modine	Various	BTU/ Hr	2	
23	Lighting Various Flourescent							
24	Building Envelop issues.							
25								
26	Arena							
27	Sterling Ceiling mounted Heaters 300 mbtu	25	D	Sterling	Various	BTU/ Hr	9	
28	Sterling Ceiling mounted Heaters 300 mbtu	25	F	Sterling	Various	BTU/ Hr	9	
29	Lighting 4 Fixture T-8 Flourescent							
30	Would like Cooling Capability							
31	Building Envelop issues.							
32	FEMA Site Potential							
33	Multiple Exhaust Fans							
34	Atrium Area							
35	Split System	18	D	Sterling	KBBU-F060AA	Tons	1	
36	Split System	18	D	Sterling	QVES-100	Tons	1	
37	Split System	18	D	Sterling	QVES-225	Tons	1	
38	Split System Out Of Service	18	F	Sterling	QVES-225	Tons	1	
39	Boiler	18	A	Lochinvar	AWN200PM	BTU/ Hr	1	
40	Condensing Unit (5 Tons)	18	F	Sterling	HAMC-W060SA	Tons	1	
41	Condensing Unit (5 Tons)	18	F	Sterling	HAMC-W060SA	Tons	1	
42	Roof Top Unit Packaged (5 Tons)	22	F	Trane	YCD060C3H0BE	Tons	1	
43	Roof Top Unit Packaged (5 Tons)	22	F	Sterling	E1ART60A7B01C61H5NB1E2	Tons	1	
44	Roof Top Unit (14 Tons)	22	F	Trane	RAUCC3043L 13DBF9	Tons	1	
45	Roof Top Unit Packaged (5 Tons)	22	F	Sterling	E1ART60A7B01C61H5NB1E2	Tons	1	
46	Condensing Unit (5 Tons)	18	F	Sterling	HAMC-W060SA	Tons	1	
47	Water Heater (100 Gallons)	15	F	AO Smith	BTC 240A 920	Gallons	1	
48	Condensing Unit (8 Tons)	18	F	Sterling	HAHB-W180AB	Tons	1	
49	Condensing Unit (5 Tons)	18	F	Sterling	HAMC-W060SA	Tons	1	
50	Roof Top Unit Packaged (5 Tons)	22	F	Sterling	E1ART60A7B01C61H5NB1E2	Tons	1	
51	Roof Top Unit Packaged (5 Tons)	22	F	Sterling	E1ART60A7B01C61H5NB1E2	Tons	1	
52	Condensing Unit (24 Tons)	22	F	Carrier	38AKS028-600	Tons	1	
53	Condensing Unit (24 Tons)	22	F	Carrier	38AKS028-600	Tons	1	
54	Multiple Exhaust Fans							
55	Lighting Multi Flourescent							
56	Multiple Flushomatic Toilets & Urinals							
57	Multiple Bathroom Sinks							
58	Building Envelop issues.							
59								

During the **Preliminary Audit**, Mckinstry walked the HAPO Center facility and recorded equipment information and condition and gave each piece of equipment a Grade.

The **Liability Matrix** is an important tool that not only gives the HAPO Center a snapshot of the present condition of the facilities equipment but also becomes a great tool in identifying potential **Unfunded Liabilities** that the HAPO Center has incurred.

Next Steps:

Understanding your Current Facility Condition (Liabilities).



15-year Capital Improvement Plan
for the mechanical equipment audited

Next Steps: HAPO Center *growth needs with energy efficiency & sustainability goals*

Questions to consider:

- **Growth Projections for the Center**
 - Growth of services required?
 - Does it still make sense to run the Ice Rink?
 - Do you want to add *Air Conditioning* to the arena?
 - Is there interest in developing a FEMA plan for Emergency Management ?
- **Energy Efficiency and Sustainability**
 - Is the HAPO Center ready for the impact of HB-1257?
 - Does it make sense to add Solar to the property?
 - Is there interest in an energy efficiency strategy for the HAPO Center?

Next Steps: Developing Funding Strategies

Funding Sources

- **Private Funding Sources**
 - ESPC financing sources (Nationwide)
 - Local and regional banks
- **390-FC Public Facilities Construction Fund**
 - Distressed Capital Fund (.09% fund)
- **Grant Funding**
 - Dept of Commerce
 - Energy and Solar grants recently rolled out
 - Homeland Security Grant Program (HSGP)
 - Emergency Management Performance Grant (EMPG)
 - Washington State Military Department
 - Security Grant program(Hardening public facilities)
 - Preparedness Grant Program



Next Steps: Understanding the new energy efficiency laws

Considerations during the IGA development:

- **HB-1257** (Signed into law in May 2019)
 - By Nov 1, 2020 energy efficiency requirements identified
 - EUI (TBD) per ASHRAE 100-2018
 - By Jun 1, 2026 facilities **220,000+** sq. ft. to comply or pay penalties.
 - By Jun 1, 2027 facilities **90,000+** sq. ft. to comply or pay penalties.
 - By Jun 1, 2028 facilities **50,000+** sq. ft. to comply or pay penalties.
 - Penalties up to \$5,000 plus \$1 / sq. ft. of floor area not complying
 - Early Adopter Funding & Grants to be available prior to deadlines.
- **SB-5116** (Signed into law in May 2019)
 - Known as the Clean Energy Transformation Act or **CETA**
 - By Jan 1, 2022 Utilities must develop a clean energy implementation plan.

Next Steps: Understanding Present Conditions

Comments & additional Investigation for the IGA:

- Franklin PUD *meter 52572* that serves the 6-Acre Lot Pedestrian Lights has 0 kWh over 3 years, but the center paid ~\$1,500 in basic charges over that period (~\$43 a month).

FRANKLIN COUNTY
C/O TRAC
6600 BURDEN BLVD
PASCO WA 99301-9040

4 256

Submitted to be Paid - 405
Initial: *SG* Date: *3/21/19*
4706 *V000672*

Service Address: 6600 BURDEN BLVD/6ALOT PEDST, PASCO, WA

Account Type	Meter Number	Services		Days	Readings		Code	Meter Multiplier	kWh Usage
		From	To		Previous	Present			
GEN-S201	52572	01/24/19	02/21/19	28	3,125	3,125	MR	1	0

Current Service Detail

Previous Balance	43.35
Payment	43.35 CR
Balance Forward	\$0.00
System Charge	39.56
Pasco Utility Tax	3.36
Total Current Charges Due 03/27/2019	\$42.92
Total Amount Due	\$42.92

PERIOD ENDING

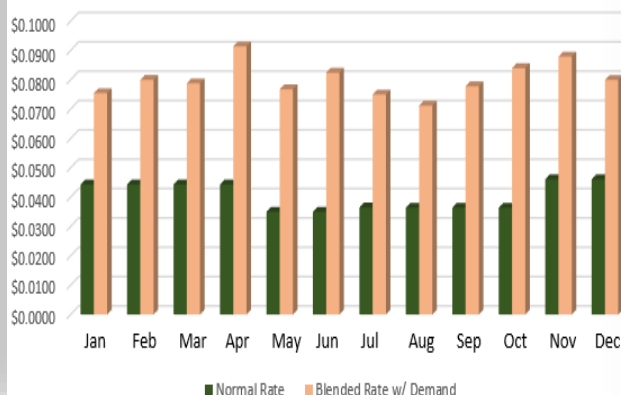
	FEB 2018	FEB 2019
Avg Daily Temp	37	23
Avg Daily kWh	0	0
Avg Daily Cost	\$0.00	\$0.00

Next Steps: Understanding Present Conditions

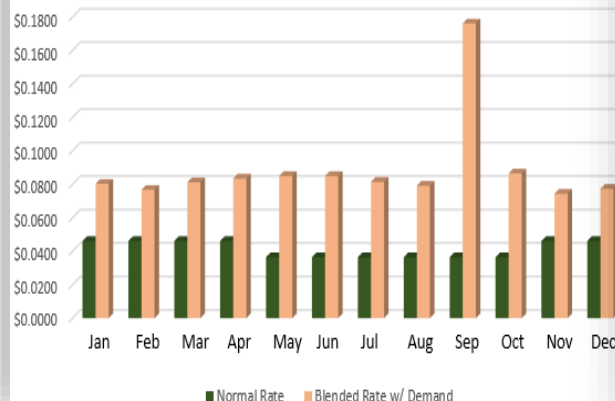
Comments & additional Investigation for the IGA:

- Historically the Electric Demand charges accounts for half if not more of the Electric bill.

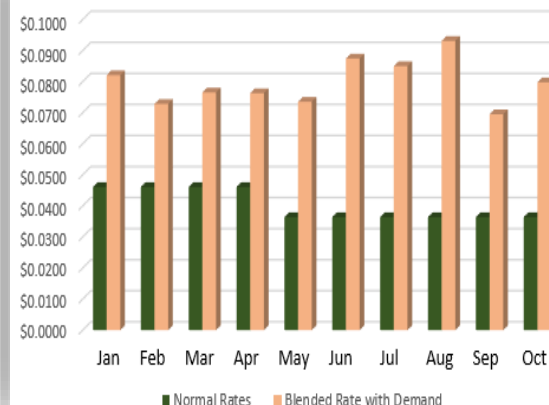
Blended Rate Cost Comparison 2017



Blended Rate Cost Comparison 2018



Blended Rate Cost Comparison 2019



In Sep 2018, the HAPO Center paid \$0.036 Per kWh for electricity.

Demand charges of \$8.26 per kW where charged leaving the blended rate of \$0.18 per kWh. (500% Increase in the kWh rate)

This means that with the 19,600 kWh used the normal cost was \$713.44.

The demand charges were \$2,415.22 leaving a total of : \$3,450.89 in Electrical charges for the Ice Pavilion in Sep 2018.

Next Steps: Understanding Present Conditions

Comments & additional Investigation for the IGA:

- The Ice Rink cost per sq. ft. is \$2.13 to operate per year.

\$/ Sq Ft Range Washington Rates	Benchmark Category (Single Sheet Ice Arena)
\$0.73	High Performance Facility
\$0.98	Satisfactory
\$1.48	Fair
\$1.73	Investigation required
\$1.98	Immediate Corrective action required

What are the future projections for the Ice Rink usage?



Summary Discussions

Alternate Discussions vs Like for Like



- **Present equipment locations.**
 - Damaged potential to equipment due to snow melt on roof

Summary Discussions

Alternate Discussions vs Like for Like



60 Ton Units on the Expo Center



Damage to refrigerant lines over Atrium



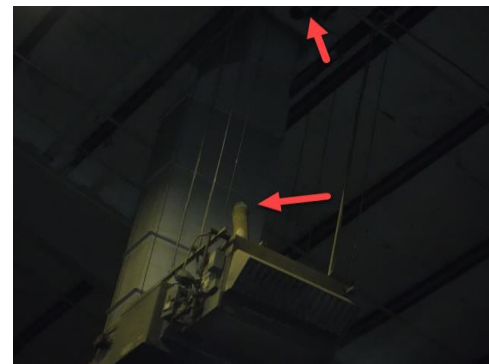
Damaged Condensing Unit over Atrium



Exhaust fan over Atrium



Insulation and drainage damage over Atrium



Damaged Gas Heater exhaust piping in Arena

3. Summary Discussions: *Determine Path* moving forward Using ESPC

Replace: *Like for Like* ?

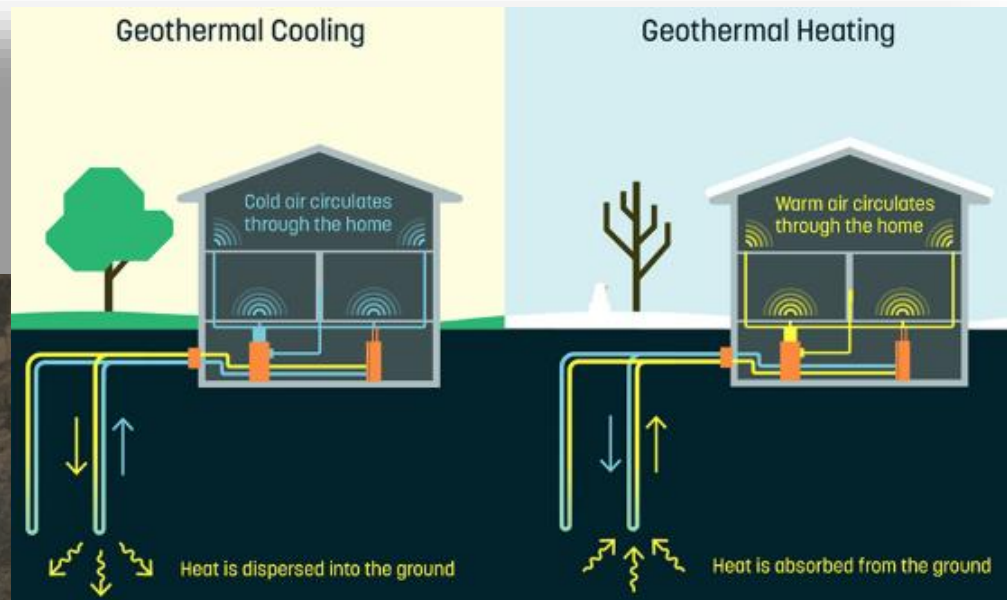
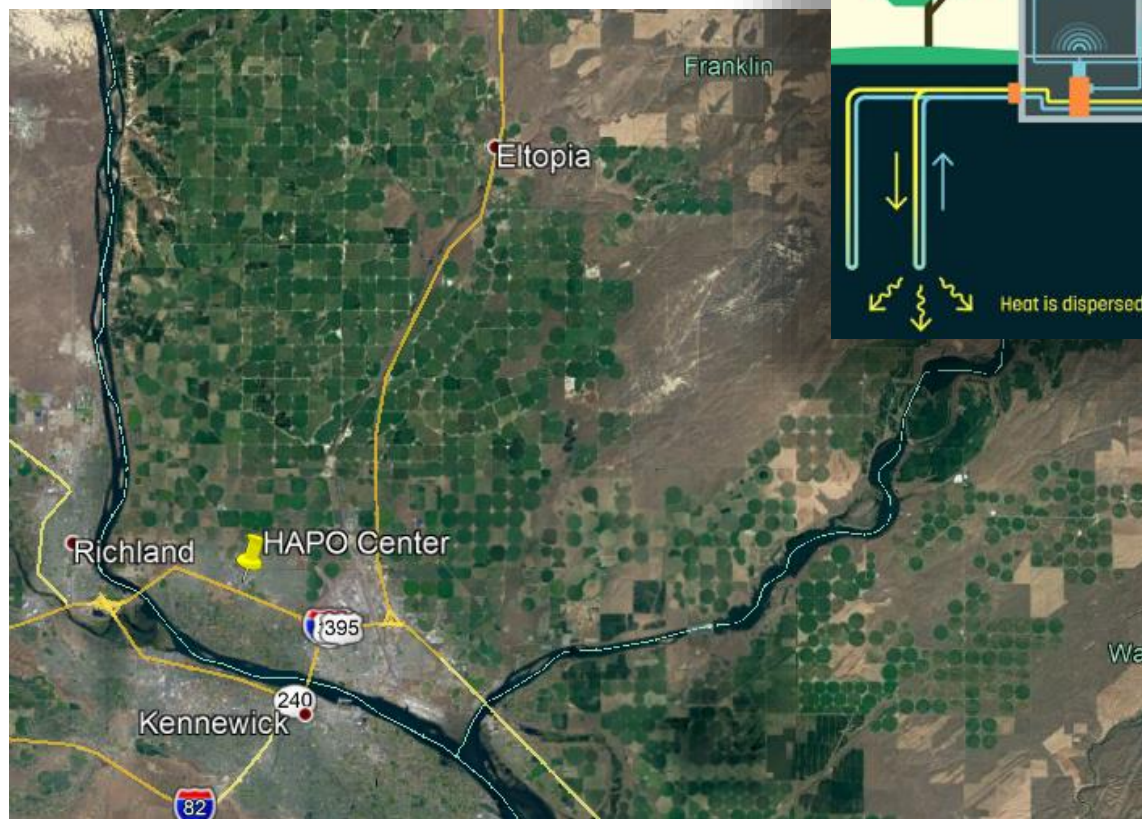
Mechanical Replacements

- **Estimated Cost to replace the mechanical equipment : \$ 3.6 M**
 - Chiller
 - HVAC (Packaged, RTU, Split systems and Air Handlers)
 - Gas Heaters
 - Boilers and Hot Water Heaters
- **Additional equipment & Options: \$.5 M ~ \$5M+**
 - Building Controls
 - Lighting
 - Building Envelop Upgrades (Insulation and Sealing)
 - Water efficiency upgrades (Toilets, Sinks, etc.)

Summary Discussions-

Alternate Discussions vs Like for Like

Geothermal Heat pump system

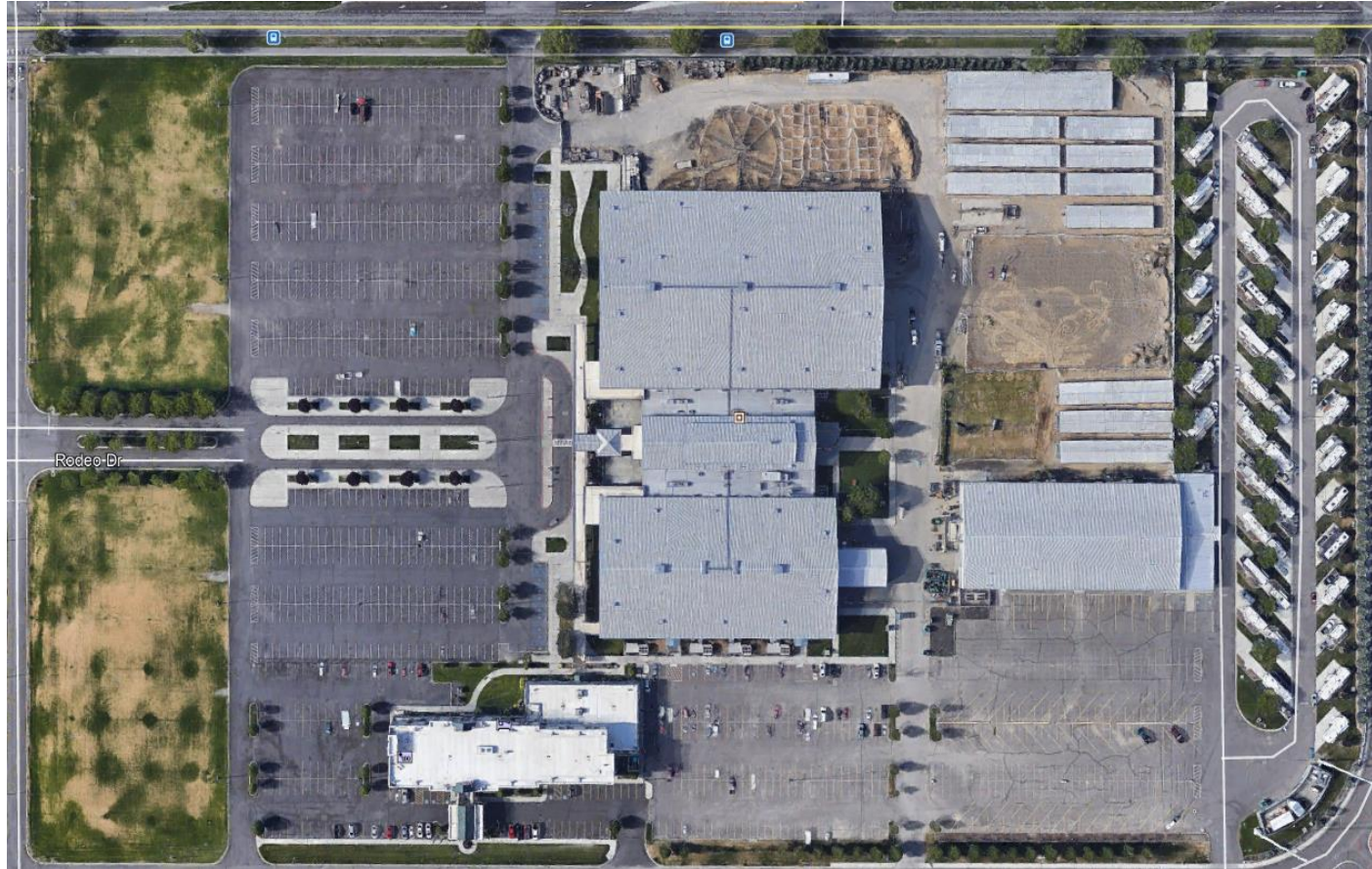


Summary Discussions-

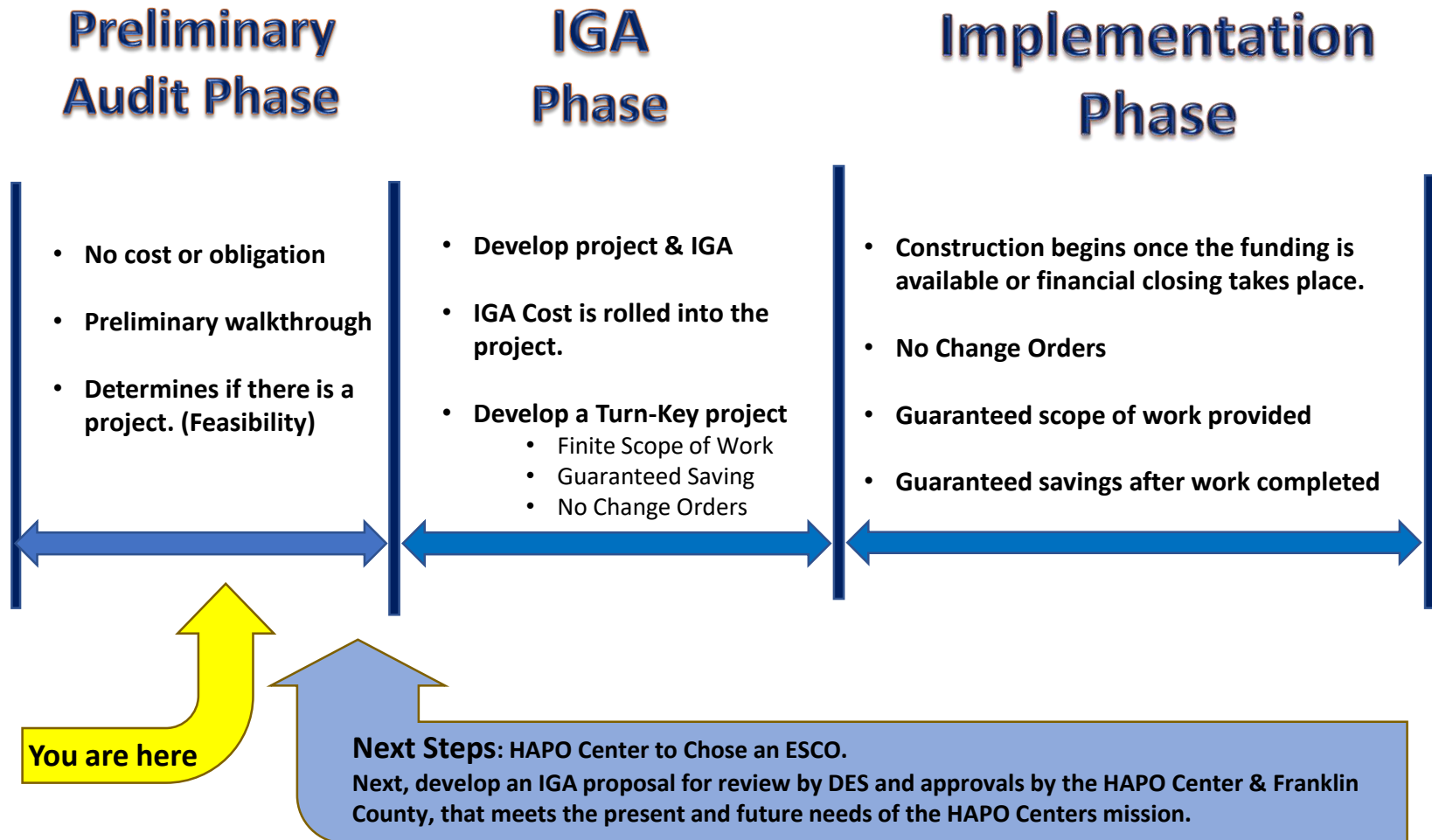
Alternate Discussions vs Like for Like

Potential for :

- Geothermal Heat Pump System
- Solar
- Expanded cooling capacity for the arena
- Centralized HVAC Mechanical room
- Energy Efficiency updates to include building envelop & building controls upgrades
- More efficient lighting system
- Water savings measures.



Summary: Understanding the ESPC Pathway



Questions & Answers



Thank You!

Boone Birdsell



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