The Facilities Master Plan Process

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ICCCFO FALL CONFERENCE

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listen • engage • advise • deliver

The Facilities Master Plan

- ICCB Requires a Master Plan every five years

What it is….

- An overall comprehensive plan to align Facilities with the Vision and Goals of the organization
- A prioritized approach to Capital Improvements and Resource Allocation addressing current and future needs
- A long-range plan that maps the direction for your facilities

What it shouldn't be….

- A collection of unrelated projects responsive to the squeakiest wheels in town

Setting Up for Success

Leadership

Master Plan Process

Communication

Implementation

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Leadership- Setting the tone

"He creates a great vibe. I think everyone sees that every day.''
-General Manager Jed Hoyer, quoted in the Chicago Sun Times

"If you meet the Buddha in the lane, feed him the ball"
– Phil Jackson, *Sacred Hoops*

Leadership- Playing the tune

Have the right team in place

Work toward a common goal

Give clear direction

Cue people to come in on time

Maintain control

Master Plan- The Process

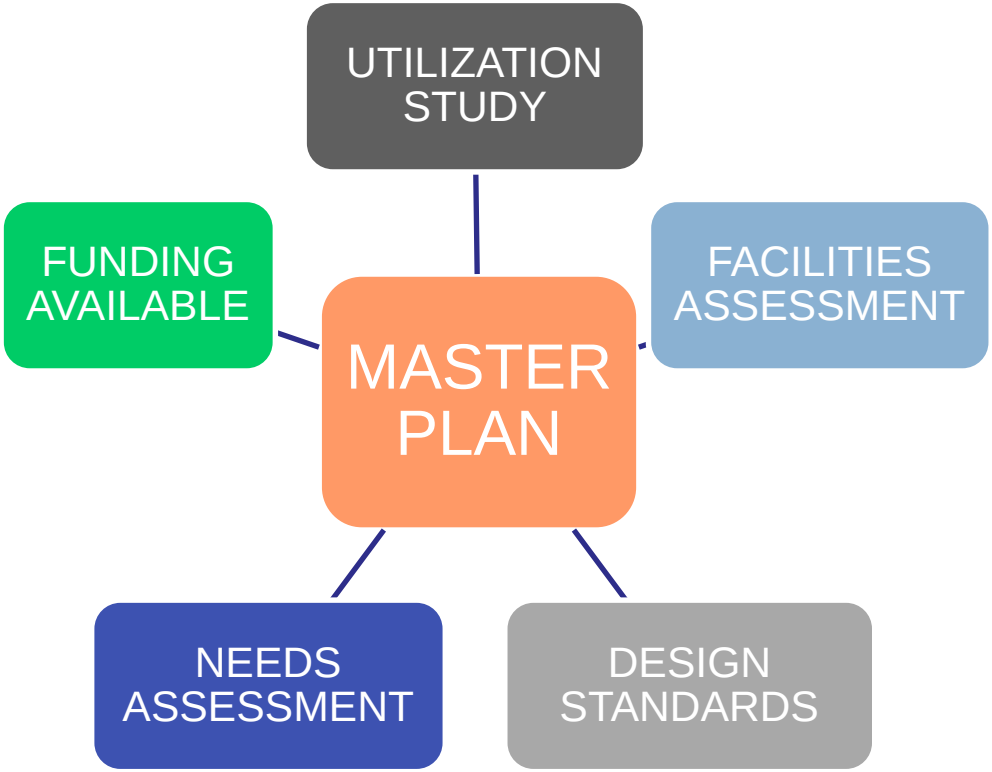
Master Plan- The Process

You are about to start working on your first Master Plan. What should you do?

- Call someone who has done it before
- Take your Director of Facilities out for lunch
- Visit peer institutions
- Panic

Master Plan- The Process

Multiple inputs in developing the Master Plan



Process- Facilities Assessment

Review existing conditions

- Inspections from roofs to boilers
- Energy Audits
- Evaluate Deferred Maintenance
- Prioritize infrastructure requirements

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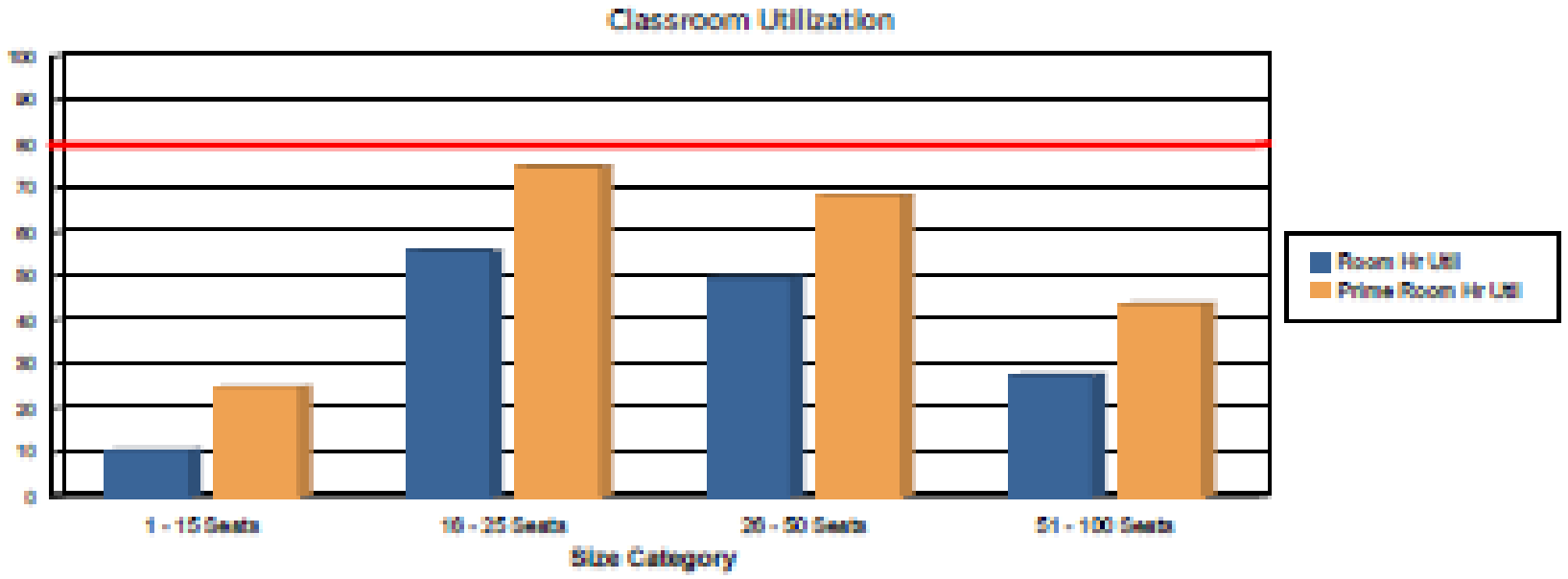
Process- Utilization Study

An objective analysis of how existing facilities are being used



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Process- Utilization Study

Data examples

T-Building Space Utilization Summary
Mon- Thur 8AM-10PM; Fri 8AM-2PM

10/24/2014

Room Number	Room Name	Room Capacity	Average Enrollment	Total Hours Available	Hours Used	Total Seat Hours Available	Total Seat Hours Used	Time Utilization (%)	Seat Utilization (%)
TEC T002	RAC Lab #1	30	0	1,105	0	33,150	0	0%	0%
TEC T003	RAC Lab #2	30	0	1,105	0	33,150	0	0%	0%
TEC T005A	RAC Lab #3A	30	0	1,105	0	33,150	0	0%	0%
TEC T005B	RAC Lab #3B	30	0	1,105	0	33,150	0	0%	0%
TEC T008	Smart Room	32	13	1,105	483	35,360	5,615	44%	16%
TEC T009	Smart Room	28	11	1,105	751	30,940	7,946	68%	26%
TEC T012	RAC Computer Lab	24	16	1,105	300	26,520	4,729	27%	18%
TEC T016	Automotive Technology	30	9	1,105	296	33,150	2,522	27%	8%
TEC T017	Engine Technology Lab	30	15	1,105	500	33,150	7,316	45%	22%
TEC T019	Transmission Technology Lab	30	13	1,105	323	33,150	4,029	29%	12%
TEC T020	Automotive Classroom	19	16	1,105	760	20,995	12,143	69%	58%
TEC T022	Automotive Classroom	21	13	1,105	624	23,205	8,455	56%	36%
TEC T114	Computer Lab (Spec.)	24	16	1,105	633	26,520	10,805	57%	41%
TEC T115	ARC Specialty Lab	24	17	1,105	169	26,520	3,274	15%	12%
TEC T117	Smart Room	24	11	1,105	790	26,520	9,471	71%	36%
TEC T118	ARM Lab	10	9	1,105	366	11,050	3,448	33%	31%
TEC T120	Manufacture & Design Lab	24	18	1,105	115	26,520	2,038	10%	8%
TEC T122	AC CNC Lab/Smart Room	12	8	1,105	143	13,260	1,041	13%	8%
TEC T124	Computer Lab (Spec.)	24	12	1,105	370	26,520	3,367	33%	13%
TEC T127	Computer Lab (Spec.)	24	15	1,105	337	26,520	5,248	30%	20%
TEC T128	Computer Lab (Spec.)	24	15	1,105	249	26,520	3,809	23%	14%
TEC T130	Smart Room	24	15	1,105	643	26,520	10,860	58%	41%
TEC T131	Smart Room	28	17	1,105	540	30,940	7,967	49%	26%
TEC T215	Keyboarding Lab	24	16	1,105	552	26,520	7,015	50%	26%
TEC T216	Computer Lab	24	18	1,105	629	26,520	10,398	57%	39%
TEC T217	Computer Lab	24	17	1,105	612	26,520	9,117	55%	34%
TEC T220	MAC Lab (Spec.)	24	10	1,105	248	26,520	2,432	22%	9%
TEC T223	EET Lab	26	13	1,105	159	28,730	1,684	14%	6%
TEC T224	CISCO Computer Lab	24	15	1,105	526	26,520	9,776	48%	37%
TEC T225	Motors & Controls Lab	20	14	1,105	152	22,100	1,900	14%	9%
TEC T226	Computer Lab (Spec.)	24	22	1,105	612	26,520	13,464	55%	51%
TEC T227	PC Technology Lab	24	17	1,105	136	26,520	2,244	12%	8%
TEC T231	Smart Room	35	16	1,105	649	38,675	9,414	59%	24%
TEC T232	Smart Room	39	23	1,105	670	43,095	16,012	61%	37%
TEC T234	Smart Room	40	22	1,105	705	44,200	17,719	64%	40%
TEC T236	Computer Lab	24	19	1,105	373	26,520	5,510	34%	21%
TEC T237	Smart Room	36	18	1,105	698	39,780	13,492	63%	34%
TEC T238	CISCO CCNP Computer Lab	24	17	1,105	71	26,520	1,212	6%	5%
TEC T239	Computer Lab	24	16	1,105	383	26,520	5,355	35%	20%
TEC T240	EET Lab	20	17	1,105	315	22,100	5,362	28%	24%
TEC T241	Computer Lab	24	16	1,105	465	26,520	8,068	42%	30%
TEC T308	Computer Lab	8	4	1,105	378	8,840	543	34%	6%
TEC T323	Computer Lab	32	11	1,105	349	35,360	3,265	32%	9%
TEC T326	Conference Room	25	17	1,105	374	27,625	5,748	34%	21%
TEC T327	Conference Room	25	17	1,105	370	27,625	5,748	34%	21%
TEC T328	Conference Room	25	17	1,105	370	27,625	5,748	34%	21%
TEC T331	Driver Safety Smart Room (Spec.)	48	26	1,105	230	53,040	3,738	21%	7%
TEC T332	Defense tactics/Multi Purpose	60	21	1,105	500	66,300	9,117	45%	14%
TEC T333	Smart Room	36	15	1,105	417	39,780	6,442	38%	16%

Academic Space Available
Grayslake Campus

10/24/2014

OPEN ACADEMIC SPACES (X indicates open times, no classes or events scheduled)
HOURLY BREAKDOWN - FALL 2014, Monday- Friday 8AM-2PM

SPACE NAME	FORMAL NAME	MAX. CAP.	8:00 A.M. - 9:00 A.M. M	T	W	R	F	9:00 A.M. - 10:00 A.M. M	T	W	R	F	10:00 A.M. - 11:00 A.M. M	T	W	R	F	11:00 A.M. - 12:00 P.M. M	T	W	R	F	12:00 P.M. - 1:00 P.M. M	T	W	R	F	1:00 P.M. - 2:00 P.M. M	T	W	R	F
A111	Smart Room	32															X					X					X				
A112	Smart Room	32																									X					X
A121	Smart Room	28																														
A122	Computer Lab/Smart Room	32					X					X					X					X					X		X			X
A123	Smart Room	32					X					X																				X
A124	Smart Room	30		X																												
A124A	Smart Room	24		X		X	X					X																				
A125	Smart Room	20				X	X					X					X					X										
A126	Smart Room	21					X					X					X					X	X				X					
A131	Smart Room	24					X																				X					X
A132	Smart Room	24					X					X					X					X					X					X
A145	Smart Room	30		X		X																					X					
A146	Computer Lab	24						X															X									X
A148	Smart Room	40		X		X	X					X															X					X
A156	Smart Room	24					X																				X					X
A157	Smart Room	35					X																									
A158	Smart Room	25																														X
A159	Computer Lab	24	X			X	X	X																			X	X			X	X
A162	Lecture Hall/Smart Room	180	X	X	X	X	X		X		X											X					X	X		X		X
A217	Smart Room	39		X		X	X					X					X					X					X					X
A218	Smart Room	35			X		X				X																X					
A220	Open Computer Lab	35	X	X	X	X		X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
A221	Physics Lab/Smart Room	28	X		X	X	X						X	X	X	X	X						X	X	X		X		X		X	
A223	Physics Lab/Smart Room	28		X		X			X		X		X		X	X	X				X		X	X	X	X	X					
A224	Smart Room	32					X																				X					X
A225	Geology Lab/Smart Room	32		X		X	X		X		X	X	X	X		X	X	X	X		X	X		X	X	X	X		X	X	X	X
A245	Smart Room						X																				X					X
A246	Smart Room	33													X																	X
A248	Smart Room	35																		X							X					X
A249	Smart Room	35					X													X							X					X
A256	Smart Room	35					X					X									X		X				X					X
A257	Smart Room	38		X		X	X					X					X					X					X					X
A258	Smart Room	35	X		X		X																				X					X
A259	Smart Room	37	X		X		X										X					X					X					X
404	Smart Room	25	X	X	X	X	X					X					X					X					X	X	X	X	X	X
408	Smart Room	30	X	X	X	X	X																				X	X	X	X	X	X
409	Smart Room	30	X	X	X	X	X					X					X					X					X	X	X	X	X	X
423	Open Computer Lab	24				X	X										X											X	X			
424	Smart Room	38	X	X	X	X	X					X					X										X	X	X	X	X	X
703	Fitness Center	50						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
706	Aerobics Room	50						X	X	X		X	X	X	X	X	X															
B002	Prairie Kitchen	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B003A	Lancer's Kitchen	15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B117	Language Lab	35				X	X				X	X					X															
B118	Smart Room	48	X	X	X	X	X	X		X																						
B122	Smart Room	27				X			X		X						X															
B123	Smart Room	29		X		X			X																							X
B128	Smart Room	32		X		X																										
B129	Smart Room	26		X		X	X		X																							
B142	Smart Room	28					X																									
B153	Smart Room	34		X		X																										X

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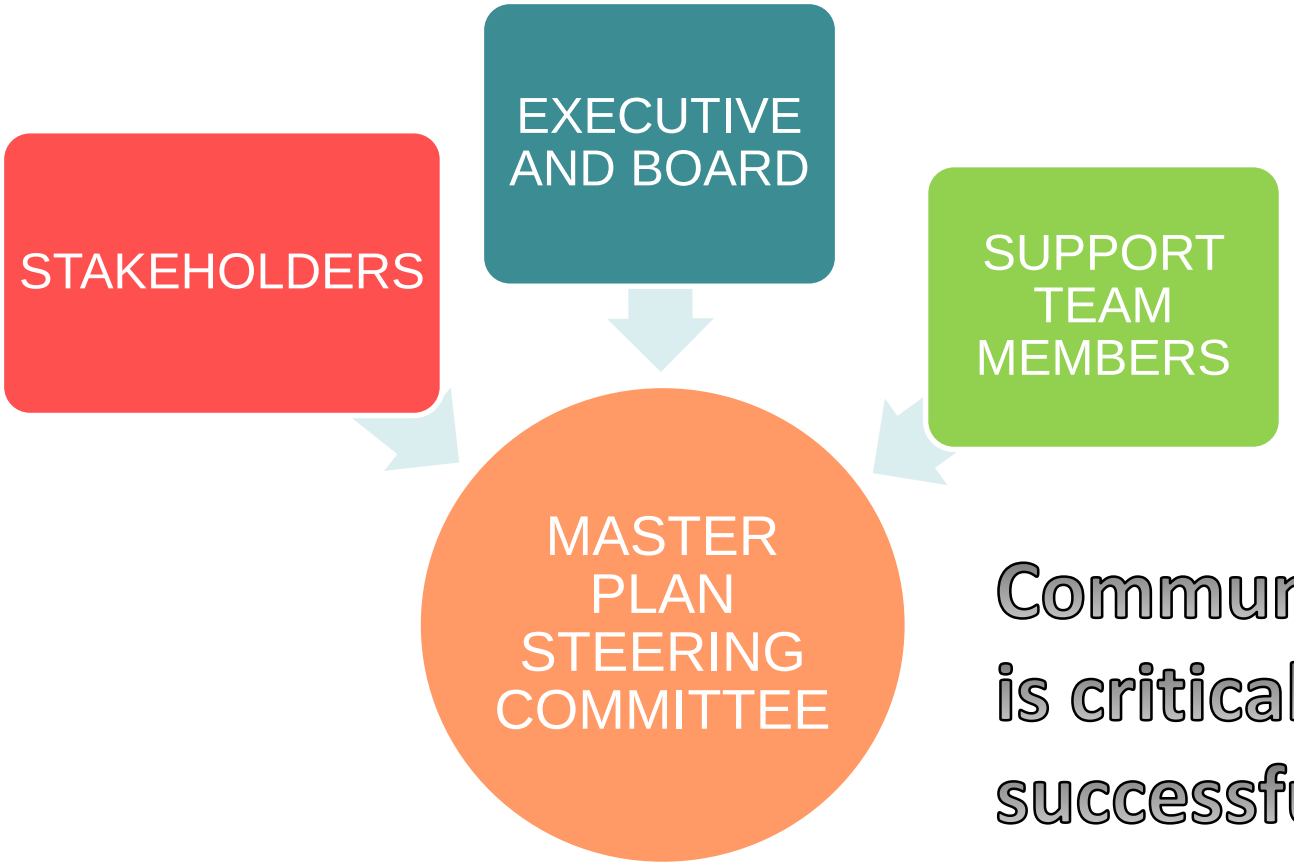
The Process- Gather the Team

- The Project Sponsor is in the **Leadership** role
- Executive Level including Board Members
- Stakeholders are those directly affected by Master Plan
- Support includes Staff and Consultants involved with the development and implementation of the Master Plan

The Process- Gather the Team



Communication is critical to a successful process

Communication- the Plan

- Establish a plan
  - Website
  - Social Media
  - Surveys
  - Focus Groups
- Solicit input at every step
- Build consensus
- Assemble Committees and have (lots of) meetings

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Communication- clarity

Manage Expectations

- Be clear about mission
- Be clear about limitations on schedule and resources available
- Many people think “Managing Expectations” means….

Telling someone else “no”.

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Communication- problems

What irritates your stakeholders?

- Not asking for input
- Asking for input and dismissing it
- Asking your stakeholders for input….

but they don’t get what they want.

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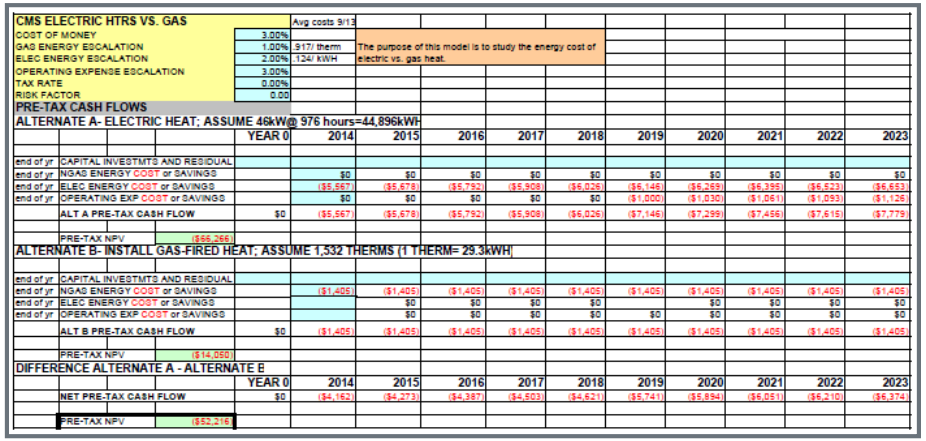
Process- Establishing Priorities

Fully- Informed Decisions

- Data-driven decisions
- What is the TOTAL Project Budget?
- Life-cycle Costs
- LEED- Does it mean a better building?



CMS ELECTRIC HTRS VS. GAS			Avg costs 9/13									
COST OF MONEY	3.00%											
GAS ENERGY ESCALATION	1.00%	.917/ therm	The purpose of this model is to study the energy cost of									
ELEC ENERGY ESCALATION	2.00%	.124/ KWH	electric vs. gas heat.									
OPERATING EXPENSE ESCALATION	3.00%											
TAX RATE	0.00%											
RISK FACTOR	0.00											
PRE-TAX CASH FLOWS												
ALTERNATE A- ELECTRIC HEAT; ASSUME 46kW@ 976 hours=44,896kWH												
		YEAR 0	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
end of yr	CAPITAL INVESTMTS AND RESIDUAL											
end of yr	NGAS ENERGY COST or SAVINGS		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
end of yr	ELEC ENERGY COST or SAVINGS		($5,667)	($5,678)	($5,792)	($5,908)	($6,026)	($6,146)	($6,269)	($6,395)	($6,523)	($6,653)
end of yr	OPERATING EXP COST or SAVINGS		$0	$0	$0	$0	$0	($1,000)	($1,030)	($1,061)	($1,093)	($1,126)
	ALT A PRE-TAX CASH FLOW	$0	($5,667)	($5,678)	($5,792)	($5,908)	($6,026)	($7,146)	($7,299)	($7,456)	($7,615)	($7,779)
	PRE-TAX NPV ($56,266)											
ALTERNATE B- INSTALL GAS-FIRED HEAT; ASSUME 1,532 THERMS (1 THERM= 29.3kWH												
end of yr	CAPITAL INVESTMTS AND RESIDUAL											
end of yr	NGAS ENERGY COST or SAVINGS		($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)
end of yr	ELEC ENERGY COST or SAVINGS			$0	$0	$0	$0		$0	$0	$0	$0
end of yr	OPERATING EXP COST or SAVINGS			$0	$0	$0	$0	$0	$0	$0	$0	$0
	ALT B PRE-TAX CASH FLOW	$0	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)	($1,405)
	PRE-TAX NPV ($14,050)											
DIFFERENCE ALTERNATE A - ALTERNATE B												
		YEAR 0	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	NET PRE-TAX CASH FLOW	$0	($4,162)	($4,273)	($4,387)	($4,503)	($4,621)	($5,741)	($5,894)	($6,051)	($6,210)	($6,374)
	PRE-TAX NPV ($52,216)											

Discounted Cash Flow Analysis

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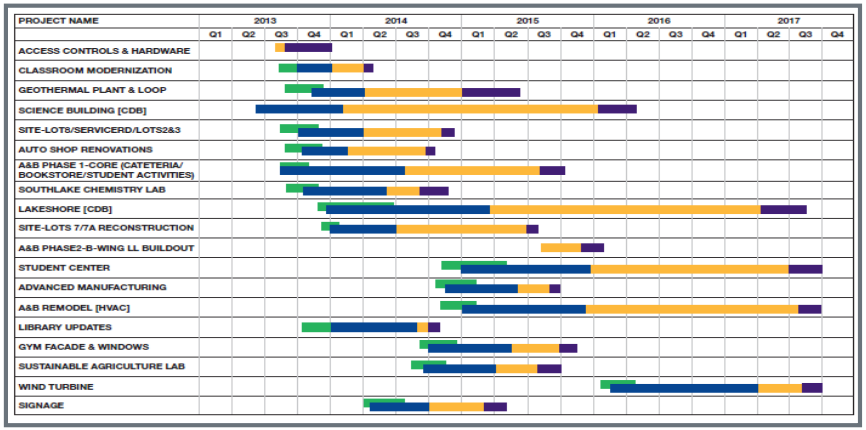
Process- Establishing Priorities

Identification of Priorities and Program

- Focus on Key Areas
- Confirm Resources available
- Establish Preliminary Schedule



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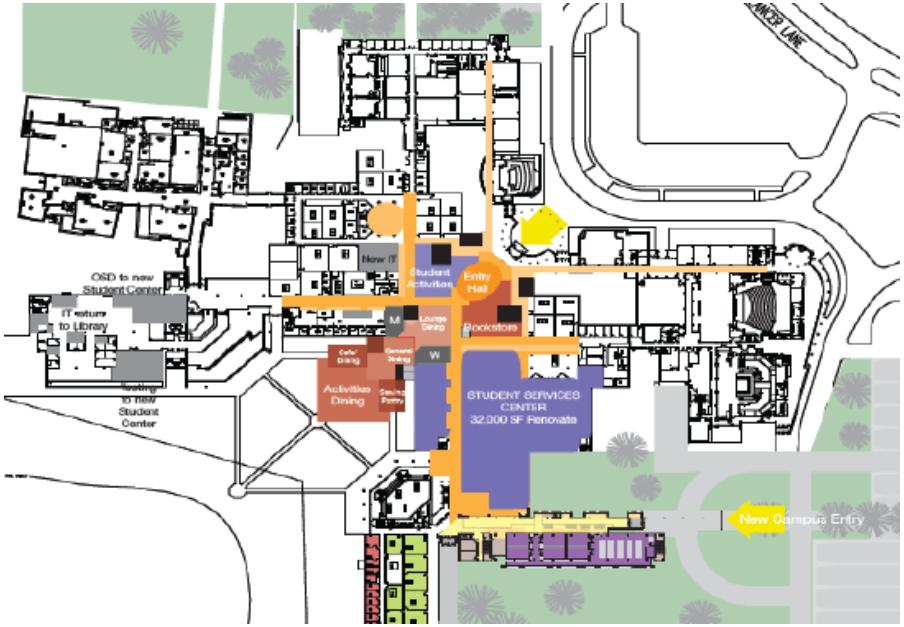
Process- Review and Approval

Master Plan includes

- Identified projects
- Budget and Funding Sources
- Implementation Schedule
- Presentation, review and approval process



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Implementation

Ready for Construction?

- Evaluate Contracting Methods
  - Construction Manager (Agency or Risk)
  - General Contractor
- Identify associated contracts for each project
- Confirm Scope, Schedule and Budget for each project

Implementation- Budget

Budget Tracking and Reporting

- Budgets, Commitments, Billing in one system
- Transparency

GLC-03 A&B Wing Additions and — Project Manager McCarty — Phase Design

Cost Category	A Original Budget	B Budget Revisions	C = A + B Current Budget	D Initial Contracts	E Approved Change Ords	F = D + E Revised Contracts	G Anticipated Costs	H = F + G Total Project Costs	I = C - H Budget Not Committed	J Work Invoiced	K = F - J Contract Balance
100 Hard Costs	$ 43,386,468	$ 0	$ 43,386,468	$ 0	$ 0	$ 0	$ 0	$ 0	$ 43,386,468	$ 0	$ 0
200 Professional	5,557,551	0	5,557,551	2,387,118	0	2,387,118	0	2,387,118	3,170,433	359,257	2,027,861
300 Utilities Fees	0	0	0	0	0	0	0	0	0	0	0
400 Owner's General Req	535,250	0	535,250	0	0	0	0	0	535,250	0	0
500 FF&E	3,515,500	0	3,515,500	0	0	0	0	0	3,515,500	0	0
600 N/A	0	0	0	0	0	0	0	0	0	0	0
700 N/A	0	0	0	0	0	0	0	0	0	0	0
800 N/A	0	0	0	0	0	0	0	0	0	0	0
900 Contingency	2,169,323	0	2,169,323								
ALL ALL Totals	$ 55,164,092	$ 0	$ 55,164,092	$ 2,387,118	$ 0	$ 2,387,118	$ 0	$ 2,387,118	$ 52,776,974	$ 359,257	$ 2,027,861

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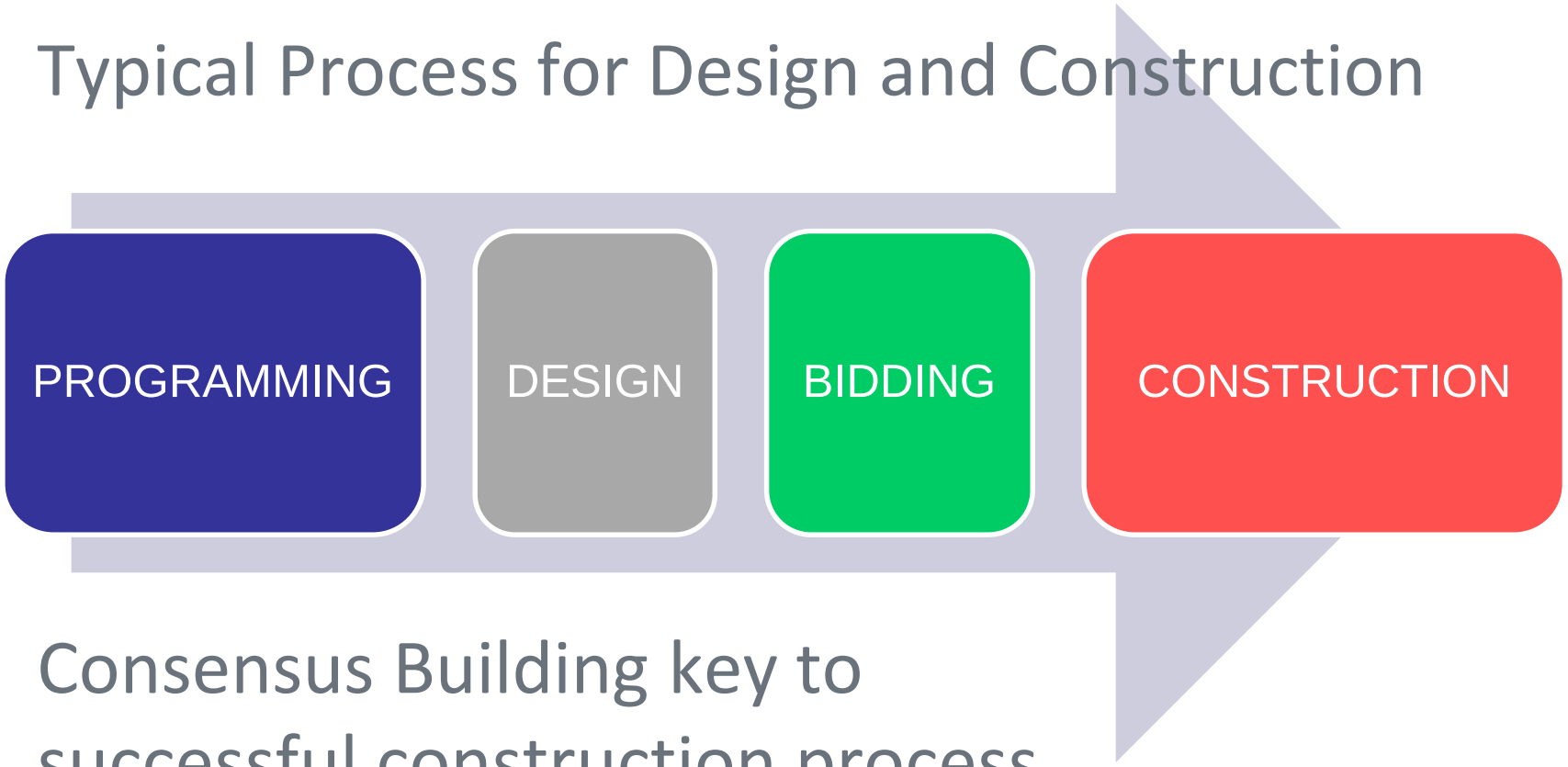
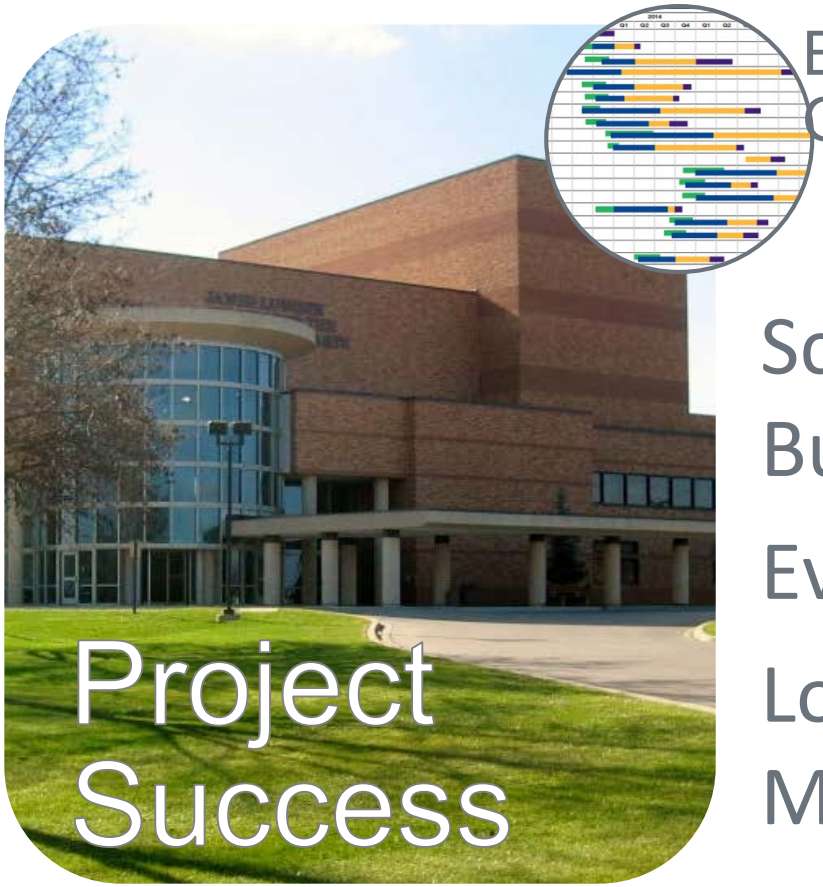
Implementation- Construction

Typical Process for Design and Construction



Consensus Building key to successful construction process

Implementation- Closeout



Every Project has
Closeout Requirements

Scope, Schedule and Budget Reconciliation

Evaluation of Process

Look-Ahead to the next Master Plan