Strategically & Effectively Managing Public Dollars on Capital Improvement Projects

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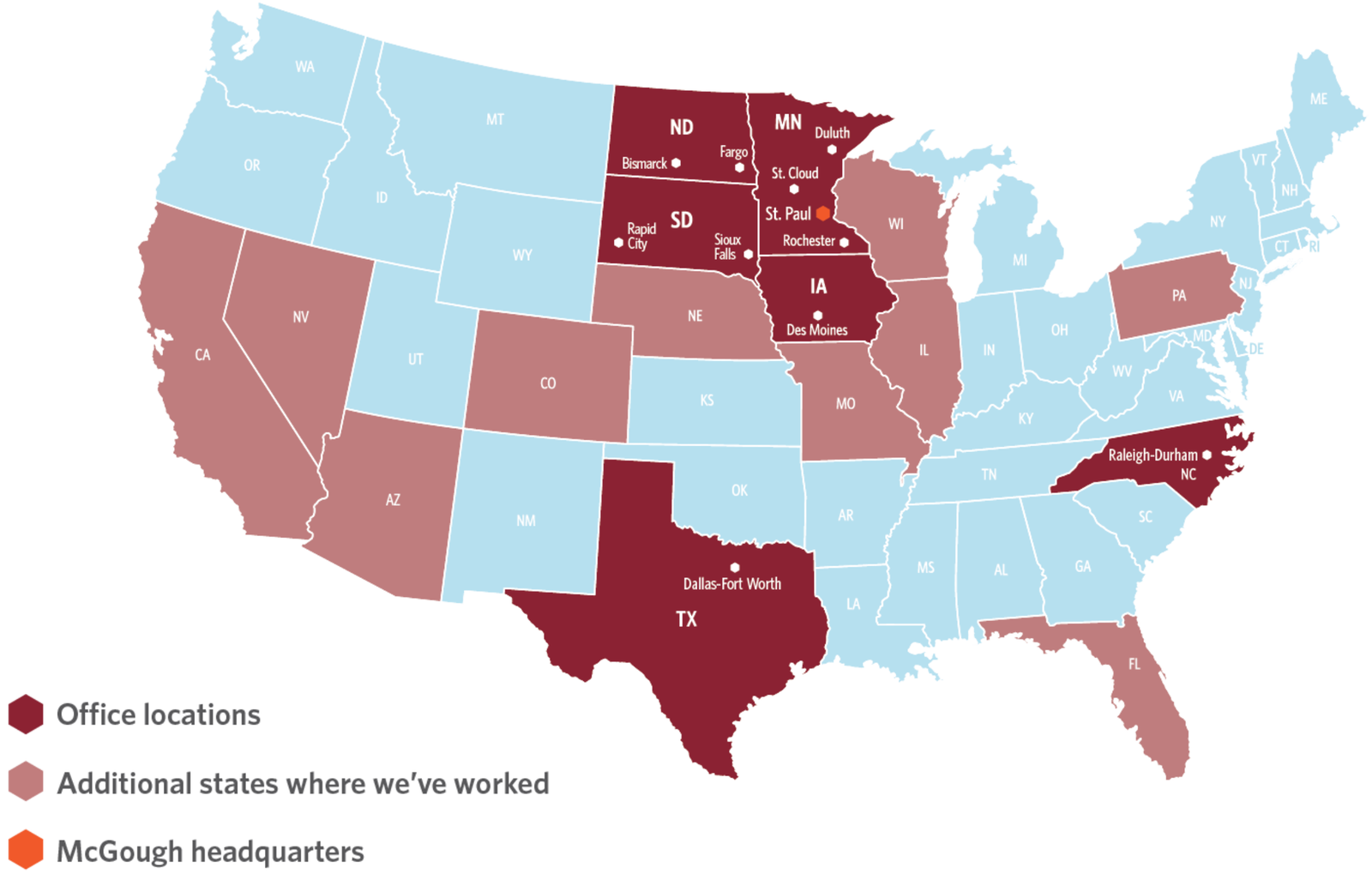
National Healthcare Practice Lead

McGough Construction | INVISION

McGough | ABOUT OUR FIRM



COMPANY TYPE
Private, family-owned

ANNUAL REVENUE
$1.2B

EMPLOYEES
700+

YEARS IN BUSINESS
68

YEARLY HEALTHCARE REVENUE
$250MM-$400MM

STAFF CREDENTIALS
27 Healthcare Construction Certificate (HCC)
9 Certified Healthcare Constructor (CHC)
1 Fellow of the American College of Healthcare Executives

INVISION Architecture

110	**100+**	**46%**	**70+**	**350+**
Years in Business	*Team Members*	*Of Iowa's Hospitals Work with INVISION*	*Years of Healthcare Experience*	*Healthcare Projects in the Past 5 Years*

AGENDA

01 Strategic Planning

02 Facility Assessment

03 Master Planning

04 Funding Sources

05 Next Steps

06 Q&A

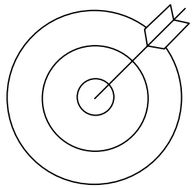
01 Strategic Planning

RAISE YOUR HAND

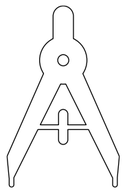
1. If you have a current strategic business plan

2. Keep your hand up if you know how that business plan should impact your facilities capital plan

CAPITAL PLANNING FLOW



Strategic Business Plan



Market Strategy Master Plan

Campus and Facility Master Plan

Capital Plan and Projects

Each step provides critical context for the step that follows

STRATEGIC PLAN AND MARKET STRATEGY

- Informed Decision Making - strategic planning provides a clear understanding of the business trajectory and guiding priorities that can influence facility needs.
- Market dynamics - competition, demographics, regional population growth
- Service line dynamics - new offerings, utilization levels, recruitment
- Entering new markets
- Potential partnerships and joint ventures
- Changes to care delivery
- Reimbursement realities
- Real Estate dynamics

CAMPUS & FACILITY MASTER PLAN

- Holistic view of campus elements – facilities, infrastructure, central plant, circulation, parking, access, etc.
- Aligning Organizational Goals with Facility Needs: Ensure that physical space and infrastructure reflect the future vision of the organization.
- Optimized Facility Usage: Ensures that every square foot of space serves a direct purpose in line with organizational goals, optimizing space utilization and future operational costs.
- Focus on growth paths at building level, access, adjacencies, customer satisfaction inputs, etc
- Condition assessments

Capital Plan and Projects

- Prioritize deployment of capital across clinical growth opportunities, routine capital replacement and deferred maintenance
- 1, 3 and 5-year spending plan aligned with priorities
- Align financing realities with prioritized needs
- Project financing strategy

02 Facility Assessments

60%

Of hospitals were built before 1975

(Source: Government Accountability Office, Statista)

$390B

Worth of deferred maintenance in healthcare facilities

(Source: HFM)

1 in 3

U.S. Hospitals is facing significant capacity and space constrains

(Source: AHA)

60%

of healthcare systems are planning major facility upgrades or expansions within the next few years

(Source: Modern Healthcare)

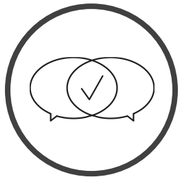
85%

of healthcare workers say the facility affects their ability to perform effectively

(Source: HFM)

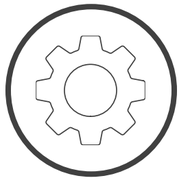
COMPONENTS OF A FACILITY ASSESSMENT

Physical Condition Evaluation: Evaluating condition of existing site(s), building structure(s) and MEPT systems and ability to serve the hospital in the future.



Narrative of Findings: An executive summary followed up with a written narrative that includes photos identifying the various findings and observations.

Categorization of Findings: Break out each major finding as Critical Items, Repair Issue, and General Repairs



Mechanical and Electrical System Equipment List: Compile a complete inventory of mechanical and electrical equipment including information like model, serial number, and year installed.

10 Year Capital Expense Plan: Utilizing information gathered on MEP systems and building components identify which years you should be planning major capital expenses for repairs and replacements.

Compliance: Ensuring that the facility(s) meets all relevant healthcare regulations, safety codes, and environmental standards.

FACILITY ASSESSMENT PROCESS & WHAT TO EXPECT

- 1-3 Days of onsite evaluation
  - Staff current state discussions
  - Site walk - building components
    - Roof
    - Windows
    - Doors
    - Joints
    - Cladding
  - Site walk - MEP
    - Inventory
    - Year in place
    - Condition
- Report findings

Capital Expense Plan & Project Costs

	ITEM	Location	2022 PV	FV	#YRS.	Replacement Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Fire Life Safety																
	Fire Panel, Fire Alarm Zone Control Box and System Field Devices (Horns, Strobes, Smoke Detectors, Pull Stations, Etc.)- Replacement of Existing Devices	Room 122 & Throughout Building	$23,618.00	$23,618.00		2022	23,618	-	-	-	-	-	-	-	-	-
General Building																
	Removal & Replacement of Ceiling Tiles	Whipple Chapel	$29,615.00	$29,615.00		2022	29,615	-	-	-	-	-	-	-	-	-
	Removal & Replacement of Front Circle Drive	West Side of Cathedral	$24,790.00	$27,088.70	3	2025	-	-	-	27,089	-	-	-	-	-	-
	Interior Nave Brick Cleaning, Re-Pointing & Brick Replacement	Nave Interior	$148,650.00	$148,650.00		2022	148,650	-	-	-	-	-	-	-	-	-
HVAC																
	Split System Cooling Unit	Boiler Room - Condensing Unit	$8,000.00	$9,274.19	5	2027	-	-	-	-	-	9,274	-	-	-	-
	Boiler Circulating Pump & Motor	Boiler Room	$2,000.00	$2,060.00	1	2023	-	2,060	-	-	-	-	-	-	-	-
	Hot Water System Pump & Motor	Boiler Room	$2,000.00	$2,533.54	8	2030	-	-	-	-	-	-	-	-	2,534	-
Plumbing																
	Hot Water Heater- Gas	Boiler Room	$12,000.00	$12,730.80	2	2024	-	-	12,731	-	-	-	-	-	-	-
	Water Heater - Electric	Cathedral Lower Level RM 163	$1,500.00	$1,957.16	9	2031	-	-	-	-	-	-	-	-	-	1,957
Roof																
	Built Up Roof Replacement	Roof	$120,000.00	$143,286.28	6	2028	-	-	-	-	-	-	143,286	-	-	-
Windows																
	Replacement of Education Wing Wood Frame Windows with New Aluminum Frame Windows with Operators	Education Wing	$149,962.00	$159,094.69	2	2024	-	-	159,095	-	-	-	-	-	-	-
	Nave- (5) Large Lancet Windows in the Balcony	Cathedral Nave	$109,210.00	$122,916.82	4	2026	-	-	-	-	122,917	-	-	-	-	-
TOTAL			**$777,830.00**	**$837,227.17**			**$218,368.00**	**$2,060.00**	**$309,742.49**	**$27,088.70**	**$122,916.82**	**$9,274.19**	**$143,286.28**	**$0.00**	**$2,533.54**	**$1,957.16**

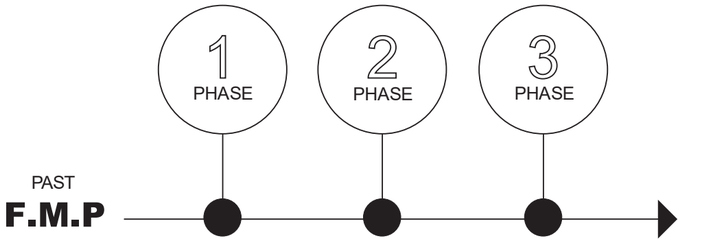
03 Master Planning

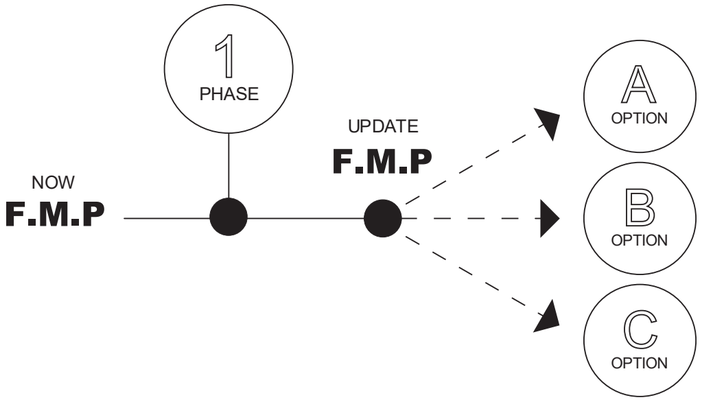
RAISE YOUR HAND

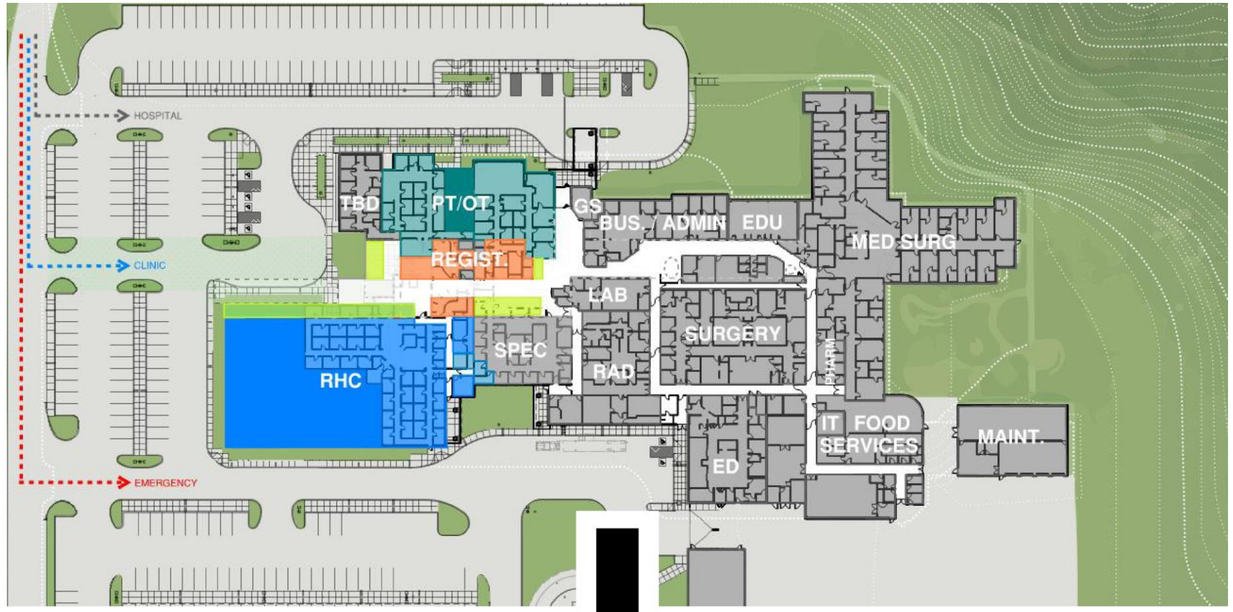
1. If you have a current master plan
2. Keep your hand up if it is being implemented

ACTIONABLE PLANS LEAD TO SUCCESSFUL PROJECTS

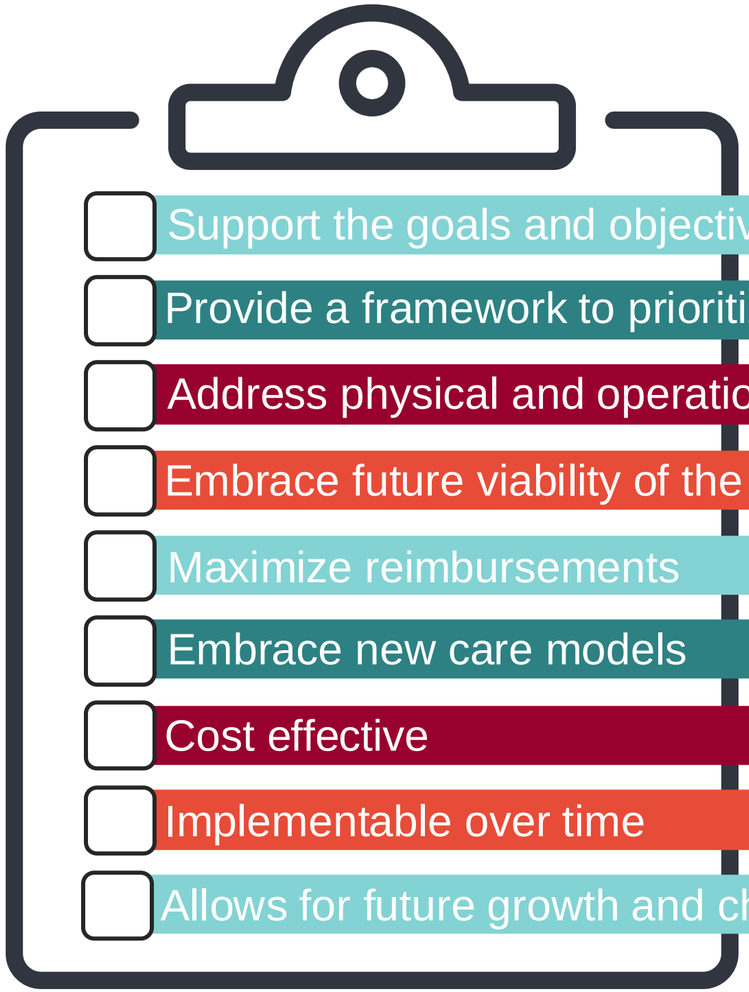
ALIGNS WITH YOUR VISION FOR THE FUTURE





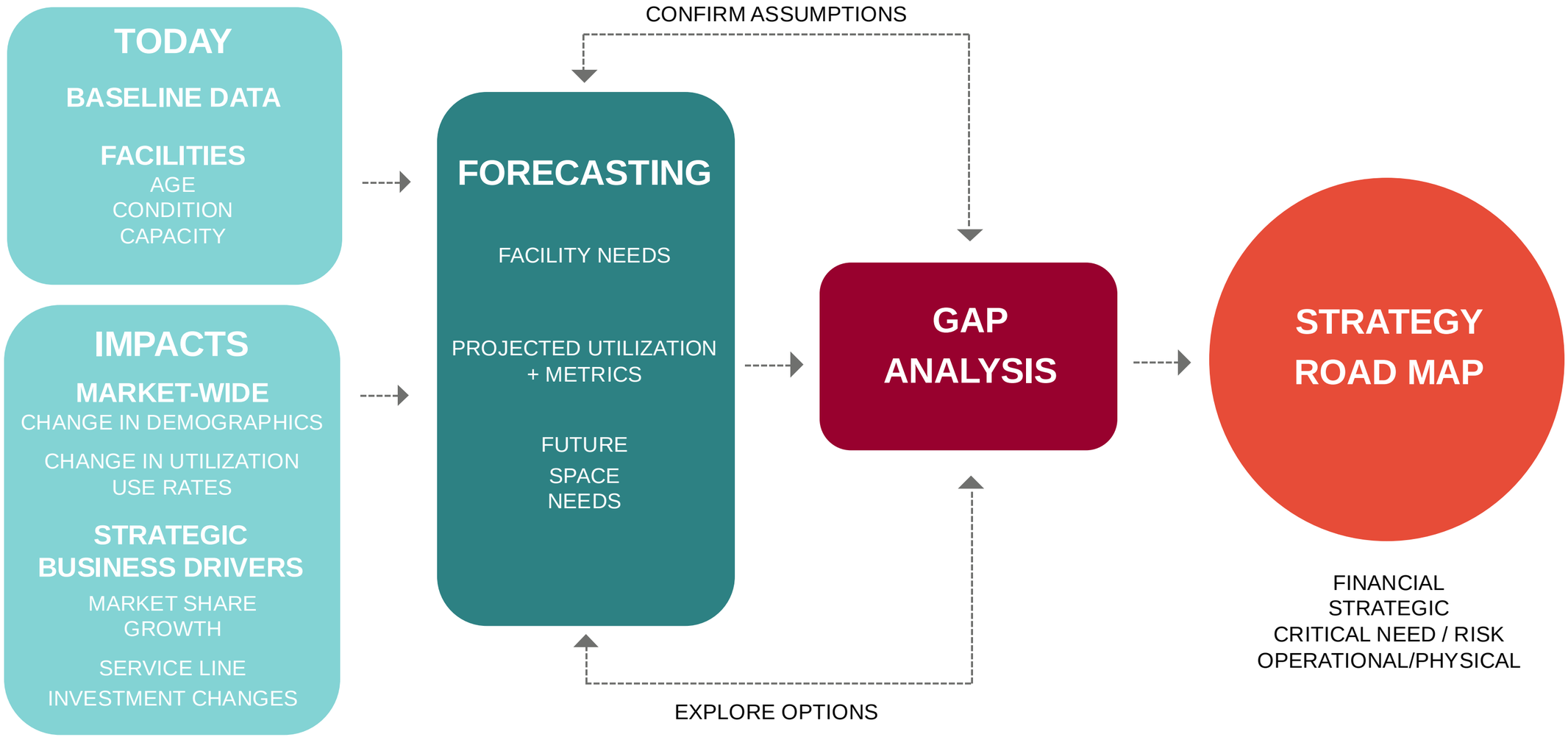


KEYS TO A SUCCESSFUL MASTER PLAN



- Support the goals and objectives of the organization
- Provide a framework to prioritize and define upcoming project requests
- Address physical and operational objectives
- Embrace future viability of the organization
- Maximize reimbursements
- Embrace new care models
- Cost effective
- Implementable over time
- Allows for future growth and change – flexible and adaptable

DATA DRIVEN METHODOLOGY



CAMPUS STRATEGY – EXISTING TO NEW

Existing

SOUTH HEALTH PLAZA
- LAUNDRY
- CHILD CARE

MEDICAL CENTER
LEVEL 4
- GEN SURG. | PRE-OP
- INFUSION / CATH RECOVERY
- CHEMOTHERAPY
- CARDIOLOGY CLINIC - 4 PROVIDERS
- ONCOLOGY CLINIC - 1 PROVIDER
- LAB

LEVEL 3
- BRAIN HEALTH
- MATERNAL CHILD
- SLEEP LAB
- ACUITY ADAPTABLE UNIT

LEVEL 2
- CATH LAB
- IMAGING
- CRITICAL CARE UNIT
- ACUITY ADAPTABLE UNIT

LEVEL 1
- IMAGING
- SURGERY
- LAB
- EMERGENCY DEPARTMENT
- SPECIALTY CLINIC - 5 PROVIDERS

GROUND
- RADIATION ONCOLOGY
- CARDIAC REHAB
- SPD
- PHARMACY

NORTH HEALTH PLAZA
- PRIMARY CARE - 20 PROVIDERS
- PULMONOLOGIST - 1 PROVIDER
- IMAGING
- LAB
- RHEUMATOLOGIST - 1 PROVIDER
- ENT OUTREACH - 1 PROVIDER
- INTERNAL MEDICINE - 1 PROVIDER
- HOME MEDICAL EQUIPMENT
- HOME CARE / HOSPICE
- PT/OT/SPEECH

MEDICAL HEALTH PLAZA
- DIALYSIS
- WOUND CARE
- INTERNAL MEDICINE - 3 PROVIDERS

FREESTANDING
- CHILD CARE

New

MEDICAL OFFICE BUILDING
PHASE 1
- PRIMARY CARE - 20 PROVIDERS
- PULMONOLOGIST - 1 PROVIDER
- RHEUMATOLOGIST - 1 PROVIDER
- ENT OUTREACH - 1 PROVIDER
- GROWTH FOR 1 PROVIDER
- IMAGING
- LAB

PHASE 2
- CARDIOLOGY CLINIC - 4 PROVIDERS
- SPECIALTY CLINIC - 6 PROVIDERS
- GENERAL SURGERY - 3 PROVIDERS
- GROWTH FOR 15 PROVIDERS? *

OTHERS*
- PT / OT / SPEECH
- HOME CARE / HOSPICE
- HOME MEDICAL EQUIPMENT

PHASE 3?
- DIALYSIS
- WOUND CARE
- INTERNAL MEDICINE?

MEDICAL CENTER
- INFUSION / CATH RECOVERY
- BRAIN HEALTH
- MATERNAL CHILD
- SLEEP LAB
- ACUITY ADAPTABLE UNIT
- CATH LAB
- IMAGING
- CRITICAL CARE UNIT
- ACUITY ADAPTABLE UNIT
- IMAGING
- SURGERY
- LAB
- EMERGENCY DEPARTMENT
- CARDIAC REHAB
- SPD
- PHARMACY

PREP/RECOVERY
- -SURGERY
- -CATH LAB
- -PROCEDURES
- -INTERVENTIONAL RADIOLOGY

CANCER CENTER
- RADIATION ONCOLOGY
- ONCOLOGY CLINIC - 1 PROVIDER
- CHEMOTHERAPY
- IMAGING - PETCT
- LAB

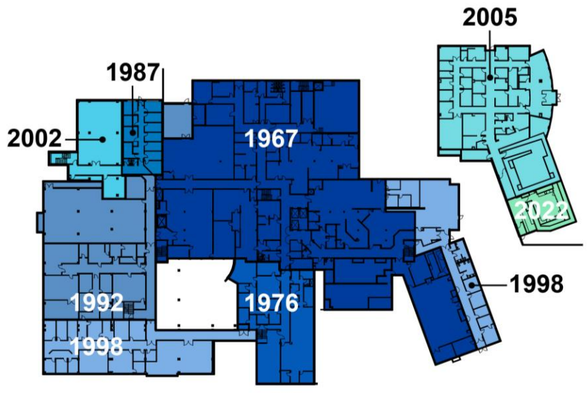
PALLIATIVE CARE?
SURVIVORSHIP CARE?

MEDICAL HEALTH PLAZA
- DIALYSIS
- WOUND CARE
- INTERNAL MEDICINE - 5 PROVIDERS
- LAUNDRY

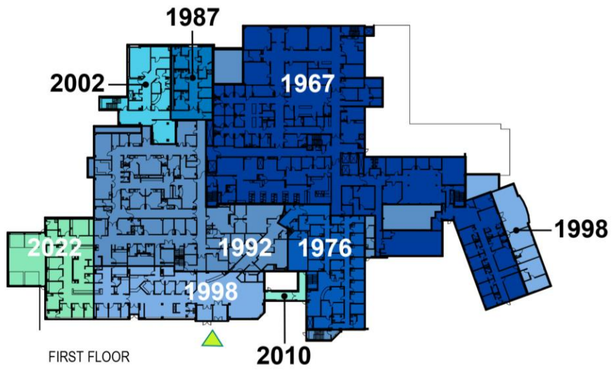
FREESTANDING
- CHILD CARE

ZONING LEGEND
- BUILDING SUPPORT
- BUSINESS
- CLINICAL SUPPORT
- DIAGNOSTIC / TREATMENT
- INPATIENT
- OUTPATIENT
- PUBLIC / ADMIN

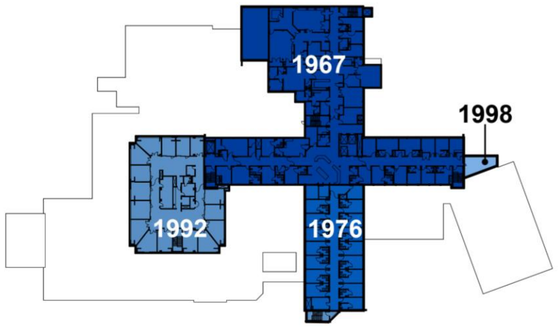
CAMPUS EVOLUTION



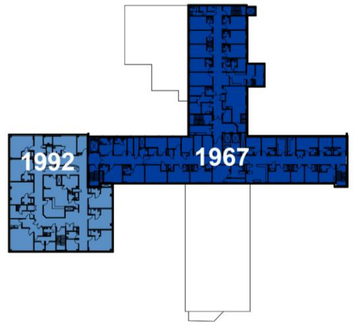
GROUND FLOOR



FIRST FLOOR



SECOND FLOOR



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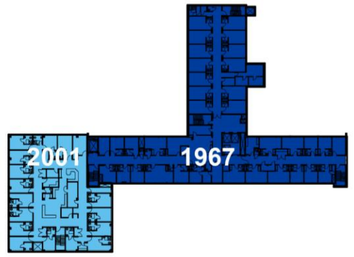
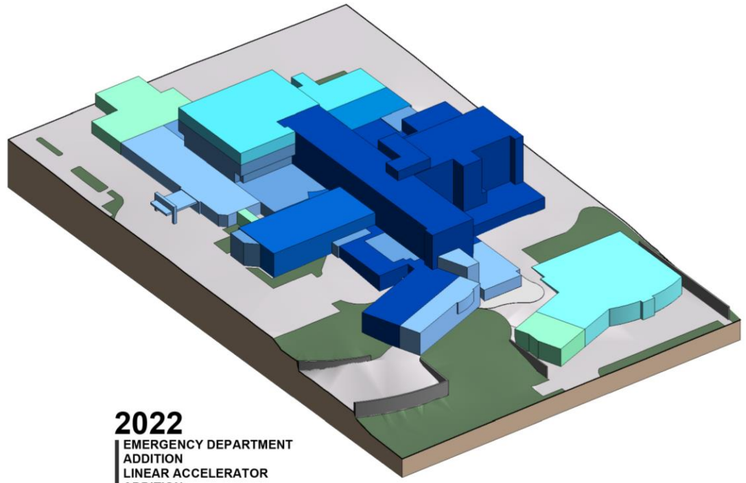
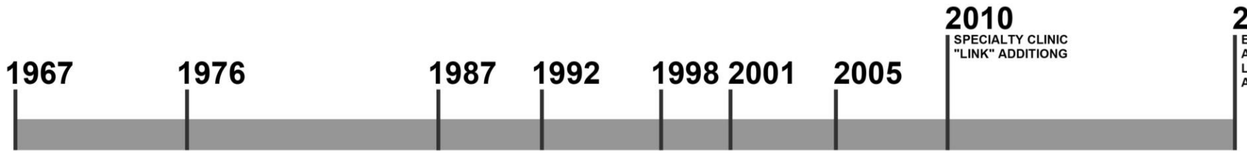
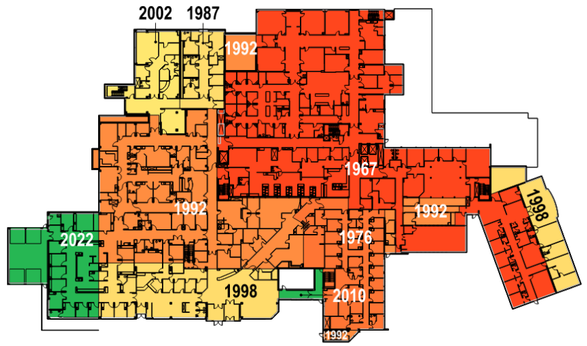


FOURTH FLOOR





FACILITY CONDITION



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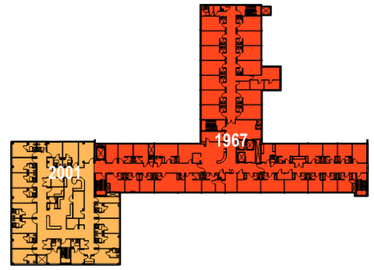

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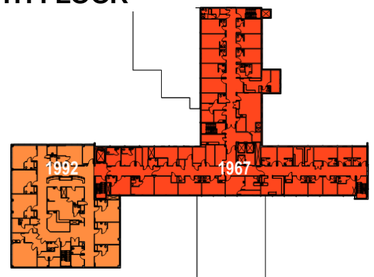

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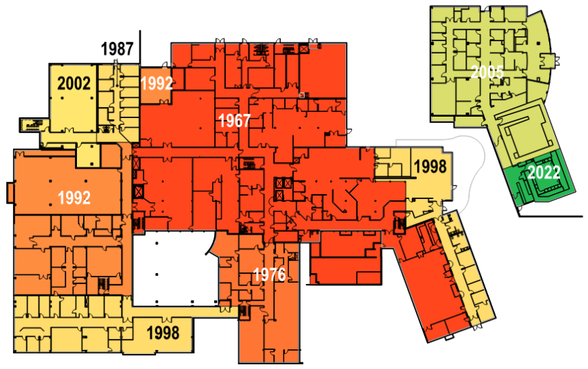
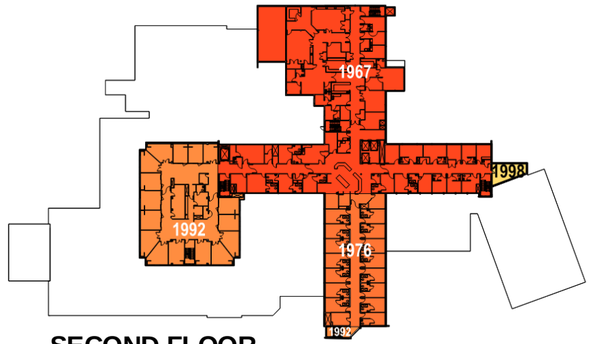


GROUND FLOOR



SECOND FLOOR

POOR

89	1967 - ORIGINAL BUILDING
85	1976 - SOUTH TOWER ADDITION
83	1992 - ED, IMAGING, & PATIENT ROOM ADDITION
79	2001 - 4TH FLOOR INPATIENT ADDITION

FAIR

77	1998 - FIRST FLOOR EXPANSION / ADDITION
76	1987 - SPECIAL PROCEDURES ADDITION
75	2002 - MRI ADDITION
56	2005 - RAD - ONC FREE STANDING BUIDING

GOOD

44	2022 - EMERGENCY DEPARTMENT ADDITION
37	2022 - LINEAR ACCELERATOR ADDITION

INFRASTRUCTURE ASSESSMENT

CRITERIA	REMARKS
System Condition	Age of major equipment ranges from 5-30+ years.
Serviceability	Majority of equipment is consolidated in mechanical/electrical equipment spaces or on the roof for good accessibility.
Reliability	Good redundancy in the cooling system, but poor redundancy in the heating system due to plant reliability concerns. Air handling systems do not have redundancy and there is limited spare capacity.
Code Compliance	Some code compliance issues were observed during plan reviews.
Constructability	Upgrading systems in an operating hospital can cause significant disruption and increased cost
System Selection	New HVAC systems will likely be rooftop units or indoor air handling units connected to the existing heating/cooling plants. Humidification will be provided by existing steam system.

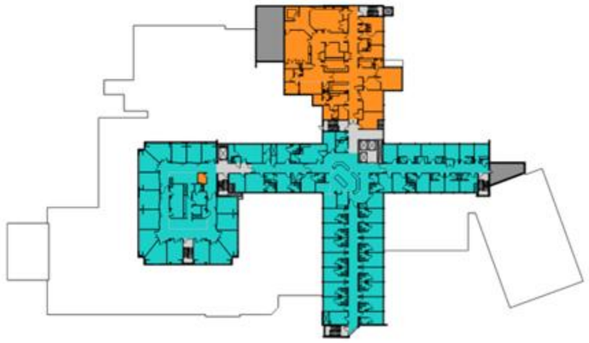
ZONING DIAGRAM

FIRST FLOOR

FOURTH FLOOR

THIRD FLOOR

GROUND FLOOR

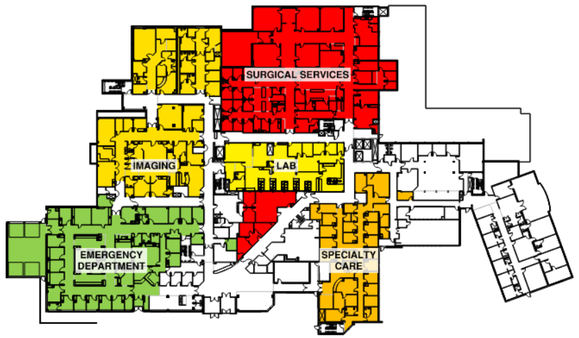


SECOND FLOOR

ZONING LEGEND

- BUILDING SUPPORT
- BUSINESS
- CLINICAL SUPPORT
- DIAGNOSTIC / TREATMENT
- INPATIENT
- OUTPATIENT
- PUBLIC / ADMIN

DEPARTMENTAL ASSESSMENT



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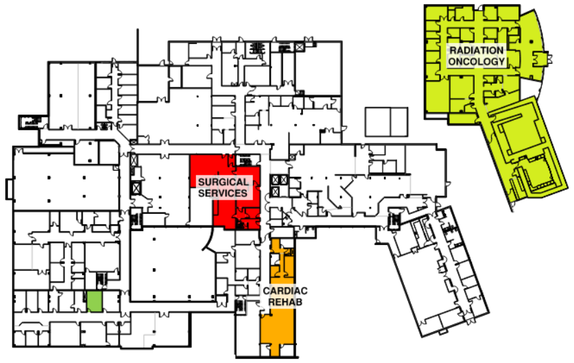

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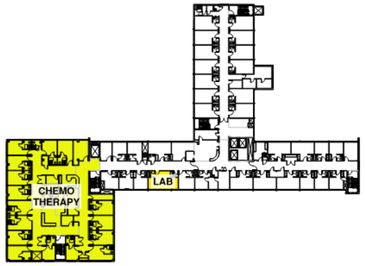

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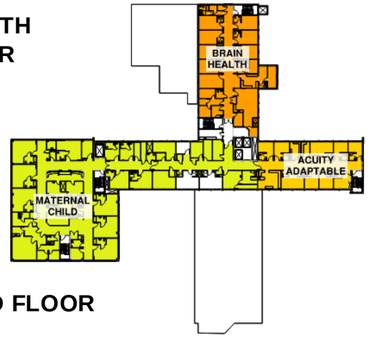

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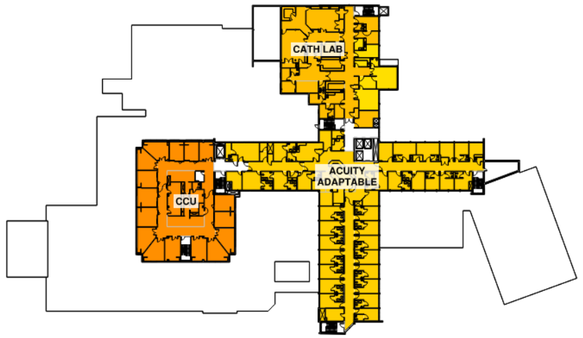


SECOND FLOOR

POOR

9	SURGICAL SERVICES
16	PRIMARY CARE (NHP)
18	CRITICAL CARE UNIT
19	BRAIN HEALTH
20	CARDIAC REHAB
21	SPECIALTY CARE

NEUTRAL

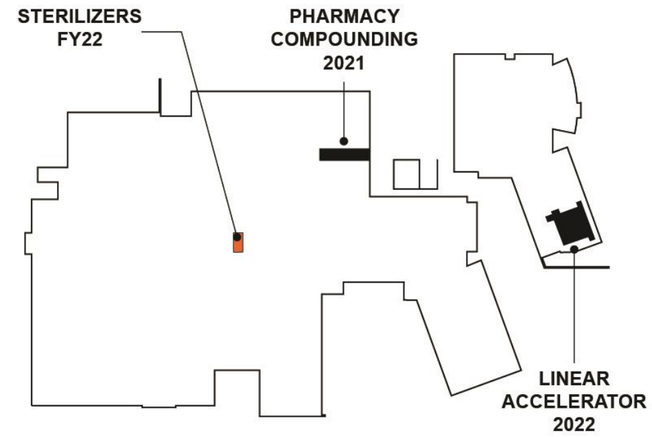
21	CATH LAB
22	ACUITY ADAPTABLE
23	IMAGING
24	LAB
27	CHEMOTHERAPY
28	MATERNAL CHILD

EXCELLENT

29	RADIATION ONCOLOGY
39	EMERGENCY DEPARTMENT

PLANNED / RECENT INVESTMENTS

MEDICAL CENTER



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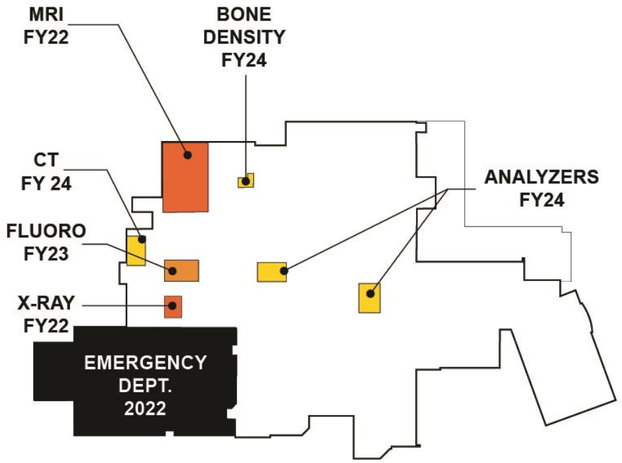

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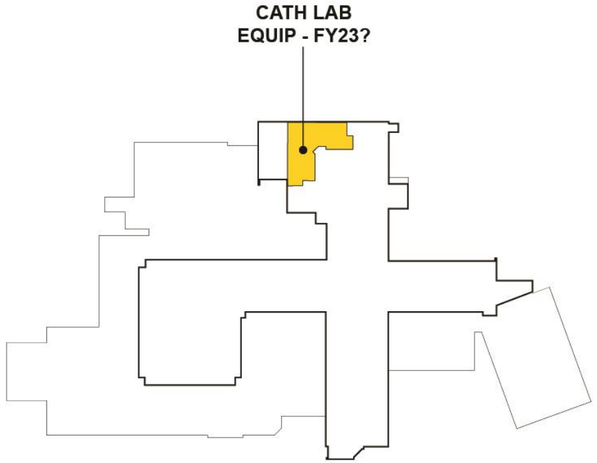
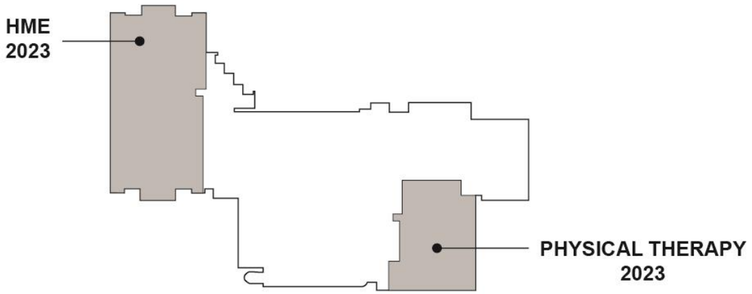
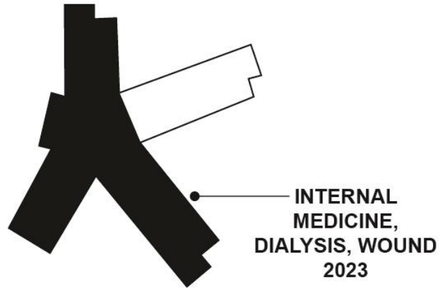


SECOND FLOOR

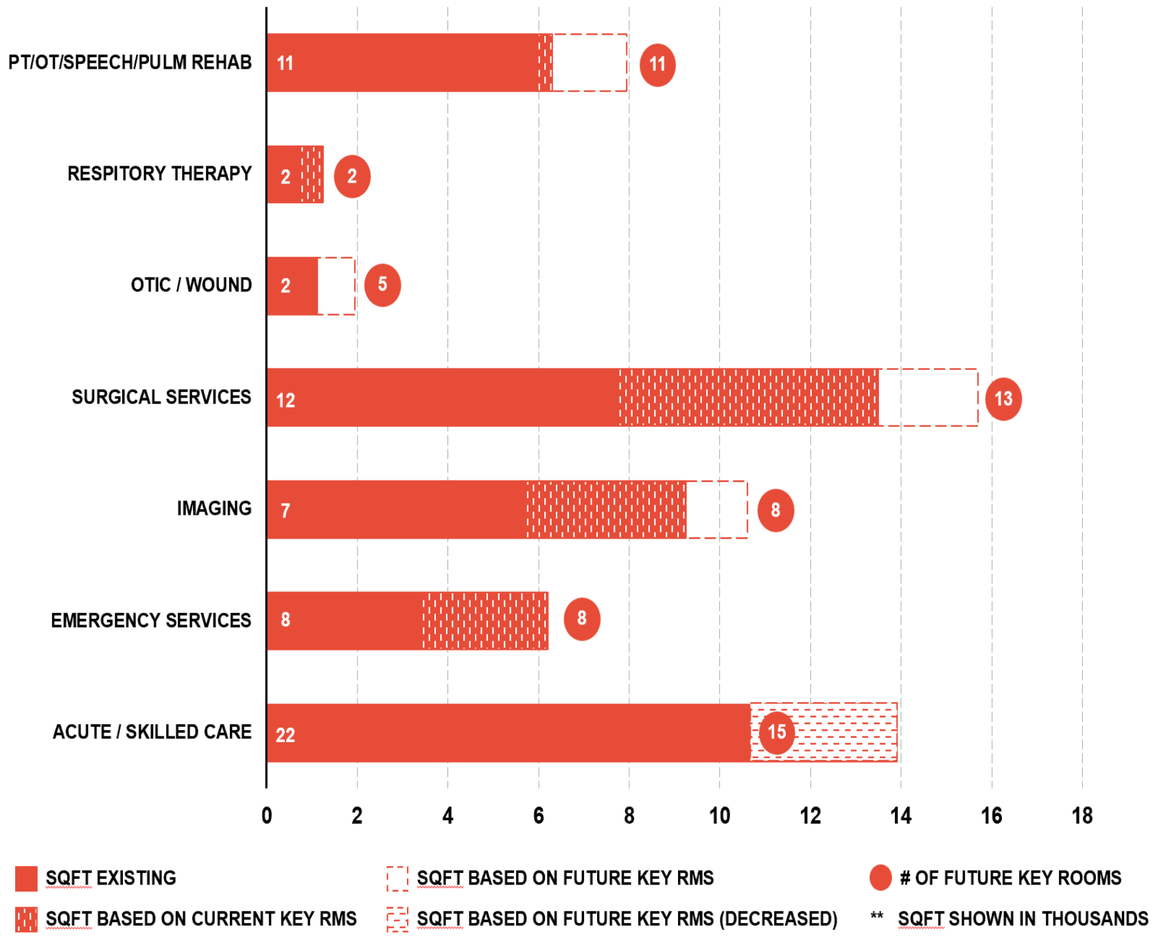
NORTH HEALTH PLAZA

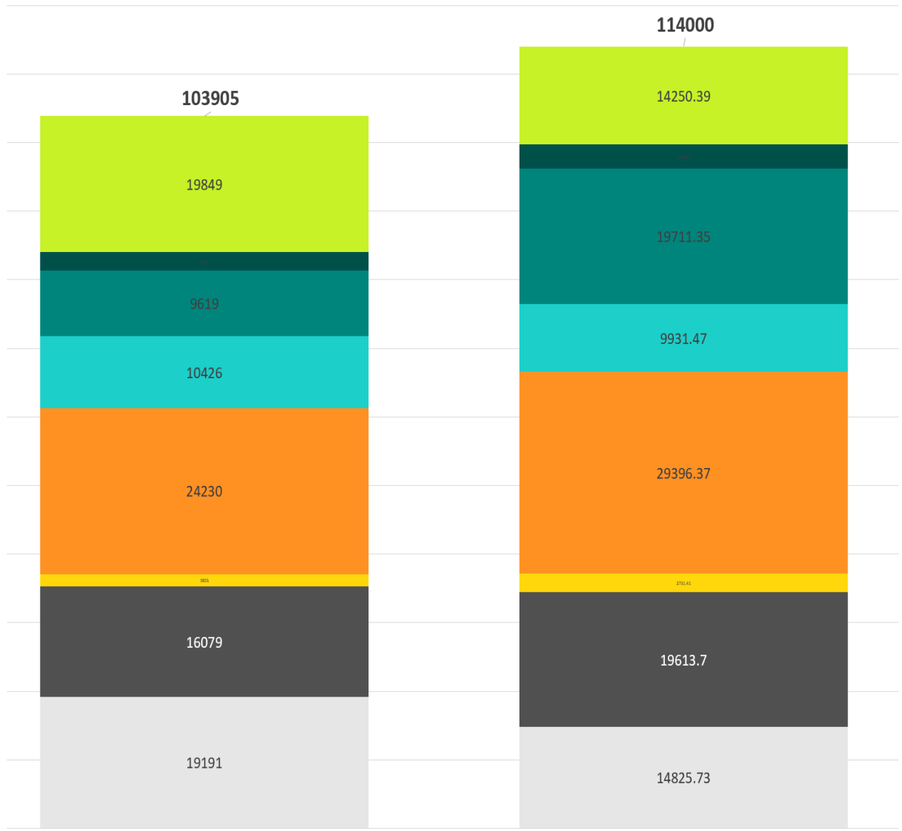


MEDICAL HEALTH PLAZA



FORECASTING





EXISTING FACILITY SQ FT

MASTERPLAN SQ FT

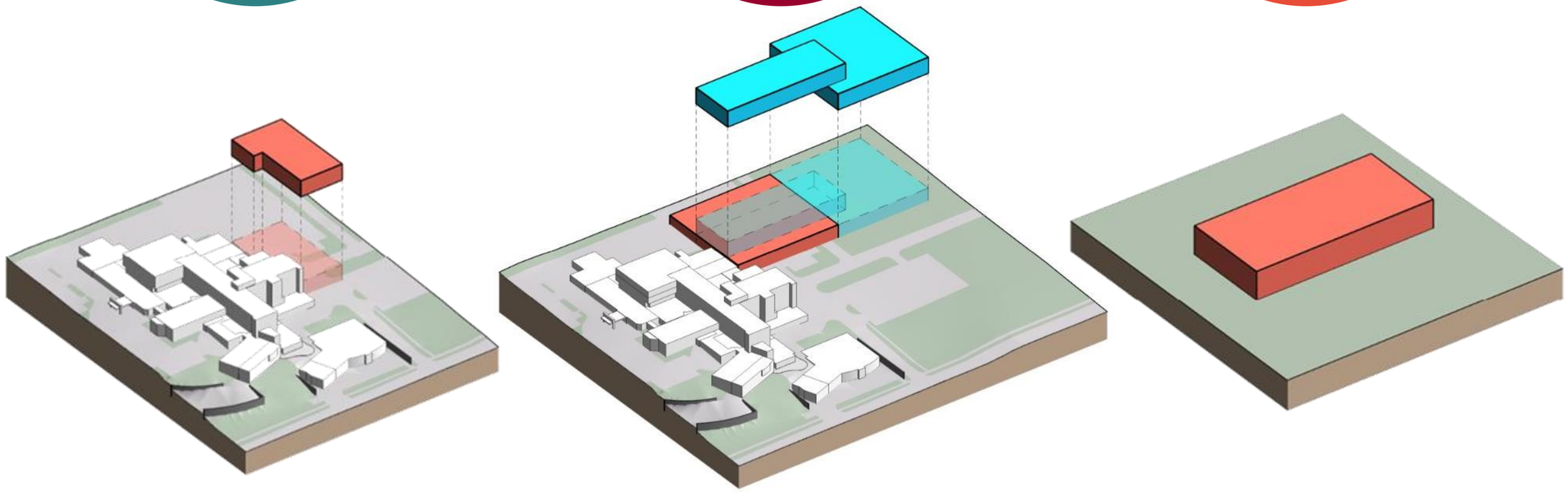
HOSPITAL STRATEGIES

A
QUICK FIX

B
EXPAND &
RENOVATE

C
PHASED
REPLACEMENT

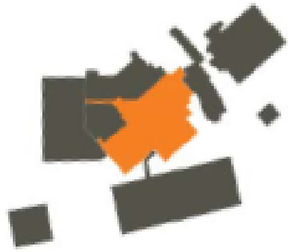
D
REPLACEMENT



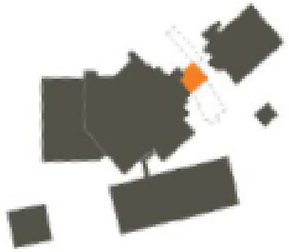
PHASING

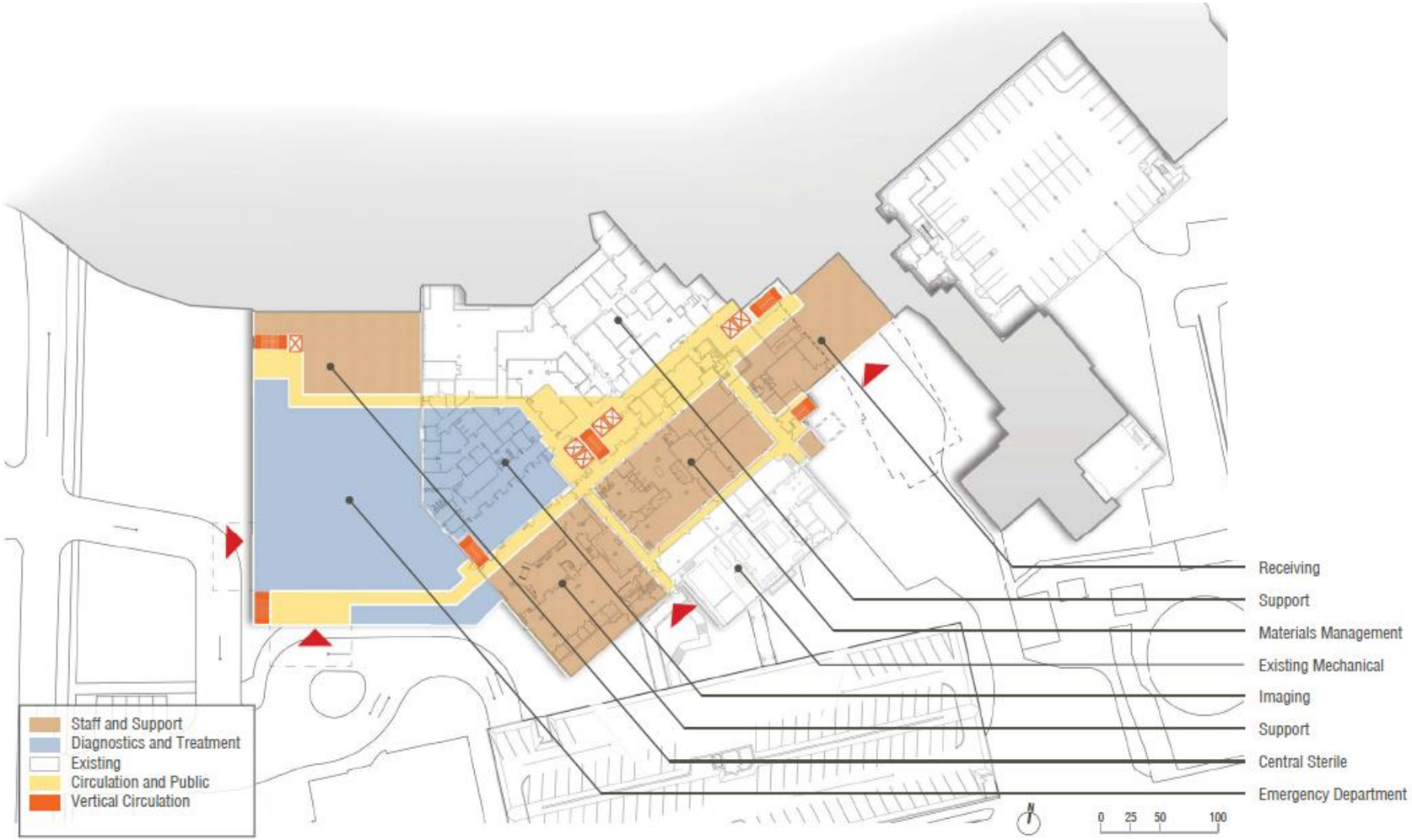
1. Transitional Phase

2. Sustainable Phase



3. Future Phase





BUDGETING

	Option A	Option B	Option C	Option D
Construction Cost	$4,000,000	$5,250,000	$7,500,000	$10,500,000
Sitework	$0	$500,000	$1,500,000	$2,000,000
Land Cost	$0	$0	$4,067,284	$4,067,284
FFE	$1,200,000	$1,575,000	$2,250,000	$3,150,000
Soft Costs	$600,000	$862,500	$1,350,000	$1,875,000
Contingency	$580,000	$818,750	$1,666,728	$2,159,228
Total Project	**$6,380,000**	**$9,006,250**	**$18,334,013**	**$23,751,513**

PHASE I - WEST EXPANSION									
1A	Wellness/Rehabilitation Services Addition	6,100			$110.00	$72.75	$40.00	$222.75	$1,358,775.00
	West Parking/Site Improvements			35,000	$5.00	$2.00	$1.00	$8.00	$280,000.00
1B	Wellness/Rehabilitation Services Renovation		5,600		$75.00	$72.75	$40.00	$187.75	$1,051,400.00
	Northeast Parking/Site Improvements			12,000	$5.00	$2.00	$1.00	$8.00	$96,000.00
					$98.00	$72.75	$40.00	$210.75	$1,854,600.00
					$125.00	$72.50	$60.00	$257.50	$4,120,000.00
					$50.00	$50.00	$25.00	$125.00	$2,000,000.00
					$98.00	$72.50	$40.00	$210.50	$1,915,550.00
					$98.00	$72.50	$40.00	$210.50	$1,452,450.00
				95,000	$5.00	$2.00	$1.00	$8.00	$760,000.00
			700		$98.00	$72.50	$40.00	$210.50	$1,410,350.00
			300		$150.00	$98.51	$65.00	$313.51	$3,072,398.00
			100						

CONSTRUCTION COST	$19,371,523.00
DESIGN CONTINGENCY- 15%	$2,905,728.45
TOTAL CONSTRUCTION COST	$22,277,251.45

$ Total	% of Const Cost	$/SF
$22,277,251.45	100%	$262.09
$2,227,725.15	10%	$26.21
$50,000.00		
$106,250.00		$1.25
$668,317.54	3%	$7.86
$1,559,407.60	7%	$18.35
$111,386.26	0.50%	$1.31
$334,158.77	1.50%	$3.93
$1,113,862.57	5%	$13.10
$501,238.16	2.25%	$5.90
$445,545.03	2%	$5.24
$144,802.13	0.65%	$1.70
$1,113,862.57	5%	$13.10
$22,277.25	0.10%	$0.26
$1,113,862.57	5%	$13.10
$31,789,947.06		**$373.41**

					$65.00	$50.00	$45.00	$160.00	$2,560,000.00
					$65.00	$50.00	$45.00	$160.00	$160,000.00
					$105.00	$72.00	$60.00	$237.00	$1,422,000.00
	North West Parking/Site Improvements			30000	$5.00	$2.00	$1.00	$8.00	$240,000.00
5B	Acute Care Renovation		7,600		$98.00	$72.00	$60.00	$230.00	$1,748,000.00
PHASE VI - NORTH/SOUTH CONCOURSE RENOVATION									
6A	Lab Relocation/Renovation		2,000		$98.00	$72.50	$50.00	$220.50	$441,000.00

04 Funding Sources

FUNDING SOURCES

External

- **Government Grants:** Funding from federal, state and local agencies
- **Philanthropic Donations**: Contributions from foundations, charities, or individual donors
- **Private Investment Loans**: Loans from banks or financial institutions
- **USDA Loans:** USDA Government-backed loan designed to support rural development
- **Public Bonds**: Municipal bonds issued by local governments for public projects
- **Tax Credits**: Recent legislation like the Inflation Reduction Act offers tax credits for non-profit healthcare organizations
- **Utility Rebates/Incentives**: Partnerships with utility providers for rebates and energy-efficient upgrades
- **OPM** (Other People's Money): Developer sourced funding and capitalized leases

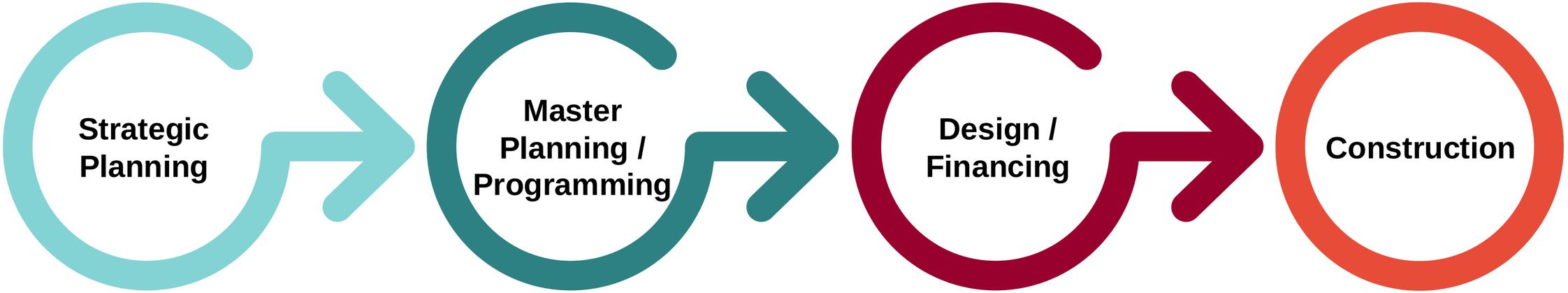
Internal

- **Operating Budget**: Using regular operating funds for project costs.
- **Capital Expenditure Budget**: Funds set aside for major infrastructure projects.
- **Green Revolving Fund:** A dedicated internal fund to finance energy efficiency upgrades, where cost savings are reinvested back into the fund

Consider Healthcare Capital Consultants such as Lument, Piper Sandler, Kaufman Hall, FTI, Mercer, etc

05 Next Steps

LIFECYCLE



- Vision
- Identify goals & priorities that drive facility needs

- Drivers, goals & priorities
- Design/Construction team selection
- Master plan strategy
- Project financing strategy
- Project budget & schedule
- CON application
- Land acquisition

- Construction method
- Design documentation
- Environmental & soils studies
- Financing application
- Community engagement and capital campaign
- Finalize budget & schedule

- Bidding & negotiations
- Loan or bond closing
- Release funding
- Construction progress
- Substantial completion
- Occupy facility
- Final closing endorsement

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Q&A

THANK YOU!