

# STRATEGIC BY DESIGN

Accelerating Facility Planning to Turn Vision into Value June 2025

#### WHO ARE WE?



#### John Downes, MBA, LEED AP

Director

jdownes@stroudwater.com 207-221-8275



#### Cameron Smith, MBA, CPHQ Consultant csmith@stroudwater.com 207-221-8253



# LEARNING OBJECTIVES FOR THIS SESSION

- At the end of this session, we should all be able to:
  - Evaluate Market Demand and Facility Needs Use market data and volume trends to inform future infrastructure requirements
  - Understand the Master Planning Process Learn a step-by-step approach for developing an effective and adaptable facility master plan
  - Identify Keys to a Successful Plan Recognize the strategic, operational, and financial factors that lead to smart, high-impact facility decisions



# OPTIMAL APPROACH TO FACILITY MASTER PLANNING

- Understanding the current and future underlying market demand for healthcare services
- > Evaluating existing **facility assets** and the need for phased investment or replacement
- > Identification of major campus issues that must be addressed today, while maintaining flexibility to address other issues in the future
- Ensuring a financially sustainable entity by modeling volume changes, facility investments, and operational changes through the Medicare Cost Report

# TRADITIONAL VS. CHARRETTE MASTER FACILITY PLANNING

- > **Duration** = 3-6 Months vs. 4-6 Weeks
- Focus = All Departments vs. Critical Departments
- > **Engagement** = Sporadic vs. Focused

(84)

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Output = Comprehensive Book of Information vs. Prioritized Plan of Action

# WHAT IS THE TIMELINE FOR A CHARRETTE MFP?

- > Data acquisition and analysis
  - > 1 month to build market analyses, create baseline facility drawings, and develop initial financial model
- > On-site facilitation and charrette
  - > 1 week intensive
  - > Volume scenarios, facility solutions, and financial modeling
  - > Semi-final deliverable at the end of the week
- > Final report 2-3 weeks



# OVERVIEW





# WHAT IS THE VALUE OF A CHARRETTE PROCESS TO HOSPITALS?



# INCORPORATE BROAD PERSPECTIVES

- > Senior Management
- > Medical Staff
- > Board / Community
- > Departmental Leadership



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# FOUR LEVERS OF DEMAND MODELING





### UNDERSTANDING THE SERVICE AREA



Source: Administration and Stroudwater analysis



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# WHAT POPULATION ARE WE SERVING?



Source: Merative

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# WHAT'S HAPPENING IN THE BROADER INPATIENT MARKET?



# WHAT OUTPATIENT SERVICES ARE GROWING?





#### EVALUATE CURRENT MARKET DEMAND FOR ADJUSTED SERVICE AREA

	PSA Estimate	Current Use Rate x/1000	Rough % of volume from PSA	Potential Addl. Mkt. Volume from Other Service Areas	5 year growth %	Merative annual growth %	Adjusted Market Size
ED Visits	7,252	412	80.0%	1,813	3.6%	0.7%	9,065
X-Ray	9,425	535	80.0%	2,356	11.3%	2.3%	11,781
CT Scans	4,215	239	80.0%	1,054	71.6%	14.3%	5,269
MRI	1,865	106	80.0%	466	11.6%	2.3%	2,331
Ultrasound	5,095	289	80.0%	1,274	11.4%	2.3%	6,369
Mammography	2,394	136	80.0%	599	35.2%	7.0%	2,993
Gastro	1,149	65	80.0%	287	9.8%	2.0%	1,436
OP Surg	2,171	123	80.0%	543	12.9%	2.6%	2,714
IP Surgery	307	17	80.0%	77	-7.8%	-1.6%	384

• Merative estimates the current-year market volumes for the PSA population.

- The PSA needs to be converted to an adjusted market, so we assume that 80% of volume is generated from PSA Zip codes.
- All subsequent market share calculations and demand modeling exercises in this analysis will "adjust" the expected PSA market estimates to account for the percentage of volumes originating from the PSA.

#### COMPARE HISTORICAL VOLUMES AGAINST ADJUSTED MARKET ESTIMATES

	Adjusted Market Size	FY 2020 GVH Volume	FY 2021 GVH Volume	FY2022 GVH Volume	FY2023 GVH Volume	Trend (20-23)	Share of Adjusted Market (using 23)
ED Visits	9,065	5,390	5,873	6,351	6,194		68.3%
X-Ray	11,781	5,621	6,349	6,704	7,004		59.5%
CT Scans	5,269	3,229	4,383	4,488	4,847		92.0%
MRI	2,331	1,296	1,553	1,560	1,865		80.0%
Ultrasound	6,369	1,785	2,076	1,932	2,285	$\sim$	35.9%
Mammography	2,993	2,139	2,905	2,817	2,937		98.1%
Gastro	1,436	3	11	403	705		49.1%
OP Surg	2,714	1,123	1,239	598	1,337		49.3%
IP Surgery	384	179	201	191	254	~	66.2%

# THROUGHPUT ASSUMPTIONS ARE KEY FACTORS TO DRIVE SPACE (HOURS / DAYS / VISIT LENGTH / EFFICIENCY)

	Adjusted Market Size	Hours	Days	Visit Length	Efficiency	Visits/ Room/ Yr	Baseline Room Need (Raw)	Baseline Room Need (Rounded)
ED Visits	9.065	24	365	180	n/a	1.250	7.25	8
X-Ray	11,781	12	275	20	80%	7,920	1.49	2
CT Scans	5,269	12	275	20	80%	7,920	0.67	1
MRI	2,331	12	255	45	80%	3,264	0.71	1
Ultrasound	6,369	12	255	45	80%	3,264	1.95	2
Mammography	2,993	12	255	45	80%	3,264	0.92	1
Gastro	1,436	8	250	45	70%	1,867	0.77	1
OP Surg	2,714	8	250	90	70%	933	2.91	3
IP Surgery	384	8	250	120	70%	700	0.55	1

• We can control these variables more than any other utilization variables

• Fractional rooms don't work!



# SCENARIO MODELING HELPS IN DETERMINING SPACE NEED

				Α	В	D	F
						2034 GVH	2034 GVH
	Merative			2034 GVH		Expected	Expected
				Expected	2034 Volume @	Volume	Volume
		2034 Market	F 12023 GVH	Volume	2034 Volume @ Basolino 1º	(Merative	(Merative
	arowth %	Volume	Share	(Merative) Growth / Same	Appual Growth	Growth / +4	Growth / +8
	growth %		Share		Annual Growth	Point Growth in	Point Growth in
				Share)		Expanded	Expanded
						Share)	Share)
ED Visits	0.7%	9,739	68.3%	6,655	6,842	7,044	7,434
X-Ray / Fluoro	2.3%	14,732	59.5%	8,758	7,737	9,347	9,937
CT Scans	14.3%	20,088	92.0%	18,480	5,354	19,283	20,087
MRI	2.3%	2,932	80.0%	2,346	2,060	2,463	2,580
Ultrasound	2.3%	7,979	35.9%	2,863	2,524	3,182	3,501
Mammography	7.0%	5,909	98.1%	5,799	3,244	6,036	6,272
Gastro	2.0%	1,744	49.1%	856	779	926	996
OP Surgery	2.6%	3,501	49.3%	1,725	1,477	1,865	2,005
IP Surgery	-1.6%	328	66.2%	217	281	230	243

• Scenario modeling

- Utilization changes
- Market share shifts

# UNDERSTAND THE SITE

- > Ownership/Landscape
- > Building Age
- > Development Opportunities
- > Departmental Adjacencies
- > Long-term Site Vision



# DEVELOP A LONG-RANGE PLAN!

- > Be careful "scratching today's itch"
- > Have a long-term plan
  - > Market analyses
    - > What is needed today vs. tomorrow?
    - > What is growing vs. shrinking?
  - > What are my facility assets today?
  - > What are my needs?
  - > What will today's project do to my future flexibility?
  - > How can the cost report help?
  - > Where must I NOT put a building?



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# ADJACENCY CONSIDERATIONS

- > Entrances
  - > ED
  - > Main
  - > Support
- > ED is the epicenter—most everything must touch it!
- > Minimize duplication—we can't afford it!
- > Minimize cross traffic—difficult to eliminate entirely!



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# EVALUATE OPTIONS: A RECENT EXAMPLE

- > Emergency department was a major issue
  - > Improve space and flow
  - > Increase number of treatment rooms
- > Utilize existing funding (use it or lose it)!
- Fast-track design process, but understand other long-term needs
  - ED project moved forward into design/pricing
  - Understand corridor connections for future beds (> 10 years)
  - Long-term address: inpatient/traffic crossing public corridors.



# DEVELOP PHASED INVESTMENTS: A RECENT EXAMPLE

- 1. ED project with CARES funding
- 2. Short-term modifications to flex space
- 3. Long-term building additions when needed
  - > Clinic
  - > Inpatient





# MASTER PLANNING IS THE TIME FOR CONSERVATIVE BUDGETING

Main Campus Construction Project										
Base Construction Cost per S/F:		\$700								
	Dece	Variance	Cost per	Construction	FFE	Other	FFE Cost	Other	Total Project	Cumulative
DEPARIMENT	BGSF	per s/f	SF	Cost	Markup	Markup		Cost	Cost	Project Cost
New B - MEP / Maintenance / BGSF Space	8,600	1.714	\$1,200.00	\$10,319,966	0.1	0.3	\$1,031,997	\$3,095,990	\$14,447,952	\$14,447,952
New B - Dietary Production	3,000	1.000	\$700.00	\$2,100,000	0.1	0.3	\$210,000	\$630,000	\$2,940,000	\$17,387,952
New B - Stores, EVS, Housekeeping, Staff Support, IT	10,000	0.786	\$550.00	\$5,500,040	0.1	0.3	\$550,004	\$1,650,012	\$7,700,056	\$25,088,008
New 1 - Lab Expansion	4,000	1.000	\$700.00	\$2,800,000	0.4	0.3	\$1,120,000	\$840,000	\$4,760,000	\$29,848,008
New 1 - Lobby, Dining / Servery, Classroom, BGSF Space	13,200	1.000	\$700.00	\$9,240,000	0.3	0.3	\$2,772,000	\$2,772,000	\$14,784,000	\$44,632,008
New 1 - Surgery / CPD	14,750	1.714	\$1,200.00	\$17,699,941	0.6	0.3	\$10,619,965	\$5,309,982	\$33,629,888	\$78,261,896
New 2 - Inpatient (MS/ICU/OB), BGSF Space	25,500	1.000	\$700.00	\$17,850,000	0.4	0.3	\$7,140,000	\$5,355,000	\$30,345,000	\$108,606,896
New 3 - Helipad	1,000	0.214	\$150.00	\$150,003	0.2	0.3	\$30,001	\$45,001	\$225,005	\$108,831,900
Reno 1 - Registration, Emergency, PFS, Pharmacy	8,000	0.571	\$400.00	\$3,200,008	0.3	0.4	\$960,002	\$1,280,003	\$5,440,014	\$114,271,914
Reno 2 - Respiratory Therapy, HIM, Administration, On-Call	7,350	0.571	\$400.00	\$2,940,007	0.2	0.4	\$588,001	\$1,176,003	\$4,704,012	\$118,975,926
Demolition of 1950's / 1980's Building with remediation	47,545	0.086	\$60.00	\$2,852,557	0	0.2	\$0	\$570,511	\$3,423,069	\$122,398,994
				\$74,652,522			\$25,021,970	\$22,724,502	\$122,398,994	

- Be realistic about construction cost per sf
- Don't forget about fixtures, furniture, equipment (FFE), and other soft costs
- In new construction, account for building gross square feet...not just useable or departmental square feet

# BUILD OUT REALISTIC DEBT SCENARIOS

Model Assumptions:				
Total Project Cost:			\$	52,259,072
Donations/Working Capital Su	upport:			15,000,000
Hospital Assumed Debt: Interest %				37,259,072 6.00%
Lending Period				35.00
Cost Based %				24.29%
Depreciation Estimates:				
	<u>% of Total</u>	<u>\$ Allocation</u>	-	<u>Useful Life</u>
Building	78.0%	40,762,076		28
Land Imp.	5.5%	2,874,249		20
Other FF&E	6.5%	3,396,840		15
Maj. Moveable	10.0%	5,225,907	_	12
	100.0%	52,259,072		

## UNDERSTAND THE FUTURE IMPACT OF THE FACILITY INVESTMENT

Scenario 1a - \$52M Facility Investment		Year	Year	Year	Year	Year	Year	
		1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>10</u>	
Incremental Reimbursement and Capital Costs:								
Depreciation	\$	2,261,449	\$ 2,261,449	\$ 2,261,449	\$ 2,261,449	\$ 2,261,449	\$ 2,261,449	
Interest		2,226,769	2,206,871	2,185,747	2,163,320	2,139,509	1,996,529	
Incremental Capital Costs		4,488,218	4,468,321	4,447,196	4,424,769	4,400,958	4,257,978	
Cost-Based Payer Mix		24.29%	24.29%	24.29%	24.29%	24.29%	24.29%	
Incremental Cost-Based Reimbursement	\$	1,090,318	\$ 1,085,484	\$ 1,080,353	\$ 1,074,904	\$ 1,069,120	\$ 1,034,386	
Hospital Operating Performance:								
Cash Flow from Operations:								
Net Income (loss) (Average 2021,2022 and 2023)	\$	3,816,005	\$ 3,816,005	\$ 3,816,005	\$ 3,816,005	\$ 3,816,005	\$ 3,816,005	
Depreciation Expense (before new debt)	\$	4,964,906	4,964,906	4,964,906	4,964,906	4,964,906	4,964,906	
Total		8,780,911	8,780,911	8,780,911	8,780,911	8,780,911	8,780,911	
  mprovement Opportunities (From 2023 Base Year):								
340B Implementation (12K Visits X\$450K/visit)		540,000	540,000	540,000	540,000	540,000	540,000	
Grow Acute Care (ADC 6) and Swing Bed Volume (ADC 4)		925,000	925,000	925,000	925,000	925,000	925,000	
Improve Physician Practice Operations		500,000	500,000	500,000	500,000	500,000	500,000	
Cost report improvements			-	-	-	-	-	
ED Standby time (\$1520K *.5*.3)		228,000	228,000	228,000	228,000	228,000	228,000	
OB LDRP Costs (\$980K*.5*.75)		367,500	367,500	367,500	367,500	367,500	367,500	
Medicare Allowable Bad Debt (5% of Patient Responsibility)		225,000	225,000	225,000	225,000	225,000	225,000	
Medicare Method II Billings (20% Medicare Payer Mix * \$2.4M)		480,000	480,000	480,000	480,000	480,000	480,000	
Cost report improvements		1,300,500	1,300,500	1,300,500	1,300,500	1,300,500	1,300,500	
		3,265,500	3,265,500	3,265,500	3,265,500	3,265,500	3,265,500	
Total Adjusted Cash flow from Operations	1	2,046,411	12,046,411	12,046,411	12,046,411	12,046,411	12,046,411	
Cash Flow from Ops and Cost-Based Reimbursement	1	3,136,729	13,131,895	13,126,763	13,121,315	13,115,531	13,080,797	
Balance Sheet Expenditures:								
Planned Annual Capital Expenditures	(	2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	
Principal on Current Mortgage	(	1,145,000)	(1,145,000)	(1,145,000)	(1,145,000)	(1,145,000)	(1,145,000)	
Debt Service Fd (1 year debt serv funded over 10 yrs)		(254,937)	(254,937)	(254,937)	(254,937)	(254,937)	(254,937)	
Debt Service on New Facility Mortgage	(	2,549,369)	(2,549,369)	(2,549,369)	(2,549,369)	(2,549,369)	(2,549,369)	
Total Expenditures	(	5,949,306)	(5,949,306)	(5,949,306)	(5,949,306)	(5,949,306)	(5,949,306)	
Net Cash Available		7,187,423	7,182,589	7,177,458	7,172,009	7,166,225	7,131,491	
Debt Service Coverage Ratio		2.21	2.21	2.21	2.21	2.20	2.20	

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# INCORPORATE CAPITAL PLANNING

- Where does the money come from for not just facility planning but other capital needs?
- When do you need to start your capital process?
- What does it include?
- Should you use local banks or try programs like USDA?





#### COMMITTED TO INCREASING THE IMPACT OF RURAL AND COMMUNITY HEALTHCARE.

Our team of rural and community healthcare experts support the leadership of hospitals, health systems with a rural footprint, and the groups and clinics that form an essential care network across the 97% of the US that is defined as rural.









John Downes, Principal and Director jdownes@stroudwater.com (T) 207.221.8275

#### Cameron Smith, Consultant csmith@stroudwater.com (T) 207.221.8253

