

## HOSPITAL Construction Survey

**Directions:** Please answer the following questions by filling in the box corresponding to your answer. In some cases, space is available for additional information. Please direct questions to Suzanna Hoppszallern, senior editor, data and research, at 312-893-6853 or [shoppeszallern@healthforum.com](mailto:shoppeszallern@healthforum.com). **All survey responses are anonymous and confidential, with results reported only in aggregate form. No personal information you submit will be used for marketing or sales purposes.** Thank you for your participation.

Institution/organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility contact: \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

1. Please indicate the type of organization/facility that most accurately describes the setting where you are currently employed in a management capacity? (Check one.)
  - Hospital – general medical and surgical
  - Hospital – specialized (children’s, heart, etc.)
  - Academic medical center
  - Health care/hospital system (management responsibility is for multiple facilities, e.g., regional manager or central office position) **GO TO QUESTION 10.**
  - Military/federal/VA facility
  - Psychiatric/behavioral health care facility
  - Rehabilitation facility
  - Long-term care facility
  - Assisted living facility
  - Ambulatory care center/surgicenter
  - Medical office building
  - Other: \_\_\_\_\_
2. Please indicate the number of beds at your organization/facility. (Check one.)
  - 1–24     25–49     50–99     100–199     200–299
  - 300–399     400–499     500 or more     Does not apply
3. Please indicate the square footage of your organization/facility. (Check one.)
  - Less than 100,00 sq. ft.
  - 100,001–500,000 sq. ft.
  - 500,001–1,000,000 sq. ft.
  - 1,000,001–3,000,000 sq. ft.
  - 3,000,001–5,000,000 sq. ft.
  - More than 5,000,000 sq. ft.
  - Does not apply
4. Which best describes the location of your facility? (Check one.)
  - Urban     Suburban     Rural
5. Select the state in which you work \_\_\_\_\_. (Drop down menu)

**Building Projects**

6. Please indicate which type of facility projects currently are under construction or being planned for construction within the next three years. (Check one box per facility.) Please indicate whether they are new, replacement or expansion/renovation projects. (Check one box per applicable facility.)

	Currently under construction	Planned within the next 3 years	New	Replacement	Expansion/Renovation
<b>Hospitals</b>					
a. Hospital — acute care. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Hospital — specialty. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Hospital – critical access. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Other building projects</b>					
d. Assisted-living facility. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Long-term care facility . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Medical office building. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Ambulatory facility. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Parking structure. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Physical plant infrastructure upgrade . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Central energy plant . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Data center (information services) . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Other (specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. If your organization is adding or modernizing specific services/departments, please indicate which services currently are under construction or being planned for construction within the next three years. (Check one box per applicable service.) Please indicate whether they are new, replacement or expansion/renovation projects. (Check one box per applicable service.)

Services/Departments	Currently under construction	Planned within the next 3 years	New	Replacement	Expansion/Renovation
a. Ambulatory care . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Bariatric care/surgery centers . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Behavioral health services. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Cancer center. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Cardiology. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Clinical observation units. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Critical care . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Emergency department . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Imaging . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Interventional suites (surgery and imaging) . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Isolation/clean rooms . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Laboratory . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Neurology/neuroscience . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Orthopedics . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Pediatrics . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. Rehabilitation services . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. Sleep disorders center . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
r. Surgery. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
s. Urgent care center . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
t. Wellness center . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
u. Women’s health/obstetrics . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
v. Wound care center . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
w. Other (specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Main Hospital Inpatient Building Services Equipment**

8. Please indicate which major building services equipment in your main hospital inpatient building currently is being replaced or upgraded. (Check one box per project.)

Major building services equipment	Currently replacing/upgrading (next 12 months)	Replaced/upgraded in the last 13-24 months	Plan to replace/upgrade in the next 13-24 months
Air handlers/ventilation . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Boilers . . . . .
- Chillers (primary) . . . . .
- Electrical switchgear/transformers . . . . .
- Elevators. . . . .
- Exhaust fans. . . . .
- Generators . . . . .
- Medical gas system. . . . .
- Medical vacuum system. . . . .
- Packaged HVAC. . . . .
- Plumbing fixtures and piping. . . . .
- Room pressure sensors. . . . .
- Split systems (DX unit) . . . . .
- Other (specify): \_\_\_\_\_

**Main Hospital Inpatient Building Service Systems**

9. Please indicate which **building services systems** in your main hospital inpatient building currently are being replaced or upgraded. (Check one box per project.)

<b>Building services systems</b>	<b>Currently replacing/upgrading (next 12 months)</b>	<b>Replaced/upgraded in the last 13-24 months</b>	<b>Plan to replace/ upgrade in the next 13-24 months</b>
Building controls/automation system . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data infrastructure (wired, cable) . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data infrastructure (wireless) . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic health record . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire alarm/protection system . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient entertainment system. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient monitoring/nurse call system . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Picture archiving and communication system (PACS) . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pneumatic tube system . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security system. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telecommunications . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**GO TO QUESTION 11**

**Regional or National Health Care Systems Building Projects** (Please answer the questions only if you have national or regional system-level management responsibilities.)

10. Please indicate the number of projects currently under construction or planned in the next three years.

<b>Hospitals</b>	<b>Indicate number of facilities</b>		
	<b>New</b>	<b>Replacement</b>	<b>Expansion/ Renovation</b>
a. Hospital — acute care. . . . .	_____	_____	_____
b. Hospital — specialty . . . . .	_____	_____	_____
c. Hospital – critical access. . . . .	_____	_____	_____
<b>Other building projects</b>			
d. Assisted-living facility. . . . .	_____	_____	_____
e. Long-term care facility . . . . .	_____	_____	_____
f. Medical office building. . . . .	_____	_____	_____
g. Ambulatory facility. . . . .	_____	_____	_____
h. Parking structure. . . . .	_____	_____	_____
i. Physical plant infrastructure upgrade . . . . .	_____	_____	_____
j. Central energy plant . . . . .	_____	_____	_____
k. Data center (information services) . . . . .	_____	_____	_____
l. Other (specify): _____	_____	_____	_____

**Specialty Hospital Construction** (Please answer the questions based on your management responsibility,

*i.e., national or regional system managers respond on a system level, and managers of facilities or campuses respond for the corresponding entity.)*

**11.** If you checked specialty hospital construction in Question 6 or 10, please indicate which type. (Check all that apply.)

- Behavioral health center/Psychiatric hospital     Cancer treatment hospital     Children's hospital  
 Heart hospital     Orthopedic hospital     Rehabilitation hospital     Women's hospital  
 Other (specify): \_\_\_\_\_

**Sustainable Construction** (Please answer the questions based on your management responsibility, i.e., national or regional system managers respond on a system level, and managers of facilities or campuses respond for the corresponding entity.)

**12.** Is your hospital/health system specifying any green/environmentally friendly construction materials in any current construction and renovation projects? (Check one.)

- No  
 All construction projects  
 Some construction projects  
 Don't know

If you responded "no," please explain why: \_\_\_\_\_

**13.** What features are being, or will be, incorporated into facilities design that are environmentally friendly and sustainable? (Check all that apply.)

- Chemical waste reclamation  
 High-efficiency building controls  
 High-efficiency HVAC  
 Increase access to day lighting  
 Low-flow water fixtures  
 Low-emission glass for windows  
 Sustainable wall covering, paint and finishes with low volatile organic compounds (VOC)  
 Other (specify): \_\_\_\_\_

**14.** What sustainable construction practices is your hospital/health system employing in its building projects? (Check all that apply.)

- Add language to contract specifications that constructors will follow LEED requirements  
 Maintain and restore site biodiversity  
 Minimize site development footprint  
 Optimize layout and orientation of building to optimize energy performance  
 Reuse/recycle demolition materials  
 Segregate construction and demolition waste  
 Specify cogeneration, fuel cells, renewable energy systems and other alternative energy sources as feasible  
 Use of physical and mechanical design and building materials to improve indoor air quality  
 Other (specify): \_\_\_\_\_

**Facility Planning and Budget** (Please answer the questions based on your management responsibility, i.e., national or regional system managers respond on a system level, and managers of facilities or campuses respond for the corresponding entity.)

**15.** When was your master facility plan last updated? (Check one.)

- Within the last six months     More than six months ago, but within the last 12 months  
 More than one year ago, but within the last two years     More than two years ago     Do not have one

**16.** How are **most** of your facility infrastructure projects budgeted and implemented? (Check one.)

- On a planned replacement schedule as part of a Facility Master Plan  
 On a planned replacement schedule, but not as part of a Facility Master Plan  
 As needed due to aging, equipment malfunctions, regulatory compliance and as budget allows  
 Other (specify): \_\_\_\_\_

**17.** Do you commission your health facilities projects (audit to review performance of building energy systems)?

(Check one.)  Yes  No

If yes,

a. What percentage of a project budget do you put toward commissioning? \_\_\_\_\_

b. Do you hire an independent third-party commissioning authority?  Yes  No

18. Is Building Information Modeling (BIM) used in: (Check one per line.)

a. Hospital capital planning  Yes  No

b. Project management  Yes  No

c. Facilities operations  Yes  No

19. Please indicate the percentage of your **recently completed** construction projects that correspond to the following descriptions. Percentages *must* total 100%.

	Percentage
On or under budget/on or ahead of schedule .....	_____
On or under budget/behind schedule .....	_____
Over budget/on or ahead of schedule .....	_____
Over budget/behind schedule .....	_____
Total .....	100%

20. Approximately what percentage of your hospital/health system's overall capital budget is allocated to construction projects? (Full fiscal year)

FY ending in:	New construction	Facility renovation	Facility infrastructure
2013 (actual)	_____ %	_____ %	_____ %
2014 (budgeted)	_____ %	_____ %	_____ %

21. How will the percentage of the hospital/health system's 2014 capital budget allocated to building projects change from 2013? (Check one in each column.)

	Hospital new construction	Hospital renovation	Hospital infrastructure upgrades	Off-site facilities
No change .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase by 1 to 5% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase by 6 to 10% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase by 11 to 25% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase by more than 25% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease by 1 to 5% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease by 6 to 10% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease by 11-15% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease by more than 25% .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. How is your organization financing construction projects? (Check all that apply.)

- Bank loans/other debt
- Existing cash reserves
- Operations
- Philanthropy
- Tax-exempt bonds
- Taxable bonds
- Federal grants
- FHA 242 program
- Other (specify): \_\_\_\_\_

**Health Care Reform Impact on Construction** (Please answer the questions based on your management responsibility, i.e., national or regional system managers respond on a system level, and managers of facilities or campuses respond for the corresponding entity.)

23. Please indicate **your** assessment of the impact of reduced reimbursement rates and new payment

arrangements on your hospital's construction plans. (Check one response in each row.)

	<b>Definitely will proceed with plans</b>	<b>Will proceed with modifications</b>	<b>Re-evaluating plans</b>	<b>Less likely to proceed</b>	<b>Definitely will not proceed</b>
New hospital construction . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospital renovation and expansion . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospital renovation without expansion . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospital infrastructure upgrades. . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off-site facilities . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**24.** As your organization continues to strategize on the best way to respond to reduced reimbursement rates and new payment arrangements, have there been discussions with senior leadership about how to utilize or modify existing facilities or campus design to meet community needs in this evolving financial climate?

- Yes     No

If yes, please describe the activities that have taken place: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**25.** What future facility development plans/construction projects are being considered in response to reduced reimbursement rates and new payment arrangements? (Check all that apply.)

- Ambulatory surgery centers
- Emergency department, adding observation units
- Freestanding emergency department
- Medical office building expansion
- Retail clinics
- New medical office building construction
- Outpatient facilities in neighborhood settings
- Primary care clinics in neighborhoods
- Residential facilities for long-term care and/or transitional patients
- Satellite facilities to cater to specialties
- Satellite facilities to cater to an aging population that wants access to routine health care close to home
- Urgent care centers in neighborhood settings
- Other (specify): \_\_\_\_\_

May we contact you by phone to interview you for stories in *Health Facilities Management* on the results of this survey?

- Yes     No

**Thank you for your participation!**  
 Please submit survey by Nov. 8, 2013.

*All survey responses are anonymous and confidential, with results reported only in aggregate form.*

*Health Facilities Management thanks the sponsors of this survey,  
 Grainger and Sherwin-Williams for underwriting this research.*

