

Estimating Health Center Project Costs

Including an analysis of data from 2021 HRSA C8E Capital Grants

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www.caplink.org

Our Vision

Stronger health centers, actively building healthy communities

Our Mission

Capital Link works to strengthen community health centers—financially and operationally—in a rapidly changing marketplace.

We help health centers:



Plan for health center sustainability and growth



Help health centers access capital



Improve and optimize health center operations and financial management

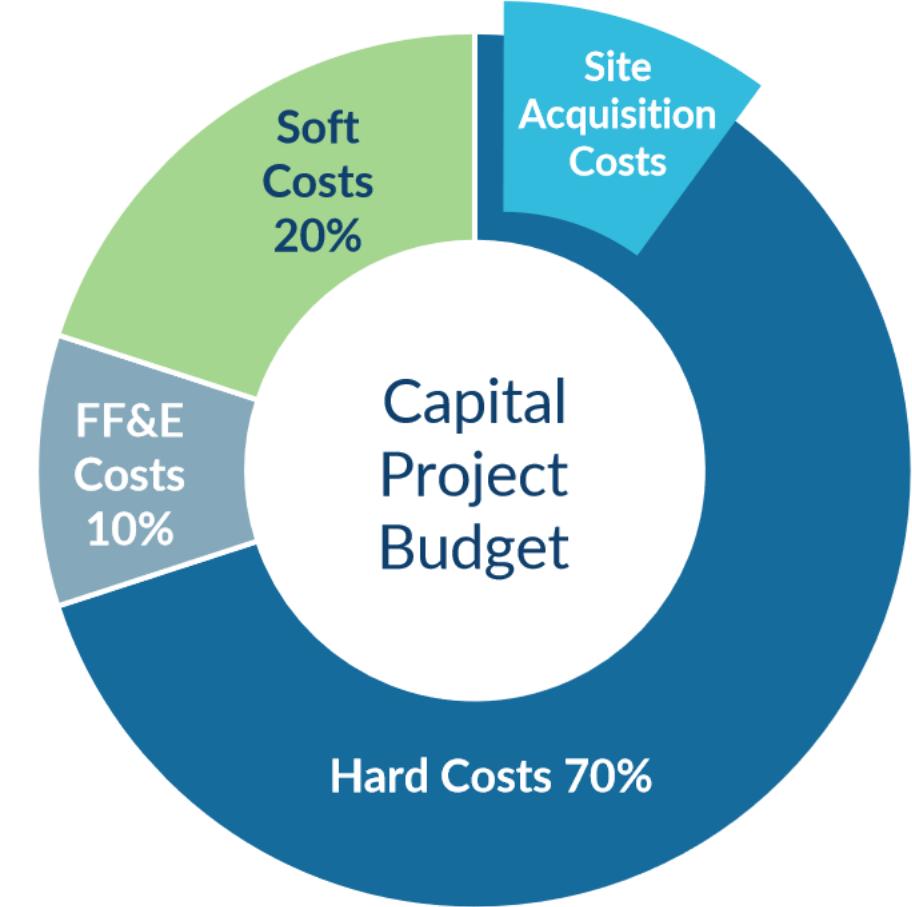


Articulate health center value



ESTIMATING HEALTH CENTER PROJECT COSTS

APRIL 2022



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The capital project budget begins with “informed guesses” and becomes more refined with input from expert professionals such as architects, construction managers, and general contractors as the organization progresses through the development process

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Final project construction costs are greatly influenced by basic building design (material selection, number of floors, energy efficiency, LEED/green building design elements, interior finishes, etc.) as well as the variability of site preparation costs.

”

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The state of the general economy at the time construction bids are solicited can have a major impact on the bids received.

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Part of the federal government's response to the COVID-19 pandemic: the C8E was a:

Non-competitive grant with award amounts determined formulaically

Grant application announced in June 2021, and awarded in September, 2021.

Centers seemed to fall into one of two categories:

In the Capital Planning Process

- the C8E was a fortuitous event and welcome addition to the Sources of Project Cash (known as the “capital stack”.)

NOT in the Capital Planning Process

- rather than pass up easily available capital \$, these health centers approached the grant amount as a project cost cap and then chose a project based on that number.

- Relatively short amount of time to determine the project to submit, estimate its cost, and prepare the grant documentation.
- As a result, many of the costs submitted were likely early estimates (better than dart-board numbers, but maybe not a lot better).
- Current high rates of inflation in the labor and materials markets may impact the period of time for which the data submitted could be useful for other health centers as cost planning guidelines.

1. Construction of a New Facility (NEW CONST)
2. Alteration/Renovation of Existing Facility, (ALT RENO), and
3. Construction/Expansion of Existing Facility (EXPAN)
4. Equipment-Only

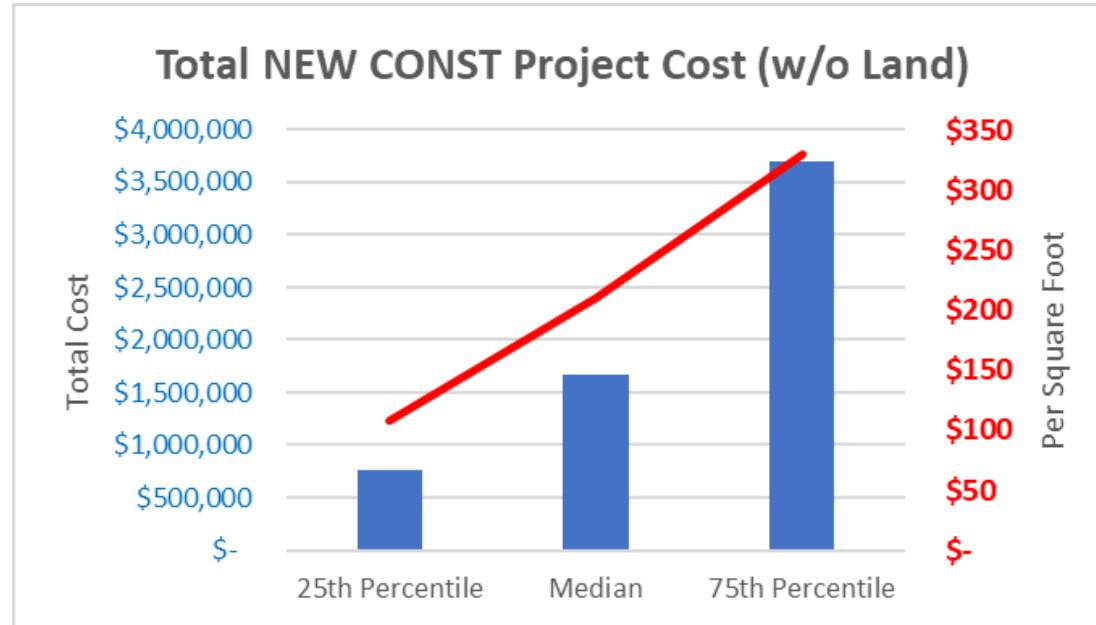
Project Category	Number of Projects
New Construction	233
Alteration/Renovation	938
Expansion	311
Equipment-only	797
Total	2,279

11,000+ individual equipment cost estimates were submitted, BUT

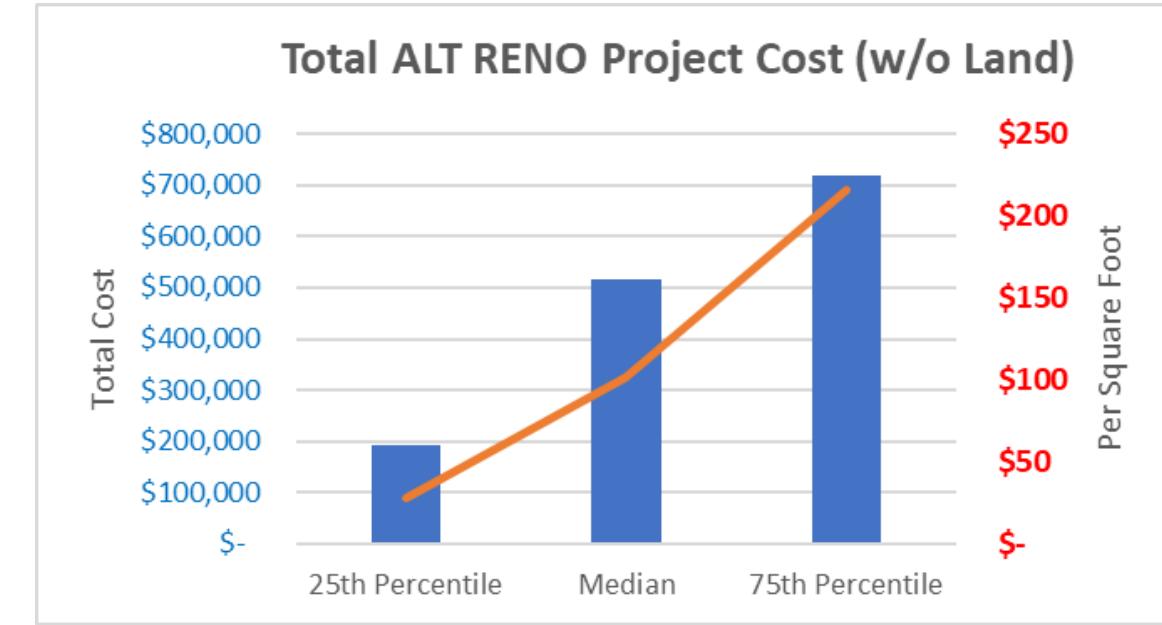
Aggregated cost analysis is much less meaningful than for other categories

- Equipment Costs will vary more by service type than by SF424c project category;
- Equipment-only projects were not required to report the associated square footage (understandable as there is limited direct correlation between project size and equipment cost);
- If a center is looking for equipment cost detail it is fairly easy and quick to obtain up-to-date quotes for the specific equipment being purchased from any number of vendors (and/or group purchasing plans) on a delivered cost and/or installed basis.

Data from the HRSA C8E Grant

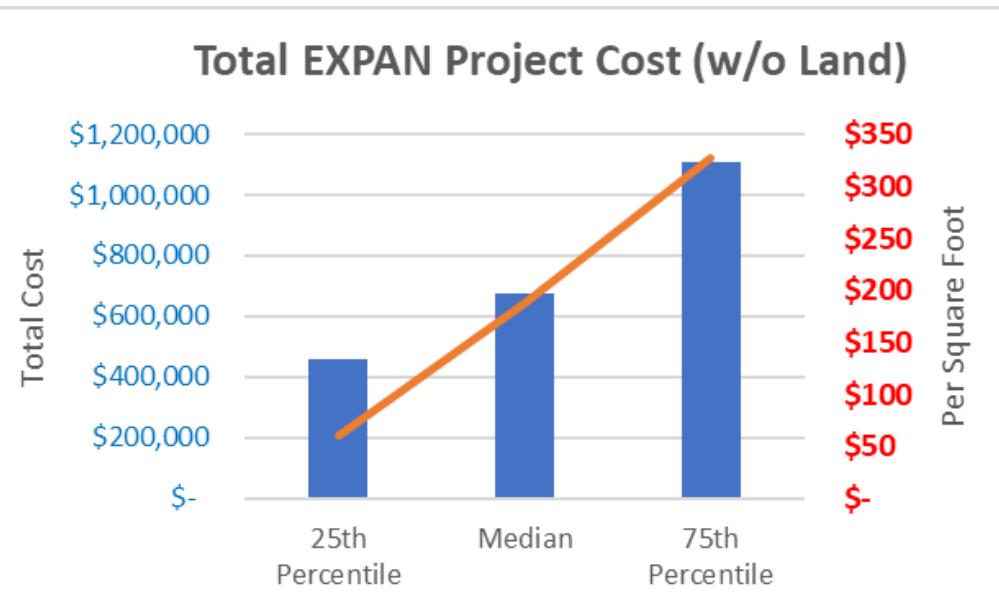


To be more useful to a health center at the initial stages of project planning, it is worth further subdividing the cost data based on size and location type which is discussed in a later slide.



Estimating an extensive renovation project between the median (\$100 per square foot) and 75th Percentile (\$215) is probably a reasonable place to start when estimating what a future project might cost before any of the design details have been worked out.

Data from the HRSA C8E Grant



Scanning the project titles submitted under the grant opportunity, a wide variety of projects fell into this category. Many involved “Expansion of xxx Clinic”, but others included adding an in-house pharmacy, a drive-through pharmacy or expanding parking capacity. As might be expected, the cost of an expansion of an existing facility falls between the cost of a completely new building and the renovation of existing space.

- Land, Structure, Rights of Way, Appraisal
- Architect & Engineering
- Demolition, Removal, Sitework
- Construction
- Equipment
- Project Inspection, Miscellaneous, Contingencies, Relocation, Administrative/Legal

Site Control Options:

- Donations – local **community** groups, city/county government, churches
- Lease
- Lease/Purchase
- Purchase

If buying a site, you NEED:

- Legal Counsel
- Title Report
- Environmental Review
- Appraisal

For project planning:

- Survey
- Permits - Talk to the local municipalities as part of planning activities, not only when you have plans and want a building permit. You want to know about:
 - zoning
 - Access requirements (on your property and public property (will the increased traffic require road widening, new lanes or traffic control). Determine who will pay for it?)
 - Are utilities available to the site?
 - Any clean energy/environmental design mandates?
- Do you know all the permitting authorities with jurisdiction over the location?
- Consider: where do patients park while construction is in process? – where do construction workers park?

Site Selection Considerations

A site's physical characteristics may significantly impact the cost of preparing for a new construction project:

- remediation of adverse environmental conditions;
- geotechnical (sub-soil conditions: location of bedrock, fill soil, moisture)
- Site shape may also present problems in terms of the location of the building footprint within a site.

Before entering into an agreement to acquire property the community health center should, together with specialists, thoroughly investigate these issues to minimize cost and risk.

Land costs were excluded from aggregate analysis because:

- they are not necessarily a part of all capital projects (only 67 of 233 New Construction projects noted land costs, and only 37 of 311 Expansion projects);
- the amount was highly variable (due to location, donations, etc.);
- where indicated, they were often significant which skewed the resulting total project cost;
- they were an Unallowable Cost under the grant terms, so it was not clear that all applicants uniformly noted the cost of land on their submissions.

Choosing an Architect

- There are national firms that specialize in health care and some that specialize in outpatient clinics or FQHC's;
- Local firms will have contacts with local contractors – that can be good or bad;
- Be clear on what you want – do you have a clear vision for what the building needs to do (as opposed to what you want it to look like?);
- Does the firm have in-house primary care space planning expertise to be sure all the functions work together, and adjacencies make sense;

Links top Capital Link space planning publications... (www.caplink.org/capital-planning-tools)

1. [**Trends in Community Health Center Design**](#)
2. [**Designing Your Facility: Preparing Your Team for Space Planning Success**](#)
3. [**Optimizing People, Place and Process: Resources to Facilitate Integrated Care in Federally Qualified Health Centers**](#)

Decisions to make – and design philosophy on which to make them;

How much of the design elements are you going to leave to the architect? Remember why EVERY architect went to architecture school – (Hint - it wasn't to design exam rooms)

Budget vs. Community Statement (= Tradeoffs)

Generate early renditions (artist's best guesses) to use to cultivate stakeholders.

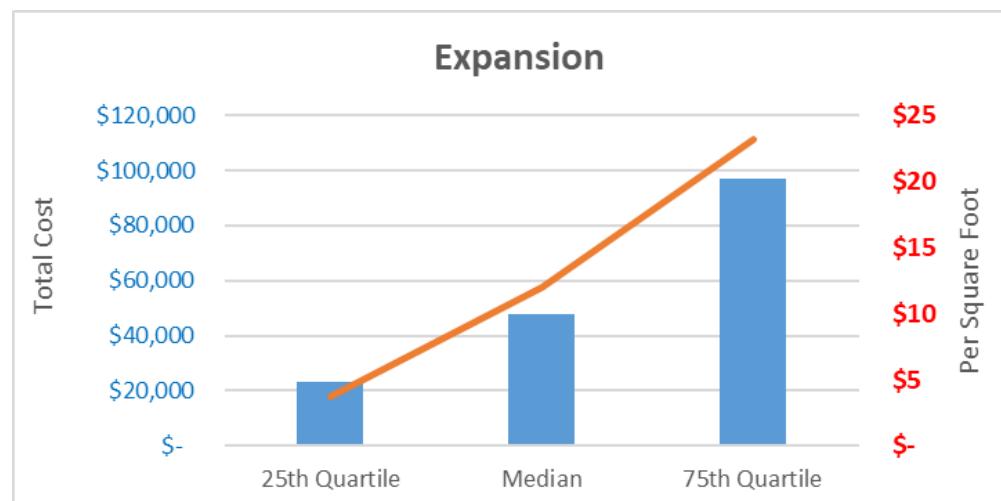
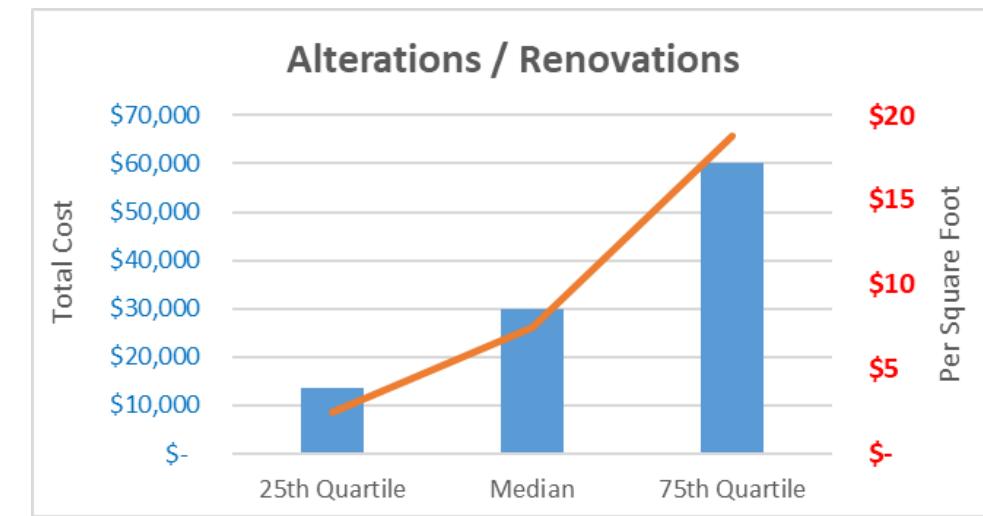
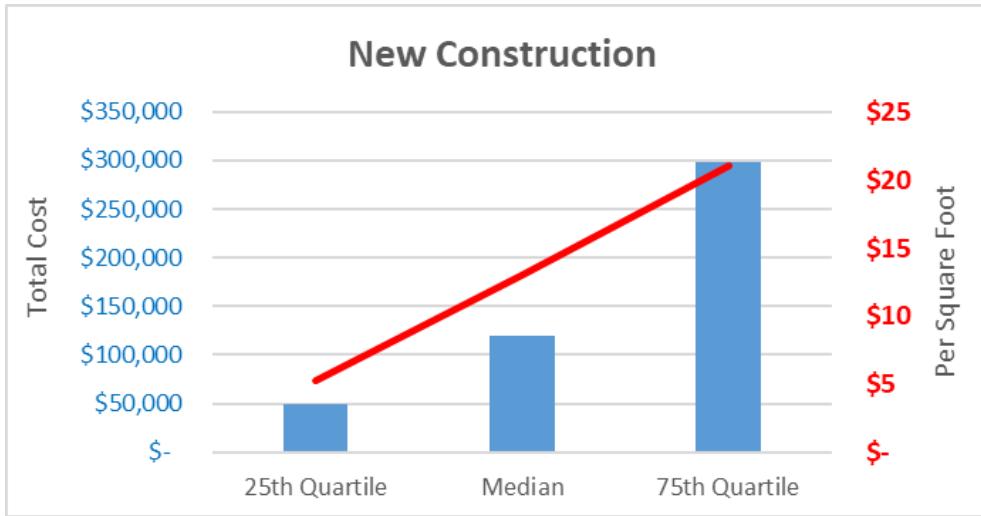


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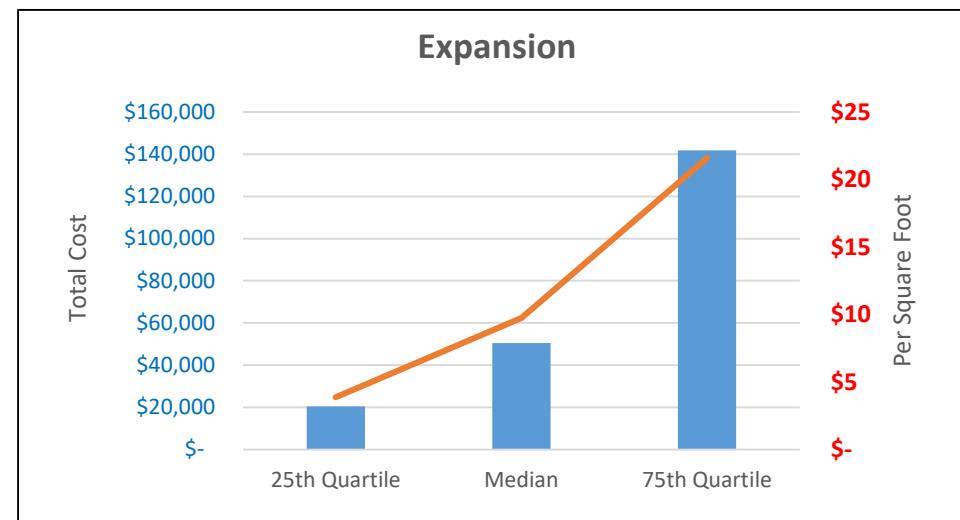
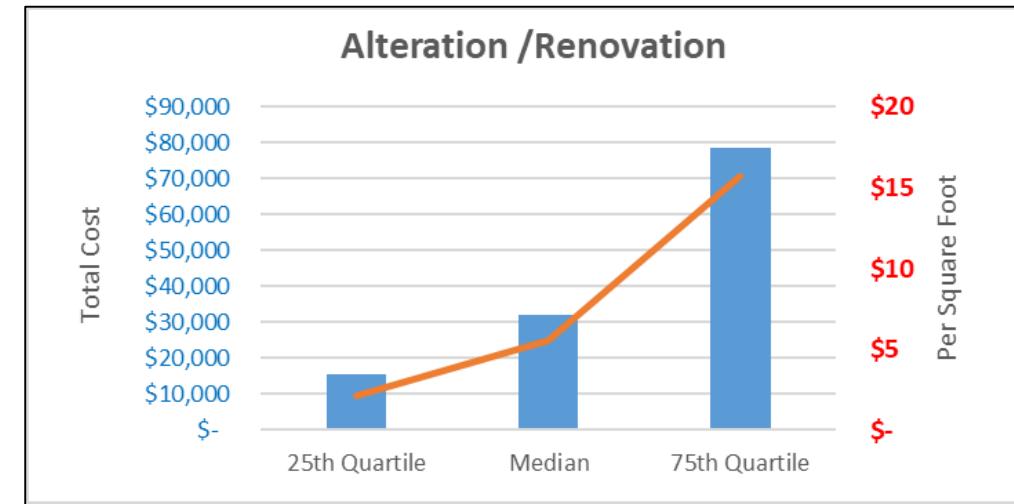
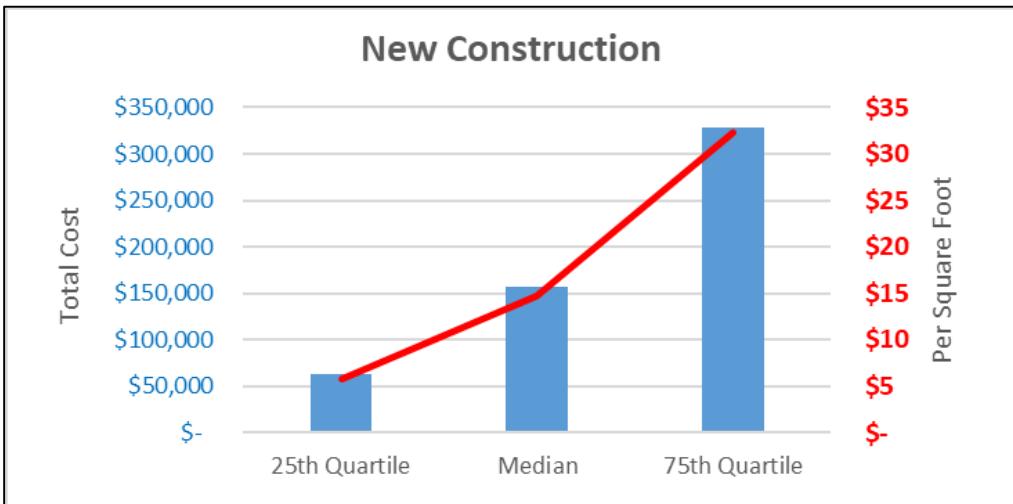


Also VGMHC – Newberg

Data from the HRSA C8E Grant



Elements of the Project Budget - Sitework



Costs are site-driven – Varies for buildings on grade vs building down - Time of year can influence costs and project schedule

Always the largest component of the project budget

- General Contractors vs Construction Managers
- The goal is usually a Guaranteed Maximum Price contract:
 - but that is getting more difficult to nail down in an inflationary environment (which is when you need it the most)
 - Cost escalators vs Contingencies
 - Elements usually include –
 - GC/CM profit,
 - Liability Insurance,
 - Builder's risk insurance,
 - Payment and performance bonds

Architect's initial budget and CM/GP final budget should fit in this frame:

General Conditions

Sitework (including utilities, sewer connection))

Concrete & Masonry

Metals

Woodwork & Carpentry

Thermal / Moisture / Insulation

Doors & Windows

Walls, Ceilings & Finishes

Floors

Roofing

Interior Finishes, Specialties, Signage

Mechanical / HVAC

Plumbing

Electrical

Landscaping / Paving / Exterior Improvements

Exterior Façade (Storefront)

Miscellaneous (incl. Fire Alarm, Fire Protection)

Contractor's Contingency

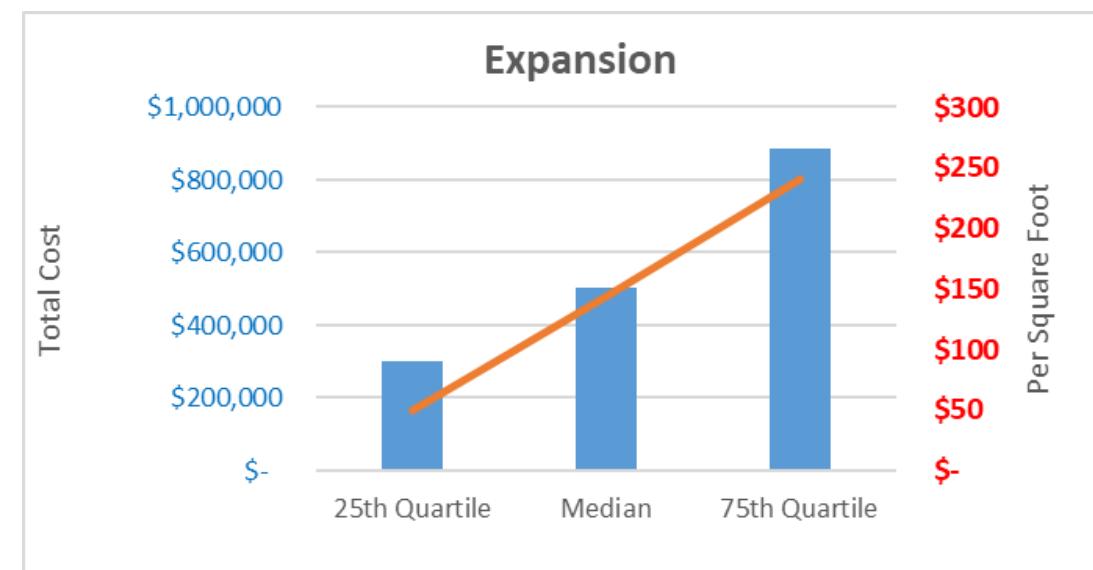
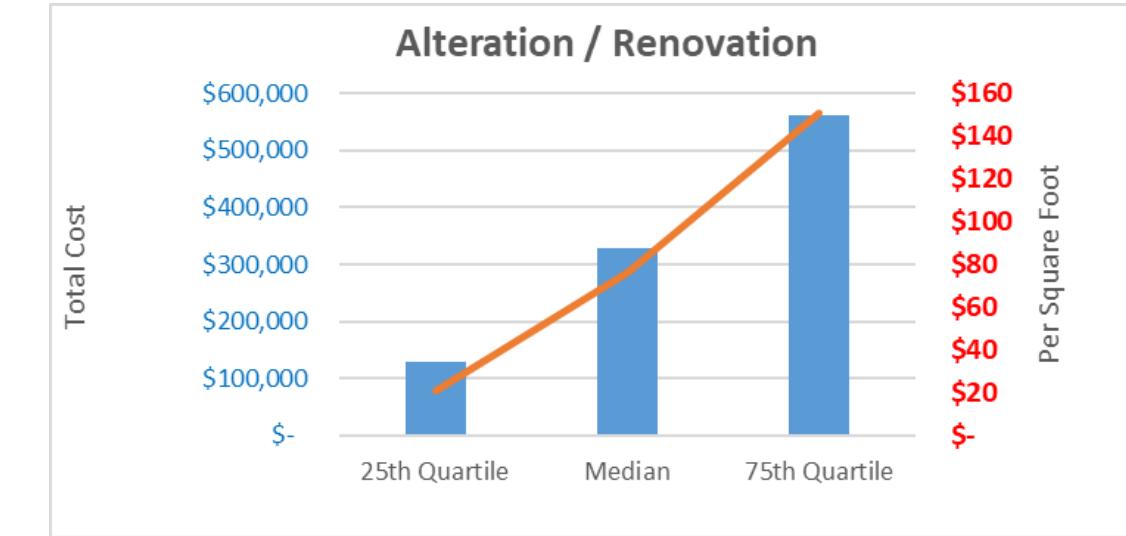
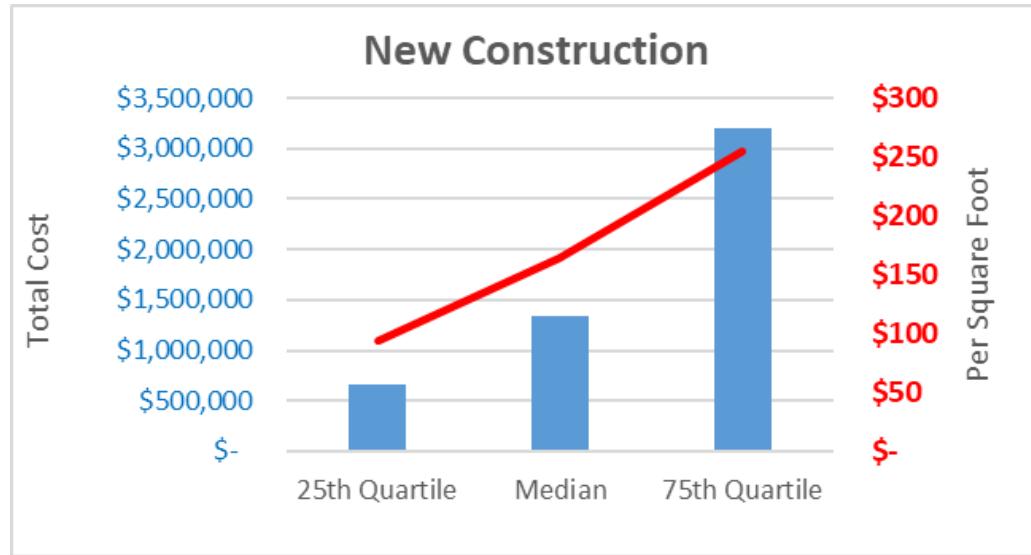
GP Overhead & Profit

General Liability & Workmen's Comp

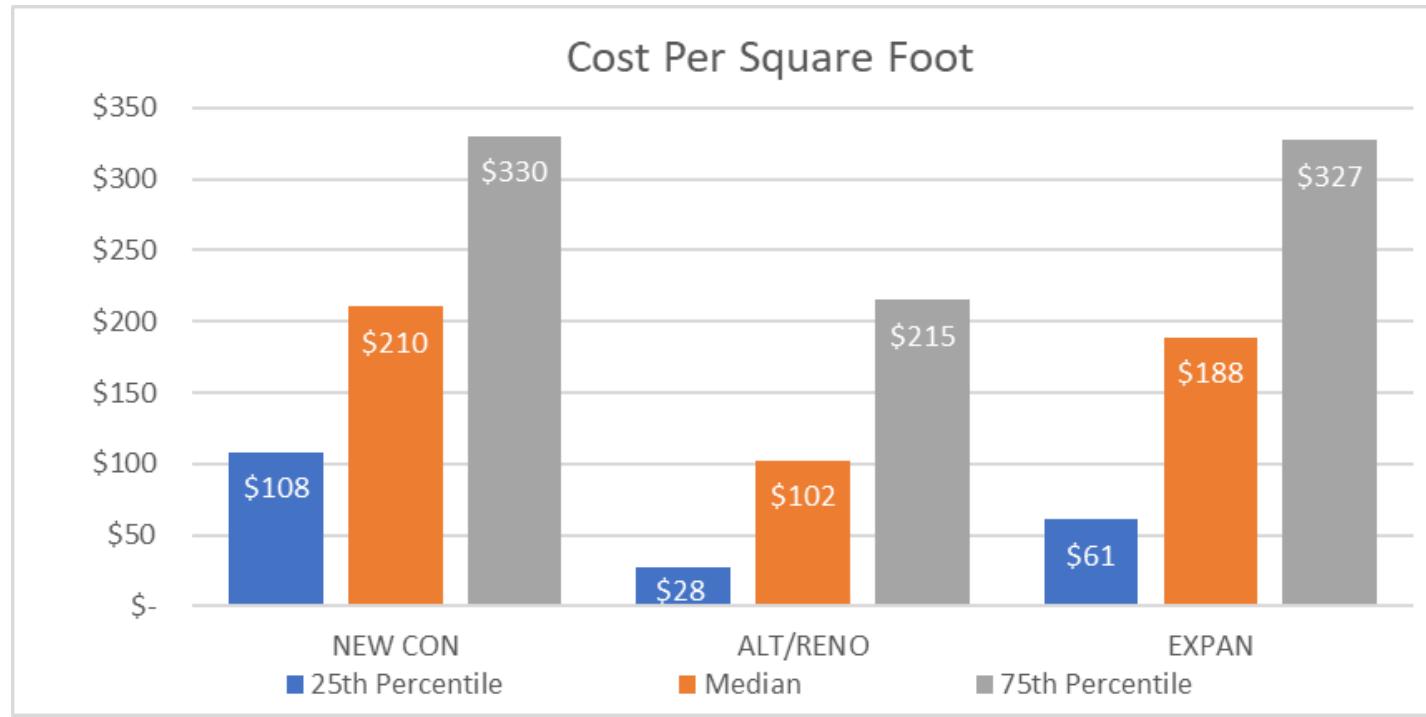
Elements of the Project Budget - Construction



Data from the HRSA C8E Grant



Does it Cost More to Add Square Footage or Renovate an Existing Space?

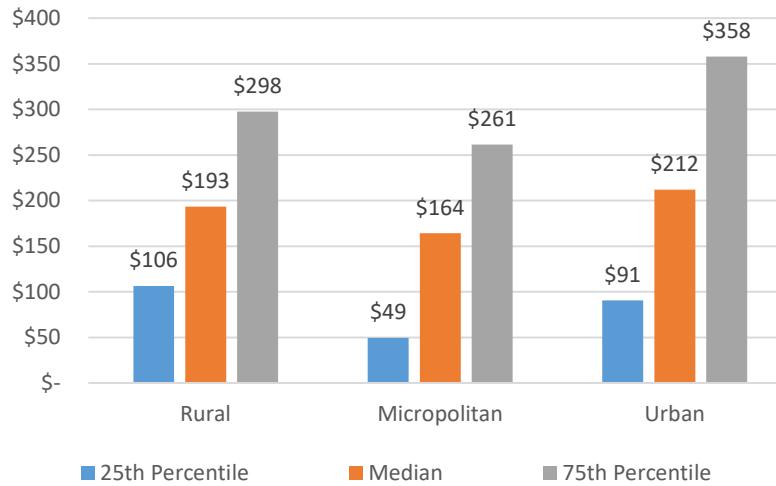


In most cases, adding square footage costs more per square foot than renovating or rehabilitating an existing space. However, this trend may not apply if you are:

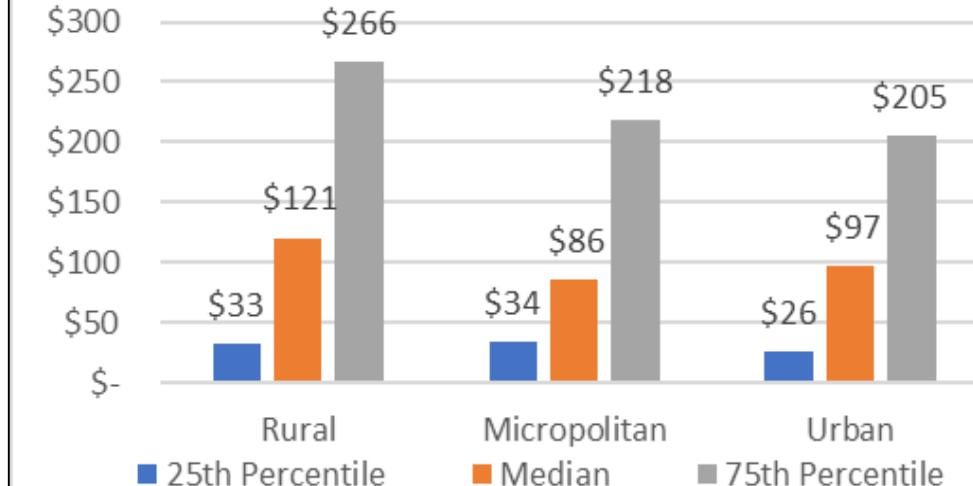
- Adapting/upgrading an existing building that has been used for something other than healthcare;
- Renovating an antiquated (way out of code) or historic facility;
- Experience significant environmental issues (asbestos, buried heating oil tanks, etc.)

How Does Location Impact the Cost of a Project?

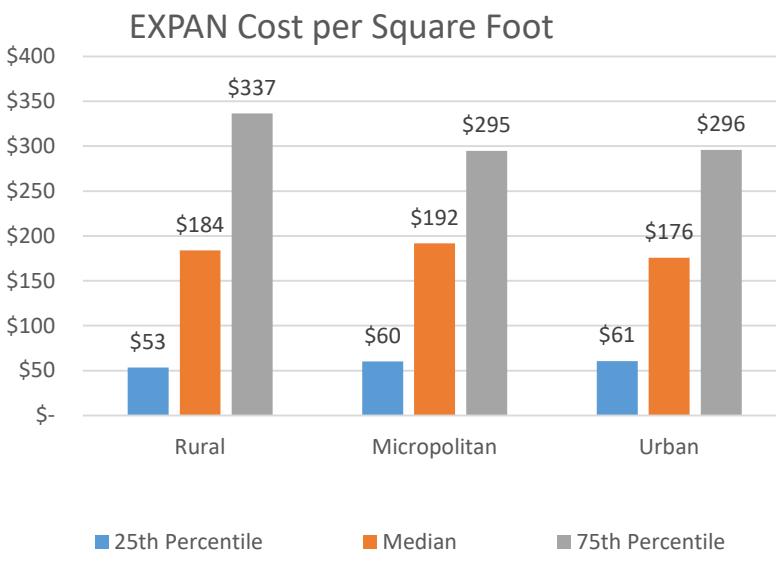
NEW CONST Cost per Square Foot



ALT/RENO Cost per Square Foot



EXPAN Cost per Square Foot



New Construction projects in Micropolitan areas appeared to be the least expensive of all, across all percentiles. Perhaps due to:

- More skilled tradespeople living in those areas,
- Construction suppliers typically need a large space for inventory (i.e., lumber) or processing (i.e., cement plants), but such plots are either not affordable or not zoned properly in urban areas.
- Rural property is generally cheaper, but the distance to urban work sites can result in high shipping costs.

FFE (Furniture Fixtures and Equipment) varies significantly across projects:

For an early, high level budget., estimate it at **10%** of total project costs (**15%** if all new or there is a lot of dental or radiology equipment).

What can impact the total FFE budget?:

- Existing FFE you move over from facilities you are vacating (account for moving and re-installation costs though);
- Donations (hospitals, local dental practices);
- Group Purchasing Plan discounts
- Some vendors can equip an entire exam room, others quote individual items
- Is delivery included in quote (?)
- Installation costs can be significant (Dental and X-ray particularly);

- Project Inspection
- Administrative/Legal
- Miscellaneous
- Contingencies
- Relocation

Capital Link Publications (informational publications and fact sheets, toolkits and guides, and industry research reports): <https://caplink.org/publications>

Capital Link Newsletter: <https://caplink.org/resources/newsletter>

Capital Link Blog: <https://caplink.org/blog>

Webinar Recordings: <https://caplink.org/resources/webinar-recordings>

NACHC Health Center Resources Clearinghouse: <https://www.healthcenterinfo.org/>

COVID-19 Resources: <https://caplink.org/covid-19>

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