Acknowledgements

**Capital Link**

Capital Link is a national, non-profit organization that has worked with hundreds of health centers and Primary Care Associations over the past 15 years to plan capital projects, finance growth, and identify ways to improve performance. We provide innovative advisory services and extensive technical assistance with the goal of supporting and expanding community-based health care. Established in the late 1990s as a joint effort of the National Association of Community Health Centers (NACHC), several state-based Primary Care Associations (PCAs), and the Bureau of Primary Health Care, Capital Link grew out of the community health center family and continues to support it through creative capital development and analytic activities. For more information, visit [www.caplink.org](http://www.caplink.org).

**Community Health Center Capital Fund (Capital Fund)**

Community Health Center Capital Fund (Capital Fund) supports the growth and development of community-based health centers serving low-income and uninsured populations by providing capital structured to meet health centers’ needs. Capital Fund manages several health center loan programs and provides targeted direct loans to health centers to assist them in leveraging multiple sources of financing for their capital projects. Capital Fund was one of Capital Link’s founding partners and now serves as its lending affiliate. For more information, visit [www.chc-capitalfund.org](http://www.chc-capitalfund.org).

**Citi Foundation**

The Citi Foundation supports the economic empowerment and financial inclusion of low- to moderate-income people in communities where Citi operates. It works collaboratively with a range of partners to design and test financial inclusion innovations with potential to achieve scale and support leadership and knowledge-building activities. Through a “More than Philanthropy” approach, we put the strength of Citi’s business resources and people to work to enhance our philanthropic investments and help improve communities.

Before and after facility cover photos courtesy of Community Health and Social Services (CHASS) Center, Inc. of Detroit, MI.
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Executive Summary

Based on a study of 176 organizations, the following report summarizes the impacts of capital projects on health center operations and financial performance. This report is Issue 3 in a series titled Community Health Center Financial Perspectives, supported by the Citi Foundation and prepared by Capital Link, in collaboration with Community Health Center Capital Fund. Written for an audience of health center leaders, this document takes a data-informed approach to guide health center capital planning and financing processes.

Key Findings

Financial and Operational Impacts of a Capital Project

There are clear financial and operational effects of taking on a capital project for which your health center can prepare, both in terms of setting aside reserves and setting expectations with your board, lenders, staff, and other stakeholders. Based on an analysis of health center capital projects completed between 2004 and 2008, the data supports the following findings:

Impact on Profitability: For health centers that completed capital projects, profitability dropped to its lowest level in the first full fiscal year after project completion (“Year 1”). Total operating expense growth rates outpaced total operating revenue growth through Year 1 before the trend reversed in Year 2. By Year 3, expenses and revenues grew at nearly identical rates for the median health center with a capital project.

Impact on Cash Flow: Health centers with capital projects should expect a drop in cash in the project year. The typical health center experienced a drop in cash of 10 days cash on hand, and it took two years for the typical health center to fully recover. By Year 3, most health centers ended up with the same or slightly higher days cash on hand levels than before a project was completed.

Operational Ramp-Up: The data showed a clear ramp-up period during the project year, at which point the staffing expense growth and the growth of full-time equivalents (FTEs) were significantly greater than patient growth, which in turn peaked in Year 1. Health center management should see this staffing up in the project year as a normal part of a capital project cycle and plan accordingly, as staffing up too late might mean some missed revenue opportunities.

Transformative Growth: At the median, operating budgets for health centers with capital projects grew by 47% over the 5-year review period, compared to health centers without projects, which grew by 24%. Growth at this level suggests an evolution of small organizations to medium-sized organizations, and medium to large.
Mitigating the Risks of a Capital Project

There are potential risks during capital project implementation that can be mitigated with appropriate planning. Most notably, capital projects appeared to exacerbate existing operating financial weaknesses in an organization. In particular, health centers that started with a break-even operating margin were more likely to end up with a negative operating margin even three years after the project. Conversely, the top performing quartile that started with a very strong operating margin of 8% ended up at close to that same level (7.6% by Year 3). This trend of the weak becoming weaker as a result of a project was also clear when analyzing working capital growth; health centers that started a project with negative working capital growth experienced shrinking working capital through Year 1 (albeit at a slower rate). Days cash on hand did improve for the 25th percentile, but only slightly. One lesson to be learned from these observations is that it is important for a health center to ensure that it has a sound operating model before embarking on the tremendous effort and transformation represented by a capital project.

The enclosed analysis also highlights the finding that health centers that staffed up over an extended period of time following project completion might not have optimized their post-project revenue. While it is a more conservative strategy to add providers once the demand has been confirmed, this approach may prevent health centers from fully capitalizing upon the market opportunities that capital projects create. If demand is stimulated by the “curiosity factor” that a new facility generates but the capacity is not there to serve that patient demand, patient growth could be smaller. A better, less reactive approach could be a detailed market assessment, a staffing plan that matches the unmet need, and a hiring process timed to coincide with the opening of the new facility.

Potential Positive Effects of a Capital Project

Boost for Strong Organizations: Although a less strong operating model appeared to be weakened by the completion of a capital project, capital projects appeared to enhance the performance of already strong organizations. From the historical data we can infer that if health centers begin a project with sound profitability, greater-than-average cash reserves, and positive working capital growth they are more likely to end up stronger along these measures three years after project completion.

Improved Payer Mix: Capital projects also appear to be associated with an improved payer mix. Compared to health centers that did not take on a capital project, health centers in the project group saw greater growth in Medicaid patients, as well as a slight reduction in the proportion of self-pay patients (although this group grew substantially on a nominal basis).

Preserved Productivity: Although provider productivity has declined on a sector-wide basis, capital projects appeared to help health centers preserve greater medical productivity as compared to health centers that did not build during the review period.

Improved Care: Capital projects also appeared to allow health centers not only to add patients but to also broaden and deepen the level of care they were able to provide to all patients, as indicated by the increased visits per user for health centers with capital projects.
Size of the Project Matters

Health centers completing small projects (capital project budget of $1 to $2 million), medium projects ($2 to $5 million), and large projects (more than $5 million) followed very different growth trajectories with respect to patients, visits, and FTEs, showing peak growth for each indicator in varying years.

Large capital projects had a longer growth cycle, stronger revenue and visit growth, and a longer period where revenue growth rates outpaced expense growth. Health centers taking on a large capital project were also more likely to have an efficient personnel expense structure, which was the lowest as a percent of total operating revenue of all the cohorts studied.

Medium-sized capital projects were more likely to struggle to recover their operating margin and cash to pre-project levels, unlike those with small and large projects, which experienced a return to pre-project profitability and better cash levels by Year 3. A combination of factors is likely the cause of these financial results; health centers with medium-sized projects also tended to be mid-sized in terms of operating budget and appeared to most acutely experience the challenges of scaling.1 Medium project health centers were also very likely to use debt as a financing source for their projects, which has an impact on operating margin and cash.

Debt as a Funding Source has Predictable Effects

Debt mostly affected leverage and profitability and did not appear to affect working capital growth. Health centers that used debt to finance some portion of their projects experienced smaller fluctuations in cash in the project completion year as they were less likely to self-fund their projects. Health centers that used debt also experienced enhanced net patient service revenue growth in the final year of the project period.

Health centers in the cohort that used debt to finance their capital projects were more likely to be in a constant-growth cycle (as signified by stronger net patient service revenue growth and personnel expense growth in final analysis year).

This report is organized in the following sections:

Section I: Introduction and Background
Section II: Financial Impact of Capital Projects on Community Health Centers
Section III: Impact of Capital Projects to Health Center Operations
Section IV: Influence of Project Size on Health Center Finances and Operations
Section V: The Role of Project Debt
Section VI: Conclusion and Takeaways for Health Centers
Section VII: Methodology and Limitations

1 This effect was also observed in a recently published report on financial and operational trends of health centers in California: California Community Clinics: A Financial and Operational Profile, 2008-2011, September, 2013.
### Key Ratio Summary:

#### Key Financial Metric

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#### Key Operational Metric

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<td>Year 3 6%</td>
</tr>
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Section I: Introduction and Background

Currently the largest network of primary care providers nationally, Federally Qualified Health Centers (FQHCs) are expected to grow from serving 22.3 million patients currently to 40 million patients over the next several years, as a result of the Affordable Care Act. This level of projected growth is even greater than the growth health centers experienced between 2005 and 2011, during which time they grew from 15.9 million to 21.1 million patients. According to a 2012 analysis by Capital Link, within that same timeframe health centers added an estimated $11.1 billion in leased and owned buildings, property, and equipment, and will need to add at least $13.1 billion in capital assets in the future to meet the growth goals of serving 40 million patients.

This document, and a companion piece written for lenders, is the second installment of a publication series intended to provide insight on issues related to health center financial and operational performance, particularly as they affect access to capital. The first issue, Community Health Center Financial Perspectives, Issue 1: Financial and Operational Ratios and Trends of Community Health Centers, focused on financial and operational performance of community health centers between 2008 and 2011, with health center leaders as the intended audience. As a companion, Issue 2 was written with lenders in mind, serving as an introduction to health center operations and financial health.

Issue 3 in the publication series (and a companion Issue 4, written for lenders) describes the impact of a capital project on a health center’s financial and operational performance and health. This report seeks to answer questions Capital Link frequently receives about capital projects, such as: How fast do health centers grow after a capital project? What are the potential pitfalls? How large should my cash reserves be to mitigate possible losses as my new facility ramps up? How fast do other health centers add staff and how does that affect the bottom line? How much debt do other health centers support when they take on a capital project? How much equity do they usually raise? The report also addresses the issue of project size, and whether and how this factor may affect health center finances and operations differently.

Data Analysis Approach

To begin to answer questions related to the impact of capital projects on health center operations and financial trends, Capital Link developed this analysis using our industry-specific database of health center audits, which represents an average of 70% of all health centers in any given year between 2003 and 2011. The year-over-year change in land, buildings, and leasehold improvements was calculated from 2004 through 2008, and any change in land, buildings, and leasehold improvements that exceeded $1 million was classified as a “capital project”. This group was further honed to identify health centers with capital projects for which five consecutive years of audits were available (in which the project year was the second year), and

\(^2\) As of 2012, according to the Nationwide Uniform Data System (UDS) Roll-up Report that tabulates FQHC and FQHC Look-Alike data.
118 organizations were identified as meeting this criteria.

In order to have a basis for comparison, we also assembled a control group that had no more than a $150,000 change in land, buildings, and leasehold improvements from 2004 to 2008. We identified 58 organizations with five consecutive years of audits that met the criteria of no major capital growth over the review period. For the financial impact section of this report, all data was reported at the median for the “Project” and “No Project” groups. In addition, health center financial data from the project group was also reported at the 25th and 75th percentile.

The data and charts in the operational impact section are based upon organization-level Uniform Data System (UDS) data from 108 health centers that had completed capital projects between 2004 and 2008; this is a subset of the 118 health centers studied in the financial data analysis section of this report. Similarly, the control group consists of UDS data from 43 organizations, a subset of the 58 studied in the financial analysis. Some organizations were excluded from this portion of the analysis simply because there was no detailed UDS data available for the analysis timeframe, most often because they were FQHC Look-Alikes, which were not required to report detailed data to HRSA prior to 2012. Unlike the median and percentile data reported in the financial analysis, data in the operational impact charts is based on aggregate or average growth; therefore direct comparison of the financial and operational data sets will be less conclusive. More information on methodology and limitations is included at the end of this report.

The financial and operational analysis in this report tracks health centers over an extended period of 2003 to 2011. We included health centers that had capital projects that occurred anywhere between 2004 and 2008, and we followed health centers for one year before the project and three years following the project. We consolidated this data into a five-year period described by the following terminology:

• Year -1 is the fiscal year before the project was completed.
• Project Year is the fiscal year during which the project was completed.
• Year 1 is the first full fiscal year following the project completion year.
• Year 2 and Year 3 were also studied using Capital Link's financial database of audited statements, while the UDS analysis went through Year 4 on relevant measures such as payer mix, productivity, and utilization.

**Terminology**

This document refers to a category of primary health care providers known variously and colloquially as “community health centers,” “neighborhood health centers,” “community clinics”—and sometimes by the technical terms “Federally Qualified Health Centers” or “FQHC,” “Section 330” health centers or “Look-Alikes (LALs).” These references generally denote a type of “safety net” provider that serves primarily low-income and uninsured patients regardless of their financial status. This document assumes a working knowledge of the definition of FQHC (including Section 330s and LALs) and will refer to the group generally as “health centers” unless we are specifically referencing subgroups of this “universe” of providers.
Section II: Financial Impact of Capital Projects on Community Health Centers

There is a great deal for health centers to consider as they plan capital projects: the size, scope, and budget for a new facility, choosing an architect and a contractor, and deciding how to pay for it are just the beginning. Similarly, at the board level, most discussions regarding the capital project are focused on architect selection, site selection, project budget approval, and often loan approvals. However, less time is spent on setting expectations for how the health center’s operations will change over time as a result of the capital project. The analysis in the charts that follow should begin to assist health centers in explaining to the board, lenders, funders, and other stakeholders what financial and operational impacts to expect when their organization takes on a capital project.

The charts in this section of the report are based upon audited financial statements from 118 health centers that had capital projects for which Capital Link possessed five consecutive years of audits. A control group of 58 organizations was included for comparison in the charts below. While the project year could have occurred anytime between 2004 and 2008, all data was consolidated into Year -1, the project year, and Years 1 to 3. More information on methodology is available at the end of this report.

The financial charts that follow include the following elements: data for health centers with capital projects is displayed for the median, as well as for the 25th and 75th percentiles throughout the five-year review period. The median results for the control group have been included for comparison purposes and appear as a dotted line.

**Impact on Profitability: Operating Margin**

(Change in Net Assets from Operations / Total Operating Revenue)

The operating margin is perhaps the most telling indicator of financial health, as it succinctly explains the proportion of operating revenue that is left over after all expenses are covered. Any operating surplus can then be reinvested into the organization in the form of expanded programming, building reserves, or capital expansion.

While the control group hovered between an operating margin of 1% to 2% throughout the review period, health centers with projects showed a clear drop in profitability by Year 1, the first full fiscal year following completion of the capital project. At the median, health centers with capital projects started with a margin that is healthy by community health center standards, at 4%. The median operating margin dropped in the project year to 2.6%, reaching a low of 1.4% the first full fiscal year after the project was completed. The median operating margin recovered to 2.8% by Year 2 and declined somewhat to 2.1% by Year 3, still within the recommended minimum range of 1 to 3%.

Year 1 was the least profitable year for the project group, representing a period in which a number of events...
were happening simultaneously (each of which will be discussed in detail throughout this report): revenue growth was outpaced by expense growth, the full effect of depreciation expense hit the income statement, and maintenance and operating expenses increased. As is discussed later in the report, more than two thirds (70%) of the 118 health centers in this study group funded at least a quarter of their projects using debt; for this group, interest expense is also fully felt in Year 1.

Interestingly, health centers in the upper quartile (the 75th percentile group) appeared to demonstrate strong profitability both before and after project completion, although it took three full fiscal years after the project year to approach pre-project levels of profitability. In contrast, health centers in the 25th percentile grew less profitable as they took on capital projects, ending with a negative 1.2% operating margin in Year 3. This result suggests that completing a capital project with a weak financial profile might worsen any underlying financial or operational issues that existed before the project, while strong operations are less likely to be affected.

**Impact on Liquidity: Days Cash on Hand**
(Total Unrestricted Cash and Investments / Daily Operating Expenses)

Days cash on hand is a liquidity measure that represents the number of days an organization could cover its daily cash operating expenses with its current level of cash and investments in the event all cash inflows ceased. For this measure higher is better, although a reasonable range for health centers is between 30 and 60 days cash on hand.

The median health center that completed a capital project lost about 10 days cash on hand during the project year. The project completion year was the most cash-consuming time for any capital project as health centers bridged pre-development costs and/or used their reserves as a funding source, at the same time that operating margins narrowed. Cash levels appeared to take about two years to recover fully (by
Year 2) as operations stabilized, and ended up slightly higher than before the project by Year 3. In all quartiles, health centers followed the same trajectory of a reduction in days cash on hand in the project year, followed by a rebounding that left them with a slightly higher level of days cash on hand than before they began the project. This rebound to better-than pre-project levels of cash occurred the most quickly and at the greatest volume of days cash on hand for projects in the 75th percentile.

It is important to note that health centers in the 25th percentile took on capital projects with cash levels that were well below the recommended cash level of at least 30-to-60 days cash on hand. By Year 1, the most challenging year, health centers in this quartile were left with just over 11 days of cash on hand, an alarmingly low level that only recovered to 18 days cash on hand by Year 2.

**Impact on Liquidity: Working Capital Growth**

(Year-over-year change in Working Capital, which is defined as: Current Assets - Current Liabilities)

The chart below delineates the trend in the growth rate of health center working capital throughout the project period. Because working capital growth rate is a year-over-year calculation, the first year of data available is for the project year (unlike the financial ratio charts that also capture Year -1, the year prior to project completion). Working capital is a measure of a health center's short-term financial health and ability to cover short-term obligations, so growth in this measure is good for the organization.

At the median, health centers experienced one year in which working capital shrank: the project year, while working capital growth for the control group was fairly consistent throughout the period, ranging between 5% and 10%. The drop in working capital for the project group was most likely driven by the drop in cash as health centers self-financed portions of their project. This was result was demonstrated in the days cash on hand, as well as additional analysis of the data set that concluded that there was little fluctuation in payables or receivables. In all other years, working capital grew at a healthy pace for the median and 75th percentiles, but peaked for all quartiles in Year 2.
In the project year, health centers in the 25th percentile experienced a dramatic drop in working capital, which continued to shrink in Year 1. Analysis of data available for the 25th percentile for Year -1 indicated that this group had slightly shrinking working capital even before taking on a capital project. One conclusion that can be drawn from the 25th percentile quartile is that capital projects exacerbate any existing weaknesses. Health centers in this percentile saw the largest drops in working capital growth and the least recovery in growth rate, reaching zero change in Year 2 before turning negative again in Year 3.

**Impact on Revenue Growth: Total Operating Revenue**

As discussed in the first installment of this series, *Financial and Operational Ratios and Trends of Community Health Centers, 2008 – 2011*, health centers experienced rapid operating revenue growth between 2009 and 2011, driven in part by multiple operating grant application cycles from the Health Resources and Services Administration (HRSA) during this period.

Between 2009 and 2010, HRSA administered several rounds of New Access Point and Increased Demand for Services funding opportunities through the American Recovery and Reinvestment Act (ARRA). In addition, the Affordable Care Act (ACA) that was passed in 2010 included $9.5 billion in operating grants for Section 330 health centers over a period of five years. Many of the health centers (39%) in the control group and the project group (59%) had a five-year review period that overlapped with the timing of these grant funds, which largely explains the jump in total operating revenue growth the control group experienced in Years 2 and 3 as the large HRSA operating grants were awarded. This effect is also demonstrated in the grant and contract revenue growth chart presented later in this report.

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3 Data available for Year -2, or two years before the project year, represented audits for 79% of the 118 projects. Year -2 data allowed us to view the year-over-year growth rate for Year -1 for the majority of the health centers in the project group.

4 It should be noted that HRSA also awarded a total of $3 billion in capital grants to health centers between 2009 and 2011. However, given that this report analyzes projects completed between 2004 and 2008, before the grants were released, the impact of these capital grants will not be seen in the project group analyzed.
Despite the increased grant revenue most health centers in this study received in at least some years, revenue growth for the median health center was much higher in the project group than in the control group. For the median health center there was a clear peak in the project year (12.7% growth) as well as another year of strong growth in Year 1 (12.2%) for total operating revenue, followed by a period of steady if slightly smaller growth. Health centers in the 75th percentile exceeded 20% revenue growth in the first two years of the project period.

Health centers at the 25th percentile for this measure experienced growth that was less than that of the control group. It is possible that the 25th percentile projects were not focused on adding visit capacity, but rather on projects that either replaced existing square footage or added administrative or other non-revenue-generating space.

**Impact on Revenue Growth: Net Patient Service Revenue**

The following chart depicts the growth rate of health center net patient service revenue (NPSR) for health centers with and without capital projects. For the typical health center, NPSR comprises approximately 60% of total operating revenue. As such, it is not surprising that it showed a similar if more dramatic growth pattern as total revenue for the median health center, with 13.2% growth in the project year and 14.7% growth in Year 1. NPSR can be considered a proxy for visits as it represents Medicare, Medicaid, insurer, and patient payments for services provided. As will be further discussed in the next section about the impact of capital projects on operations, patient, and visit growth also peaked in Year 1.

NPSR growth showed a leveling off in Year 3 for the median project health center and an increase in growth rate for the control group. These results were likely influenced by the boost in the aforementioned operating grants that happened in Years 2 and 3 for many of the control and project health centers in the study group. Operating grants often help health centers add provider staff, thereby boosting earned revenue in the form of NPSR.

As mentioned in the total operating revenue discussion above, the 25th percentile might have represented
projects that were primarily replacement projects and/or administrative facility projects that did not add capacity to serve more patients. In contrast, the 75\textsuperscript{th} percentile experienced tremendous growth in NPSR, above 25% in the first two project years.

![Net Patient Service Revenue Growth Rate](image)

**Impact on Revenue Growth: Grants and Contracts Revenue**

The chart below provides additional detail on another major component of health center operating revenue, grants, and contracts, which typically comprise 30% of health center revenues (although grants and contracts peaked at 37% of total operating revenue in 2010 due to the roll out of the HRSA grant programs). The typical health center that completed a capital project peaked at 5.7\% grant and contract revenue growth in the project year. Much of this growth was likely fueled by New Access Point or Change in Scope grants provided by HRSA for health centers planning to increase medical capacity. These are ongoing grants for new sites and expansion projects that are above and beyond the 2009 and 2010 ARRA-related grants. These grant awards typically range between $400,000 and $700,000 per year, and occur on an ongoing, annual basis once they are awarded.

![Grants and Contract Revenue Growth Rate](image)
Following the project year, the median health center’s pattern of grant and contract growth began to look more like that of the control group, although it always grew at a slightly higher rate.

**Impact on Expense Growth: Total Operating Expenses**

Similar to total operating revenue, there was a clear peak in operating expense growth during the project year, with a growth rate of nearly 15% for the median health center. Partial data for the growth rate as of Year -1 (not included in the below chart) also suggests that health centers taking on projects were already growing more quickly than health centers not completing projects. However, it is clear that the control group grew only modestly, with 5%-to-6% growth in any given year. At the median, total operating expenses for health centers with capital projects grew by a total of 47% over the review period, compared to health centers without projects, which experienced total growth of 24% from Year -1 to Year 3.

The primary drivers of expense growth for health centers that completed capital projects are personnel-related expenses and building-related expenses, both discussed in a later section.

**Capital Project Impact on Operations: Revenue and Expense Growth Compared**

The chart below compares operating revenue and operating expense growth for the 75th percentile, median, and 25th percentile within the group of health centers that completed a capital project during the review period.

Projects in each quartile demonstrated the same pattern of expense growth outpacing revenue growth through Year 1 before the trend reversed. The sustained period in which expenses grew more rapidly than revenues caused the operating margin to hit its lowest point in Year 1. The more quickly a health center completing a capital project can reverse this trend and accelerate revenue growth, the sooner it will return to greater profitability.
By Year 3, revenue and expense growth are quite similar for the median health center (with 9.1% growth for both), while expense growth appears to slightly outpace revenue growth for both the 25th and 75th percentile health centers.

The charts below explore the primary drivers of total operating expenses, staffing, and building expenses.

**Staffing Trends: Personnel Expense Growth**

Comprising approximately 70% of all health center expenses, personnel expenses are a major expense driver and accounted for much of the growth in expenses for health centers completing capital projects. As health centers expand their medical capacity with capital projects, a necessary and substantial expense is adding providers and supporting staff.

At the median, personnel expense (which includes staff salaries, benefits, and contracted personnel), grew by 13% in both the project year and in Year 1. Personnel expense continued to grow more than the control group in Years 2 and 3, suggesting that there is a sustained hiring effort that does not stop once the doors open. Primary care provider recruitment can be a major challenge for health centers as they staff up for a capital project, particularly in rural areas. This challenge helps explain why some health centers at the median and 75th percentiles experienced continued growth in staffing, since many health centers hired providers and their associated support staff as they were able to recruit them.

As mentioned earlier, more than half of the projects studied were completed in 2007 and 2008, so it is possible that the second small wave of staffing expense growth in Year 3 was fueled by the large wave of HRSA operating grants that occurred during 2009 and 2010. However, during Year 2 many health centers go through a period of retooling and reevaluation of operations in their new buildings. This post move-in retooling is typically followed by some additional hires in Year 3 following the reevaluation process.
Staffing Trends: Personnel Expense as a Percentage of Total Operating Revenue

The chart below demonstrates that the median health center that completed a capital project stayed within the recommended range of 70% to 75% for personnel expense as a proportion of total operating revenue.

Unlike most of the measures in this report, the 75th percentile category in this case most likely represents the weaker organizations, as having high personnel expenses as a proportion of total revenue typically correlates with lower profitability. However, it should be noted that many health centers are compelled to pay their medical providers competitively, as provider recruitment/retention is a looming issue that is out of a health center’s control if they want to reduce staff turnover (which in turn has a negative effect on productivity). Enhanced provider salaries result in a higher personnel expense as a proportion of total operating revenue.
At the median, health centers with and without capital projects remained stable throughout the project period. Both the project and control groups had a small increase in Year 3; this increase was likely due to an overall decrease in productivity that has been occurring across the health center sector, discussed in Issue 1 of this series as well as later in this report. At the 25th percentile, health centers saw greater fluctuations in personnel expense as a proportion of total operating revenue; this result may have been more influenced by fluctuations in revenue than in staffing, but further investigation is warranted.

**Impact on Profitability and Capital Structure: Building-Related Expenses as a Proportion of Total Operating Revenue**

(Rent + Utilities and Maintenance + Depreciation)/Total Operating Revenue

Although a much smaller percentage of total revenue, building-related expenses grew even more rapidly than personnel expense, increasing by 19% in the project year, compared to 13% for personnel-related expenses. The chart below provides detail on building-related expenses as a proportion of total operating revenue. As a proportion of revenue, building-related expenses comprised approximately 6% of total operating revenue in the year prior to project completion for the median health center. As depreciation and increased utilities and maintenance expenses were introduced to the income statement for at least part of the fiscal year in the project year, and then in full in Year 1, building-related expenses grew to become 7% of total operating revenue.

As mentioned in the operating margin discussion, between the pre-project year (Year -1) and Year 2 the median health center experienced a sustained drop to profitability of about 1 percentage point as new costs (such as personnel, interest, and building expenses) affected the income statement. The 1 percentage point difference in building-related expenses is clearly part of what pushes profitability downward for the median health center, creating a change in capital structure.

While health center managers might be tempted to disregard depreciation (which represents the aging of a building) as only a paper loss because it is a non-cash expense, it is essential to keep in mind that
depreciation represents a real cost that has a significant impact on profitability. In addition, although there is typically a three- to five-year period where little in the way of major maintenance is required, utilities expenses are very real costs for expansion projects that will increase the moment the new facility opens, and major repairs and renovations will eventually need to be made as the building ages. Increases to these expenses should be closely considered and included in a set of financial projections that is disclosed to the board as they consider and prepare for a new capital project.

**Impact to Balance Sheet: Leverage**

(Total Liabilities / Total Net Assets)

A later section in this report includes the finding that 70% of capital projects in the study group utilized at least some amount of debt to finance their capital projects. This helps explain the trend in leverage demonstrated in the chart below. The leverage ratio measures an organization's total liabilities as compared to its total net worth, and reflects how an organization is financing its assets – either with debt, its net assets, or a combination of both. The lower this ratio, the less leverage it is using and the less risk it is assuming. This leverage is mainly in the form of debt but occasionally health centers also finance their operations by lengthening payables and other current liabilities.

![Leverage Chart](chart)

All organizations in the project group remained within the recommended range of 1.0 to 3.0 for leverage. For the typical health center at the median, leverage did increase but only modestly, from 0.7 in Year -1 to just below 1.0 in the project year, before slowly declining again to close to pre-project levels by Year 2 (0.74). Projects at the 75th percentile showed the same 0.3-point increase in leverage as health centers at the median. In contrast, health centers with projects in the 25th percentile for leverage showed only a slight 0.1-point change, suggesting that very little if any debt was utilized as a funding source for the projects.

The results in the above chart suggest that by and large, health centers are utilizing debt in a responsible manner that creates only a temporary, modest increase in leverage, never exceeding or even approaching the suggested maximum of 3.0 even at the 75th percentile.
Section III: Impact of Capital Projects on Community Health Center Operations

This section of the report explores how health center patients, staffing levels, and other operational indicators evolve as health centers complete capital projects. The charts in this section are based upon organization-level UDS data from 108 health centers that had capital projects between 2004 and 2008. This group is a subset of the 118 health centers studied in the financial data analysis section of this report. Similarly, the control group consists of UDS data from 43 organizations, a subset of the 58 studied in the financial analysis. Unlike the median and percentile data reported in the financial analysis, the charts are based on aggregate or average growth; therefore direct comparison of the financial and operational data sets is less conclusive. More information on methodology and limitations is included at the end of this report.

Capital Project Implementation: Impact on Patient and Staffing Growth

The chart below provides an overview of the growth trajectory of patients and staff, the two main drivers of revenue and expenses, respectively. For health centers with capital projects, there was a clear peak in staff growth as defined by total full-time equivalents (FTEs) growth in the project year, as these organizations ramped up their provider and supporting staff to boost capacity. The only year in which patient growth exceeded FTE growth was Year 1. Based on analysis in the report, it appears that this “crossing,” in which patient growth exceeds FTE growth in at least one year, is essential for project viability. This crossing moment did not occur for medium-sized projects, which had a slightly harder time stabilizing than small and large projects.

Total FTE and Total Patients Growth Rate - with and without Capital Projects

![Graph showing total FTE and total patients growth rate with and without capital projects. The graph indicates a clear peak in staff growth in the project year, with patient growth exceeding FTE growth only in Year 1. It also shows a disparity in stabilization for medium-sized projects compared to small and large projects.](image-url)
Total staff (FTEs) grew by 11% in the project year. It is also important to note that health centers taking on projects continued to hire at a more rapid rate than the control group throughout the period of review. In contrast to the clear growth pattern of the project group, health centers without capital projects demonstrated modest, somewhat random growth, averaging at about 2.4% for annual patient growth and 3.6% for FTE growth. It is possible that the control group was able to generate some growth in place, i.e. operational growth without capital expansion, through operating grants, new leases, and facilities reconfigurations. However, growth in the control group was more modest than that of the project group, which averaged 6.7% for annual patient growth and 8.1% for annual FTE growth over the period.

The next chart evaluates the relationship between hiring, patients, and the visits that they generate for health centers with capital projects.

Total patients, visits, and FTEs all grew by similar amounts in the first two years (18% for patients and visits each, and 19% for FTEs), but the growth pattern looks quite different. The total FTE growth rate peaked in the project year, while patients and visits peaked in the first full year after the project. Visits continue to grow more rapidly than patients, indicating that health centers with capital projects were able to deepen their services with existing patients, while also adding new patients. This result is also demonstrated in the utilization discussion later in this section.

FTEs grew more quickly than visits or patients in the final two years; this trend is similar to the control group in all years, although the growth rates of the project group are further apart. It is possible that health centers that completed capital projects were preparing for the next cycle of growth, but the trend of staffing growth outpacing visit growth is worth following into future years to understand how profitability is affected.
Capital Project Implementation: Impact on Medical Provider Productivity

Provider productivity can have a major impact on a health center’s income statement, as additional billable visits are produced across the same fixed cost staffing structure. However, as the first issue of the Community Health Center Financial Perspectives series noted, provider productivity (billable, medical visits seen by physicians, nurse-practitioners, and physician assistants) has been in decline. Much of this decline is likely tied to the implementation of Electronic Health Records (EHR) systems, which adds time to the visit process, thereby slowing down productivity.  

The above chart demonstrates that all health centers had an overall drop in productivity between Year -1 and Year 3, which was likely influenced by the introduction of EHRs. However, it is of note that capital projects appeared to help stave off some of this productivity drop, with a modest increase to productivity in Year 1 of the project. The Year 1 increase in productivity may be explained by the likelihood that most health centers were moving from inefficient facilities that lacked the ideal ratio of three exam rooms per medical provider, into purpose-built buildings that had ample space for optimal productivity. By Year 2, health centers with capital projects were following the same trend of declining productivity that the control group demonstrated across the period of review, with the exception of a modest increase in Year 3. However, the decline for those with projects was much more modest than for the control health centers, and productivity remained higher than the control group in all years.  

While the productivity data in this report was calculated on a dataset that is from a longer period of time than the 2008-2011 review period in the first issue of this series, EHR implementation for FQHCs was under way as early as 2003, the first year of the analysis period in this report. Based on analysis by the National Association of Community Health Centers, by 2006 only an estimated 8% of all FQHCs had implemented EHR systems at all sites. By 2012 nearly 80% of all FQHCs had implemented these systems at all sites (and 90% had EHR systems installed in at least one site), indicating a ten-fold growth in EHR adoption in six years (per the 2012 UDS National Roll-up Report).
Impact of Capital Projects on Patient Utilization
(Visits per Patient per Year)

The chart below analyzes how capital projects influence the way patients utilize health center services. Patient utilization is calculated as visits per user in a calendar year, and can be calculated for total visits for all patients, or just for medical patients. As the number of visits per patient increases, the more likely it is that a health center patient’s medical, dental, and mental health needs are being fully met.

Depending upon service mix and staffing levels, visits per patient will vary widely for any given health center. However, by tracking the same group of organizations over time, a clear trend emerged during the review period showing a divergence between health centers that completed a capital project versus the control group that did not complete one. While both groups started out with very similar levels of total and medical visits per patient, the projects group experienced modest growth in utilization, ending up at 4.23 visits per user in Year 4, up from 4.13 in Year -1, while medical utilization grew from 3.37 to 3.54 over the same timeframe. As a reference, the national average for total visits per patient is 3.96 and 3.31 for medical visits per medical patient, according to the UDS 2012 national roll-up report.

The more notable trend is the visits per user for the control group, which declined from 4.07 in Year -1 to 3.88 by Year 4, and medical visits per user, which declined from 3.33 to 3.21. While health centers with projects began with utilization slightly above the national average, the control organizations shifted from above average to below average over the review period. This result suggests that health centers with projects are not only showing growth in their patient base, but are also able to increase the depth of services they provide to each patient. Further, it is likely that with each successive year, the control group was becoming more limited in their ability to provide all of the visits needed by each patient as they ran out of physical capacity in their existing facilities.
Visits have historically been the primary driver of health center revenue, not patients. However, this relationship will likely change with the advent of new payment systems. While health centers are by and large reimbursed on a fee-for-service basis, a shift to global payments may be inevitable in the future, meaning that eventually health centers will be reimbursed based on the number of patients they serve, not their encounters. When and if this shift happens, visits will go from driving revenue to driving costs, meaning that utilization and how it is impacted by capital expansion will be managed from a cost-containment rather than a revenue enhancement perspective. In any case, the findings indicate that health centers with capital projects were able to accommodate new patients as well as deepen their services to their existing patients, thereby improving the quality of care they are able to provide.

**Impact of Capital Project Implementation on Service Mix**

The chart below provides detail on dental, mental health, and enabling patients (defined as patients that utilize enabling services such as case management, financial counseling, and health education classes) as a percent of all patients, or users. For scale and clarity, the proportion of medical patients as a percent of all users has been excluded from this chart. This measure remained between 88% and 86% for both the project and control groups throughout the project period, showing a slight drop as other user groups grew as a proportion of total users, as demonstrated below. The chart indicates that the model of care appeared to stay relatively consistent for health centers with capital projects, although there were significantly more dental patients at the end of the project (20%) period than when they began (16%).

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6 “A Chat with Dr. Farzad Motashari – Head of ONC” (Office of the National Coordinator for Health Information Technology), Forbes Magazine, September 24, 2013.
7 Please note that there is overlap among medical, dental, mental health and enabling patients, such that the proportions add up to more than 100%.
While mental health users dropped slightly as a proportion of total patients after peaking in Year 1, their visit growth tells a different story, as indicated in the next chart. This chart depicts the growth pattern for visits, including total visits, as well as medical, dental, and mental health visits. As was noted in Issue 1 of this series, health centers are continuing to diversify their services, with the highest growth in dental and behavioral health. Dental visit growth was by far the highest over the project period, with nearly 18% growth in the project year that suggests a pent up demand for services. It appears that dental visit growth is the driver behind growth in total visits, exceeding the growth in medical visits (which represent 71% to 72% of total visits in any given year). In contrast, the growth pattern for mental health visits appeared to have less to do with the capital project, particularly in Years 2 and 3 when the growth rate continued to increase. It is likely that mental health visit growth was related more to the general trend of health centers adding behavioral health services as they moved towards a more integrated model of care, formalized by the Patient-Centered Medical Home (PCMH) model that was further promoted in the Affordable Care Act.

Impact of Capital Project Implementation on Payer Mix

Perhaps the most interesting finding within the operational analysis is that the completion of capital projects appeared to be associated with an improved payer mix, although not in an expected manner. The chart below includes pre- and post-project payer mixes for the project and the control groups. Health centers with capital projects began with a healthy payer mix, and by Year 4 ended up with an even stronger payer mix, growing the best-paying category of patients (Medicaid) while the uninsured, or self-pay, patients declined as a percentage of total patients. The very fact that health centers without capital projects had less favorable payer mixes initially might have influenced their risk sensitivity and debt capacity, making them less likely candidates to take on a capital project at the outset.

In the aggregate, health centers that completed capital projects ended up with a nearly five percentage point growth in the proportion of Medicaid patients, which represent the best paying category for health
centers thanks to the cost-based reimbursement health centers receive. Self-pay patients (the lowest paying category) declined by two points as a percentage of total patients to 33.5%. In contrast, for the control group, self-pay patients remained level, and Medicaid patients only increased by two percentage points as a share of total patients. However, it should be emphasized that self-pay patients were still growing in number, just not as rapidly as Medicaid patients. Between the project year and Year 4, self-pay patients grew by 17.1% for the project group and 12.6% for the control group, while Medicaid patients grew by 38.8% and 23.1% for the project and control groups respectively. Medicare patients grew by 31.6% for the project group and 12.7% for the control group, although remained relatively consistent as a proportion of total patients for both cohorts.

At first glance, the surprise in this analysis is that patients with private insurance did not grow as a percentage of total patients, but instead declined by two percentage points. However, it should be noted that this decline in the proportion of privately insured patients does not reflect a significant absolute drop; on a nominal basis, total privately insured patients remained relatively flat for the project group, shrinking by just half a percentage point, indicating that health centers neither gained nor lost a significant number of privately insured patients. For health centers in the control group, privately insured patients dropped by 1.8%; this result suggests that a capital project actually helped preserve privately insured patients to a modest extent. It should be noted that the drop in the proportion of privately insured patients in the above chart is likely in part driven by the health centers with project periods that occurred during the 2008-2010 Great Recession, in which unemployment increased, and many people lost their private insurance as a result.

For years, health centers considering capital projects have assumed that a new, modern facility would change a health center’s patient base, making it look more like the general population, not just the low-income population. One natural extension of this assumption is that patients with private insurance would
grow as a proportion of total patients. That the reverse has happened might simply mean that the building alone is not sufficient to attract a different patient base, but that additional marketing and outreach are required. This result is an important lesson to consider as a projected seven million people enroll in early 2014 through the Health Insurance Exchanges,\(^8\) which were a central element of the Affordable Care Act. Outreach and marketing to this population will be essential not only to grow the patient base, but also to avoid losing uninsured patients as they become insured, as there is a risk that they will seek care with other providers that accept their new insurance.

This section of the report explores the extent to which project size impacts health centers. For this report, a “project” has been defined as the year-over-year or multi-year change in land, building, and leasehold improvements. It should be noted that the change in equipment was not considered, so the project budget cut-offs represent slightly larger projects. For example, furniture, fixtures, and equipment typically represent between 10% and 15% of total project costs, so a $5 million change in land, buildings, and leasehold improvements could represent total project costs of anywhere between $5.6 and $5.9 million.

Health center capital projects were placed in the following three categories:

- **Small projects**: $1 to $2 million projects (47 organizations)
- **Medium projects**: $2 to $5 million projects (50 organizations)
- **Large projects**: Above $5 million projects (21 organizations)

The charts that follow explore the viability and impact of capital projects on health center operations by project size, with the control group included as relevant for comparison purposes.

**Impact of Project Size on Profitability**

Health centers with small, medium, and large projects all began with healthy profit margins between 4% and 5% and followed the same trajectory as the median capital project described earlier in this report, reaching their lowest profitability in Year 1 as new expenses impacted the income statement. However,

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medium projects did not appear to recover to pre-project profitability (as health centers completing small and large projects did), ending up with slightly less than a 2% margin, down from 4% before the project. The profitability trend for medium-sized projects is nearly identical to the typical, median project described in Section II.

While it was not immediately apparent why the medium-sized projects resulted in reduced profitability, there are at least two possible explanations. The first is that health centers with medium-sized capital projects were the most likely to use debt as at least 25% of their financing sources; in fact more than 83% of organizations with medium-sized projects took on some amount of debt. However, as the analysis that follows indicates, the most significant factor that affected the performance of medium-sized capital projects appears to be the challenge of achieving efficient operational scale.

### Operating Budget by Project Size

One factor affecting the profitability for the medium-sized projects is organizational scale, and the efficiency of that scale. The chart below indicates that small projects are more likely to be completed by organizations with smaller operating budgets, medium projects by medium-sized organizations, and so on. A recent Capital Link analysis of health centers in California\(^\text{10}\) found that health centers with four sites had the slimmest operating margins (1.1%), compared to health centers with one to three and five-plus sites, where profitability ranged from 2% to 4%, suggesting an awkward stage of growth health centers go through as they scale their organizations upwards. One factor affecting health centers with medium projects could be that they are simply operating temporarily at this less efficient scale in which the fixed cost structure for staffing or other expenses is high relative to their smaller and larger peers, as illustrated in the personnel expense discussion later in this section.

\(^\text{10}\) *California Community Clinics: A Financial and Operational Profile, 2008-2011*, Capital Link
The next chart is based on an analysis of the median organization’s budget size (as defined by total operating expenses) by project size for the year prior to project completion (Year -1) and in Year 3. In each project size cohort, the median operating budget grew similarly over the project period, with budget growth ranging from 48% to 60% as compared to 37% growth for the median operating budget for health centers in the control group. As expected, health centers taking on larger projects tend to themselves be larger.

One pronounced finding from the above analysis is that the capital project appeared to accelerate organizational growth, essentially catapulting organizations into the next size category. Based on the above analysis of the median operating budget by cohort, by the end of their project period organizations in the small cohort had operating budgets ($12.6 million in Year 3) that were similar in size to organizations in the medium project cohort at the beginning of their respective projects ($12.5 million in Year -1). Likewise, health centers in the medium project cohort look at the end of their project period (with a median operating budget of $19.9 million in Year 3) very much like health centers about to take on a large project ($19.3 million in Year -1).

**Project Size and Liquidity: Days Unrestricted Cash on Hand**

The chart below shows the trend in days cash on hand for health centers with small, medium, and large projects as well as for the control group. For all three project size cohorts at the median, there was a decline in days cash on hand in the project year that did not recover until Year 2. Health centers with medium-sized capital projects exhibited smaller fluctuations in days cash on hand, and also did not recover completely to pre-project levels. The smaller fluctuations in cash can be explained in part by the greater proportion of medium projects that use debt as a financing source, as taking on debt reduces the need to self-finance with cash reserves. The slightly lower cash levels by Year 3 for the medium project cohort are more likely tied to the lower profitability demonstrated in the prior operating margin chart.
Both large and small projects showed larger fluctuations in cash levels, and ended the review period with larger cash reserves than when they began the project. Large projects began and completed their projects with the healthiest cash reserves out of all the project size cohorts. The typical health center undertaking a small project began with just over 30 days cash on hand, which is at the bottom of the 30-to 60-day range recommended by Capital Link. For health centers with small projects, cash levels dropped below 20 days cash on hand for two years with a nearly 50% reduction to days cash in the project year.

It is possible that health centers with smaller projects did not anticipate the extent to which capital projects can consume cash, or that smaller projects were not as carefully planned or managed and thus tended to go over-budget. With a project of any size, health centers should develop a plan to establish cash reserves, which would help avoid the drop in cash below the recommended 30 days cash on hand as the project is implemented.

_**Revenue and Expense Growth Trends for Health Centers with Small, Medium, and Large Capital Projects**_

The charts below provide trend data and total growth over the five-year period in median total operating revenue and total operating expenses for each project size cohort. Most notable in the total growth figures is that health centers with large projects were the only organizations for which total operating revenue growth exceeded that of total expense growth. This finding should not be surprising given this cohort’s performance on profitability (beginning and ending with over 5%), but does suggest that health centers taking on large projects are operating at a more efficient scale, such that either their fixed cost structure does not need to grow as much as that of the other cohorts, or larger projects are more able to capitalize on the earned revenue opportunity presented by a capital expansion.
Revenue and Expense Growth Rate Trends for Small Project Cohort: For health centers that completed small ($1 to $2 million) projects, it took two years for the revenue growth rate to exceed the expense growth rate, which finally occurred in Year 2 with a peak of 13% revenue growth. However, this pace was sufficient to the extent that, at the median, health centers with small projects were able to recover their pre-project profitability by Year 3. Total median revenue growth for the small project cohort (47%) exceeded that of the medium project cohort (41%), but not that of the large project cohort (49%).

Revenue and Expense Growth Rate Trends for Medium Project Cohort: Health centers that completed medium capital projects ($2 to $5 million) did not experience the same later peak in revenue growth as small or large projects; instead their peak revenue growth was in the project year, at 12%. It was not until Year 3 that the total revenue growth rate exceeded the total expense growth rate, possibly suggesting a longer recovery period that might result in stronger profitability in Year 4 (not included in this report), but is clearly less profitable during the review period. While the medium project cohort had the smallest expense growth, it also demonstrated the smallest revenue growth overall.
**Revenue and Expense Growth Rate Trends for Large Project Cohort**: The large project cohort was the only group of health centers for which total operating revenue growth exceeded total operating expense growth in all but one year (the project year), setting them up for strong profitability in Years 2 and 3 (see the operating margin discussion) as fixed costs stabilized. Most notably, the large project cohort was also the only group for which total revenue growth exceeded total expense growth over the period.

Net Patient Service Revenue Trends by Project Cohort

As with total revenue and expenses, each project cohort follows a different trajectory in net patient service revenue (NPSR) growth rate. All three cohorts had a sustained period of growth in NPSR that exceeded the control group through Year 2.

At the median, NPSR growth rate peaked for the medium project cohort in the project year, unlike for the typical median project, for which NPSR growth peaked in Year 1. The early, large peak in NPSR for the medium project cohort suggests that health centers in this cohort may have built their capital projects in response to pent-up demand. However, health centers in this cohort are not able to sustain this level of growth in Year 1 (the first full fiscal year following the project).

Median NPSR growth rate peaked for the small project cohort in Year 1, while health centers in the large project cohort had a peak of median NPSR growth rate in Year 2, suggesting a longer ramp-up and operating growth cycle for health centers with large projects. For the review period, total NPSR growth at the median was smallest for the small project cohort and greatest for the large project cohort. However, health centers in the medium project cohort had very similar total growth to the small project cohort, despite a larger investment in capital. This fact, and that NPSR growth rate peaked so early for the medium project cohort, suggests a mismatch between demand and capacity that will be touched upon in the operations discussion that begins on page 33.
Project Size and Personnel Expense as a Percent of Total Operating Revenue

The personnel expense structure varied widely for health centers with small, medium, and large projects, as illustrated in the chart below. There were large fluctuations in personnel expenses as a percent of total operating revenue that were in contrast to the trend for the median for all capital projects illustrated in Section II, which was significantly more stable from year to year than any cohort below. Health centers with large projects have the most favorable personnel expense structure, starting out at 67.2% in the pre-project year and ending at 67.9% in Year 3. Sizeable fluctuations occurred for the large project cohort as health centers staffed up (project year) and as NPSR peaked (Year 2). The small project cohort experienced the greatest change to their personnel expense structure, beginning at 68.4% and ending at 71.0%.
However, health centers in the medium project cohort had the room for error for personnel expense to maintain profitability, beginning with total personnel expenses at 72.6% of total operating revenue, and ending extremely close to the recommended maximum for this benchmark of 75% of total operating revenue. This finding is another example that suggests that health centers in the medium project cohort are the most challenged when it comes to operating at the most efficient scale. It should be noted that this scaling issue is typically temporary, a facet of the “awkward” growth phase that is necessary for health centers to go through in order to eventually reach more patients.

**Project Size and Impact to Operations**

The charts that follow provide analysis of the operational (UDS) data of the same small, medium, and large cohorts. The growth rates for total patients, total visits, and total staff (FTEs) are displayed below for each cohort, demonstrating that the growth trajectory differs substantially depending on project size. Similar to the revenue/expense analysis, the large project cohort was again the only group for which the total growth of the main revenue driver (visits) was greater than the total growth of the main driver of expenses (staff, or FTEs).

Health centers with small projects experienced the greatest FTE growth in the project year, with much smaller growth in Year 1 that remained between 6% and 7% for the remainder of the review period (still much higher than the control group). Unlike the project group as a whole, the small project cohort saw peak patient and visit growth in the project year (instead of Year 1), suggesting that only modest capacity for additional patients and visits was added when compared with the demand for services; if additional capacity were available, visit growth would most likely have exceeded patient growth in the later years, as was demonstrated for the large project cohort, and to a lesser extent the medium project cohort. Over the five-year period, Total FTEs grew by 30%, compared to total visit growth of 25%.
The most notable trend for health centers in the medium project cohort is that despite significant FTE growth, they never demonstrated a moment of “crossing,” in which patient growth exceeded FTE growth, as occurred for the project group as a whole (and for the other two cohorts). This result likely contributed to the lower profitability and slower revenue growth observed for this cohort. Visit growth peaked in the project year, suggesting that health centers in the medium cohort were initially addressing pent-up needs of their current patient base, while accelerating new patient growth slightly in Year 1. Visit growth exceeded patient growth again in Years 2 and 3, indicating some ability to deepen and/or broaden services to existing and newly-added patients within this cohort.

![Patient, Visit and FTE Growth Rates - Medium Capital Projects](chart)

While total FTE growth was greatest for the medium project cohort, it did not result in the greatest growth in visits (or as demonstrated earlier in this report, in the greatest NPSR growth). The timing of when provider FTEs were added might provide a clue as to why visit and NPSR growth were not more significant: total FTE growth was similar in Year 1 as in the Project Year, but medical provider FTEs (not show in the above chart) had peak growth in Year 1 of 11.5%, as compared to just 5.4% growth in the Project Year. The delayed hiring of providers, peaking in Year 1, is a possible indicator for a more conservative staffing pattern with an extended ramp-up that continued into Year 1.

Anecdotal project data suggests that many health centers wait to fully staff up their provider team until they see sufficient demand for services once a new facility opens. However, as the chart above suggests, this approach might not allow health centers to fully capitalize on the unique window of opportunity created by a new or newly expanded facility. If the provider capacity is not present at the same time that the curiosity factor of a new project generates demand for services, that window of opportunity is missed and visit and revenue growth are not optimized. However, it should be noted that provider recruitment is an issue for health centers nationally, so some of the delayed hiring could be out of the control of organizations in this cohort.
Interestingly, health centers in the large project cohort experienced the lowest first-year FTE growth out of all cohorts. This finding could be related to the larger scale of these organizations and the fact that they were adding proportionally fewer additional staff members. Another explanation is that health centers completing large capital projects are usually moving from cramped facilities, so the expansion project allows existing staff to operate more efficiently, requiring fewer additions. Also, many health centers with larger capital projects invest in ramp-up even before the project year by expanding operating hours and recruiting in advance of opening the new facility in order to bring the maximum capacity possible into the newly built facility. It would be interesting to evaluate Year -2 data to determine whether more growth in FTEs occurred earlier for health centers in the large project cohort.

Unlike the other cohorts, health centers in the large project cohort had a second peak in FTE growth in Years 2 and 3, most likely as part of the retooling process that happens for many large projects after moving in, but also possibly in response to the Year 1 demand in visits and patients. Health centers with large projects also had the most sustained visit growth in each year, with total visit growth of 32% slightly exceeding total FTE growth of 31%.

**Trends in Total Visits per User for Small, Medium, and Large Project Cohorts**

The chart below compares the control group utilization (or visits per user) to the small, medium, and large project cohorts. Health centers in the small project cohort had virtually unchanged levels of 4.2 total visits per user as visits and patients grew by approximately the same amount. Medium project health centers started out with below average utilization of 4.0 visits per user in Year -1, and ended up at 4.14 in Year 3 as visit growth began to exceed patient growth. Large projects began with above-average utilization (4.3), which declined to 4.1 by Year 1 before increasing to greater than pre-project levels in Year 3 (4.36).
The temporary reduction in visits per user for health centers in the large project cohort can be explained by observing the patient and visit growth trends in the chart on the previous page. Until Year 2, patient growth exceeded visit growth as the new building likely drove the “curiosity factor” that helps health centers add new patients. As the years passed, patient growth continued but at smaller rates, while health centers in this cohort are simultaneously deepening their medical services to existing patients as they also add new services, causing the visit growth rate to remain substantially higher than patient growth through Year 3.

**Impact of Project Size on Medical Productivity**

(Medical Visits / by Physician, Nurse Practitioner, and Physician Assistant FTEs)

The next chart compares medical provider productivity of the control and project cohort groups. Health centers in the medium project cohort have by far the greatest productivity, despite having low profitability.

High productivity for the medium project cohort, and recalling that health centers in the medium project cohort have the most costly personnel expense structure, helps confirm the hypothesis that a lack of efficient scale is the most significant factor hindering the financial performance of health centers in the medium project cohort; it is clear that health centers in this cohort have efficient medical staff. However, health centers in the medium project cohort, which tend to be medium-sized organizations, also appear to have a less efficient overhead staff structure that is better suited to a slightly larger operation, as suggested by the high personnel expense to total operating revenue ratio discussed earlier in this report. This mismatch in staffing levels to revenue structure may simply be an indicator of organizational growth. Any

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11 While adding support staff can enhance productivity, medium-project health centers had average support staff per medical provider as compared to the project group. This measure grew to be only slightly higher—than average in Years 2 and 3 (2.18 support staff FTEs per provider FTE, as compared to 2.13 for the project group overall) and does not on its own explain the scaling issue.
medium-sized organization will have to invest in staffing and other infrastructure in order to grow; this investment often results in a stage in which revenues and expenses do not line up, but eventually a more efficient scale is reached.

Health centers in the large project cohort showed the more typical decline in productivity that Capital Link is accustomed to seeing for larger projects. The drop in productivity occurred in the project year, followed by an increase in Year 1 that exceeded pre-project levels. The project year drop for large projects can be explained by the logistical complexity of the move, often entailing the consolidation of multiple locations, and often also the inclusion of a new EHR at the same time. Following the adjustment period in the Project Year, the Year 1 gain in productivity for large projects can most likely be accounted for by providers operating within purpose-built, adequate spaces with appropriate exam room to provider ratios. In all three cohorts, it is likely that as the health centers ran out of room in their new facilities in later years, productivity decreased. In addition, based on the control group trends, there were probably other factors affecting productivity, most likely related to EHR implementation. Health centers in the small project cohort appeared to follow a similar trajectory to the control group, although they began with slightly higher visits per provider and lost less ground than the control health centers.

**“Constant Expansion” Health Centers**

As health centers with projects were selected for analysis in this study, it was noted that a number of health centers demonstrated regular, substantial growth in their land, building, and leasehold improvements. A “constant expansion” label was given to any health center who added at least $1 million in land, building, and leasehold improvements for each of at least three years within a five-year period (not necessarily consecutive years). While larger projects were more likely to be labeled as a constant expansion
organization, the table below indicates that many health centers expanded in this manner. While outside the scope of this report, it would be interesting to compare the financial performance of these organizations to their more periodic-expansion peers. It is likely that different staffing patterns and visit growth would be observed for these organizations.

<table>
<thead>
<tr>
<th>Constant Expansion Health Centers by Project Size</th>
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<tbody>
<tr>
<td>Total</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>Small</td>
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<td>Medium</td>
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<tr>
<td>Large</td>
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Section V: The Role of Project Debt

The final section of this report explores the way in which health centers finance their capital projects, and how the inclusion of debt affects financial performance. To calculate this measure, each health center’s change in long-term debt was calculated as a proportion of their estimated total project budget.\textsuperscript{12}

The chart to the right shows the breakdown of the extent to which health centers utilized debt. “Modest Debt” was defined as anywhere between 10% and 25% of the project budget, while “Debt” was defined as financing from debt comprising 25% or more of the total project budget; 70% of the 118 projects were classified in the Debt cohort. About 16% of health centers were classified as “Little to No Debt”, which was a change in debt that represented less than 10% of total project costs, while “Debt Reduction” showed actual reductions in debt that were most likely not related to capital project financing.

**Does Debt as a Financing Source Differ by Project Size?**

\textsuperscript{12}To estimate the project budget, we first tabulated the year-over-year change in land, buildings and leasehold improvement. An estimated 15% in furniture, fixtures and equipment expense was then added to this figure to approximate the total project budget.
As noted in the project size discussion in the previous section, medium projects were the most likely to assume at least 25% of their project budget in the form of long-term debt, which impacted the operating margin. As the chart above demonstrates, more than three quarters (78%) took on debt at this level, and another 4% assumed modest debt (i.e. 10% to 25% of their project costs). Large projects were the most likely to take on debt in any form, with 76% assuming debt amounts that were equal to at least 25% of their project costs, and another 14% of health centers with large projects assumed at least modest debt. More than half (60%) of small projects also used debt.

The next series of charts explores how debt affected profitability, liquidity, and leverage, as well as the extent to which debt impacted how health centers were able to staff up or grow their earned revenue.

**Impact of Debt Financing on Profitability**

The chart below shows the five-year trend for profitability for the debt cohort, the little-to-no-debt cohort, and the control group for comparison. The median operating performance for health centers in the debt cohort looked much like the median health center assuming a capital project, beginning with 4.3% profitability and recovering at a slightly lower operating margin of 2.8% by Year 2. The operating margin for both cohorts remained within or above the recommended range of 1% to 3% throughout the review period.

In contrast, health centers financing their project only with their own reserves and/or grants showed an overall improvement to profitability by one percentage point at the median. In either case, both the debt and no debt cohorts had profitability that was quite similar in Year 1, at 1.4% and 1.7% respectively.
Impact of Debt Financing on Liquidity

As could be expected, the median health center in the little-to-no-debt cohort experienced a large drop in days cash on hand from the pre-project Year -1 to the project year, going from 62 to 47 days cash on hand as health centers in this group used their own cash reserves to finance their projects. Health centers in the little-to-no-debt cohort ended with 47 days cash on hand, far lower than their pre-project levels.

In contrast, the debt cohort had cash levels that remained level, although it should be noted that the typical health center that used debt began at a lower level of cash than the little-to-no-debt cohort, with 34 days cash on hand. The debt cohort had its largest cash drop in Year 1, most likely as profitability dropped temporarily at the same time as cash principal payments were initially due, which are not a part of the income statement. Similar to the full group of health centers that complete capital projects, health centers in the debt cohort had a two year period in which days cash on hand was lower, recovered by Year 2, and continued to increase beyond pre-project levels in Year 3. Most notably, cash levels for the debt cohort returned to better-than pre-project levels by Year 2 and continued to improve through Year 3, ending with 39 days cash on hand.

Impact of Debt Financing on Balance Sheet Composition

Another distinction between health centers that utilized debt and those that did not is the change in leverage. Debt financing will change the way a balance sheet is composed, increasing the proportion of debt such that leverage (or total liabilities divided by total net assets) increases. While this measure obviously changed for health centers taking on debt, leverage always remained within the recommended range of 1.0 to 3.0.
The next two charts explore how health center operations were impacted by a debt-financed capital project as compared to projects in which little to no debt was assumed. Net patient service revenue (NPSR) serves as a proxy for visits, while measuring personnel expense growth conveys a sense of how health centers increased their staffing levels.

**NPSR Growth for Debt-Financed Health Center Projects**
Based on the chart above, it is clear that at the median, health centers with debt-financed projects saw a boost to NPSR in the project year as well as in Year 1 that the little-to-no-debt cohort did not experience, as well as sustained NPSR growth in Year 3. Although a review of the UDS data was not a part of this analysis, larger and more sustained growth in patient visits for the debt cohort would most likely also have been observed, suggesting a more regular and constant growth cycle. Over the review period, health centers that used debt financing had total NPSR growth (at the median) of 48.6%, while the little-to-no-debt cohort had 42.9% total NPSR growth.

**Personnel Expense Growth for Debt-Financed Health Center Projects**

Health centers with debt-financed projects showed a different staffing ramp-up than health centers that used little to no debt to fund their capital projects, which appear to add the greatest staffing expenses in Year 1 instead of in the project year. This staffing pattern suggests a more conservative approach to ramping up at a new facility.

At the median, health centers in the debt cohort grew their staffing expense by a total of 46.3%, while the little-to-no-debt cohort grew by 41.5%. The debt cohort also showed a second peak of staffing up in Year 3 unlike the little-to-no-debt cohort, in which staffing expenses began to taper off. These findings suggest that health centers that use debt financing are more likely to be in the “Constant Expansion” cohort briefly mentioned in the last section – those that are constantly expanding their facilities and most likely also their operations.
Section VI: Conclusion

As this report has demonstrated, it is essential that health centers think beyond just the architectural plan and the project budget and consider the real financial and operational effects of taking on a capital project. The following table encapsulates the most tangible key lessons that health center managers can use as they prepare for the organizational transformation that accompanies the completion of a capital project.

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Takeaways for Health Centers

Tools you can use as you prepare for your next project

Ensure that your health center has a strong operating model before taking on a capital project. As the analysis in this report indicates, capital projects can further weaken the financial performance of health centers that begin with low operating margins and working capital growth, while they appear to strengthen the same measures for already-strong health centers.

Mid-sized health centers may need to take extra care with their planning, given the rigors of a capital project may combine with the challenges of operational scale, resulting in especially slim operating margins and cash reserves.

Plan for cash reserves. At the median, health center cash levels dropped by 10 days’ worth of expenses, or by a 25% drop in days cash on hand in the project year, and took two years to recover.

1. Plan to have at least 10 days in cash set aside as an additional operating cash reserve as you prepare for your capital project.

2. A pre-development line of credit that gets rolled into the permanent financing can be another way of preparing for this temporary cash setback.

3. Consider securing an adequate operating line of credit as a “fallback” to provide resources to manage cash flow as your organization grows. Keep in mind that as operations grow, any operating line of credit your health center already has already will also need to grow.

Set expectations with lenders, staff, and the board that your income statement will most likely be the least profitable the first full fiscal year after the capital project. Regardless of project size or quartile, Year 1 was the least profitable year for health centers completing capital projects.
Financial projections go a long way towards helping set these expectations by showing in detail when each expense is expected to hit the income statement and how the balance sheet will be transformed as a result of the cash fluctuations, the additions of debt, as well as buildings, land, and equipment. Financial projections can also help you determine what 10 days cash will actually amount to (in dollars) as compared to your expanded operating budget.

**Invest in ramping up** your staff. Anticipate that patient and visit growth may not peak until the year after you open. Consider the importance of having key provider staff in place by the time your new facility doors open in order to create the widest window of opportunity possible to permanently expand your patient base.

**Invest in market analysis.** You should not conclude from this report that large projects are “the way to go” for every health center. Rather, a project should be appropriately sized, both to the organization taking on the project, as well as to the demand and provider capacity in the service area.

**Debt can be an excellent tool for capital project financing** (if used wisely). Debt reduces the need to self-fund a large portion of a capital project, preserving precious cash reserves to fund ongoing operations. Further because debt appears to free up resources, it may leverage enhanced growth in Net Patient Service Revenue later in the project period. While there was an impact to the operating margin for health centers utilizing debt as a funding source, the setback observed was temporary, and the operating margin remained within the recommended range of 1% to 3% in all periods.
Section VII: Methodology and Limitations

Determining the impact of capital projects on health center growth and financial performance required the selection of groups of health centers to be studied. For the sake of feasibility, health centers who had submitted financial audit data to Capital Link were identified. Between 2003 and 2011, Capital Link’s database represents an average of 70% of all health centers in any given year; from this set, two specific groups were parsed out for study.

To create a distinct group of health centers that had completed capital projects that was sufficiently large enough to study, we chose to evaluate projects over a period of time, selecting health centers with projects completed between 2004 and 2008. We classified a “capital project” as any change in land, buildings, and leasehold improvements that exceeded $1 million. We further honed this group to identify health centers with capital projects for which five consecutive years of audits were available (in which the project year was the second year). The 2004 to 2008 project completion timeframe utilized our most recent financial audit data, while also creating a group of 118 health centers for study.

In order to have a basis for comparison, we also assembled a control group that had no more than a $150,000 change in land, buildings, and leasehold improvements for 2004 through 2008. We identified 58 organizations for which we had five consecutive years of audits that met this criteria of no major capital growth over the review period. For the financial impact section of this report, all data was reported at the median for the “Project” and “Control,” or “No Project” groups. In addition, health center financial data from the project group was also reported at the 25th and 75th percentiles.

The data and charts in the operational impact sections of the report are based upon organization-level Uniform Data System (UDS) data from 108 health centers that had capital projects between 2004 and 2008; this group is a subset of the 118 health centers studied in the financial data analysis section of this report. Similarly, the control group consists of UDS data from 43 organizations, a subset of the 58 studied in the financial analysis. Some organizations were excluded from this portion of the analysis simply because there was no detailed UDS data available for the analysis timeframe, most often because they were FQHC Look-Alikes, which were not required to report detailed data to HRSA prior to 2012. In some cases, only partial data was available because a health center obtained FQHC status during the review period; these organizations were excluded.

The financial and operational analysis in this report tracks health centers over an extended period of 2003 to 2011, as we followed health centers for a five-year period (one year before the project and three years following the project), and we included health centers that had capital projects that occurred anywhere between 2004 and 2008. We consolidated this data into a five-year period described by the following terminology:
• **Year -1** is the fiscal year before the project was completed.
• **Project Year** is the fiscal year during which the project was completed.
• **Year 1** is the first full fiscal year following the project completion year.
• **Year 2** and **Year 3** were also studied using Capital Link’s financial database of audited statements, while the UDS analysis went through **Year 4** on relevant measures such as payer mix, productivity, and utilization.

**Limitations**

Since we obtained the financial and operational data from two separate sources, the reporting periods are not always identical. UDS data is reported on a calendar year basis, while financial audit data is based on fiscal years, which can end in any month (although typically June, the middle of the calendar year). Each health center decides its own fiscal year end, so even within the financial audit dataset these are only approximately in sync. This limitation is something intrinsic in the nature of the data, but our approach of choosing a base reference year (i.e. the project year) minimizes the impact of this limitation.

Another limitation of the analysis is that while we have full control over our audited financial dataset, our use of the UDS dataset is more limited as a result of HRSA restrictions on its use. Because of these restrictions, metrics pulled from UDS could only be used in aggregated analysis. These data limitations should not present flaws in the analysis, but are worth discussing to better understand the methods chosen.

When looking initially at the data, the sample set for all Test and Control groups were skewed to smaller capital projects. For example, within the small project cohort that was defined as projects between $1 and $2 million, 32% of the projects were $1.1 million or less, while just 7% of projects were $1.9 million and greater. Because of the asymmetrical nature of these groups, the mean (or average) is not a very helpful measure for central tendency nor is variance helpful in understanding the variability of the data. An alternative and more useful measure of “center” for skewed data is the median. The median is essentially the sample value at the middle of the list of sorted sample values. If there is no exact middle value, an average of the two closest values is taken as the median. In the same way, the sample x percentile (such as 25th percentile for example) is the value at or below which x% (25%) of the sample values lie. Similar to the median, if there is no exact value, the average between the closest lower and upper values is used. Sample percentiles can provide a good understanding of the spread of the population. Instead of looking at variance, looking at the quartiles (the 25th and 75th percentiles) gives a sense of the spread of the data and its variability. This gives the best output for looking at our dataset and understanding what is occurring.

It should be emphasized that unlike the median and percentile data reported in the financial analysis, data in the operational impact charts is based on aggregate or average growth due to the aforementioned limitations of the dataset; therefore direct comparison of the financial and operational data sets will be less conclusive.
The above chart compares all Federally Qualified Health Centers by HRSA Region to the 176 organizations that were studied in this report (118 health centers with projects and 58 control organizations). While some regions are overrepresented (particularly regions 1 and 5) and others underrepresented (regions 3 and 4) to varying degrees, the chart illustrates a fair representation of health centers nationally given the sample size utilized. It should also be noted that for the project year, there is some better representation of the later project years (particularly 2007 and 2008), simply because more projects were undertaken by health centers in those years. Health centers in the control group were distributed across the five project years relatively equally, with a slight over-representation in 2007 and a slight under-representation in 2008.