

**Economic Impact of Marin General Hospital:
Operations, Capital Improvements and Expansion
Marin County, California
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Executive Summary

Marin General Hospital (MGH) is seeking to update and retrofit its facilities through a bond measure to fund capital improvements over a 36-month period of building. This bond measure will help MGH renovate and modernize its facilities and continue to grow its operations. The estimated amount of capital expenditures from the bond would be approximately \$368 million on structures and \$33.5 million on parking. This report looks at the economic impacts of MGH's current operations and the projections from the proposed capital expenditures. Currently MGH, and its affiliated organizations, employ approximately 1,900 people and generate almost \$400 million in annual, net patient revenue. These daily functions generate a large number of economic impacts throughout Marin County. MGH has engaged in updating and expanding facilities on a continuous basis. Since 2008, MGH has invested approximately \$14.5 million per year in multiple projects, all of which create jobs and income for workers beyond the daily hospital services. The bond measure will provide both a one-time increase to Marin County's economy due to construction efforts, but will also provide support for ongoing functions and expanded services delivery. Thus, there are four sets of economic impacts to consider: current capital expenditures, current services, planned capital expenditures from the bond measure and expanded operations due to changes.

Hospitals are unarguably an important economic engine for any community. Hospitals generate support for educational institutions, manufacturers and many other businesses while they provide primary and specialty healthcare services locally. Because of their links to education and demand for skilled workers and medical professionals across multiple job classifications, hospitals heighten their economic impact by paying workers their wages and salaries and also purchasing supplies and equipment. Alongside of daily business, capital expenditures provide support for businesses throughout Marin County and expand health care delivery options and capacity. The combined spending expands MGH's economic impact. It should be noted that economic leakages occur when hospitals spend on goods and labor outside the local market, and the results in this study take those leakages into account.

The social impact of hospitals includes local provision of acute and outpatient services across an array of medical conditions. Marin General Hospital provides specific types of care that are otherwise not available in Marin County. These services include a Family Birth Center with a Level II Neonatal ICU, cardiac, neuro and vascular surgery. In addition, MGH is the designated Trauma Center for Marin County.

Key Findings:

Current Operations:

- Marin General Hospital and its Affiliates directly support approximately 1,900 jobs and indirectly supports another 1,887 jobs due to MGH and its employees' spending in Marin County;
- Net patient revenue generated by MGH represents almost 2.0 percent of the total revenue generated by Marin County businesses overall annually;
- Current MGH operations, averaged from 2011-13, generate \$32.1million in state and local tax revenues annually through the economic impacts; and
- Revenues are projected to grow at four to five percent per year, which grows the economic footprint of MGH across Marin County.

Current Capital Expenditures:

- From 2009-2013, capital expenditures at MGH generated approximately \$72 million of business revenue for construction and related businesses, or \$14.5 million per year;
- These expenditures employed approximately 36 workers annually outside the scope of health care delivery;
- The construction and employee spending in Marin County support another 20 jobs in Marin County;
- These expenditures have also provided an additional \$4.5 million in revenue annually for other businesses in Marin; and
- The capital expenditures provide an annual \$572,000 in state and local tax revenues beyond local fees and taxes to complete permitting processes and other requirements.

Proposed Capital Expenditures from Bond Measure:

- The construction spending will generate an additional \$169 million boost for Marin County's economy during construction over the 36-month construction phase;
- The number of workers supported directly by this effort will be approximately 528 and support another 1,160 workers in Marin County during the improvements phase for structures and parking; and
- The expenditures of both the workers and MGH from the bond revenue would be almost \$20.9 million in state and local tax revenue annually, which does not include local fees within the expenditures.

Once a new or improved facility is operational, subsequent growth of MGH services increases the positive economic impact on Marin County. An important aspect supported by this report's findings is that MGH's services affect Marin County's economy differently than its capital expenditures. MGH has a two-pronged impact, through capital expenditures that become a larger volume of services, representing major economic support in Marin County for decades to come.

Economic Impact of Marin County's Hospitals Marin County, California

Introduction

The purpose of this report is to provide context and data for the economic role that Marin General Hospital (MGH) plays in the Marin County economy. This study also estimates the economic impacts of MGH's current operations and capital spending, as well as what would come from a bond measure planned for the November 2013 ballot in Marin County. This bond measure will help MGH renovate and modernize its facilities and also grow its operations, preparing MGH to provide more services for Marin County's residents and also be open and working in the wake of a natural disaster, such as an earthquake, by 2018. The bond measure seeks \$394 million dollars for renovation and modernization efforts.

In addition to acute care, MGH provides primary medical care and numerous, other health services. There are many dimensions to economic impact analyses. Marin Economic Forum (MEF) recognizes that economy vitality and healthy communities are complements; economic and social development, specifically the residential location of businesses and residents, depends on both job and business opportunities and also social supports such as health care and education. MGH is of vital importance to Marin County in these ways. This study estimates those effects, specifically the proposed bond measure's economic impact.

Marin General Hospital (MGH) has been a provider of health care for Marin County's communities since 1952. The 235-room Greenbrae facility is the sole provider of many acute care services in Marin County, including a Family Birth Center with an advanced natal intensive care unit as well as cardiac, neuro and vascular surgeries.¹ In addition, MGH is the County's designated Trauma Center. Hospitals generally have a wide array of employees and functions. The economic impact of a hospital is not only due to its primary care functions. It is also in its administrative functions, facilities management, related outpatient services, information technology deployment, and other services provided. As a result, hospitals are job engines for a local community across many skill levels, wages and worker demographics. MGH is also a non-profit organization, relying on a mix of services revenues, donor support, grants, and debt to finance both daily services and capital improvements.

Measure F on the November 2013 ballot allows the Marin Healthcare District to issue \$394 million in general obligation bonds to build a new Marin General Hospital that meets California's

¹ See <http://www.maringeneral.org/about-us> for more.

earthquake standards. The measure allows MGH to enhance and expand emergency and other medical facilities; furthermore, the bond measure allows MGH to provide expanded niche treatments for heart, stroke, cancer and other diseases, and to reduce wait times in its emergency services department. MGH projects four to five percent annual growth over time in terms of its revenues; this bond will fund MGH's ability to provide services to a larger number of people in Marin County.

Hospital spending on the local community, and the spending contributed by a hospital's workers, causes a ripple effect throughout the county economy. This ripple effect increases the economic connections of Marin County's businesses, residents, non-profit organizations, and governments of MGH's everyday business. There are additional, private-business revenues and tax receipts for local governments. Also, hospitals provide an infusion of resources to local businesses through their capital expansions. Such capital improvements or expansions deliver a different, parallel set of economic impacts and connections to the local economy. New construction and renovations adds or enhances operating capacity of the overall commercial space. This translates into more jobs, more wages, more business revenue, and more tax revenue. MGH generates and supports economic activity in Marin County in terms of employment, business revenue and tax receipts. It also provides specific services that may not be available if MGH was not there. MGH's capital spending, and the major effort to come, augments those economic effects to support the economic and social fabric of Marin County.

This report addresses MGH's economic impact on the county economy. The analysis provides data as to how MGH's operations and capital expenditures affect Marin's businesses, workers and local governments. Economic impact analyses estimate how an industry's or a company's operations support other industries in a specific geographic area. These include supported jobs, annual business incomes and annual tax receipts. This report shows the broad reach of financial effects with respect to MGH's current operations and capital expenditures. These data can also be used to estimate the economic effect of future capital projects and services growth at MGH on Marin County. This report shows the relative importance of hospitals to the county economy and communities using employment data across all industries from both operations and capital expenditures. Recent capital expansions have supported not only construction and the trades, but also many other industries that would have otherwise seen reductions in demand. In addition, there are connections to the broader, healthcare ecosystem and industry clusters in Marin County. We start with a brief look at the role hospital operations play in Marin County in recent years.

Marin General and Marin's Health Care Industry: The Basics

Because its breadth of services is relatively wide, the economic impact from a single hospital can be quite significant for a community. Not only are jobs supported within the facility itself, there are also several, "allied" industries that have local hospitals as clients. They can range from accounting firms to waste management businesses. There also is a relationship among hospitals and other local healthcare industries. For instance, many medical professionals have staff privileges in local hospitals, teach and proctor hospital interns, and also have local private practices. There is also some exportation of services and additional revenue generated for Marin County from the greater Bay Area due to MGH's niche services and its location.

The healthcare industry comprises a continuum of services. Residential health care and assisted living are complements to hospital services, as are community clinics and public healthcare facilities. The largest employment categories are hospitals and also "ambulatory care", which encompasses medical and dental offices, chiropractors, and other outpatient services. Hospitals act as points of sale for acute and primary care needs that a medical office alone could not provide alone. Because space is a major consideration for providing inpatient services, as well as capital investment to expand or update current capacity to serve patients, hospitals are their own engine of economic growth for a community.

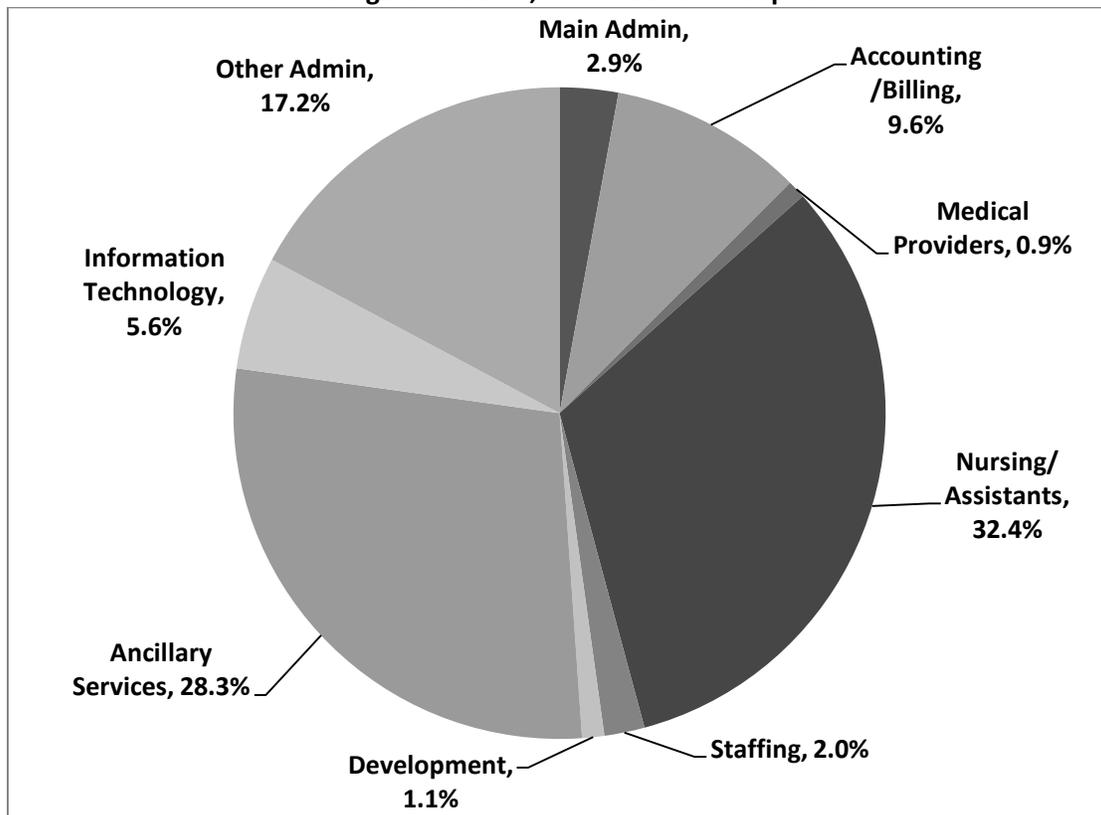
The economic impacts of services and facilities construction expand the hospitals' financial dimensions throughout the county economy. As part of a broader health-care network and set of services, hospitals can be an explicit part of the local economic development process. Business decisions to locate in Marin County may be based on the breadth and depth of hospital services; this is also true for residential location choices. Hospitals exist to serve the community, and thus support a population that ranges from a healthy workforce to school-age children. Hospitals also provide such services locally, rather than adjacent counties gaining patients or clients and thereby taking income away from Marin County.

MGH creates jobs to support its ongoing, daily operations. Job creation is further enhanced as construction projects expand hospital services capacity. For these reasons, hospitals play a critical role in Marin's economic development. In terms of new business revenue, new jobs and wages and a broader ripple effect from those changes, hospitals possess a large economic footprint in Marin County. Furthermore, because of hospital job and business revenue creation, there are also large, public revenue benefits from sales, transit occupancy taxes (TOT) and property taxes. Daily hospital services are the main economic engine for MGH; their preservation and enhancement is the rationale for capital expenditures.

Marin has a relatively large amount of its labor force in the healthcare sector, close to four percent.² Data in this section provides insight about hospitals' role in the greater Marin County economy. Marin County, based on its proximity to the Bay Area, draws from Stanford's medical programs, the University of California, San Francisco (UCSF) and its programs, UC Davis, Touro University of California in Vallejo, Dominican University of California in San Rafael, and other, regional educational facilities in terms of staffing positions for medical professionals. The College of Marin also provides education for certification and other health-care professional coursework. MGH also provides a place for medical doctors to practice and maintain a footprint in Marin County; its staffing categories provide insight into the breadth of employment to deliver acute and primary health services.

Job Classifications

**Figure 1: Proportion of Wages Paid by Job Categories
Average of 2008-12, Marin General Hospital**



Sources: Marin General Hospital and MEF

² Please see Lewin Group (2011) for more on hospitals and economic development.

Figure 1 provides major job categories and the proportion of wages paid by Marin County hospitals to those categories on average between 2008 and 2012.

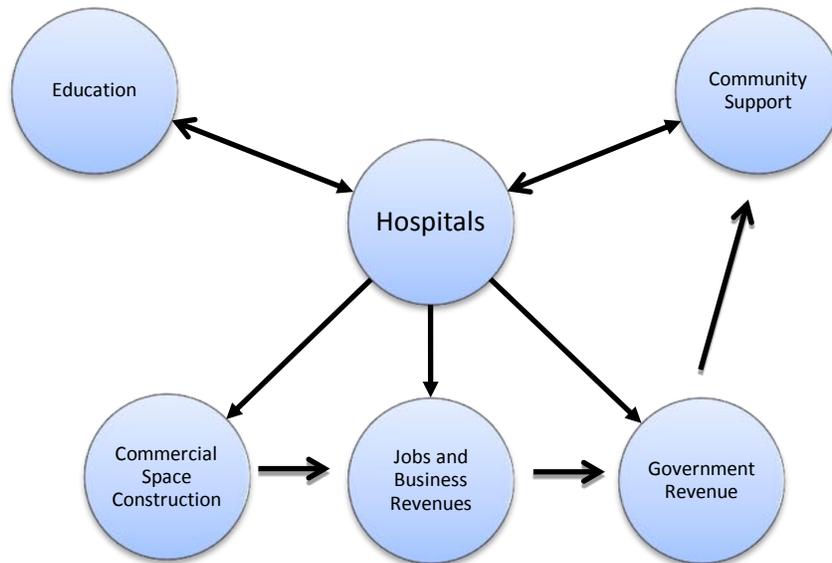
The major job centers are as follows:

- Medical Providers: These are the frontline medical doctors (MDs) and clinical PhDs;
- Nursing and Nursing Assistants: This category constitutes most medical staff other than doctors themselves across all nursing certifications and educational levels (RN, CNA, HHA, LVN, etc.);
- Staffing: This is the talent management staff, advertising and hiring positions as needed;
- Development: Because MGH is a nonprofit organization, this group drives the fundraising and financing for hospital updates and expansions, as well as provides public and government relations with respect to hospital operations and place in the Marin County community;
- Ancillary Services: This group is the outpatient services group that provide rehabilitation and other services after inpatient care to complete the continuum;
- Information Technology: Like any other major business, MGH also employs technical professionals to provide service and support to MGH's information network, servers, databases, equipment, and other technology needs;
- Accounting/Billing: MGH employs accounting and bookkeeping professionals to deliver financial information to the organization, as well as support payroll needs;
- Main Administration: This is the executive team that guides the strategic direction of MGH, including all leadership positions outside the medical service delivery side of the organization;
- Other Administration: This is a catch-all category for administration staff that are client services agents, office staff, and other personnel.

Jobs at Marin General Hospital provide a base for local demand in retail and personal services, as well as many professional services that support these workers. Figure 2 shows the theoretical ecosystem of health care in Marin County and how hospitals as businesses connect to all parts of the local economy, including education and government. Note that education and community support generate a two-way benefit. Education provides a skilled workforce, and hospitals provide an extension

of teaching and education for medical professions that supplements local colleges and universities. The community is the customer base, and the hospitals provide local options for Marin County's communities, providing a wide array of medical services and procedures. From those two major inputs, hospitals create additional jobs, business revenue, government revenue, and additional commercial space.

Figure 2: Hospitals and the Marin County Economy

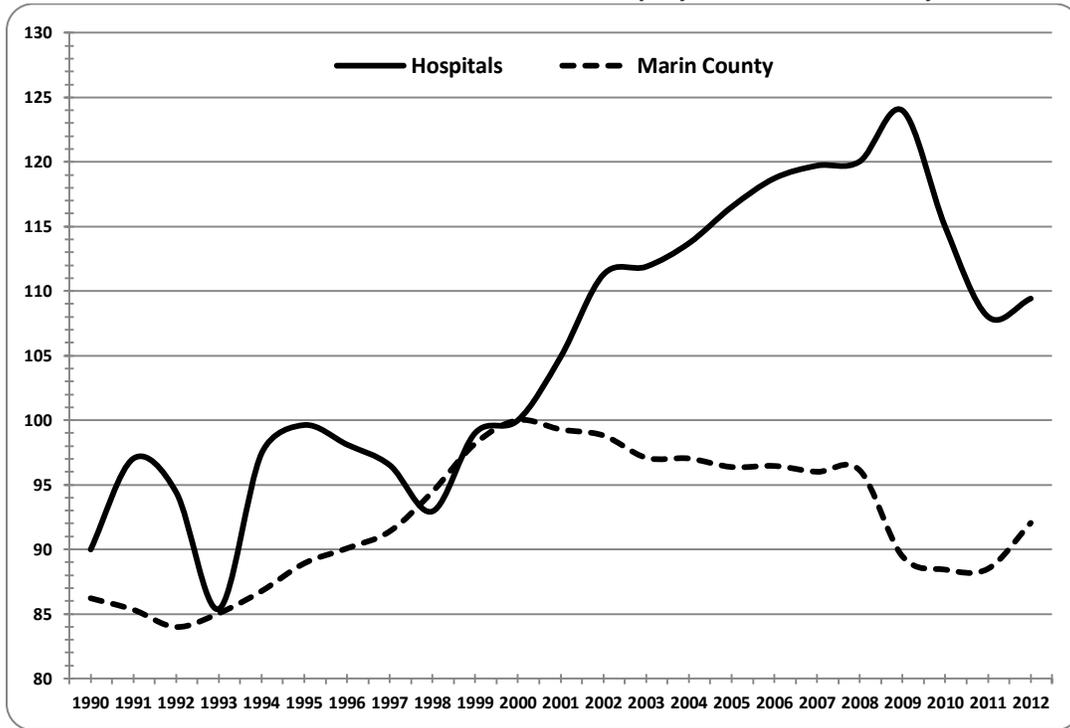


The economic ecosystem of Figure 2 shows a positive feedback loop. As employment grows in the community, there also is an increase in hospital services due to increased residents and workers. There is also a connection between capital expenditure and expansion of employment for hospital business operations. When hospitals spend money on expansion, they create more jobs related to construction, infrastructure, maintenance and allied industries to commercial structure construction. Once the new or expanded structures are built, they create more business space for hospital services. As services increase and revenue rises in parallel, the community investment made by the hospitals pays ongoing dividends by directly creating more jobs and positive economic impacts. Hospitals are places where goods and services come together from various places to be offered to the consumer.

Figure 3 compares hospital employment and total employment in Marin County since 1990. Like other industries, the period between 2009 and 2011 showed some attrition, which then picked back up in 2012. Health care is a targeted industry in Marin County in terms of focal industries for growth and public support; health care continues to be a growth sector in Marin County, and its links to local

education institutions and other industries through the economic impact shows how hospitals can be an economic development asset. Hospitals represent health care access and employment, social and economic benefits side-by-side.

**Figure 3: Comparison of Growth in Employment, 1990-2012, Index (2000 = 100)
Health Care and Total Private Sector Employment, Marin County**



Sources: Bureau of Labor Statistics and MEF

Table 1: Capital Expenditures for MGH Past and in Progress, 2008-2012

Year	Amount
2008	\$4,344,000
2009	890,000
2010	19,108,000
2011	14,971,000
2012	15,577,000
SubTotal of Completed Projects	\$54,890,000
Construction in Progress at December 31, 2012	\$17,460,000
Total 2008-12 and in progress	<u>\$72,350,000</u>

Source: Marin General Hospital

MGH intends to make infrastructure investments in Marin County, as capital expenditures are another way in which MGH generates economic impacts for Marin County now and into the future.

Table 1 summarizes capital expenditures from 2008 to 2012 for MGH. Capital expenditures have two stages of impact, which make construction efforts very powerful economic machines. The first stage is the construction where there are jobs created, business revenues are derived locally, and new tax revenue comes from both new buildings and related elements. Once commercial construction is completed, the ongoing operations of businesses that occupy the new space generate business revenue, more employment and more tax revenue into the future. The region provides some comparisons as well.

Regional Data and Information

A recent report by Philip King, PhD, and Professor at San Francisco State University for Hospital Council of Northern and Central California (HCNCC), provided regional information for the North Bay counties and the economic impact of these counties' hospitals. Some of the information in the HCNCC study provides further context for understanding how a hospital like Marin General Hospital can affect Marin County's economy, but also have regional reach in its effects. The five counties covered in the HCNCC report are Sonoma, Lake, Mendocino, Napa, and Marin.³

Some of the highlights of this report include the employment and wage data for hospital employment at a general level. Because hospitals have an array of positions as described above, looking at a specific wage level as a metric is somewhat tricky, but health care in general does pay slightly better than industries in general. The 2013 report provides data from Employment Development Department (EDD) about job projections across the North Bay and current age levels. Sonoma County (represented by Santa Rosa and Petaluma in combination) is slightly lower in terms of general wage levels (\$24.05 per hour) than the San Francisco-San Mateo-Marín counties area (\$31.58 per hour). For health care, the wages jump to \$34.54/hour and \$37.81/hour respectively.

For hospitals, recently released data show that seven (7) organizations in Marin County are considered hospitals and employ about 1,470 people in total. The HCNCC report (2013) states that four major hospitals in Marin County are: Marin General; Kentfield Rehabilitation Hospital; Novato Community; and Kaiser Foundation Hospital in San Rafael. These facilities have a total 458 hospital beds, and serve over 88,000 inpatient days, over 304,000 outpatient visits and have total net revenues less non-cash expenses like depreciation of \$509 million in 2010. These data came from the California

³ MEF was provided a hard copy of this report by MGH; the website for similar reports and where this report is likely to be found in the future is <http://www.hospitalcouncil.net/economic-impact-reports>.

Office of Statewide Health Planning and Development (see www.oshpd.ca.gov). In Marin County, the 1,470 workers are paid over \$104 million in wages in 2012.

Summary

The importance of this regional context is to show that there is room to grow for Marin County hospitals, and Marin General Hospital intends to generate that growth. Generally, Marin County hospitals have continued to hire across an array of positions and have grown their footprint in the Marin County economy. Much of this happens through capital improvements and capacity expansion. MGH's proposed bond measure helps to modernize and renovate its facilities and also support the projected to increase in health care services demanded by in Marin County and the North Bay. The next section shows the economic impacts of both current services, recent capital expenditures, and those predicted as a result of a success bond measure.

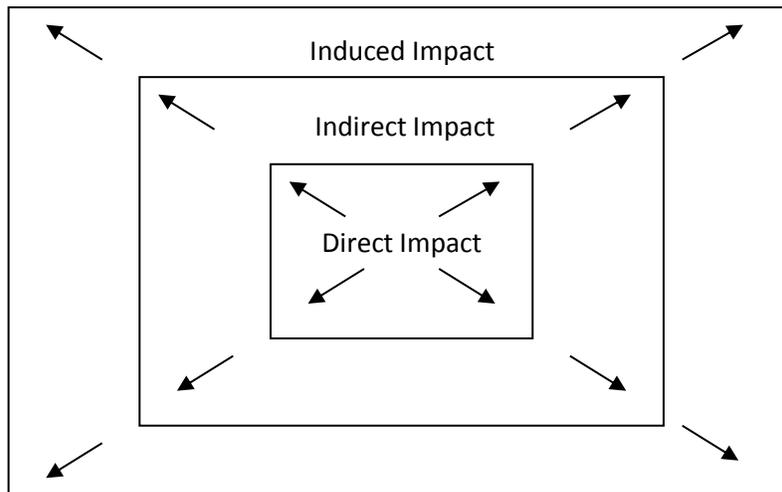
Economic Impact of MGH Operations and Capital Expenditures

The total revenue generated by hospital operations leads to wages paid to workers and helps fund capital expansion and improvement projects along with philanthropic donations. Using an average of full-time employment from 2008 to 2012 as a basis for economic impacts, MGH supported and generated approximately \$400 million in annual revenue and almost 1,900 jobs. Hospital services and capital expenditure on hospitals expansion or improvements create broad economic impacts. These can be summarized by a combination of annual business revenues, and annual tax revenues supported or generated by the services, and supported full-time equivalent jobs.

The IMPLAN® model used here, which stands for IMpact analysis for PLANning, is a model by which municipalities and counties worldwide analyze employment, business revenue and tax effects of economic events (see www.implan.com for more). There are three classifications of effects. The **direct** effects are those that initiate the impact. For example, hiring construction workers to build more hospital space generates an increase in wages paid to more people who are employed in Marin County. This direct benefit from new wages and jobs begins a chain reaction of gains, which affects local employment, taxes and business revenue generated in other industries. Figure 4 shows the ripple from the direct effects of hospital growth on the greater economy conceptually.

Indirect effects come from directly-affected workers and businesses (new construction jobs and revenues for local construction companies) increasing their spending on local businesses. For example, when a construction worker purchases more restaurant meals, groceries and other local goods and services, multiple local businesses gain revenue. As these merchants' sales increase, they raise their employment levels to meet enhanced demand. These additional jobs, wages paid and business revenues create **induced** effects. The induced effects are similar to the indirect ones, but come from the indirectly-affected workers and firms and their spending on the local economy more broadly. A new employee at a deli, who gets a job due to an increase in demand for the deli's goods and services, increases her demand of a broad range of personal services, retail products and other spending. The sum of these is the total or overall economic impacts from the original event.

Figure 4: Economic Impact Concept



Daily Services Impacts

Hospitals are service providers; however, acute care and specialty care services are only available at a limited number of facilities both regionally and specifically in Marin County. Marin General also generates export income from clients that travel from other areas to take advantage of niche services at MGH; there may also be some clients that are traveling through Marin County and use MGH if needed while a tourist here. The availability of local services also reduces leakage that would otherwise drive demand to hospitals outside of Marin County.

MGH's existence supports jobs, business revenues and tax receipts in an ongoing way. When hospital services grow in terms of employment or total business revenue, the Marin County economy

expands. However, important aspects and findings of this report are the differences in how MGH's services affect Marin County's economy versus its capital expenditures. It is important to also recognize leakages that exist due to MGH (as with any hospital) when specialty equipment is purchased from wholesalers or manufacturers that reside outside Marin County. MGH employs workers that live outside of Marin County which increases the leakages from business revenues remaining local. The economic impact model takes account of these leakages, which reduce the overall multiplicative effects of current and expanded operations. Almost all hospitals and businesses throughout Marin County have some amount of leakages.

Using employment, wage and revenue data provided by MGH and the Office of Statewide Health Planning and Development (see www.oshpd.gov), Tables 2 through 4 show the effects on various industries throughout Marin County due to MGH's daily business operations. MGH generates gross patient revenue, but must pay a large amount of that revenue to third parties. For operations, net patient revenue is the key figure and what actually affects the local economy. Note the breadth of industries and services affected. Medical and dental offices and residential care facilities are among the most affected industries beyond the hospitals. This shows positive, financial connections between services provided at local hospitals and those in other healthcare industries.

**Table 2: Revenue Impacts, MGH Daily Services,
Most Affected Industries across Marin County, 2013\$**

Industry	Direct	Indirect	Induced	Total
Private hospitals	\$400,000,000	\$177,400	\$4,369,300	\$404,546,700
Real estate establishments		27,110,700	7,824,900	34,935,600
Rental Income for Property Owners			27,910,700	27,910,700
Insurance carriers		6,473,200	7,484,700	13,957,900
Medical labs and outpatient services		6,102,700	3,886,300	9,989,000
Bars and Restaurants		1,286,700	7,420,000	8,706,700
Management of companies		7,275,400	963,400	8,238,800
Medical and Dental Offices		53,700	8,177,000	8,230,700
Wholesale trade businesses		2,508,600	4,813,800	7,322,400
Investment Banking		1,476,400	4,032,200	5,508,600
Legal services		2,538,800	2,934,400	5,473,200
Pharmacies		3,426,100	1,107,700	4,533,800
All Others		37,616,800	70,667,200	108,284,000
Totals	\$400,000,000	\$96,046,500	\$151,591,600	\$647,638,100

Grocery and department stores, investment banking, employment services, bars and restaurants are all supported by having hospital services locally. Very little of economic life in Marin County goes untouched by MGH due to its employment size and multiple industry connections. Tax revenue

generated includes many different local and state taxes across many jurisdictions. There may also be some additional transient occupancy tax (TOT) revenue based on an increase in “medical tourism” that may come from clients traveling to MGH for both inpatient and outpatient procedures and rehabilitation.

**Table 3: Jobs Supported Annually from MGH Daily Services
Most Affected Industries, Annual Estimates for Marin County, 2013**

Industry	Direct	Indirect	Induced	Total
Hospitals	1,900.0	1.6	30.1	1,931.7
Real estate agencies		153.6	44.3	197.9
Bars and Restaurants		22.2	131.4	153.6
Employment services		79.2	11.1	90.3
Medical and Dental offices			71.3	71.3
Private household operations			66.5	66.5
Investment Banking		17.4	47.5	64.9
Services to buildings and dwellings		38.0	17.4	55.4
Medical labs and outpatient services		34.8	22.2	57.0
Wholesale trade businesses		17.4	34.8	52.2
Grocery Stores		1.6	50.7	52.3
Management services		36.4	4.8	41.2
All Others		261.3	691.9	953.2
Totals	1,900.0	663.5	1,224.0	3,787.5

**TABLE 4: State and Local Taxes Generated due to MGH Daily Services
Annual Tax Revenues Supported, 2013\$**

State and Local Taxes	Amount
Employment Taxes	\$1,210,300
Sales and TOT Taxes	7,522,400
Property Tax: Commercial	8,362,400
Income Taxes	9,272,400
Other Taxes And Fees	5,707,800
Total State And Local Taxes	\$32,075,300

Capital Expenditures Impacts

The economic impact of capital expenditures by local hospitals expands the breadth of industries affected by decisions made to operate and expand services. While bars and restaurants, investment banking, real estate, property owner income, and banks and credit unions are affected, hospital operations are also directly affected as are design services, gasoline refineries, insurance, and wholesalers. Medical and dental offices are also affected in an “induced” way. As more construction workers are employed, the demand for basic health care would rise, some of which generates

augmented hospital-services demand. Tables 5 through 7 show how \$14.5 million in annual spending by MGH to improve or expand commercial space to provide services affected the Marin County economy.

Table 5: Supported Business Revenue from Annual Capital Expenditures by MGH in Marin County from 2008-12, 2013\$

Industry	Direct	Indirect	Induced	Total
Capital Construction	\$10,100,200			\$10,100,200
Architectural, engineering, and related services		\$552,500	\$6,800	\$559,300
Rental Income for Property Owners			\$537,000	\$537,000
Real estate establishments		\$78,800	\$143,900	\$222,700
Wholesale trade businesses		\$115,300	\$88,600	\$203,900
Bars and Restaurants		\$29,500	\$140,300	\$169,800
Insurance carriers		\$18,800	\$143,400	\$162,200
Medical and Dental Offices			\$154,100	\$154,100
Legal services		\$89,100	\$55,300	\$144,400
Banks and Credit Unions		\$68,000	\$66,200	\$134,200
Investment Banks		\$25,100	\$74,900	\$100,000
Check Cashing/Pawn		\$26,900	\$62,500	\$89,400
All Others		\$697,100	\$1,406,200	\$2,103,300
Totals	\$10,100,200	\$1,701,100	\$2,879,200	\$14,680,500

Table 6: Jobs Supported Annually (Full-Time Equivalent) from Annual Capital Expenditures by MGH for Marin County

Industry	Direct	Indirect	Induced	Total
Capital Construction	35.7			35.7
Architectural and related services		2.7		2.7
Bars and Restaurants		0.3	1.3	1.6
Wholesale trade businesses		0.5	0.4	0.9
Medical and Dental Offices			0.7	0.7
Private household operations			0.6	0.6
Real estate establishments		0.2	0.5	0.7
Investment Banking		0.2	0.5	0.7
Grocery Stores			0.5	0.5
Legal services		0.4	0.2	0.6
Services to buildings and dwellings		0.3	0.2	0.5
Nursing and residential care facilities			0.4	0.4
All Others		2.6	6.8	9.4
Totals	35.7	7.2	12.1	55.0

There are similar effects on employment. Note that some job creation is directly related to construction efforts and follow the revenue numbers (architectural, engineering and design services), but new retail employment is relatively large versus retail revenue. These results suggest there are more people working in retail industries as a result of ongoing capital expenditures, with respect to other industries in Marin County. The reason the direct effect in Table 5 is not \$14.5 million is due to leakage

from purchases to other areas outside of Marin County; the totals here are Marin County totals taking such leakages into account.

The increase in construction activity affects retail revenue, but not as much as it affects employment. Revenue generated from these capital improvements is larger in higher-margin businesses (professional services, apartment and commercial leases, banks and credit unions) versus retail services. Bars and restaurants see larger amounts of revenue and employment support. Government also gets a revenue surge, though some of the tax revenue will go to Sacramento. The critical idea here is that a capital expansion impact becomes augmented operational impacts as shown in Tables 2 through 4, enhancing the total impacts from hospital services.

Table 7: State and Local Taxes Generated from Annual Capital Expenditures by MGH for Marin County, 2013\$

State and Local Taxes	Amount
Employment Taxes	\$18,900
Sales and TOT Taxes	127,100
Property Tax: Commercial	141,600
Income Taxes	180,500
Other Taxes And Fees	103,900
Total State And Local Taxes	\$572,000

Renovation and Modernization Economic Impacts: The Bond Measure

The previous sections provide a way to look at how MGH’s daily services and capital expenditures affect the Marin County economy. The proposed bond measure funds a mix of facilities renovation and expansion; further, there will be expanded and renovated parking. The main rationale for these changes is to prepare MGH to provide local services in the case of a natural disaster; these expenditures will be retrofits and help with future expansions and planned demand increases of four to five percent per annum. On the facilities side, the planned expenditures are approximately \$368 million, including both the construction and renovation expenses (“hard costs”) and the “soft costs” of planning, permitting, and other services for compliance, safety and structure otherwise. For the parking structure and lots, there will be a combined cost of \$33.5 million for a total of over \$401 million in initial spending. Notice in Table 8 some of those expenditures are leaked away due to local versus regional and national purchases of equipment and other needs. Similar to the economic impacts of capital expenditures over the last five years, MGH’s use of the bond measure will have a large number of economic impacts during the project’s life cycle. Notice that the industries affected by the spending for the bond measure are similar to those affected by ongoing capital spending at MGH in Tables 5 through 7.

**Table 8: Supported Annual Business Revenue from
Bond Measure Expenditures by MGH, Marin County, 2013\$**

Industry	Direct	Indirect	Induced	Total
Capital Improvements	\$115,474,700			\$115,474,700
Parking Structure and Lots	7,492,600			7,492,600
Architectural and related services		6,814,700	82,000	6,896,700
Rental Income for Property Owners			6,548,900	6,548,900
Real estate establishments		955,700	1,755,500	2,711,200
Wholesale trade businesses		1,389,900	1,080,500	2,470,400
Bars and Restaurants		355,200	1,711,300	2,066,500
Insurance carriers		231,400	1,748,100	1,979,500
Medical and Dental Offices			1,878,300	1,878,300
Legal Services		1,108,300	674,100	1,782,400
Banks and Credit Unions		821,400	806,600	1,628,000
Investment Banking		300,800	914,000	1,214,800
All Others		9,020,200	17,909,500	26,929,700
Total	\$122,967,300	\$20,997,600	\$35,108,800	\$179,073,700

**Table 9: Jobs Supported Annually (Full-Time Equivalent) from
Bond Measure Expenditures by MGH Hospital in Marin County**

Industry	Direct	Indirect	Induced	Total
Capital Improvements	400.0			400.0
Architectural and related services		169.6	2.0	171.6
Parking Structure and Lots	128.3			128.3
Bars and Restaurants		15.9	76.4	92.3
Wholesale trade businesses		25.7	19.9	45.6
Medical and Dental Offices			42.2	42.2
Private household operations			40.8	40.8
Real estate agencies		13.6	25.1	38.7
Investment Banking		8.9	27.2	36.1
Grocery Stores		2.3	30.4	32.7
Legal services		20.2	12.3	32.5
Maintenance/Services for Buildings		14.8	10.8	25.6
All Others		166.7	434.7	601.3
Totals	528.3	437.7	721.8	1,687.7

**TABLE 10: State and Local Taxes Generated from
Bond Measure Expenditures by MGH in Marin County, 2013\$**

State and Local Taxes	Amount
Employment Taxes	\$230,000
Sales and TOT Taxes	1,550,800
Property Tax: Commercial	1,728,100
Income Taxes	2,202,200
Other Taxes And Fees	1,266,800
Total State And Local Taxes	\$6,977,900

The renovation project is planned to take place over a 36-month period; the analysis here assumes that those annual expenses will be distributed over each year evenly. In a further similarity to the previous subsection, the direct effects are lower than the planned spending by MGH due to leakages for materials, workers and other needs.

Conclusions: Importance of Hospitals and Their Expansions

Marin General Hospital (MGH) is seeking to expand and update its facilities through a bond measure. This bond measure will help MGH renovate and modernize its facilities and also grow its operations by 2018. The bond measure construction effort would have significant economic impact on Marin County. This study estimates that the combination of structure renovations and parking expansion and construction would create another \$169 million in business revenues, support over 1,680 jobs during the construction phase (including over 528 jobs on site) and generate over \$20.9 million in state and local tax revenue. MGH has daily functions and services that employ approximately 1,900 people and generate almost \$400 million in annual revenue, and there are projections for four to five percent growth in revenues per annum. Recent capital expenditures also show investment in infrastructure and planning for growth. The bond measure will provide both a one-time increase to Marin County's economy due to construction efforts, but will also provide for ongoing functions and expanded services delivery. There are three sets of economic impacts to consider: current capital expenditures, current services, planned capital expenditures from the bond measure, and expanded operations due to changes.

Hospitals are an important economic engine for any community. Because of their links to education and demand for skilled workers and medical professionals across multiple job classifications, hospitals heighten their economic impact by paying good wages and salaries and purchasing supplies. Hospitals also add new facilities and update current ones. This spending generates more spending in an array of industries beyond health care; construction spending generates a parallel set of impacts on various, other businesses. Through its economic impacts, the daily functions and services provided by MGH support over 3,787 workers in Marin County, approximately two percent of overall county employment, and almost \$647 million in business revenue, and \$32.1 million in state and local tax revenue annually. Current and planned capital expenditures outside the bond measure support over 78 jobs and \$21 million in business revenue annually, as well as approximately \$821,000 in annual state

and local government revenue. These figures are net of leakages from Marin County; the economic impacts would be larger if all expenses were locally purchased.

The social impact of hospitals includes local provision of acute and outpatient services across an array of medical conditions. Marin General Hospital provides specific types of care that are otherwise not available in Marin County. There are also links to education at all levels. Healthy communities are a major component in economic development; the presence of a hospital with a wide breadth of niche services can attract and retain businesses and residents. Table 11 summarizes the economic effects of MGH now and as a result of a successful bond measure. These impacts do not include the projected expansion of MGH’s daily services for Marin County’s residents, which are supported in their growth by what the bond measure provides.

Table 11: Summary of Economic Impacts

Operations/Capital Improvements	Business Revenues	Employment	State/Local Tax Receipts
Current operations: Direct	\$400,000,000	1,900.0	
Total Impacts	\$647,638,100	3,787.5	\$32,075,300
Annual Capital Expenditures (2008-12): Direct	\$10,100,200	35.7	
Total Impacts	\$14,680,500	55.0	\$572,000
Bond Measure Capital Expenditure: Direct	\$368,901,900	528.3	
Total Impacts	\$537,221,100	1,687.7	\$20,933,700

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Data about the bond measure, daily business functions, and recent capital expenditures was provided by Marin General Hospital staff.