

## Counterfactual study of New Hampshire’s economy in the absence of growth from hospitals

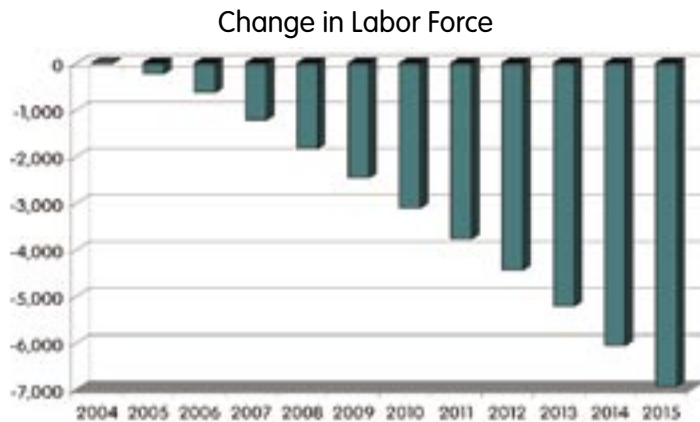
Later, each of the six counties involved in the study will be reviewed comparing the difference between economic growth each was expected to have in the absence of any additional hospital construction projects and the growth that it experienced with the projects.

### Input for New Hampshire

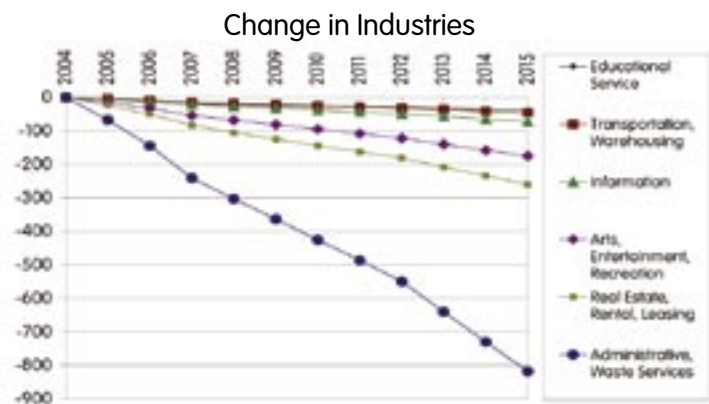
So what would happen in the state’s economy if these and other hospital expansions did not take place? To get a statewide perspective of the importance of hospitals to New Hampshire’s economy, a simulation was created which held statewide employment in hospitals at the 2004 level for the entire period of the study. This artificially created condition eliminates any new employment growth that would normally be experienced in the *Hospital* industry. These results are measured in comparison to how the state’s economy would normally have grown with expected hospital increases.

### Impact of a “No-Growth condition in Hospitals” on New Hampshire

If *Hospital* growth were to be frozen, then the labor force would be affected. The lack of growth is slow to start, with 222 fewer people in the labor force in the second year (2005). This magnifies each year, resulting in a reduction of more than 6,900 by 2015.



The distinguishing element between the labor force and employment levels is that employment is not restricted by residence and includes people who commute into the area. While *Healthcare and social assistance* is the industry most affected by the “no growth” condition (with almost 9,400 fewer jobs by 2015), the industries effected extend far beyond just health-related industries. *Construction* felt the effects, having 1,200 fewer jobs by 2015. Some of these reduced levels can be from the lack of projects to expand hospital



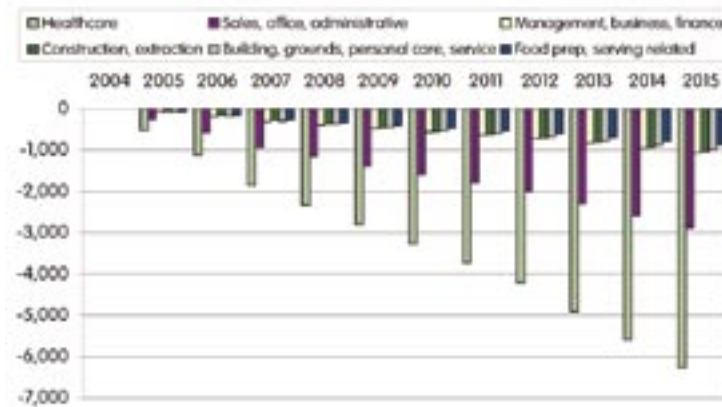
## Hospital Construction Projects in New Hampshire

facilities. Other industries are secondary, related not only to the lack of growth in hospitals but closely tied to related changes in population. *Retail trade* would expect to shrink by over 800 positions, while *Administrative and support and waste management* companies would reduce their forces in response to a smaller demand for services.

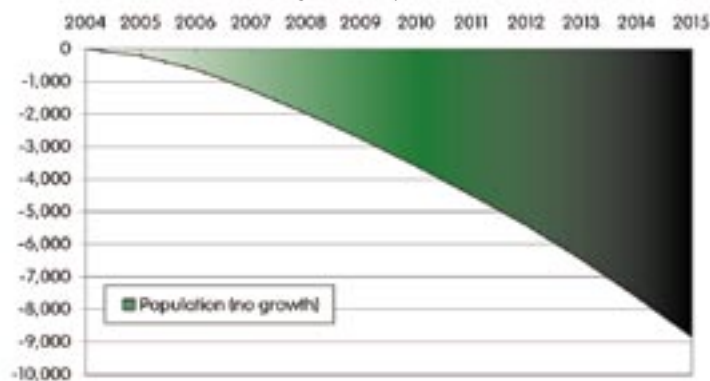
*Healthcare* occupations lost a chunk of the employment, 6,200 fewer workers by 2015, from a lack of growth in healthcare related industries. Additionally, almost 2,900 workers are lost in *sales, office and administrative* occupations, and there will not be a need for over 1,000 workers in *management, business, and financial* occupations as well as *construction and extraction* occupations. Subsequent reductions in population would result in *buildings and grounds and personal care service* occupations and *food preparation and serving related* occupations also scaling back by about 900 workers in each field.

Population would also change differently. Even though the labor force is based on place of residence, the effects on population are expanded because people in the labor force have dependents and family members not included in the labor force. For this reason, the reductions in population are initially similar to the labor force, 211 people in 2005. But as people leave to find employment outside of the state, they take their families with them, causing the losses of population to overtake those in the labor force, reducing the population by almost 9,000 people by 2015.

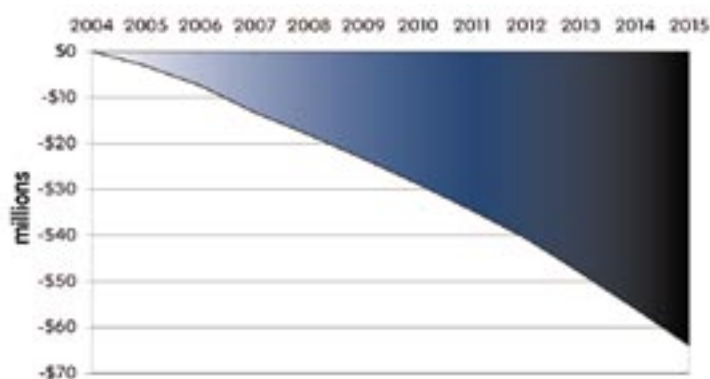
Change in Occupations



Change in Population



Change in State Revenues



On a broader scale, hospitals are a business, as such they contribute to the state's comprehensive annual financial report (CAFR). If hospital growth were to stagnate at the 2004 level, along with related reductions in other industries, state revenues would also be negatively affected. The losses would start at \$3.1 million in 2005, and each year would lose more until by 2015 the loss for the year would reach \$63.9 million.

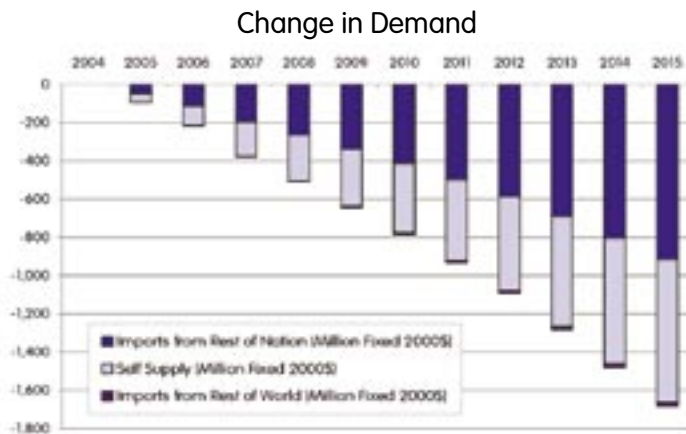
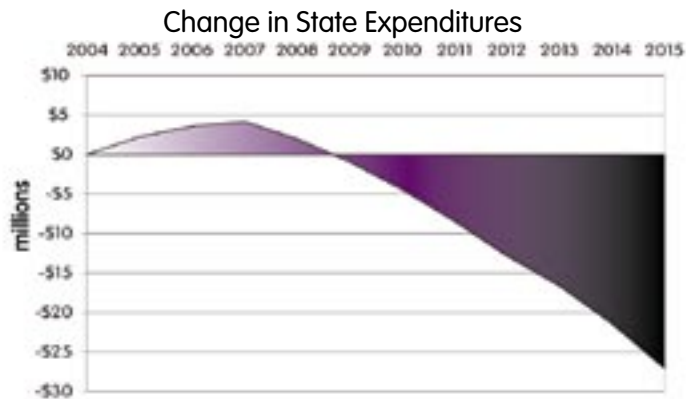
Likewise state expenditures would take a hit. Initially, as those without work require public assistance, the expenditures would rise \$2.2 million, and the increase in expenditures the following year, 2006, would be over \$3.5 million. The increases peak above \$4.1 million in 2007 before they start to subside. These reductions then follow the same pattern as the reductions in population.

The losses statewide change the *demand* for goods and services in the state. For this study, demand is met through three components:

- Self supply - meaning the goods and services that are readily available within the state borders.
- Imports from the rest of the nation - defines those products that come from outside of the state, but within the nation.
- Imports from the rest of the world - which covers everything else.

The lack of growth in employment and the related diminishing population will also require fewer products. The levels of *self supply* and *imports from the nation* are close to parallel until around 2007. The lack of growth in hospitals, over time, will magnify the lack of *imports from the rest of the nation*. At that point, with employment and population levels declining, the imports decline faster (partly because there is less need to purchase/import equipment) than the demand on goods and services provided in the state.

Individuals in the state would see a difference in their average annual wage as a result of "no growth" from hospitals. The reductions, compared to what would be expected to be earned

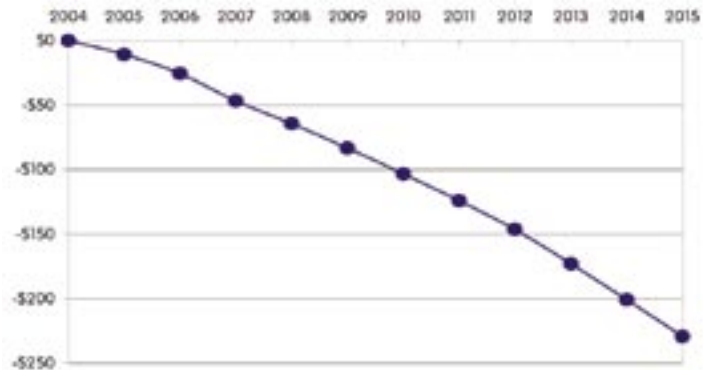


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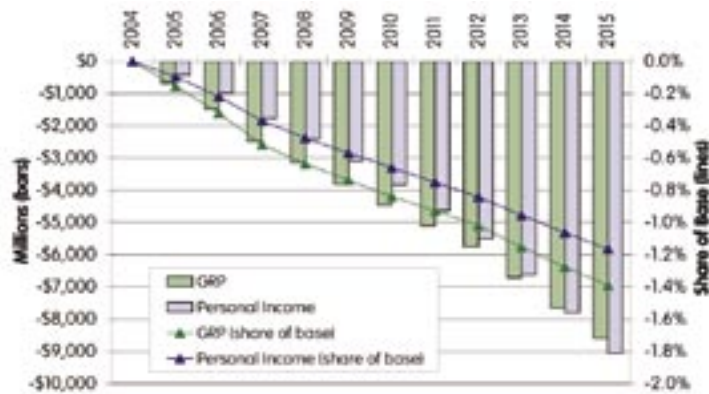
with normal hospital activity, are slow to begin with, just over \$10 in 2005. That difference to their annual pay may not be noticed by everyone. However, that reduction grows to over \$50 by 2008, and doubles to \$100 by 2010. By 2015, people may notice they are getting nearly \$230 less per year on average.

The financial losses on an individual basis may not be remarkable, but when those are considered collectively, it has a much bigger impact. In the first year, 2005, of "no growth" from hospitals, the state would have \$67.4 million less in the local economy. That marks just the beginning in the reduction of the state's gross regional product, as the level continues to decline, dipping \$147.8 million below what would have been expected to be earned with normal hospital activity in the next year. By 2015, the state will be more than \$858.5 million below its expected GRP levels. Personal income, an element included in GRP, follows a similar trend. The reductions in personal income were initially slower, \$42.1 million the first year, however the losses exceeded those of GRP by 2014 at \$780.1 million, reaching \$905.6 million by 2015, because of the lack of growth in population.

Change in Annual Average Wage



Change in Gross Regional Product and Personal Income



Population by Age Range

