

Coös County Perspectives... The Federal Prison



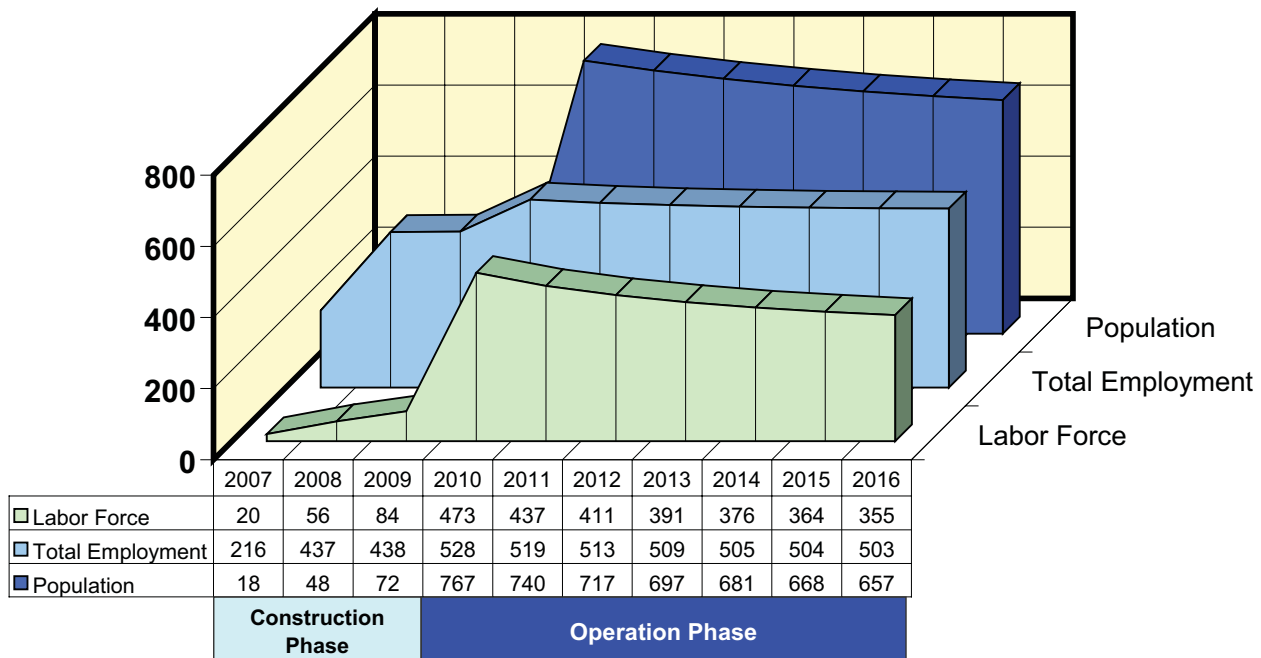
Long suffering with the decline of the paper industry, Coös County is about to experience an addition to its employment mix as it is preparing for the construction and staffing of a new federal prison. A medium security 1,230-inmate federal correctional facility and a minimum-security satellite prison camp is planned to be built and operated in Coös County.

In Spring 2007 the Federal Bureau of Prisons purchased the land where the prison is to be built and released the names of the contractors chosen to do the design and construction of the prison.

This federal prison will bring the following changes to Coös County:

- Generate approximately 500 jobs on average in the timeframe from 2008 to 2016
- Increase the population by approximately 700 people, and the labor force by about 400, on average from 2010 to 2016
- Expand its Gross Regional Product by an average of \$23.2 million fixed 2000 dollars annually from 2008 to 2016
- Bring \$22.8 million nominal dollars to the county's total personal income in 2008 which will increase to a \$33 million difference by 2016
- Create jobs in retail trade, the service industry, and state and local government

Federal Prison Impact on Population, Total Employment, and Labor Force





The Modeling

New Hampshire Employment Security (NHES) used the New Hampshire 10-county, 70 industry sector econometric model developed by Regional Economic Models, Inc. (REMI) to simulate the impact of a federal prison on the Coös County economy over the next ten years.

The Employment and Labor Market Information Bureau (NHES-ELMIB) used the estimated employment and payroll data, and migration estimate count from the Federal Bureau of Prisons' Environmental Impact Statement (*EIS*)¹ as the changes to the baseline in the REMI model.

Construction Phase:

In May 2007 the design and construction contract for the federal prison in Berlin was awarded to Bell Constructors and Heery Construction Company, a joint venture out of Rochester, New York. Hence, we modeled the construction phase of the prison to begin mid 2007. The *EIS* estimated the construction of the prison would take 30 months and an average of 301 workers would be employed during the period. Based on these projections, we added 150 construction jobs in 2007 and 301 in 2008 and 2009 to the REMI model's forecast.

Annual average compensation (wages plus benefits) for construction jobs in Coös County in the REMI Model baseline was \$16,879 in 2007. Compensation in the construction industry in Coös County is low because a large portion of the employment is part-time and/or seasonal. The REMI Model is based on Bureau Economic Analysis data. This data source includes self-employment. Some

workers in Coös County may work in the logging industry part of the year and do construction work when logging jobs are not available. In contrast, average weekly wage for construction workers in covered employment² in Coös County is \$642 in 2005, equivalent to an average annual wage of \$33,384.³ The REMI average is based on an estimate of 1,232 construction workers (including self-employed) in comparison to the covered employment count of 447 construction jobs.

The *EIS*, using the Davis-Bacon wage rate for the three county area (Coös, Grafton, and Carroll), estimated that the construction workers building the federal prison would average approximately \$57,520 per year in 2005 dollars. In order to account for this difference in wages, we adjusted the compensation for the 300 (150 in 2007) additional construction workers. Over the two and half-year period the difference in payroll amounted to \$32.3 million in fixed national 2006 dollars, which we added to the Coös County economy.

Operation Phase:

The *EIS* estimates that the ongoing operations and maintenance of the federal prison will require approximately 325 Federal Bureau of Prison employees. We therefore entered 325 federal civilian jobs to the model from 2010 onward.



¹ Proposed Federal Correctional Institution, Berlin, New Hampshire - Volume I Final Environmental Impact Statement (EIS), August 2006. U.S. Department of Justice, Federal Bureau of Prisons.

² Estimate based on UI wage records.

³ Average weekly wage in covered employment does not include employer contributions for employee pension and insurance funds and employer contributions for government social insurance. Average wages should, therefore, be lower than average compensation.

The *EIS* suggests an annual payroll of approximately \$19.1 million (2005 dollars). Using this figure, the average annual compensation for the federal prison employee would be \$60,706. This is about ten thousand dollars lower than the average annual compensation for federal workers in the REMI model's baseline for Coös County. To account for this difference, we adjusted the annual average compensation for these additional federal civilian employees downward.

As the government sector is mostly self-reliant,⁴ the multiplier effect of government jobs is mainly limited to the additional consumption these federal civilian jobs induce in the Coös County economy.

In order to ensure that the new federal prison has a core group of experienced staff from the beginning of its operation, 40 percent of the employees will be transferred from other federal correctional facilities. In addition, the *EIS* assumes that about two-thirds of the new hires will not be from the northern New Hampshire region.⁵ In other

words, approximately 266 employees would be new to the area.

Since some households may supply two workers to the prison, the *EIS* assumes that 240 households will move into the area. The *EIS* used the 2000 U.S. Bureau of the Census national estimate of average household size to calculate the total population impact on Coös County. In order to align the additional federal prison employment with the population increase, we added 626 economic migrants⁶ to the Coös County population in 2010.

In general, the REMI Model assumes some in-migration would take place due to an employment increase in any sector, but not to the degree that this new federal prison facility will create and not so suddenly. The REMI model notes the external shock of 626 migrants we added to the model and readjusts its own internal calculations, so any over-counting is minimal.



⁴ According to the input/output tables in the REMI Model, Government does not demand much input (services/products) from private industry and does not produce an output purchased by private industry.

⁵ *EIS*, Page IV-42 (See footnote 1 for source detail).

⁶ 240 households multiplied by 2.61 average household size equals 626. We did not migrate any population into the model in the construction phase as the construction crews are only going to be stationed in Coös County temporarily.

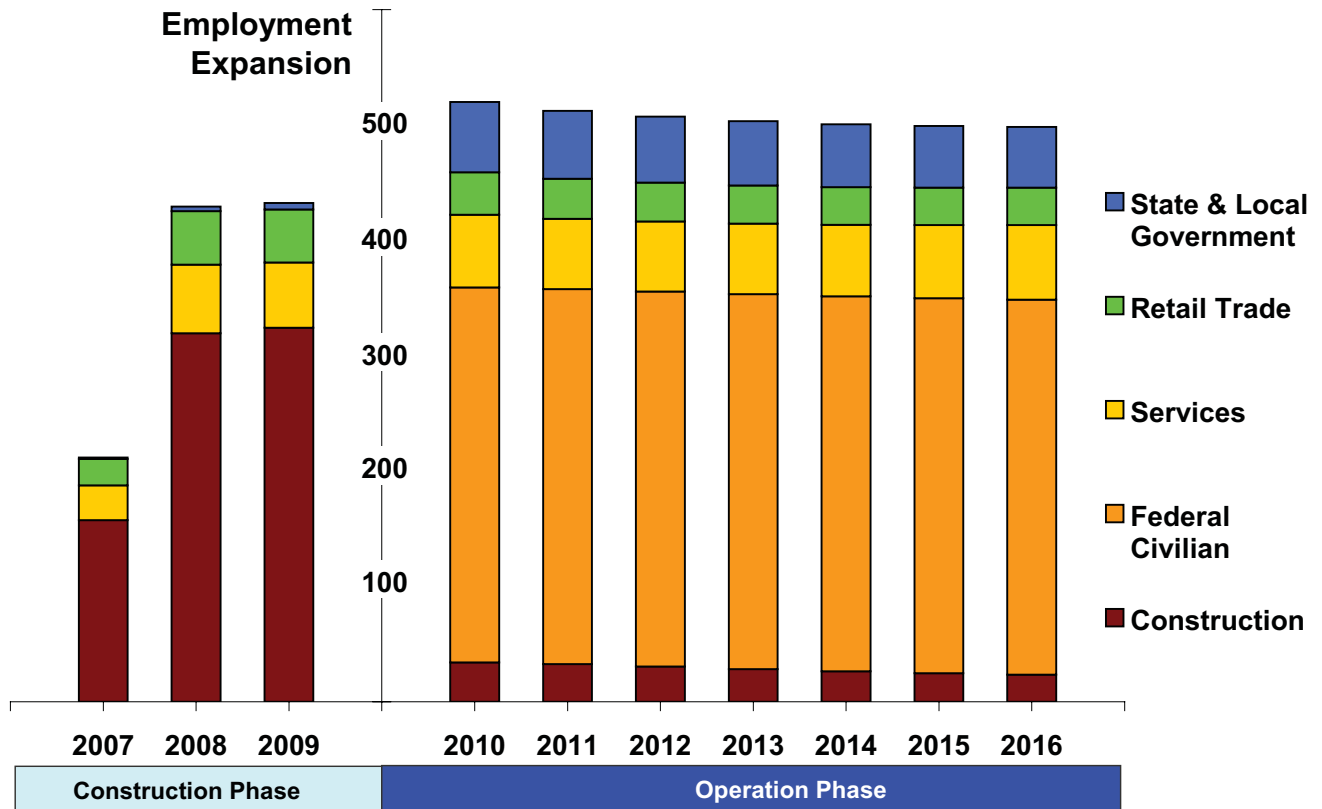


The Result of Modeling

It is understood that the impact of the federal prison has two phases: Construction and Operation. In each stage, an additional 400 to 500 jobs are created. However, it is important to distinguish between the two phases as they involve two very different types of industries that therefore require different job-skills. In the first phase, the types of occupations required are engineers and skilled and unskilled construction workers. The second phase, the operation of the prison, will require a large number of correctional officers and administrative and service staff.

The number of jobs that are going to be held by local residents under the construction phase is likely to be limited. In the short term jobs related to the operation of the prison will be limited as well.⁷ Of special interest are the jobs that are created due to the secondary effect of establishing the federal prison in Coös County.

- The secondary effect of the construction phase is 46 jobs annually in Retail and up to 60 jobs in Services, while there is little impact on state and local government.
- The increased demand for Services and Retail will continue when the Federal prison is operating. These jobs are induced to the Coös County economy mainly due to an increase in consumer spending related to the injection of additional income from prison employment.
- Despite the differences in the occupational mix in the employment related to the construction phase versus the operation phase, the number of jobs and the wage levels are very similar.
- The big difference between the two phases (other than variance in occupational skill sets) is that the prison employment is of a more permanent nature than the jobs related to the construction phase. The prison employees are therefore likely to bring their families with them to live in Coös County.



⁷ See footnote 6 for the in-migration discussion.

- As the prison employees and their families move to Coös County, there will be an increased demand for housing. This will continue to generate jobs in the construction industry even after the prison construction phase is over.

As we migrated more than 600 people into Coös County in 2010, the population spikes by more than 750. This additional population will require more state and local government services. That is why 61 more jobs will be created by 2010. Of this total, three quarters are in local government employment. This additional local government employment is related to increased demand for education as more children are anticipated to move into the area.

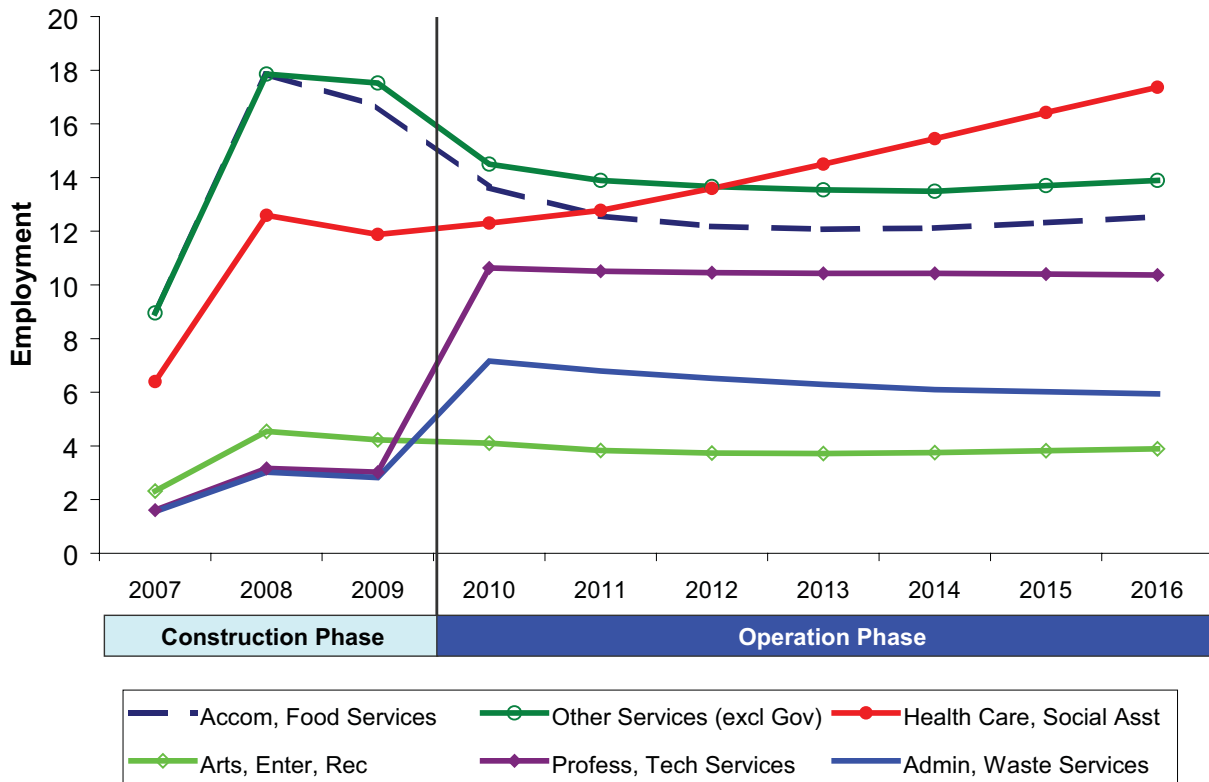
After a while, some of the migrants might leave (e.g., workers transferring to other federal prisons), and local residents that have been trained as correctional officers would be able to fill these positions at the federal prison.

At the detailed level, as the construction phase gives way to the operation phase, employment in service industries shows the following differences:



- The demand for Accommodation and Food services is the highest in the construction phase.
- Health Care and Social Assistance employment continues to add jobs above the baseline forecast as the population is boosted by migrants.
- Employment in Professional and Technical services, and Administrative and Waste services will also increase as the Federal prison becomes operational, due to both the increased demand for services from the prison itself as well as increased demand from the in-migrating population.

Detailed Employment Gain in Services





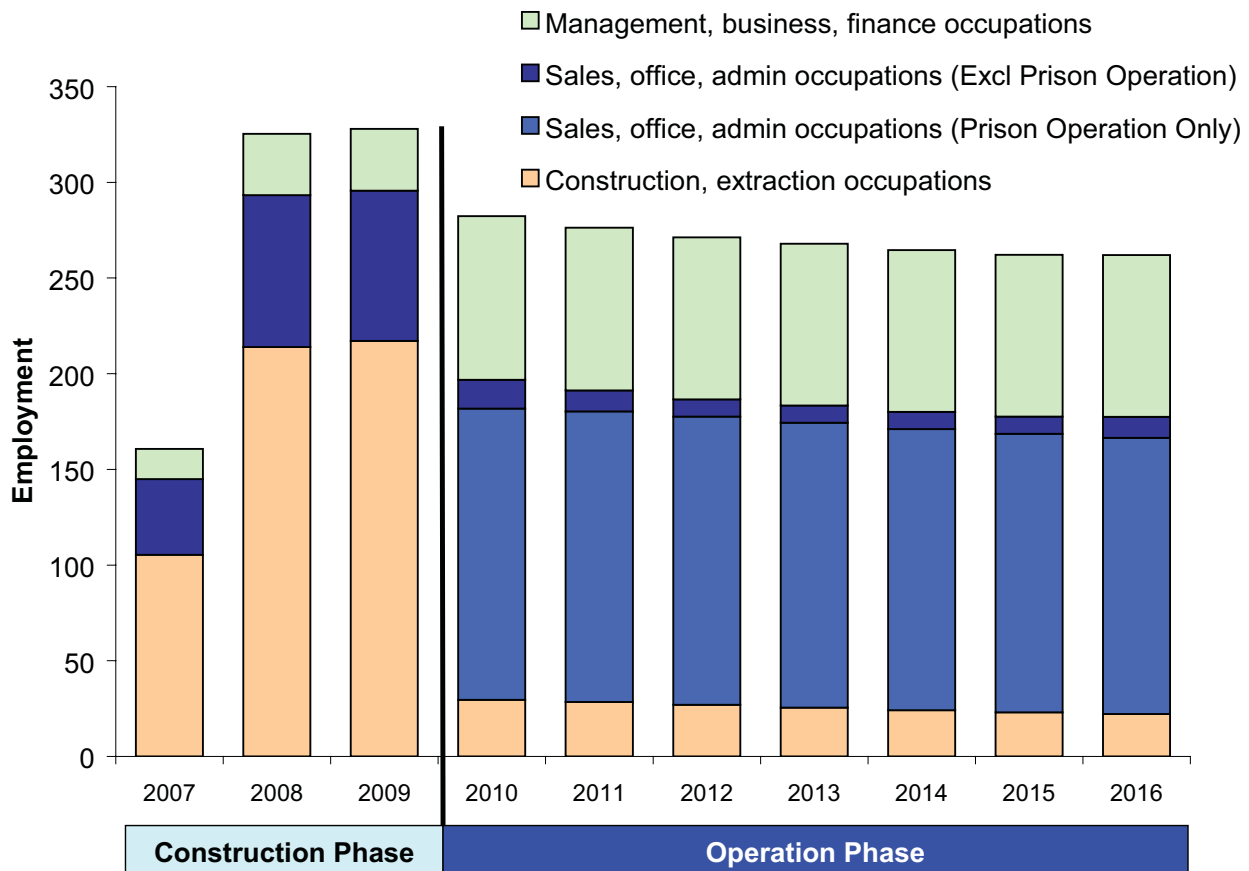
Occupational Mix

The two combined occupational groups generating the largest amount of new employment is *Construction, extraction occupations* and *Sales, office, administrative occupations*. *Construction, extraction occupations* is directly linked to the construction industry employment. *Sales, office, administrative occupations* is a mixed group of retail sales workers related to increased consumer spending and administrative and office workers directly related to the input of 325 federal civilian jobs in the model. The data sources that the model is based on do not specify different kinds of federal government employment (U.S. Forest Service, U.S. Postal Service, Internal Revenue

Service, etc.) Therefore, the model produces a picture of the average federal government occupational mix (represented with a majority of professional administrative staff).

Management, business, finance occupations is another combined occupational group that generates a fair amount of jobs both under the construction and operation of the prison. Management occupations are part of any industry and will be generated in proportion to total employment generated. Additional population will generate jobs in the business and financial sector related occupations, which is why the employment in *Management, business, finance occupations* increases from 32 in the construction phase to 86 in the operations phase.

Top Three Combined Occupational Groups Adding the Most New Jobs (Note: not all occupational groups are included)



Note: The majority of jobs listed under Sales, office, administration occupations in 2010 onward are correctional officers.

Maintenance, food preparation, transportation, and other service related occupations are generated by the induced and indirect impact of the construction and operation of the federal prison. As these jobs are created in proportion to total employment generated, the occupational impact generated by the each of the two phases is about the same.

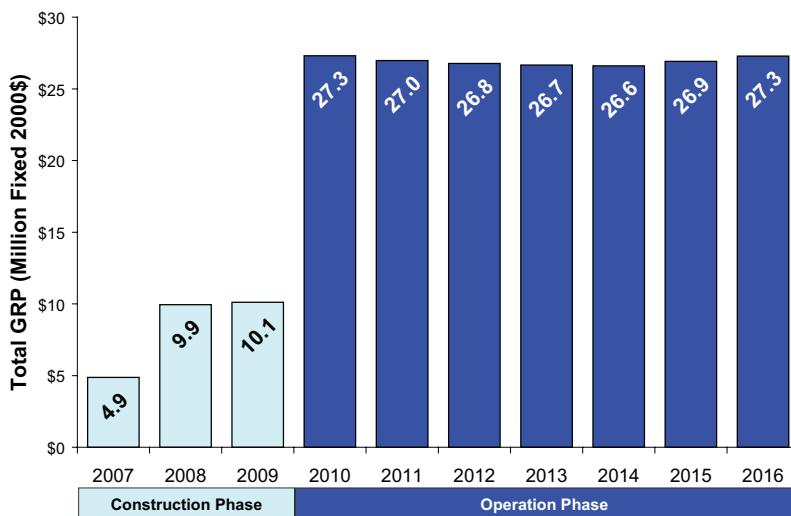
Healthcare, education, and protective service (this group does not include correctional officers) related occupa-

tions are created in proportion to population increase. Therefore the construction phase has a minimal impact on these occupations, whereas these occupations generate a fair amount of employment when the operational phase of the prison begins (with the assumption that a large in-migration will occur simultaneously).



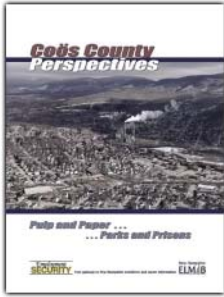
Occupational Impact	Construction Phase		Operation Phase Continues	
	2008	2009	2010	2011
Construction, extraction occupations	214	217	30	29
Sales, office, administration occupations	79	79	167	163
Management, business, finance occupations	32	32	86	85
Install, maintenance, repair occupations	28	28	23	22
Food preparation, serving related occupations	19	19	19	18
Transportation, material moving occupations	19	18	18	18
Building, grounds, personal care, services occupations	17	17	21	20
Healthcare occupations	6	6	30	31
Computer, math, architecture, engineering occupations	5	5	32	32
Education, training, library occupations	3	4	25	24
Protective service occupations (Exclude Prison Guards)	1	2	26	26
Life, physical, social science occupations	0	0	20	20

Federal Prison Impact on Coös County



Gross Regional Product

The construction phase will add close to \$10 million in 2008 and 2009 to the Coös County Gross Regional Product (GRP) baseline in fixed 2000 dollars. As the Federal prison becomes operational, more than \$27 million fixed 2000 dollars are added to the GRP for Coös County. This amount accounts for 2.8 percent of the country's GRP.



In May 2006, New Hampshire Employment Security's Economic and Labor Market Bureau published the economic impact study, *Coös County Perspectives, Pulp and Paper ... Parks and Prisons*. It was prompted by the closings, separated by just a few weeks, of Groveton Paperboard in

Northumberland and the Burgess pulp mill in Berlin. In addition to examining the loss of these historical mainstays of the Coös County economy, the study considered the prospects for recovery from this dual blow contained in a number of economic development projects that were either already underway or had been proposed. One of the proposed projects was the potential siting of a medium security federal prison in Berlin.

The legislative and administrative approvals for the prison are now in place, and the land has been purchased. With the recent awarding of the design contract, it seems appropriate to revisit the question of the potential economic boost that the construction and operation of a new federal prison will provide for Coös County.

Can the corrections industry replace pulp and paper manufacturing as the mainstay of the Coös County economy? We present this paper, which examines in detail the impact of building and staffing of a new federal prison, to help local planners and businesses and the community at large understand and prepare for this next chapter in the story of the Coös County economy.

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