

McDowell County

History and Population¹

The Virginia General Assembly formed McDowell County in 1858 from part of Tazwell County (Virginia). The County was named in honor of James McDowell, the twenty-fifth governor of Virginia. McDowell County is approximately 535 square miles and abuts Mercer, Mingo, and Wyoming counties in the north and Virginia in the south. Welch was established as the county seat in 1892. Other cities in McDowell County include Coalwood, Keystone, and Gary.

The population has declined by almost 40 percent over the past twenty years. The 1980 U.S. Census reported a population of 49,899. That figure decreased to 35,233 in 1990 and further decreased to 29,306 in 1999. In 1990, 91.2 percent of McDowell residents lived in rural areas. Approximately 86 percent of residents are white, 13.5 percent are African-Americans, and less than 1 percent are of other races. Although McDowell County is rural like its neighboring West Virginia counties, it is more ethnically diverse.

Education

There are thirteen elementary schools, three middle or junior high schools, three high schools, and one vocational center in McDowell County. There are no institutions for higher education located within McDowell County. The closest institutions are *Bluefield State College* in Mercer County, *Concord College* in Mercer County, *Appalachian Bible College* in Raleigh County, and the *College of West Virginia* in Raleigh County.

In 1990, only 42.3 percent of people twenty-five years of age or older were high school graduates. This is considerably lower than the state average of 66 percent and well under the national average of 77.6 percent. Of those who have a high school education, only 4.6 percent had college degrees or higher.

¹All data obtained from internal Center estimates (baseline and simulations) or from the following publicly available sources: *West Virginia Blue Book 1997*, *U.S. Census*, *U.S. Bureau of Labor Statistics*, *WV Bureau of Employment Programs Labor Market Information and County Profiles*, *WV Department of Education Reports Cards*, *U.S. Census American Factfinder*.

The Economy

There are one US Route (52) and six WV Routes (16, 80, 83, 103, 161, 635) in McDowell County. Norfolk Southern operates a railroad in the county. There is one public airport located in the county, Welch Municipal Authority, and freight and parcel carriers are available. The closest navigable waterway is the Kanawha River located in Kanawha County.

In 1997, 64.6 percent of workers residing in McDowell County worked in the count while 30.6 percent of workers commuted to another county. Less than one percent worked in another state (with 4.7 percent not reporting). This represents a roughly median proportion of commuters in the study region. In addition to population declines, the county has suffered a dramatic reduction in private capital. For example, the number of registered automobiles is down nearly a third in the past decade to under 19,000. The largest employers are the *McDowell Board of Education*, *Welch Emergency Hospital*, *Council of Southern Mountains*, *McDowell County Continuous Care*, and *McDowell County Commission*. There were 7,570 people included in the 1999 civilian labor force, 6,470 employed and 1,100 unemployed. The 1999 unemployment rate was 14.5 percent, twice the state average of 6.6 percent and more than three times the national average of 4.1 percent.

In 1998, government jobs accounted for 37.2 percent of jobs in McDowell County. Retail trade employed 17.5 percent of workers and retail trade figures topped \$121,000,000 in 1998. Mining employed 15.7 percent of workers and was the highest paying industry, followed by construction, and wholesale trade. About one out of every seven workers is employed in the mining industry and the average wage was \$39,485. The average annual wage for McDowell County was \$22,599. This income measurement would be significantly reduced if there were negative changes to the mining industry without positive comparable changes in other industries. For example, excluding mining wages lowers the 1998 average annual income to just \$19,443, see Table 1.

Table 1
1998 Employment and Wages, by Industry

Industry	Employment	Average Annual Wages (\$)
West Virginia	678,568	25,278
McDowell County	5,442	22,599
Mining	857	39,485
Construction	99	26,687
Manufacturing	114	15,263
Transportation & Public Utilities	254	24,300
Wholesale Trade	92	25,514
Retail Trade	952	12,182
Finance, Insurance, and Real Estate	246	25,440
Services	806	18,374
Government	2,023	21,543

Table 2 illustrates the structure of the mining industry in the county. These data, from 1999, offer the most recent count of mining and mining related firms in the county. Their average sales and the average number of employees illustrate the distribution of firm size in the county. The issues of firm size and regional *economies of scale* are discussed in more detail in Chapter 3 and Appendix C of this study.

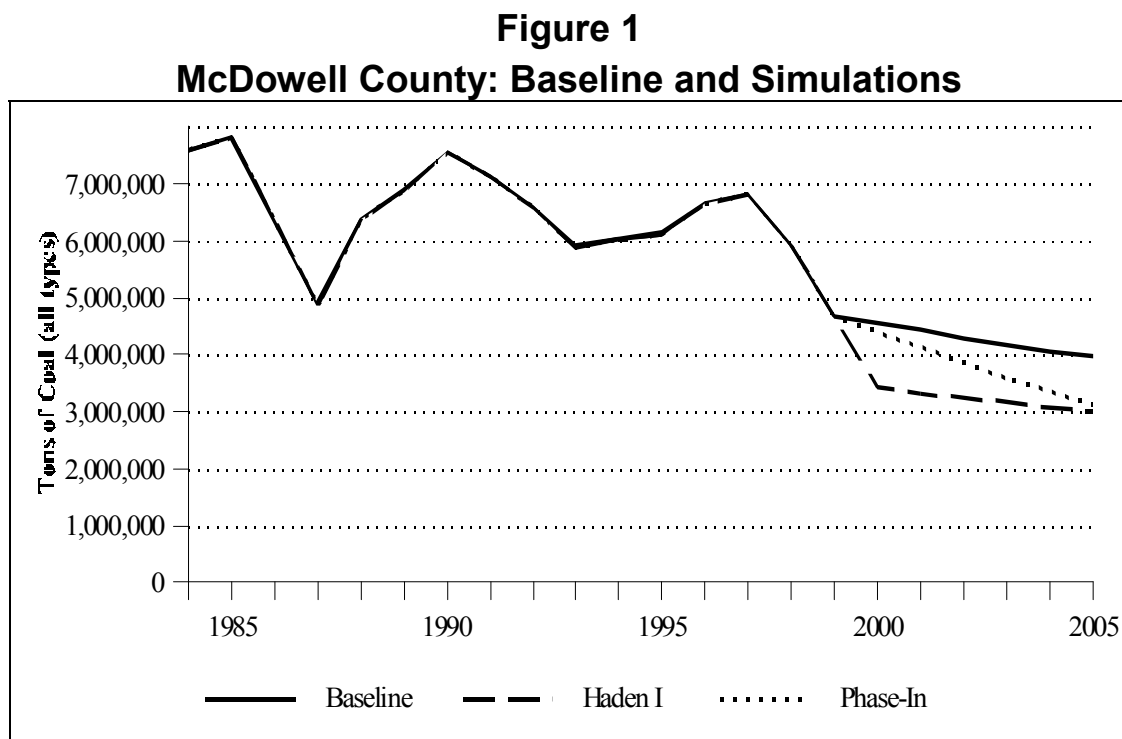
Table 2
The Structure of Coal Mining in McDowell County (1999)

Activity	# of Firms	Mean Employees	Average Sales (\$millions)
Bituminous coal and lignite-surface mining	5	22	2.9
Bituminous coal surface mining	1	N/A	N/A
Bituminous coal and lignite loading and preparation	2	5	6.9
Bituminous coal-underground mining	7	21	1.8
Coal mining services	5	8	0.6
Coal Mining services, nec	4	15	0.8

Note: This is the most current firm structure available.

Forecast and Simulations

Using the method described in the main text of this study we estimate the baseline forecast of economic activity surrounding coal production in the county for 2000. From this we also constructed two simulations, that of a phased in Haden Decision (effectively restricting new surface coal permits) and a restrictive Haden Decision (which limits any valley fill activity by surface mining operations). This baseline forecast is a benchmark against which the effects of pending litigation may be judged. The benchmark and two simulations appear in Figure 1.



The Baseline

The effect of current regulation and market influences on the production of coal in McDowell County are illustrated in a baseline forecast. The expected baseline forecast would result in decreases in wages, employment, and output in McDowell County. The effects are illustrated in Table 3.

Table 3
McDowell County: Baseline

Industry	Employment	Wages	Output
Agriculture	0	0	0
Mining	16	631,000	3,705,000
Construction	1	29,000	62,000
Manufacturing	0	2,000	10,000
TCPU	1	54,000	189,000
Trade	4	62,000	138,000
FIRE	1	21,000	115,000
Services	3	68,000	140,000
Other	0	1,000	1,000
Total	-26	-\$868,000	-\$4,360,000

Note: figures may not sum due to independent rounding and exclusion of some minor categories. TCPU is transportation, communications and public utilities, FIRE is finance, insurance and real estate.

This decline in production would also generate the loss of 7 public sector jobs over the forecast period as demand and revenues decline. Table 3 illustrates the commercial activity impact associated with our baseline forecast. Since the private sector responds to impacts more quickly than the public sector we expect the government jobs to be lost in part, over later years.

The Haden Decision Phase-In

In our first simulation we assume that the pending litigation described in the Haden Decision is phased-in. This phase-in results in no further valley fill permits approved for surface mines. The remaining time each currently approved seam can be mined has not been the subject of research; however, we feel that assuming a seven year life-span of each seam conservatively estimates the period of phase-in of the Haden Decision. The expected Haden Decision phase-in simulation would result in decreases in wages, employment, and output in McDowell County. The effects are illustrated in Table 4.

Table 4
McDowell County: Haden Decision Phase-In

Industry	Employment	Wages	Output
Agriculture	0	0	0
Mining	35	1,381,000	8,344,000
Construction	2	65,000	141,000
Manufacturing	0	4,000	23,000
TCPU	3	121,000	425,000
Trade	9	139,000	311,000
FIRE	2	47,000	259,000
Services	7	154,000	315,000
Other	0	2,000	2,000
Total	-58	-\$1,774,000	-\$9,820,000

Note: figures may not sum due to independent rounding and exclusion of some minor categories. TCPU is transportation, communications and public utilities, FIRE is finance, insurance and real estate.

In addition to the 58 private sector jobs impacted by the phase-in scenario, we project the loss of 16 public sector jobs over the forecast period. This loss impacts most heavily on education, public safety and administration.

The Restrictive Haden Decision

If the currently pending litigation results in a full closure of all mines in which valley fill activities occur, this would result in the loss of virtually all surface mining. The forecasted outcome would result in decreases in wages, employment, and output in McDowell County. The impacts are illustrated in Table 5. In addition to the commercial activity affected under this scenario, we project the loss of 71 public sector jobs over the forecast period.

Table 5
McDowell County: Restrictive Haden Decision

Industry	Employment	Wages	Output
Agriculture	0	0	0
Mining	152	6,001,000	36,183,000
Construction	8	284,000	610,000
Manufacturing	1	17,000	101,000
TCPU	14	525,000	1,844,000
Trade	39	603,000	1,348,000
FIRE	7	203,000	1,123,000
Services	30	666,000	1,367,000
Other	2	11,000	11,000
Total	-253	-\$8,310,000	-\$42,587,000

Note: figures may not sum due to independent rounding and exclusion of some minor categories. TCPU is transportation, communications and public utilities, FIRE is finance, insurance and real estate..

Of course the Haden Decision phase-in and the restrictive Haden Decision simulations converge at seven years, or the beginning of 2007. The impact of this affects the aggregate employment, output and wages within the counties. The impact on individual firms is more difficult to simulate. Firm response to decreased demand can result in lay-offs, a shift in the focus of the firms activity or a complete closure of the firm.

The illustrative impact on the number of firms in a sample set of industries in McDowell County is illustrated in Table 6.

Table 6
McDowell County:
Selected Restrictive Haden Decision Induced Firm Losses

Industry	Job Losses	Total Employment	Total Firms (1999)	Potential Firms Lost
Railroads and Related Services	3	65	2	0
Motor Freight Transportation/Warehousing	6	40	12	4
Wholesale Trade	7	71	19	5
General Merchandise Stores	5	203	12	1
Food Stores	10	320	41	4
Eating and Drinking Places	6	216	26	3
Miscellaneous Retail	5	115	26	3

The Impact on Public Services

The Full Haden Decision may potentially impact not only the private sector jobs, wages and output, but also the public sector which supports them. While a full accounting of the change in both tax revenues and expenditures is outside the scope of this study, it seems apparent that a loss in employment will dramatically affect the county. Building from considerable recent historical evidence, the dramatic decline in jobs, due to the Haden Decision, will reduce demand for key public services through out-migration. Indeed, there is little evidence that the potential decline in employment following these events will differ substantially from that of the early 1980's. This means that the jobs lost through the dissipation of coal mining activity will not be absorbed in other sectors. The highly skilled workers displaced in McDowell County however will find ample similar opportunities elsewhere. A simple adjunct to this simulation is to estimate the declining demand for public education caused by this impact. Declines in employment have continued to reduce public school enrollment. Potential out-migration due to the restrictive Haden Decision may result in a decline in enrollment of 2.54 percent (or roughly 137 of 5,400 students in the county). The rate at which this occurs is outside the scope of this study. This impact will have dramatic implications regarding the staffing and potential consolidation of schools within the county.

This scenario projects reductions in coal production that directly affect the State and County's collection of severance taxes. The loss of output forecast under this scenario would generate a reduction of Severance Tax collections by the State of over \$1,411,000 of which the majority, \$1,058,000 would have gone directly to the County coffers. Indirectly this scenario may have an effect on property taxes. The County currently levies property taxes of \$10.1 million on roughly \$504 million in assessed value. A dramatic impact on the County's economy will also effect the market valuation of the property, both commercial and private use. The impact on property taxes and revenues other than severance taxes has not been estimated in this study.

Summary & Conclusions

The impacts on McDowell County described in this section reflect our best estimate of the baseline forecast and simulated effects of the Haden Decision given its two potential outcomes of litigation. The impacts outlined here are conservative, and are not intended to be alarmist, but instead seek to offer planning guidance to local planning officials, both public and private. Clearly a comparison with other counties suggests that the impact on coal production in McDowell county is dramatic. However, this analysis does not include the cross border commuting from the County that is a hallmark of the county's labor force. Hence any impacts on the adjacent counties will also influence McDowell County.