

**THE UNIONIZATION OF WEST VIRGINIA COAL,
1900-1935: A CHRONOLOGY**

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ABSTRACT: The history of the United Mine Workers in West Virginia presents a potentially rich field for research on the causes and consequences of unionism in coal. Indeed there has already been much research on unionism in West Virginia coal, but most of it has been qualitative and descriptive, and therefore it cannot easily be compared to quantitative data on the coal industry available from official sources. This paper complements both existing research and official data sources by providing a systematic chronology of unionism by coal field and estimates of union strength over time.

This paper chronicles the unionization of West Virginia coal from the turn of the century, when the state was still essentially nonunion, to about 1935, when the state was completely unionized. The rise, fall, and rise of the United Mine Workers in West Virginia over this period was relatively rapid, but not uniform across coal fields. Consequently, West Virginia presents a potentially rich field for research on the causes and consequences of unionism in coal.

Indeed, there has already been much research on unionism in West Virginia coal. Most of it is qualitative and descriptive, emphasizing institutions and class relationships, and drawing on textual sources (interviews, correspondence and legal documents).

By contrast, this paper is designed to facilitate quantitative research on the union. A great deal of detailed quantitative data on West Virginia's coal industry is already available in the annual reports of the state's Department of Mines, in the U.S. Bureau of Mines annual Mineral Resources of the United States, in the Report of the U.S. Coal Commission (1925), in Fisher and Bezanson's (1932) analysis of the Coal Commission's data, and other sources. This paper is intended to add value to that data by providing a systematic chronology of unionism at a similarly detailed level.

The paper is organized by coal field. Each field in West Virginia consists of at least one and usually several counties. In general, unionism proceeded at the field level, so the union histories of individual counties in the same field are closely correlated. The coal mining areas of West Virginia are usually divided into the following nine fields: the Northern Panhandle, the Kanawha, the New River, the Winding Gulf, the Northern West Virginia, the Upper Potomac, the Logan, the Pocahontas, and the Williamson.

In what follows, the New River and Winding Gulf fields are discussed together because of their geographical proximity and similar union history. The Logan, Pocahontas, and Williamson fields are discussed together for the same reason. The paper concludes with new estimates of union strength in West Virginia coal from the turn of the century to 1935.

1 Northern Panhandle Field

West Virginia's Northern Panhandle includes the counties of Brooke, Hancock, Marshall, and Ohio, which lie in close proximity to coal fields in Ohio and Pennsylvania. The union was well-organized and had bargained with at least some operators in the Panhandle since 1901, although the field had never been totally unionized.¹ Anti-union operators in this field pioneered the use of court injunctions against union organizing. In particular, the Hitchman Coal & Coke Company at Wheeling (Marshall county) obtained injunctions against the union beginning in 1907 (reaching the U.S. Supreme Court on appeal in 1917), and the West Virginia-Pittsburgh Company at Colliers (Brooke county) obtained injunctions against the union beginning in 1914.²

The union nevertheless reached a peak in strength in 1920, gaining contracts with all but three mines protected by injunctions. The union's position had deteriorated by 1922, when all but two or three mines were reported to be operating with nonunion labor during the long and occasionally violent strike.³ Organizing and strike activities were reported during 1923 and 1924, but by spring of 1925 trade publications claimed that no mines in the Panhandle were operating under union contract, despite strikes at mines not protected by court injunctions.⁴ However,

another source reported substantial union strength in Ohio county as late as the end of 1925 (see Table 1). In any case, strikes and union membership drives continued throughout the 1920's.

A few mines signed up with the union again in the summer of 1931, after a rash of strikes which had spread from the Fairmont field.⁵ The rest of the field signed up again after the organizing drive of 1933.

2 Kanawha Field

The Kanawha field, named for the Kanawha River, is a large coal mining area centered around Charleston and including Boone, Clay, Kanawha, and Putnam counties, most of Nicholas county, the northwest corners of Fayette and Raleigh counties, and the Spruce River section in northern Logan county. Coal fields on tributaries of the Kanawha River--Pond Fork, Coal River, Spruce River, Lens Creek, Cabin Creek, and Paint Creek to the south, and Elk River, Campbell's Creek, Kelly Creek, and Gauley River to the north--are usually included in the Kanawha field. The small coal field at Pomeroy Bend (Mason county), near where the Kanawha River enters the Ohio, is also usually included in the Kanawha Field.

The Kanawha field was the first in southern West Virginia to be unionized. District 17, covering the Kanawha and adjacent coal fields, was first organized in April 1890⁶. A series of strikes in the 1890's were unsuccessful⁷ but strikes in 1902 led to individual agreements with operators, followed by a collective agreement in 1903. The Cabin Creek operators deunionized their portion of the field in late 1904⁸, but most of the field remained unionized through 1912.

In 1912, the Paint Creek operators tried to deunionize their portion of the field as well. The union called a strike on Paint Creek, which spread to nonunion Cabin Creek and Coal River. The violence that ensued generated nationwide attention and provoked the Governor to declare martial law three times. High-pressure mediation by Governor Hatfield finally resulted in a settlement in 1913, featuring a checkoff for Paint Creek and effective unionization of Cabin Creek and Coal River. The checkoff was extended to the entire Kanawha field under the 1914 agreement.⁹

The events of 1912-1913 signalled increased militancy among the Kanawha miners. In 1916, the district leadership was taken over by an insurgent faction led by Frank Keeney, hero of the Cabin Creek strike, but even Keeney had difficulty controlling the rank-and-file members. The Kanawha miners were the last in West Virginia to return to work in December 1919 after President Wilson obtained a court order forcing the UMW to call off its national strike.¹⁰ They were also responsible for the famous "Armed March" of thousands of unionists on nonunion Logan county in August and September 1921.

The union reached a peak in strength in the Kanawha field in 1920. District 17 reached its furthest southern extent when the mines on Coal River in Boone county were completely unionized in July 1920.¹¹ Wages were raised in mid-contract in August 1920 following a similar agreement in the Central Competitive Field.¹²

Roughly half the field went nonunion during the strike of 1922. Following instructions from the UMW's international leadership, District 17 refused to meet with the Kanawha Coal Operators Association until after a settlement was reached in the Central Competitive Field, even though the

Kanawha operators were ready to extend the existing wage scale to avoid a strike. In response, the Kanawha C.O.A. threatened to resume operation on an open-shop basis at reduced wages.¹³ After the Central Competitive Field signed with the union in August 1922, many Kanawha operators refused to follow. The Association itself refused to sign without wage concessions.¹⁴ Some companies north of the Kanawha River signed individual contracts with the union, but most companies south of the river refused and continued operation on a nonunion basis.¹⁵ In September 1922, the nonunion operators filed suit against those who had signed with the union to enjoin collection of the checkoff, the revenues from which would of course be used to support strikes against the nonunion operators.¹⁶ Temporary injunctions were granted, causing consternation within the union, but then were overturned by higher courts.¹⁷ In January 1923, the nonunion operators again reduced wages.¹⁸

Most of the remaining union mines signed with the union again in March 1923, following the signing of an agreement in Cleveland for the Central Competitive Field. The 1923 agreement extended the existing wage scale for another year.¹⁹ The new contract was signed by 50 operators of 70 mines employing 1200 miners and producing about 30% of the tonnage in the Kanawha field.²⁰ A few companies which had been unionized did not sign the 1923 agreement, and either shut down or began operating on a nonunion basis.²¹

The Kanawha field went essentially nonunion in 1924. At a series of conferences in March and April 1924, the remaining union operators refused

to agree to the wage scale recently negotiated at Jacksonville for the Central Competitive Field. Instead they demanded wage concessions, citing the low price of coal, but the union would not budge.²² The remaining union operators gave up on reaching an agreement and on July 7, 1924 announced a new lower nonunion wage scale.²³ Only a "scattering" of operators in the Pomeroy Bend section (Mason county) were reported operating union through the end of 1925.²⁴ The union continued strike activities in the Kanawha field until about March 1, 1926.²⁵ Wages were increased by the operators in the fall of 1926 as prices rose during the British coal strike, but were decreased again in December when the strike was settled.²⁶

The Kanawha field remained nonunion until the organizing drive of 1933-34. All operators signed with the union at that time except the Elk River Coal and Lumber Co. at Widen in Clay county.²⁷

3 New River and Winding Gulf Fields

The New River field includes most of Fayette county and the northeast corner of Raleigh county. The handful of mines in Summers and Greenbrier counties are sometimes considered part of the New River field. The Winding Gulf field includes Wyoming county and most of Raleigh county. Coal in these fields is of the "smokeless" or low-volatile type.

Both fields were the scene of intense union organizing activity and periodic strikes since 1902. The first contract in these fields was mediated by Governor Hatfield in the summer of 1913 in response to a strike threat by the newly-organized District 29²⁸. Succeeding agreements established grievance procedures and tied wages to those in the Central

Competitive Field, but did not include the closed shop, the checkoff, nor recognition of the union.²⁹

A contract more favorable to the union was negotiated in the New River field in the summer of 1919. In late June and July, operators and union representatives of the New River field met jointly to discuss a new contract to replace the wartime agreement. The representatives of District 29 demanded the continuation of existing wages and the introduction of the checkoff and the closed shop.³⁰ The union did not strike during negotiations. Coal prices remained high and a labor shortage was reported, but this was probably due to low morale over lack of an agreement rather than to any concerted job action.³¹

The joint conference finally signed a contract in early August granting the closed shop and the checkoff effective September 1. A preliminary wage scale was established to run through April 1, 1920. After that date the wage scale would depend on the outcome of negotiations in the Central Competitive Field. Any wage increase in the Central Competitive Field would also apply to the New River field and would be effective through the end of the new Central Competitive Field contract.³²

The new contract was not universally accepted. A "stormy" convention of District 29 held August 5-9 failed to ratify it, delegates objecting to the lack of wage increases (and small decreases for some classifications), to the prohibition of strikes over grievances, and to the mandatory eight-hour day.³³ However, the contract was then submitted to a vote by the rank and file, who approved it.³⁴ Most New River companies ratified the contract by signing up with the union, but a few refused to

sign, objecting to the closed shop and the checkoff. These companies produced 10% of the tonnage in the New River field and included the McKell Coal and Coke Co. and the Willis Branch Coal Co., which later suffered violent attacks by union miners.³⁵

Meanwhile the Winding Gulf operators did not sign a similar contract,³⁶ but unilaterally announced a "voluntary" wage increase in early September. The wage increase was allegedly prompted more by the rise in the general wage level than by the threat of unionism.³⁷ However it is interesting to note that wages in the Winding Gulf remained higher than those in the New River field by roughly 35 to 40 cents per day.³⁸

A crisis occurred a few months later in the New River field as a result of the national coal strike which began November 1, 1919. In response to orders from the international union, the New River miners walked out on November 1, even though their new contract supposedly prohibited striking at through April 1, 1920. After President Wilson obtained a court order requiring the international union to call off the strike, the New River miners returned to work in early December. In retaliation for the "illegal" strike, operators stopped collecting the checkoff, claiming that the contract had been nullified.³⁹ The New River miners struck again, and with the help of the U.S. Attorney General forced the operators to sign an agreement on February 4, 1920 restoring the checkoff.⁴⁰

The period from 1920 to early 1921 was one of relative stability for the union in the New River field. Membership in District 29 stood at 9,687-essentially the entire field.⁴¹ The wage agreement was revised on schedule in April 1920 following the new wage agreement in the Central Competitive

Field.⁴² The new joint board of arbitration began hearing cases that same month.⁴³ The wage scale was increased in the fall of 1920 in response to rising coal prices and a labor shortage.⁴⁴ The nonunion operators of the Winding Gulf responded by raising wages also.⁴⁵

Then the union collapsed precipitously in the winter of 1921-22. Coal prices began falling in mid-1921 and operators one by one began shutting down their mines. After long shutdowns, operators began reopening on a nonunion basis at lower nonunion wages, beginning in November.⁴⁶ Some reopened against the organized opposition of their employees, and evicted striking miners from company houses under protection of court injunctions.⁴⁷ Others reopened on a nonunion basis with the cooperation, perhaps even at the initiative, of their destitute employees.⁴⁸ By August 1922, the New River field was described as completely nonunion.⁴⁹ The UMWA treasurer's report for November 1922 recorded only 4 paid-up members.⁵⁰ District 29 essentially disappeared.⁵¹

The union returned, as District 17, in the organizing drive of 1933-34. All mines in the New River and Winding Gulf fields signed up with the union at that time except the McKell Coal and Coke Co.⁵² A union-shop agreement for this field was finally signed in 1939.⁵³

4 Northern West Virginia Field

The Northern West Virginia field, sometimes called the Fairmont field, consists of mines scattered across 12 1/2 counties of north-central West Virginia. Most of the mines lie on the Monongahela River and its

tributaries, or on the upper portions of the Elk River. Included are the counties of Barbour, Braxton, Gilmer, Harrison, Lewis, Marion, Monongalia, Preston, Randolph, Taylor, Upshur, and Webster, and the part of Nicholas county served by the Baltimore and Ohio Railroad. The field was under the jurisdiction of District 17 until 1926. Strikes and organizing activity were reported in Northern West Virginia at regular intervals as far back as 1878. However, what few contracts were won at this time were quickly violated by the operators.⁵⁴

A resurgence of organizing by UMW District 17 and a strike in 1916 won contracts and a permanent union organization for most of the miners in Preston and Taylor counties.⁵⁵ The operators meanwhile organized themselves into the Northern Virginia Coal Operators Association (C.O.A.) for collective bargaining.⁵⁶ The following year, the operators conceded a wage increase and an eight-hour day.⁵⁷ Most of the rest of the field was organized during 1918 with the encouragement of the Federal Government.⁵⁸

In the summer of 1919, the UMW launched a campaign to organize a few of the remaining mining areas, namely at Tygarts Valley (Upshur county), Scotts Run (Monongalia county), Elkins (Randolph county), and Kingwood (Preston county).⁵⁹ Most mines in the Tygarts Valley were signed up quickly in August 1919.⁶⁰ Miners in Scotts Run were organized in March 1920⁶¹ and contracts were probably signed shortly thereafter. Operators in the Kingwood area, especially the Penn-Mary Coal Co. owned by Bethlehem Steel, were less receptive to the union and a strike was reported to be in

progress there in August 1920.⁶² It appears that the Kingwood operators eventually signed with the union, perhaps in the fall of 1920.

During the 1922 strike, the Scotts Run Operators aggressively fought the union. These operators had been shut down for much of 1921 due to competition from the nearby nonunion Connellsville field of Pennsylvania. Just prior to the expiration of the old contract, they formed a separate Monongahela Coal Operators Association and announced a wage cut and elimination of the checkoff beginning April 1, 1922.⁶³ Many of these operators ran their mines on a nonunion basis during the strike but then signed with District 17 after the Central Competitive Field agreement was signed in Cleveland.⁶⁴

Preston county operators were even more aggressive. They reportedly cut wages and began nonunion operation even before the expiration of the old agreement.⁶⁵ They were reported to be still operating nonunion in September 1922,⁶⁶ and apparently continued to operate nonunion for the rest of the decade.

Other operators in the Fairmont field were less militant in 1922. After the Central Competitive Field agreement was signed, over 150 companies in Northern West Virginia signed up with the union in late August 1922.⁶⁷ The Northern West Virginia C.O.A. itself did not sign, however, and some of its members did not resume relations with the union.⁶⁸

In 1923, with coal prices high, District 17 had little trouble getting agreements with both operators associations to extend existing wages. On February 9 a one-year agreement was signed with the Northern West Virginia C.O.A.⁶⁹ and on February 20 a similar agreement was signed with

the Monongahela C.O.A.⁷⁰ However, many mines in the Elkins section refused to participate in negotiations with the union nor to sign the resulting agreement.⁷¹

Coal prices were again falling as negotiations were reopened in 1924. Operators in the Fairmont field expected the union to make wage concessions. When a three-year agreement was signed at Jacksonville, Florida for the Central Competitive Field which did not include wage concessions, many Fairmont operators denounced the new agreement.⁷² Nevertheless, representatives of the Northern West Virginia C.O.A. signed a similar agreement with District 17 at Baltimore covering the period from April 1, 1924 to April 1, 1927.⁷³ The Baltimore agreement was ratified by a small plurality of the badly-divided Association (see Table 2). Meanwhile, the Monongahela C.O.A. met with District 17 officials on April 2-3 at New York and signed a similar agreement.⁷⁴ The 1924 agreements turned out to be the last union contracts signed in Northern West Virginia until 1931.

As coal prices continued to fall, companies which had signed the agreements began to waver. Reports appeared that working conditions were deteriorating at union mines and that enforcement of the contracts had become lax.⁷⁵ In July 1924, the Monongahela C.O.A. requested wage concessions from the union but was refused. By fall of 1924, many companies which had signed the agreement, including the Consolidation Coal Co., the largest company in Northern West Virginia, began to shut down their mines. A few reopened on a nonunion basis. In February 1925, several large operators met with district and international officials of the UMW,

including International President John L. Lewis, to ask for wage concessions, but they were again turned down.⁷⁷

The year 1925 saw the collapse of the Baltimore and New York agreements. By April 1 only 11 mines in Northern West Virginia were reported operating on a union basis.⁷⁸ More union mines which had shut down began reopening on a nonunion basis,⁷⁹ including in June 1925 the Consolidation Coal Co.⁸⁰ Miners at Shinnston in Harrison county broke away from the UMW, formed a company union, offered wage concessions, and went back to work.⁸¹ By the end of 1925, except for parts of Monongalia county, nearly all of Northern West Virginia was operating on a nonunion basis (see Table 3). The UMW meanwhile called a series of strikes against companies operating on a nonunion basis--both those who had signed the 1924 agreements and those who had not--on April 1, 1925, on September 25, 1925, on July 5, 1926, and on October 20, 1926.⁸²

By the expiration of the 1924 agreement, all of its signatories had either broken the agreement or shut down.⁸³ None agreed to meet with the union to renew the agreement in 1927, so a new strike was called, beginning April 1, 1927, which was again unsuccessful in winning any contracts.⁸⁴

Despite these setbacks, organizing efforts continued with the support of the international union, which had assumed direct control of District 17 since 1924. In March 1926 the Fairmont field was separated from District 17 to form a new District 31 with officers appointed directly by the International Board.⁸⁵ Organizing efforts were now directed towards non-members, including African-American miners, most of whom had been

brought to Northern West Virginia to break earlier strikes.⁸⁶ The union changed the tone of its publicity to emphasize its interest in local coal industry as a whole, building a broad consensus in Northern West Virginia in favor of government action to support both wages and coal prices.⁸⁷

The union experienced a small resurgence after strikes in Northern West Virginia in the summer of 1931. Wages at that time were falling to very low levels, particularly at the smaller operators.⁸⁸ A nearly spontaneous strike broke out at small operators in the Scotts Run district in May 1931. A New York Times reporter described the action as "really a revolt against starvation while working."⁸⁹ The strike was successful. Most companies in Scotts Run signed contracts with the union in June, granting higher wages and union recognition, including the checkoff.⁹⁰ Meanwhile the strike spread to Harrison, Taylor, and Barbour counties and to sections of the Panhandle field.⁹¹

Eventually contracts were signed in the summer of 1931 covering roughly 4000-6000 miners at 40 smaller companies in Northern West Virginia. These contracts provided for reestablishment of the eight-hour day, union recognition, and wage increases, although the new union wages were still 33% below the wages already paid at the large nonunion companies such as the Consolidation Coal Co.⁹² Note that such contracts were now possible only because in 1929 the international union had abandoned the Jacksonville wage scale and had authorized districts to negotiate their own wage scales.

The UMW was still very weak in Northern West Virginia. A few months after the new contracts were signed, it conceded a 25% wage reduction in

response to falling nonunion wages.⁹³ Nevertheless, the contracts were renewed in June 1932 for one year.⁹⁴

A complete resurgence of the union occurred in the summer of 1933 after a massive organization drive. On September 29, 1933 the Northern West Virginia C.O.A. signed a new agreement with the union based on the Appalachian Agreement, which had been signed the previous week.⁹⁵ The Fairmont field has remained completely unionized ever since, although the "captive" mines owned by the steel companies did not formally recognize the union till 1941.

5 Upper Potomac Field

The Upper Potomac field, sometimes called the Piedmont-Cumberland field, includes Grant, Mineral and Tucker counties in the northeast corner of the state, bordering Maryland. They were included in the territory of District 16 of the United Mine Workers, which also covered Maryland's Georges Creek field (Garrett and Allegany counties).

Union organizing and strike activity was reported in the Upper Potomac as early as the late nineteenth century, but no contracts were won.⁹⁶ Union progress in this field required Federal intervention. With the assistance of the U.S. Fuel Administrator, District 16 had managed to secure wage agreements with most companies in the field in May 1918⁹⁷. However, operators in the field refused to be party to wage agreements made in the name of the UMW, so "representative committees" of miners signed the agreements instead of the UMW.⁹⁸ This arrangement was demanded even by the larger companies in the field, such as the Consolidation Coal Company and

the Davis Coal and Coke Co., which meanwhile operated mines in the Fairmont field where they explicitly recognized the union.⁹⁹ Nonrecognition meant open-shop operation with no checkoff possible, and limited the union's role in settling grievances.¹⁰⁰

A new contract was signed in December 1920, effective through March 31, 1922. Despite strong pressure by miners, the operators again refused to grant the closed shop.¹⁰¹ The new contract also apparently contained a clause barring the union from striking for ninety days after April 1, 1922 while negotiations were to be held for a new contract.¹⁰²

In 1922, the miners again demanded the closed shop and again the operators refused.¹⁰³ The miners also demanded continuation of the existing wage scale, despite falling coal prices. The Davis Coal and Coke Co. and some other operators unilaterally reduced wages and imported nonunion strike breakers a few months before the expiration of the existing contract.¹⁰⁴ Remaining union miners struck on April 1, 1922, along with other miners nationwide.¹⁰⁵ The operators refused to bargain further and reopened their mines in July with nonunion labor under protection of court injunction.¹⁰⁶

The strike finally collapsed in the Upper Potomac in June 1923 when the miners went back to work without a contract.¹⁰⁷ Although a few strikes occurred in the late 1920's over further wage reductions,¹⁰⁸ the union lay essentially dormant in the Upper Potomac field until the organizing drive of 1933.

Three large coal fields in the extreme southern part of West Virginia successfully resisted unionization until the 1930's.

The Logan or Guyan field, consisting of Lincoln county and most of Logan county¹⁰⁹, was the scene of intense and violent labor struggles from the late 'teens through the early 1920's. This intensity and violence were related to Logan county's geographic situation and to its local politics. Logan was a focus for organizing activities by District 17, partly because it bordered the unionized Kanawha field to the north. The county government was dominated by avidly anti-union operators, who supported the notoriously brutal Sheriff Don Chafin and paid the salaries of his deputies.¹¹⁰ In addition to strike activity against individual mines, Logan county was the site of some of the largest armed conflicts in U.S. labor history. In 1919, a march by thousands of armed union miners from the Kanawha field was stopped before reaching Logan county after strong personal appeals by the state governor and by Frank Keeney, President of District 17.¹¹¹ A second armed march in August-September 1921 actually reached Logan County and fought a battle with Chafin and his deputies before being turned back by federal troops.¹¹² Despite intense and costly unionizing efforts, no coal company in the Guyan field ever operated under union contract until 1933-34.¹¹³

McDowell and Mercer counties form the West Virginia part of the Pocahontas field, which also includes neighboring Tazewell county in Virginia.¹¹⁴ The coal in this field is of the "smokeless" or low-volatile type, which is also found in the New River and Winding Gulf fields just north of the Pocahontas. The Pocahontas field experienced a brief period of

union organizing activity at the turn of the century.¹¹⁵ A few locals were again organized just after World War I,¹¹⁶ but union activity was severely restricted by court injunctions obtained by the operators.¹¹⁷ Coal production grew rapidly during the twenties in this field, which was completely untouched by strikes. No union contracts were signed here between the operators and the UMW until 1933.¹¹⁸

Mingo county, site of the Williamson or Thacker field, lies just south of Logan county.¹¹⁹ Mingo county's history was similar to Logan's except that the union was more successful here just after World War I. Even though the operators used armed guards to prevent organizers from entering company towns,¹²⁰ District 17 managed to organize 34 locals and enroll 6400 miners (80% to 90% of the county's mine labor force) in Mingo by 1920.¹²¹ In May and June of that year, District 17 President Frank Keeney sent letters to the coal operators, requesting a meeting to negotiate wages.¹²² Almost all of them refused and were struck by the union.¹²³ About 22 companies in Mingo county did sign with the union, but most were very small--only three were large enough to have railroad tipples.¹²⁴ Those companies which did sign operated only for a short time, if at all, under union contract before closing down or going nonunion.¹²⁵ The Williamson field remained nonunion until the organizing drive of 1933-34.

7. State-Level Summary

This final section presents summary estimates of union strength in West Virginia coal from the turn of the century to 1935. Existing estimates

are few. The United States Coal Commission (1932) presents two sets of estimates (which do not always agree) of union membership from the turn of the century to 1923, at two- and three-year intervals, apparently taken from personal communications with the secretary-treasurer of the international union. Tryon and Rogers (1927) estimate the percent of tonnage mined under union contract in 1925 (9.5% on January 1 and 4.9% on December 31).¹²⁶ Anson (1940) quotes a number of estimates of union membership from 1900 to 1936 in the course of a narrative about the history of the union in West Virginia.

New estimates of union strength were constructed for this paper. First, estimates were constructed at the level of the county (see Appendix A) based on sources referenced in this paper and additional sources describing particular union contracts.¹²⁷ The county estimates were then averaged, weighting by tonnage. The resulting state-level estimates are presented alongside estimates of Anson and the Coal Commission in Table 4 and Figure 1.

These new estimates are somewhat larger than the others from 1906 to 1913 and much larger from 1914 to 1918, most likely because they measure different dimensions of union strength. Consider three alternative measures of unionism: the percent of tonnage produced under union contract, the percent of employees working under union contract, and the percent of employees who are members of the union. The first two measures could differ if output per worker were different under union and nonunion conditions, but this difference was probably too small (and of the wrong sign) to explain the difference in the unionism estimates.¹²⁸ Alternatively, union employment could be less than membership, particularly in the absence of a

checkoff or other closed-shop provision in the contract. In fact, the Kanawha field worked under a contract with no checkoff from 1906 until 1913, when employment at unionized mines in the Kanawha field accounted for roughly 15% of statewide employment in coal,¹²⁹ more than the discrepancy between the tonnage and membership estimates for this period. Similarly, the New River and Winding Gulf fields and the Cabin Creek section of the Kanawha field were brought under union contract in 1914 but did not win the checkoff until later (1916 for Cabin Creek, 1919 for the New River). Together these fields accounted for roughly 20% of statewide employment in coal,¹³⁰ nearly equal to the discrepancy between the tonnage and membership estimates for this period. Whether or not the absence of a checkoff explains the discrepancies in the estimates, it is remarkable that the membership estimates show almost no response to the dramatic union victories in West Virginia in 1913 and 1914.

Figure 1 demonstrates graphically the ebb and flow of unionism in West Virginia coal from 1900 to 1935. During the period from 1900 to 1920, unionism advanced in waves. The first wave occurred in 1903 with the unionization of the Kanawha field. The second wave occurred in 1914 with the unionization of the New River and Winding Gulf fields and the Cabin Creek and Coal River sections of the Kanawha field, and the recovery of the Paint Creek section of the Kanawha. The third wave occurred in 1918-1919 with the unionization of the Northern West Virginia and Upper Potomac fields. All was lost in the early 1920's, but the entire state was unionized in one giant wave in 1933-34. This unique pattern of unionism invites comparisons with trends in wages, employment, safety, productivity, mechanization, ethnic composition, and other aspects of the industry

recorded in government sources. It is hoped that the narrative and estimates provided in this paper will facilitate these comparisons.

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NOTES

1. United Mine Workers Journal Aug. 2, 1900 p.1. Black Diamond April 27, 1901 p.547; May 4, 1901 p.579; May 18, 1901 p.652; May 25, 1901 p.688.

2. Bituminous Operators Special Committee, "Brief Submitted to the United States Coal Commission," August 1923 p. 103. The union's account of the Hitchman case is given in the UMWA's report to the AFL Convention of 1918, reprinted in UMWJ May 1, 1919 pp. 12-13. Lunt (1979, pp. 19-23, 39-54, 58-59) discusses cases of both operators.

3. Descriptions of the strike are given in Coal Age May 18, 1922 p. 864; July 6, 1922 p. 38; July 13, 1922 p. 77. A violent incident at Cliftonville in July 1922 is described in Lee (1967), pp.194-195 and Chernanke (undated manuscript).

4. Coal Age Apr. 16, 1925 p.581. Coal Trade Bulletin Apr. 16, 1925 p.399; June 1, 1925 p.5; June 16, 1925 p.53-55.

5. West Virginia State Federation of Labor, Proceedings of the Convention 1931-1932, pp. 56-57. New York Times June 23, 1931, p.6.

6. Evans (1920) vol. II, pp.40-41.

7. Bailey (1971) describes strikes in the Kanawha Valley and the Pomeroy Bend in the first half of 1894. Corbin (1981) pp.43-47, describes the unsuccessful strike of 1897 and the organizing drive of 1901. Coal Age (August 19, 1899, p.217; September 16, 1899, p.322; September 23, 1899, p.357; September 30, 1899, p.379; November 4, 1899, p.522; November 11, 1899, p.557) describes the strike of 1899, which resulted in some wage concessions but no formal contracts.

8. The Cabin Creek operators may have been motivated by the prospect of higher relative wages. The 1904 Kanawha wage agreement called for the

gradual elimination of Cabin Creek's 5-cent per ton differential for pick miners. Black Diamond April 16, 1904 p.853. UMWJ Nov. 17, 1904, p.4; Dec. 3, 1904 p.1; Dec. 8, 1904 p.5.

9. The Paint Creek-Cabin Creek strikes have attracted massive research and analysis, including Bailey (1980), Corbin (1981) pp.87-105, Lunt (1979) pp.23-38, Carter (1913), Lynch (1914), and Sprague (1977). Eyewitness accounts are given by Lee (1969) pp.17-50 and Mooney (1967) pp.10-46 and in testimony before a U.S. Senate Subcommittee of the Committee on Education and Labor (Senate Hearings, 1913). An official view, midway through the crisis, is given by the West Virginia Mining Investigation Commission (1912).

10. Coal Age December 11 & 18, 1919 p. 903; December 25, 1919 pp. 944-945.

11. Coal Age August 5, 1920 p. 312. UMWJ August 1, 1920 p. 8.

12. Coal Age September 30, 1920 p. 695.

13. Coal Age April 6, 1922 p.589.

14. NYT August 20, 1922 p. 3. UMWJ September 1, 1922 pp. 3-4. Coal prices had fallen since April.

15. Coal Age August 31, 1922 p. 346; September 7, 1922 p. 372. Senate Hearings 1932 p. 927.

16. NYT September 19, 1922 p. 28. UMWJ June 1, 1923 p. 3.

17. UMWJ August 15, 1923 pp. 3-4, 10, 16; May 15, 1923 p. 3.

18. UMWJ February 1, 1923 pp. 6-7.

19. NYT March 31, 1923 p. 4. Coal Age March 1, 1923 p. 385; April 5, 1923 pp. 573-574; April 19, 1923 p. 652.

20. Coal Age April 19, 1923 p. 652.

21. Coal Age April 5, 1923 pp. 573-574.

22. NYT March 2, 1924 p. 8. Coal Age March 6, 1924 p. 360; April 3, 1924 p. 504; April 17, 1924 p. 576.
23. Coal Age July 10, 1924 p. 55; July 17, 1924 p. 94.
24. Tryon and Rogers (1927), p.148.
25. Coal Age March 4, 1926 p. 337. UMWJ April 1, 1926 p. 5.
26. Coal Age December 23, 1926 p. 885.
27. UMWJ November 1, 1939 p. 10.
28. United Mine Workers Journal, May 15, 1913 p.1; May 29, 1913 pp.1-2; June 26, 1913 p.1; July 3, 1913 p.1; July 10, 1913 p.1-2; July 17, 1913 p.1. Coal Age, June 28, 1913 p.1001; July 5, 1913 p.26; July 12, 1913 pp.66-67. Coal Trade Bulletin, July 1, 1913 pp.25-26, July 15, 1913 p.21.
29. Corbin (1981), pp. 113-114. Coal Age, February 20, 1919, p. 370.
30. Coal Age, July 3, 1919, p. 25; July 10, 1919, p. 64; July 17, 1919, p. 111; July 31, 1919, p. 200; January 15, 1920, p. 142.
31. Coal Age, July 10, 1919, p. 77; July 17, 1919, p. 124; July 24, 1919, p. 69. Perhaps the miners expected a wage increase.
32. Coal Age, August 7, 1919, p. 243. The New River field contract is reproduced in UMWJ, September 1, 1919, pp. 12-13.
33. Coal Age, August 14, 1919, p. 284; August 21, 1919, p. 330.
34. Coal Age, August 28, 1919, p. 372. Some disruptions were reported where wages were decreased under the new contract, however. Coal Age, September 25, 1919, p. 540.
35. Coal Age, September 11, 1919, p. 468; September 25, 1919, p. 540. Non-Union Operators of Southern West Virginia, pp. 10-11.
36. NYT, September 2, 1923, p. 6.
37. Coal Age, September 11, 1919, p. 455.
38. Coal Age, October 14, 1920, p. 817.

39. Coal Age, December 11 & 18, 1919, p. 20; December 25, 1919, p. 944-945; January 29, 1929, p. 237.

40. Coal Age, February 19, 1920, p. 358; February 17, 1921, p. 323. UMWJ, April 15, 1920, p. 5.

41. Membership from U.S. Coal Commission (1925), Part III, unnumbered table facing page 1050. Employment in the field stood at 9,290 in 1920 according to Fisher and Bezanson (1932), Appendix Table 72, pp.354-355.

42. UMWJ, May 1, 1920, p. 2.

43. Coal Age, April 29, 1920, p. 868.

44. Coal Age, October 7, 1920, p. 768.

45. Coal Age, October 14, 1920, p. 817.

46. Coal Age, December 15, 1921, p. 975. Senate Hearings, 1932, p. 681.

47. Coal Trade Bulletin, February 1, 1922, p.209; May 1, 1922, p.438. UMWJ, February 1, 1922, pp. 11-12. NYT, April 14, 1922, p. 5; April 16, 1922, p. 20.

48. UMWJ, January 15, 1922, p. 13; July 15, 1922, p. 9. Coal Age, January 5, 1922, p. 21.

49. Coal Age, August 31, 1922, p. 346. Senate Hearings, 1928, p. 1445.

50. Blankenhorn (1924) p.10.

51. Coal Age, April 10, 1924, p. 541. It is interesting that District 29 was allowed to dissolve while Districts 17 (Kanawha field) and 31 (Northern West Virginia) were kept alive by the international union even when they had no contracts and essentially no members. Blankenhorn (1924) pp.9-10, argues that the international president deliberately kept alive districts whose votes on the International Executive Board he could control. Because Districts 17 and 31 came under direct international control in the late 1920's their skeleton organization may have been useful to the president for

this reason. District 29 has since been re-established and exists today with headquarters again at Beckley.

52. West Virginia State Federation of Labor, Proceedings of the Convention, 1934-35, p. 15.

53. UMWJ, September 1, 1939, p. 4. The McKell Coal and Coke Co. and the Kingston-Pocahontas Coal Co. resisted the union shop, however.

54. Massay (1970) pp.235-84, describes strikes and union organizing from 1878 to 1902. Later strikes and organizing efforts are described in Black Diamond June 21, 1902 p.886 and March 26, 1904 p.695, UMWJ Feb. 18, 1904 p.5; July 7, 1904 p.5; December 7, 1904 p.5.

55. Coal Age May 20, 1916 p.883; June 3, 1916 p.956. Coal Trade Bulletin June 1, 1916 p.30.

56. Coal Trade Bulletin Aug. 1, 1918 p.43. A predecessor organization, the Central West Virginia Coal Operators Association, had been organized "to be able to combat any effort of labor unions making an attempt to organize the miners in that part of West Virginia" but was disbanded after unionization (Coal Trade Bulletin Jan. 1, 1915 p.39).

57. Coal Age May 12, 1917 p.837.

58. Coal Age Dec. 5, 1918 p.1040; January 14, 1926 p.47. Coal Trade Bulletin Sept. 16, 1918 pp.27-31, 53; Oct. 1, 1918 p.40. Emmet (1924), p.9. Freeburg (1925), p.151.

59. Coal Age July 17, 1919 p. 111.

60. Coal Age January 15, 1920 p. 142.

61. Coal Age April 8, 1920 p. 722.

62. Coal Age August 12, 1920 p. 312.

63. Coal Age February 16, 1922 p. 300; April 6, 1922 p. 586.

64. Coal Age November 23, 1922 p. 862.

65. Coal Age March 2, 1922 p. 380. Coal Trade Bulletin, March 16, 1922, p.343.

66. Coal Age September 7, 1922 p. 378.

67. Coal Age September 7, 1922 p. 372.

68. Coal Age August 24, 1922 p. 298.

69. UMWJ February 15, 1923 p. 3. Coal Age April 5, 1923 p. 585.

70. UMWJ March 1, 1923 p. 2. Coal Age March 1, 1923 p. 386.

71. Coal Age March 8, 1923 p. 433.

72. Coal Age March 13, 1924 p. 396.

73. Coal Age April 3, 1924 p. 504. The Baltimore agreement is reprinted in Senate Hearings 1928 pp. 1077-1086.

74. Coal Age April 10, 1924 p. 541. The New York agreement is reprinted in Senate Hearings 1928 pp. 1087-1096.

75. Coal Age July 24, 1924 p. 129.

76. Coal Age July 24, 1924 p. 129.

77. Coal Age February 19, 1925 p. 294.

78. Coal Age April 9, 1925 p. 531.

79. Coal Age April 9, 1925 p. 531.

80. Coal Age June 4, 1925 p. 877; June 18, 1925 p. 909. UMWJ July 15, 1925.

81. NYT November 5, 1925 p. 14. Freeburg (1925), p. 156. Senate Hearings 1928 p. 1133.

82. Coal Age April 2, 1925 p.509; October 1, 1925 p.509; July 1, 1926 p.20; October 28, 1926 p.610. UMWJ July 15, 1926 p.3.

83. Senate Hearings 1928 p. 1132. Those who remained shut down until April 1, 1927 and thus did not break the agreement included the Four States Coal Co., the Young Coal Co., and the Grasselli Chemical Co.

84. UMWJ April 15, 1927 p. 15; May 1, 1927 p. 10.
85. Coal Age April 8, 1926 p. 512. UMWJ April 15, 1926 p. 7. This was a sensible division from a geographic standpoint since transportation was slow in this mountainous state. It was also probably a sensible division from a financial standpoint, since by 1926 the Fairmont miners were themselves on strike and could no longer support striking miners elsewhere in District 17.
86. Coal Age May 13, 1926 p. 684.
87. UMWJ December 15, 1927 p. 13. Coal Age June 1930 pp. 372-373. NYT July 5, 1931 III p. 5.
88. Coal Age December 30, 1926 p. 920; May 1929 p. 314; June 1930 p. 372.
89. Coal Age November 27, 1931 p. 25.
90. UMWJ June 15, 1931 pp. 3-4. NYT July 5, 1931 III p. 5.
91. NYT June 13, 1931 p. 2. West Virginia State Federation of Labor, Proceedings of the Convention 1931-32 pp. 56-57.
92. NYT November 27, 1931 p. 25; November 28, 1931 p. 15; November 30, 1931 p. 6. West Virginia State Federation of Labor, Proceedings of the Convention 1931-32 pp. 56-57.
93. NYT November 27, 1931 p. 25.
94. UMWJ June 15, 1932 p. 12.
95. UMWJ January 1, 1934 pp. 8-11.
96. Black Diamond Apr. 21, 1900 p.441; Apr. 28, 1900 p.462,469; Sept. 5, 1903 p.480; Oct 3, 1903 p.689; Nov. 7, 1903 p.949. UMWJ Sept. 3, 1903 pp.1,6. Harvey (1969) describes conditions in the nineteenth century, with emphasis on the Maryland part of the field.
97. Coal Trade Bulletin, May 1, 1918 p.40; May 15, 1918 p.38; June 1, 1918 pp.48-50. See also discussion in Harvey (1969) pp. 361-363.
98. Coal Age April 13, 1922 p. 628.

99. UMWJ May 15, 1923 p. 4.
100. UMWJ April 1, 1923 p. 7.
101. Coal Age December 16, 1920 p 1253; December 30, 1920 p. 1344.
102. Coal Age September 14, 1922 p. 420.
103. Coal Age January 26, 1922 p. 176. UMWJ May 15, 1923 p. 4.
104. Coal Age January 12, 1922 p. 59; March 23, 1922 p. 507.
105. UMWJ May 15, 1923 p. 4.
106. Coal Age July 20, 1922 pp. 111, 117; July 27, 1922 p. 142; August 17, 1922; August 31, 1922 p. 341; September 7, 1922 p. 378; September 21, 1922 p. 466. See also discussion in Harvey (1969) pp. 364-365.
107. UMWJ May 15, 1923 p. 4. Coal Age July 12, 1923 p. 89.
108. Coal Age December 9, 1926 p. 817.
109. The mines along Spruce River, in northern Logan county, are usually included in the Kanawha field.
110. The details of this situation are recounted in Lee (1969), pp. 87-140; Lunt (1979), p. 122; and Corbin (1981), pp. 115-116.
111. Coal Age, September 11, 1919, pp. 455-456.
112. The "mine wars" in Logan and Mingo counties have also attracted massive research, including Corbin (1981), 217-224. Lunt (1979), pp. 120-144, Barb (194), Libertella (1969), and Clarke (1921). Eyewitness accounts are given by Lee (1969), pp. 51-111, Mooney (1967), pp. 89-100, and in testimony before the U.S. Senate Committee on Education and Labor (Senate Hearings, 1921).
113. Senate Hearings, 1928, pp. 1445-1447.
114. Sometimes the western half of McDowell county is called the Tug River field.
115. Senate Hearings, 1932, p. 1075.

116. Corbin (1981), p. 196.
117. Lane (1921), pp. 64-73. NYT, February 11, 1923, p. 8.
118. NYT, August 25, 1933, p. 11.
119. Southern Wayne county is sometimes included in the Mingo Field.
120. Roughly 80% of the miners employed in West Virginia lived in company-owned houses, mostly in isolated mining camps. See U.S. Coal Commission (1925), Part III, p. 1467.
121. Coal Age, July 1, 1920, p. 28. Corbin (1981), p. 202. See also International President John L. Lewis's report in UMWA Proceedings of the Convention, 1921, pp. 137-143.
122. Coal Age, June 10, 1920, p. 1216.
123. Senate Hearings, 1921, pp. 114-124.
124. Senate Hearings, 1921, pp. 124-130. Coal Age, November 18, 1920, p. 1054.
125. UMWJ, July 15, 1920, p. 11. NYT, December 30, 1920, p. 28. Coal Age, January 13, 1921, p. 78.
126. Coal Age, January 27, 1927, p.147, Table III. This calculation excludes mines not reporting union status.
127. Sources describing particular union contracts are listed in Appendix B, available from the author.
128. Averaging of the county estimates in Appendix A using employment as weights gave slightly higher estimates of unionism than when using tonnage as weights. Similarly, Tryon and Rogers (1927) report union percentages of employment as 12.0% and 5.3% on January 1 and December 31, 1925, respectively, slightly higher than their tonnage estimates.
129. Total employment in Clay, Kanawha, Mason, Nicholas and Putnam counties was 8225 in 1906 and 7716 in 1913. This total includes some nonunion mines

in these counties (e.g. on Cabin Creek in Kanawha county) but also excludes some union mines in other counties (e.g. along the upper Kanawha River in northwestern Fayette county).

130. Total employment by the Cabin Creek Consolidated Coal Co., the major producer on Cabin Creek, was 4285 in 1914 (Department of Mines Report).

Total employment in the New River and Winding Gulf fields was 11,924 in 1914 (Fisher and Bezanson (1932) pp. 354-355, Appendix Table 72).

TABLE 1:

Percent of Employment Unionized in Three (of Four) Counties
of the Northern Panhandle Field in 1925

County	As of 1 Jan. 1925	As of 31 Dec. 1925	Employment
Brooke	17.6%	17.6%	1,609
Marshall	1.6%	1.6%	1,671
Ohio	64.0%	64.0%	2,421

SOURCE: Percent union computed from Table V, Tryon & Rogers (1927) p.143.
Employment from West Virginia Department of Mines Report.

NOTES: Tryon & Rogers's data are taken from a survey by the U.S. Bureau of Mines of all mines operating during 1925. The percentages above are based only on mines reporting. Mines not reporting included 3.08% of employment in Ohio County, 1.24% of Brooke County. All mines in the Marshall County reported their union status. Tryon and Rogers do not give results for Hancock County, which reported only one mine in operation with 18 employees.

TABLE 2:

Ratification Vote on Baltimore Agreement of 1924
By Members of the Northern West Virginia
Coal Operators Association

Vote	Number of Operators Voting	Number Who Actually Operated Union After Vote
Aye	21	8
Nay	14	0
Absent	14	3
Delinquent	13	2
Already nonunion	18	0
TOTAL	80	18

SOURCE: Testimony of President Anderson of Consolidation Coal Co. at U.S. Senate Hearings (1928, p.1383).

TABLE 3:

Percent of Employment Unionized in Eight (of Thirteen) Counties
of the Northern West Virginia Field in 1925

County	As of 1 Jan. 1925	As of 31 Dec. 1925	Employment
Barbour	54.8%	4.5%	2,253
Harrison	54.1%	0.5%	6,024
Marion	68.9%	12.2%	5,956
Monongalia	45.6%	41.2%	6,614
Preston	0.0%	0.0%	2,081
Randolph	0.0%	0.0%	812
Taylor	0.0%	0.0%	1,087
Upshur	0.0%	0.0%	824

SOURCE: Percent union computed from Table V, Tryon & Rogers (1927) p.143.
Employment from West Virginia Department of Mines Report.

NOTES: Tryon & Rogers's data are taken from a survey by the U.S. Bureau of Mines of all mines operating during 1925. The percentages above are based only on mines reporting. Mines not reporting included 22.92% of employment in Harrison County, 9.70% of Barbour County, and 1.94% of Monongalia County. All mines in the remaining counties above reported their union status. Tryon and Rogers do not give results for Braxton, Gilmer, Lewis, Nicholas, and Webster counties, whose combined employment was 816 in 1925.

TABLE 4:

Estimates of Union Strength in West Virginia Coal, 1899-1936.

Year	Employment	Union Membership					Unionized
	WVDM[a]	Anson[b]		USCC[c]		USCC[d]	Tonnage
	Total	Total	As % of Employ.	Total	As % of Employ.	As % of Employ.	Appendix[e] Percent
1899	22,095					3%	0.0%
1900	24,635	1,000	4.1%	897	3.6%		0.0%
1901	29,160						0.2%
1902	31,743			2,212	7.0%	7%	1.7%
1903	35,601						12.1%
1904	41,981			6,210	14.8%		15.8%
1905	45,778					12%	14.5%
1906	47,396			2,413	5.1%		15.8%
1907	51,456						15.6%
1908	56,493	7,000	12.4%	2,081	3.7%	3%	14.8%
1909	62,189						13.0%
1910	63,974			2,548	4.0%		13.9%
1911	67,776	2,340 (Dec)	3.5%				14.1%
1912	67,314	3,074 (Nov)	4.6%	1,945	2.9%	3%	12.6%
1913	70,321						7.1%
1914	76,143			7,740	10.2%		33.4%
1915	80,098					5%	31.6%
1916	77,889			7,945	10.2%		32.8%
1917	86,095	7,000 (Jan)	8.1%				34.6%
1918	89,618	17,000 (Jun)	19.0%	30,213	33.7%	30%	35.0%
1918		30,213 (Dec)	33.7%				
1919	89,424	49,027 (Dec)	54.8%				51.3%
1920	96,221			49,027	51.0%	29%	49.9%
1921	115,676			25,698	22.2%		49.5%
1922	107,448			34,240	31.9%		29.8%
1923	120,567			28,955	24.0%	21.1%	27.1%
1924	115,384						18.1%
1925	110,985	0	0.0%				7.4%
1926	119,937	0	0.0%				0.8%
1927	119,178	0	0.0%				0.0%
1928	112,292	0	0.0%				0.0%
1929	107,393	0	0.0%				0.0%

TABLE 4:

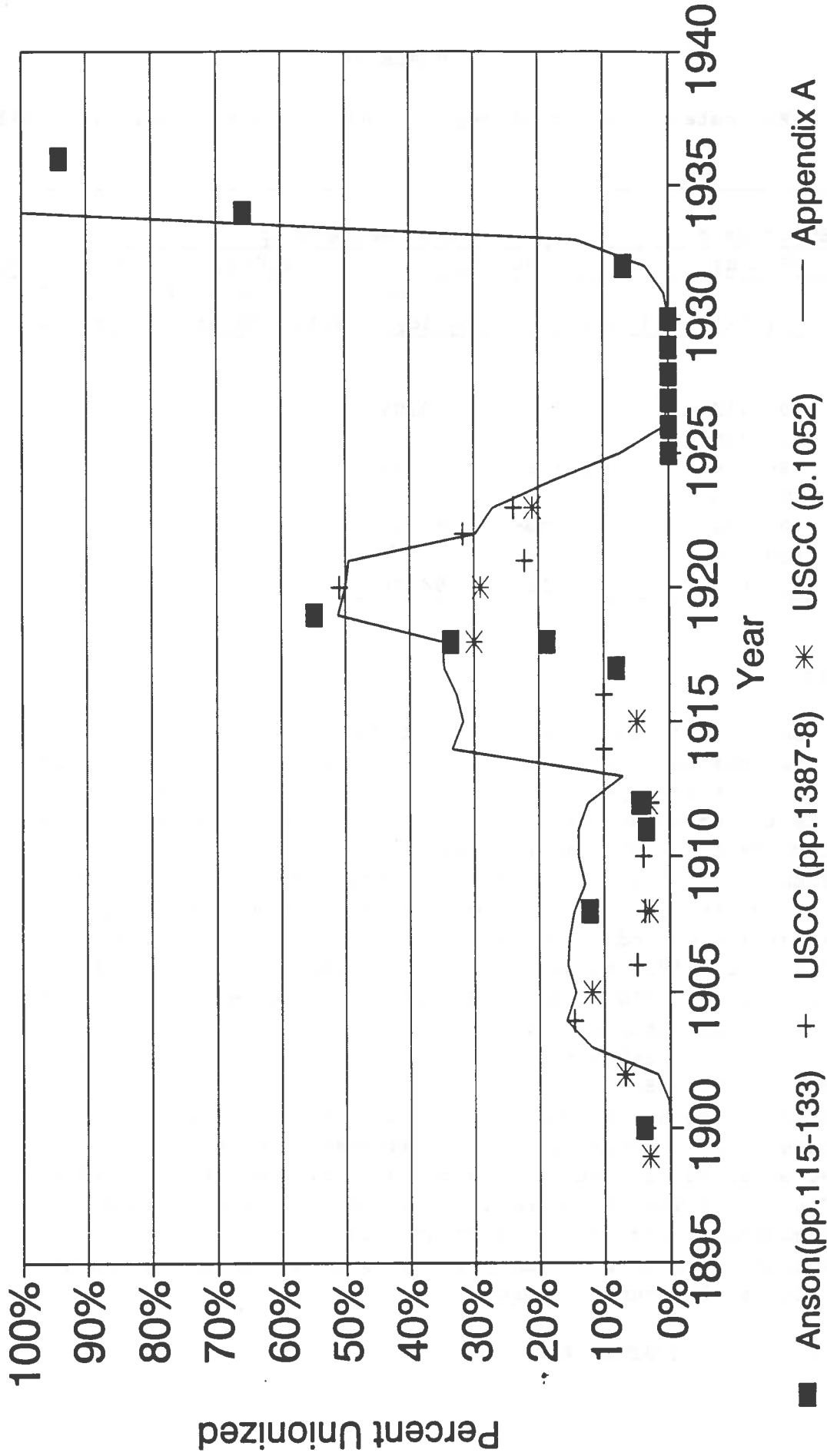
Estimates of Union Strength in West Virginia Coal, 1899-1936.

Year	Employment	Union Membership			Unionized
	WVDM[a]	Anson[b]	USCC[c]	USCC[d]	Tonnage
	Total	Total	As % of Employ.	As % of Total Employ.	Appendix[e] Percent
1930	107,412	0	0.0%		0.0%
1931	97,778				0.5%
1932	86,829	6,000 (Jan)	6.9%		3.6%
1933	95,180				14.2%
1934	106,402	70,000 (Dec)	65.8%		100.0%
1935	109,568				100.0%
1936	111,625	105,000 (Jan)	94.1%		100.0%

SOURCES:

- [a] From West Virginia Department of Mines. Figures includes "total employees excluding coke men." Employment data before 1925 are for fiscal years ending June 30. Data for 1925 and later are for calendar years ending December 31. Figures for 1934-36 include truck and wagon mines.
- [b] From Anson (1940, pp. 115-133). Figures for 1911 and 1912 refer to District 17 only, thus excluding the Northern Panhandle field (District 6) and the Upper Potomac field (District 16). Figure for 1932 refers to miners "working under contract," not membership. Figure for 1934 refers to southern West Virginia only--presumably District 17.
- [c] From United States Coal Commission (1925, Part III, Tables 1-2, pages 1387-1388).
- [d] From United States Coal Commission (1925, Part III, Table 1, page 1052). Refer to paid-up membership in the UMWA as of November 30 (except 1923 which is as of May) and include Maryland. Figure for 1923 is corrected from source using updated employment information in column (1).
- [e] Average of author's county-level estimates given in Appendix A, weighted by county tonnage.

Figure 1: Estimates of Union Strength
in West Virginia Coal, 1899-1936



SOURCES: See notes to Table 4.

APPENDIX A:

COUNTY-LEVEL ESTIMATES OF UNION STRENGTH

This appendix presents the author's own rough estimates of the level of unionism in West Virginia counties over the period of this study. The estimates here are based on a large number of primary and secondary sources, including the sources referenced in the body of the paper and additional sources describing particular union contracts referenced in Appendix B (available from the author). These are the only estimates of unionism at the county level known to the author, except for Tryon and Rogers's (1927) estimates for 1925 cited in the text.

The estimates here, given in Table A1, cover the period 1900-1935, during which the mines of West Virginia were unionized. Before 1900, all counties were essentially nonunion (except possibly in the Northern Panhandle field) while after 1935, all counties were essentially 100% unionized.

The figures given here are intended measure the percent of tonnage produced under union contract during each year. Thus they need not match estimates of percent union employment or percent union membership (see discussion in body of paper). The estimates are designed for use with the data contained in the Annual Reports of the West Virginia Department of Mines. To conform with these Reports, therefore, the estimates before 1925 refer to fiscal years ending June 30, while the estimates beginning in 1925 refer to calendar years.

Obviously these estimates are imprecise, especially in cases of partial unionization, where estimates are limited to just three values: 10%, 50%, and 90%. Some cases of partial unionization reflect divided counties, where part of the tonnage was produced at union mines and part was produced at nonunion mines. Other cases reflect transition years, where a county operated part of the year under union conditions and part under nonunion conditions. For some counties and years the available information did not permit even a rough guess

of the level of unionism. Such cases are represented by blanks in the table. The last line of the table shows estimates for the entire state. These are weighted averages of the non-missing county estimates, where the weights are county tonnage as given in the Reports of the Department of Mines.

[APPA2.WP5] 4/23/92

TABLE A1:

Estimated Percent of Tonnage Produced Under Union Contract
For West Virginia Counties, 1900-1935

County	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Barbour	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boone	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Braxton	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brooke		10	90	90	90	90	90	50	50	50	50	50	50	50
Clay	0	0	0											
Fayette	0	0	0	10	10	10	10	10	10	10	10	10	10	10
Gilmer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greenbrier	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hancock		10	90	90	90	90	90	50	50	50	50	50	50	50
Harrison	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kanawha	0	0	0	90	100	90	90	90	90	90	90	90	90	50
Lewis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Logan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marion	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshall		10	90	90	90	90	90	50	50	50	50	50	50	50
Mason	0	0	0	10	100	100	100	100	100	100	100	100	100	100
McDowell	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mineral	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mingo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monongalia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nicholas	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ohio		10	90	90	90	90	90	50	50	50	50	50	50	50
Preston	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Putnam	0	0	0	100	100	100	100	100	100	100	100	100	100	100
Raleigh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Randolph	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taylor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tucker	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Upshur	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wayne	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Webster	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entire state	0.0	0.2	1.7	12.1	15.8	14.5	15.8	15.6	14.8	13.0	13.9	14.1	12.6	7.1

TABLE A1 (continued)

County	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
Barbour	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Boone	90	100	100	100	100	100	100	100	100	0	0	0	0	0
Braxton	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Brooke	50	10	50	50	50	50	50	50	50	10	10	10	0	0
Clay	100											0	0	0
Fayette	100	100	100	100	100	100	100	90	10	0	0	0	0	0
Gilmer	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Grant	0	0	0	0	10	90	90	90	90	0	0	0	0	0
Greenbrier									0	0	0	0	0	0
Hancock	50	10	50	50	50	50	50	50	50	10	0	0	0	0
Harrison	0	0	0	0	0	90	100	100	100	90	50	10	0	0
Kanawha	100	100	100	100	100	100	100	100	100	50	50	0	0	0
Lewis	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Logan	10	10	10	10	10	10	10	10	10	0	0	0	0	0
Marion	0	0	0	0	0	90	100	100	100	90	90	50	0	0
Marshall	50	10	50	50	50	50	50	50	50	10	0	0	0	0
Mason	100	100	100	100	100	100	100	100	100	100	50	10	0	0
McDowell	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mineral	0	0	0	0	10	90	90	90	90	0	0	0	0	0
Mingo	0	0	0	0	0	0	0	10	0	0	0	0	0	0
Monongalia	0	0	0	0	0	50	100	100	100	90	50	50	10	0
Nicholas	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Ohio	50	10	50	50	50	50	50	50	50	10	50	50	10	0
Preston	0	0	10	90	90	90	100	100	50	10	10	0	0	0
Putnam	100	100	100	100	100	100	100	100	100	100	50	0	0	0
Raleigh	100	100	100	100	100	100	10	0	0	0	0	0	0	0
Randolph	0	0	0	0	0	50	100	100	100	10	10	0	0	0
Taylor	0	0	10	90	90	90	100	100	100	90	10	10	0	0
Tucker	0	0	0	0	10	90	90	90	90	0	0	0	0	0
Upshur	0	0	0	0	0	50	100	100	100	90	10	10	0	0
Wayne	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Webster	0	0	0	0	0	50	100	100	100	90	50	10	0	0
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entire state	33.4	31.6	32.8	34.6	35.0	51.3	49.9	49.5	29.8	27.1	18.1	7.4	0.8	0.0

TABLE A1 (continued)

County	1928	1929	1930	1931	1932	1933	1934	1935
Barbour	0	0	0	0	10	10	100	100
Boone	0	0	0	0	0	10	100	100
Braxton	0	0	0	0	0	10	100	100
Brooke	0	0	0	0		10	100	100
Clay	0	0	0	0	0	10	100	100
Fayette	0	0	0	0	0	10	100	100
Gilmer	0	0	0	0	0	10	100	100
Grant	0	0	0	0	0	10	100	100
Greenbrier	0	0	0	0	0	10	100	100
Hancock	0	0	0	0		10	100	100
Harrison	0	0	0	0	10	10	100	100
Kanawha	0	0	0	0	0	10	100	100
Lewis	0	0	0	0	0	10	100	100
Lincoln	0	0	0	0	0	10	100	100
Logan	0	0	0	0	0	10	100	100
Marion	0	0	0	0	0	10	100	100
Marshall	0	0	0	0		10	100	100
Mason	0	0	0	0	0	10	100	100
McDowell	0	0	0	0	0	10	100	100
Mercer	0	0	0	0	0	10	100	100
Mineral	0	0	0	0	0	10	100	100
Mingo	0	0	0	0	0	10	100	100
Monongalia	0	0	0	10	50	90	100	100
Nicholas	0	0	0	0	0	10	100	100
Ohio	0	0	0	0		10	100	100
Preston	0	0	0	0	0	10	100	100
Putnam	0	0	0	0	0	10	100	100
Raleigh	0	0	0	0	0	10	100	100
Randolph	0	0	0	0	0	10	100	100
Taylor	0	0	0	0	10	10	100	100
Tucker	0	0	0	0	0	10	100	100
Upshur	0	0	0	0	0	10	100	100
Wayne	0	0	0	0	0	10	100	100
Webster	0	0	0	0	0	10	100	100
Wyoming	0	0	0	0	0	10	100	100
Entire state	0.0	0.0	0.0	0.5	3.6	14.2	100	100

