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AN INVESTIGATION OF ALTERNATIVE STRIKE POLICIES
FOR RAILROAD WORKERS

By
Evan Morrisey

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford, MS
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DEDICATION

This thesis is dedicated to those who have guided and encouraged me throughout the year. I would like to especially thank Dr. Joe Atkins and Florencia Ferrari who grew my interest and involvement in labor studies. Solidarity.

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I'd like to acknowledge Dr. Kyle Fritz who helped me through my countless questions and complications through the writing of my thesis. Also Dr. Jared Rolls for directing my understanding of the rich history of the rail labor movement that shapes the status quo. Thank you so much.

ABSTRACT

In principle, railroad workers have a legal right to engage in strikes in the United States, just like a majority of other workers. In practice, however, they are ostensibly forced into compulsory arbitration where Congress legislates their contract even if they vote to strike. The government's justification for overriding the workers' right to strike in this way is that a full-scale strike could have serious economic impacts to the national economy. Overriding railroad workers' right to strike still raises ethical concerns, because the right to strike is crucial for workers to protect their interests. While unrestricted, indefinite, large-scale strikes may lead to significant economic harms, there may be ways to limit strikes that prevent the worst economic harms to the nation while also protecting worker rights more effectively. I explore both unrestricted strikes and strikes that are legally restricted in participation, duration, or geographical area. Each type of strike is evaluated along two metrics: how well it is able to create pressure on employers to protect workers' rights, and how well it limits economic damage compared to the standard American policy of unrestricted strikes. Few restricted strikes are currently used in the US, so where information on these metrics is scarce, I draw on similarly developed Western countries. Ultimately, I find that a combination of limitations on participation and duration is the best way to minimize economic damage while protecting worker rights. I also recommend future investigations to procure more detailed economic data on strike actions as well as define further different categories of industrial actions.

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CHAPTER 1: INTRODUCTION

At 8:55 PM on February 3, 2023, a train carrying a multitude of hazardous materials went off the rails while passing through East Palestine, Ohio. The crash set the chemicals aflame, resulting in hydrogen chloride and phosgene being released into the air (Perkins, 2023a). The entire community of East Palestine had to be evacuated from the area, because while the gaseous chemicals dissipated, they released a large number of dioxins into the environment. Dioxins are extremely harmful to the environment. Over 38,000 minnows and 5,500 other small aquatic species reportedly died due to the disaster (ODNR, 2023). Dioxins are also dangerous for humans, as they increase the risk of cancer, cause reproductive issues, and harm the immune system all while staying in the environment for long periods of time (US EPA, 2014). Testing in East Palestine revealed that dioxin levels were hundreds of times higher than the levels at which Environmental Protection Agency (EPA) scientists found risk of cancer to increase (Perkins, 2023b). Sometimes when dioxins have polluted a town they have resulted in the permanent evacuation of the population. The entire town of Times Beach, Missouri was evacuated by the EPA and turned into a superfund site—a polluted area designated for long term cleanup—due to dioxins being sprayed on the street to keep dust down (J. Little, 2020). The risks these toxins pose to the community is generational.

While some said that the accident was an anomaly, others claimed that it was instead the

result of railroad companies' own inaction. The railroad lobby had worked to halt a regulation from the Obama administration to outfit trains carrying hazardous materials with electronically-controlled pneumatic braking systems that would have reduced some of the risk (Sommerlad, 2023). While the accident sparked outrage, it did not come as a surprise to railroad workers. They already understood that railroad companies had been lobbying against changes and pushing a dangerous new cost-cutting business strategy. A press release by Railroad Workers United (RWU) stated that, “The root cause of this wreck [is the] operating model known as ‘Precision Scheduled Railroading’ (PSR)” (RWU, 2023).

PSR is a system in which railroad companies make longer and longer trains with smaller crews to maximize the efficiency of the network while lowering labor costs. PSR has been adopted by all major carriers in the United States because it has substantially increased their profits, making them one of the most profitable industries in the entire country (AJOT, 2019). Rail companies themselves emphasize that while these practices do generate high profits, they are also best for the consumer, as they reduce transit time, create a more accurate time table for shipments, and improve the utilization of company resources (Union Pacific, 2019). But adopting PSR has drawbacks. Companies forgo traditional safety practices of constructing trains that distribute weight correctly and are thoroughly inspected (Hussein, 2023). The Government Accountability Office has reported that these schemes have also decreased the amount of equipment that railroads keep on hand as backup (GAO, 2023). While the Federal Railroad Administration (FRA) states that it does not see anything conclusive about the safety impacts of PSR, it is still taking steps to address the risks of longer trains and employee fatigue. FRA data also shows an increase in the overall rate of accidents on the railroads and increases in the total

number of fatalities (FRA, 2024). It is important to note that even when the number of employee deaths and injuries have held steady, the number of railroad workers has plummeted as companies lay more people off. Sheet Metal Workers' International Association (SMART) President Jeremy Ferguson testified to Congress in 2022 that since 2015 railroad companies had reduced the workforce by 30% (*Examining Freight Rail Safety*, 2022).

The reduction in workers puts strain on those who remain. Railroad workers tell stories of how they get called in early to work with longer and longer trains and still are forced to work 14-to-17-hour days (DeLay, 2022). All of this set up a major fight for contract negotiations and rail companies in 2022. Railroad workers demanded an end to PSR, mandatory crew minimums, and paid sick days (SMART, 2023). The crew minimums and sick days were symptoms of the larger problems with PSR. When rail companies refused to negotiate on these terms it put the industry on path to a strike (AP, 2022b).

Railroad workers, who had no sick days, demanded in negotiations with railroad companies seven mandatory sick days estimated to cost around \$321 million, which would have been less than 1.2% of its profits in a single year (LaRocco, 2023). But rail companies understood where the negotiating power sat in these talks. While unions asked for sick days worth \$321 million, the companies had already spent \$196 billion on stock buybacks since 2010 (Buck, 2022). Money was changing hands, but just between the companies and the shareholders.

Instead of allowing the strike to proceed after negotiations were locked out, President Joe Biden called for a Presidential Executive Board for further arbitration between unions and companies. The Executive Board is the ultimate step in which the President appoints an advisory

board for further mediation to suggest a nonbinding contract to both of the parties, both of whom can choose to reject the contract. Instead of addressing railroad workers' demands in negotiations of the Presidential Executive Board appointed to adjudicate the dispute, the President chose to offer zero paid sick leave days in the final proposal (Funk, 2022b). When railroad workers again rejected this deal, the President, who stated at the beginning of his campaign that he would be the "most pro-union President leading the most pro-union administration in American history," decided to stop the strike by imposing the terms of the contract he negotiated on workers (House, 2021). Ironically, the last time Congress had considered overruling the workers in a 1992 labor dispute, then-senator Joe Biden had stated, "We need to restore a measure of balance to these negotiations," and voted against imposing the contract (Daniels et al., 2022).

Roadway mechanic Reece Murtagh said, "Joe relied on us to get him home to his family, but when it was his turn to help us out...to better our life, he turned his back on us" (Hsu, 2022). Murtagh's reaction to President Biden's decision to end the railway worker's strike was indicative of how part of organized labor reacted. The President's decision to end the railway worker's strike was a clear betrayal in the minds of laborers to their goals in negotiations.

In his public statements, the President repeatedly emphasized the large economic impacts that the strike would have had on the economy and how it would have hurt many families during the holiday season (Kinery, 2022). Industry analysts from rail companies estimated that a strike on the railroads would cost about \$2 billion per day, and representatives from a chemical industry trade group reported that it could cost 700,000 jobs from manufacturers that depend on the railroad if it lasted for a month (Funk, 2022a).

Despite the forced arbitration and imposed contract, railroad workers did end up getting *some* of their initial demands met. In 2023, several of the large railroad companies chose to extend four sick-leave days to their employees, but none of the companies expanded sick days to more than 61% of workers (Greenhouse, 2023). Unions had demanded seven days for all workers. Conductors and engineers involved in running the trains day-to-day still lack sick days, and many still feel that their initial complaint against the railroad's PSR that cut 25% of employees went unaddressed (Greenhouse, 2023). Workers in many parts of the railroad industry still have not gotten access to basic labor rights for jobs that can be extremely difficult. The option to strike presented itself as the greatest leverage that the unions would have to win these demands on sick days. Yet Congress and the President were able to legislate over this dispute, enforcing a contract that the unions had democratically rejected (Sainato, 2022).

Railroad workers are governed by a separate piece of labor legislation: the Railroad Labor Act (RLA). The RLA provides a structure of mandatory negotiations that unions and companies must exhaust before they turn to industrial action. The power to break a strike in such a dramatic fashion was borne out of the Supreme Court's interpretation of the Commerce Clause of the Constitution and is intimately connected to the RLA (Elliott, 2022). The Commerce Clause gives Congress the power "to regulate commerce with foreign nations, and among the several states, and with the Indian tribes." Repeatedly, it has established the idea that regulations on commerce that occurs between states within national borders is within the regulatory apparatus of the federal government. During the Pullman Car Company strike of 1894, the federal government issued an injunction to stop the strike and deploy federal troops to put the striking workers back to work. In response, the American Railroad Union, which was on strike,

filed suit against the government filing the injunction. The Supreme Court found that the government could indeed file an injunction and stop the strike, writing that, “The strong arm of the national government may be put forth to brush away all obstructions to the freedom of interstate commerce” (Scarinci, 2016).

The connection to the protection of Interstate commerce in the Commerce Clause persists to this day. The federal government can no longer issue judicial injunctions through the courts to stop strikes due to the Norris-LaGuardia Act that bans injunctions against workers (U.S.C., 1932). However, because the workers under the RLA are outside the purview of the Act these workers can have their strikes directly ended through legislation. The RLA is specifically premised on the idea that the government has this authority to regulate and, if necessary, enjoin a strike in rail and aviation industries (B. Little, 2022). In 1917, the Supreme Court affirmed that Congress has the power to regulate interstate commerce of railroads in the court case *Wilson v. New*, where Congress had established new wage rules for the industry in the face of strike threat (Balser et al., 2023). The constitutional authority of Congress has been found pursuant of this decision.

The RLA of 1926 itself primarily set up a large mediation and regulatory regime to stop strikes from occurring in the industry. It creates a number of mediation boards to adjudicate smaller disputes, provides mandatory cooling-off periods in negotiations between management and unions, and gives power to the President to establish an emergency board to negotiate in the case that the two parties have still not reached an agreement after the cooling-off period (*45 USC Ch. 8: RAILWAY LABOR*, n.d.). The act was the result of a long battle by labor against the pro-company Rail Labor Board established by the Transportation Act of 1920. The new RLA was a

detente in which “railroad labor, management, and the federal government established a new cooperative relationship and accompanying institutions” (Huibregtse, 2010, p.65).

This alternative system for railroad workers has generated issues of fairness. With the exception of public-sector employees and agricultural and domestic workers, all other industries in the United States are governed by the National Labor Relations Act (NLRA), guaranteeing them the right to strike. Workers outside of the NLRA face an unfair burden of losing all of their labor rights merely due to their choice of career. In the case of railroad workers, the reasoning from proponents of curtailing worker rights is that a strike would cause an extraordinary economic situation. Yet transportation workers such as the International Brotherhood of Teamsters threatened to strike UPS if they did not agree to provide air conditioning for drivers and end a system of two-tiered pay. They received both of those demands, as UPS knew they would risk losing \$7 billion in a 10-day walkout (McCorvey et al., 2023). Teachers across multiple states also retain the right to strike. Some 36,000 teachers and staff went on strike in the Chicago Public Schools to fight for smaller class sizes and cost-of-living adjusted wages (Pratt, 2019). That these workers are given the leverage necessary to succeed in collective bargaining and railroad workers are not is unfair. With a status quo that fails to meet the needs of workers, policymakers need to seek a fairer solution.

The repercussions of the East Palestine disaster are still being felt today. Even though this traumatic rail accident occurred, the government has been reluctant to push for increased regulation. Financial disclosures reveal that Norfolk Southern Corporation, the company liable for the disaster, increased its lobbying expenditures by 30% last year, spending a total of \$2,340,000 (Public Citizen, 2024). Senator Sherod Brown and J.D. Vance had co-sponsored a

bill to increase regulations on railroad safety, including provisions to mandate minimum two-man crews, increase the number of hotbox detectors, increase maximum fines on rail companies that violate safety provisions, increase regulations on trains carrying hazardous materials, and limit train length; yet the bill has stalled out after being introduced over a year ago (Thakker, 2024). No further regulation to improve railroad safety is in the pipeline. Railroad companies like Norfolk Southern Co. show remarkable resistance to any kind of increased safety measures. Companies fail to self-regulate, the government fails to regulate, and when unions try to strike over regulation they get sent back to work.

The regulatory powers of Congress are broad and vaguely defined in the purview of "interstate" commerce, which is used to prevent strikes in these industries. It seems unfair for rail workers to not have the power to negotiate in earnest with management when they cannot strike. Yet admittedly, the grave consequences that the President cites would be damaging to the economy. How can workers be empowered to demand and receive dignified treatment while balancing the economic harms that could debilitate the economy? In this thesis, I argue that Congressional preemption of striking is an overstep and explain how to incorporate limited striking in these industries in an American context.

CHAPTER 2: THE HISTORY OF RAIL STRIKES

When searching for a solution to a problem, it can be helpful to understand the origins and causes of that problem. Consequently, I begin with an overview of the historical context of the legal right to strike in the United States. The current state of American labor law concerning railroad workers has gone through a variety of different phases. The events that led to the construction of the Railroad Labor Act and consequent revisions demonstrate how the right to strike has been built up and eroded overtime. Labor law in the United States is not static; railroads in the 19th and 20th century formed some of the strongest and most militant unions that fought the government tooth and nail for concession. However, the RLA is a story of what happens when the unions put aside their militant strikes for government mediation. Now modern railroad workers have discovered that these agreements prevent them from engaging in the sort of industrial action that won the legal agreements in the first place. To understand this dynamic, we must start at the beginning.

The railroad strike movement has its beginnings in the explosion of the railroad industry in America. When the nation was united after the Civil War, the mileage of track skyrocketed from 35,000 miles in 1865 to 93,000 in 1880 (Stowell, 1999, p.19). This set the stage for greater labor unrest among workers as they entered these industrialized jobs for the very first time. By 1877 many of the workers not only had concerns about their pay on the job, but also the difficult

working conditions they faced on the railroads. They asked companies (1) to stop assigning the first crew into town as the first crew out, which cut down on their time with family, (2) for regular runs so they could have stable work schedules, (3) for passes home if there were long layovers while changing over trains, and (4) to abolish the company “classification” system that depressed their wages (Brecher, 1997, p. 17). They wanted their working conditions to be improved, and they wanted to be treated with dignity.

At the same time, craft union membership, unions that permit only certain workers based on their trade and skills, had plummeted from 300,000 in 1870 to 50,000 in 1876 (Brecher, 1997, p.17). As a result, workers in 1877 were outside of traditionally conservative craft unions and disgruntled at their treatment. This came to a head when the B&O rail company cut workers’ wages for a third time that same year, causing workers to walk off in Martinsburg, West Virginia. The walk-off spread like wildfire to cities across the country (Piper, 2013). The strike was brutally broken by the intervention of federal troops across the country. In West Albany, New York, some 600 federal troops were garrisoned in the city and the trainyards to stop the striking workers (Stowell, 1999, p.88). While workers failed to win an outright victory, it was the first time a national-scale railroad strike had taken place.

While some inroads may have been made in the wake of the strike, the craft railway unions like the Order of Railway Conductors (ORC), the Brotherhood of Locomotive Firemen (BLF), and the Brotherhood of Locomotive Engineers (BLE) soon started to distance themselves from the strike in an attempt to curry favor with railroad officials and the government (Case, 2010). The divisions within the railroad movement would grow, as the Knights of Labor (KOL) sought to establish itself on the railroad. It was one of the first industrial unions in which all

laborers: skilled or unskilled, men or women, white or black could join. The Knights precipitated the next large railroad strike: the Southwest Strike of 1886. Striking against railroad tycoon Jay Gould would ultimately end in failure, but their adoption of sympathy strikes in which KOL locals would strike in support of other locals became more commonplace; 11% of strikers participated in them in 1885, but this rose to 45% in 1894 (Case, 2010). The KOL entered a sharp decline after their losing negotiations during the strike against Jay Gould. The railroad Brotherhoods during this era stuck to a narrow goal of agitating for better wages and benefits, while the nascent industrial unions like the Knights pressed for a broader vision of American society that included more workers and necessitated more strike actions (Parfitt, 2010, p.31).

One of the most influential railroad leaders of the period, Eugene V. Debs, underwent a huge change in his personal ideology. While originally part of the BLF and a proponent of conservative craft unionism, he steadily began to critique the fact that a large part of the workforce was excluded by the brotherhoods and the only union they could join was the KOL (Salvatore, 1982, p. 100). He became convinced that craft unionism would only create more division. With this in mind, Debs, along with several other unionists, formed the American Railroad Union (ARU). This was one of the first instances of industrial unionism in the US. Any worker who was employed by a company that owned rail lines was eligible to join, meaning anyone from conductors to coal miners could be a part of the organization (Brecher, 1997, p.97). The union scored a huge victory in the strike of the Great Northern Line of 1894, where striking workers won almost all of their wage demands due to a favorable arbitration award (Salvatore, 1982, p.121). Workers soon began to join the union in droves, called to its industrial mission. Each day after the strike 2,000 men joined, and the union soon reached 150,000 members (Salvatore, 1982, p.125). This built up the momentum in the union for the massive Pullman

Strike of 1894. Pullman workers, who could now join the union, recounted how their wages for piece work were cut by 77% from 1893 to 1894 (Carwardine, 1894). When the Pullman workers walked off the job to protest these wage cuts, 260,000 railroad workers, almost half of them not ARU members, followed suit by striking in solidarity (Brecher, 1997, p.101).

The reaction to the massive labor unrest on the railroads was swift and violent; the federal government secured blanket injunctions across the country from Michigan to California to ban strike activities (Brecher, 1997, p.104). This meant that all the striking railroad workers were functionally breaking the law. The government was then able to send in 12,000 federal troops to put down the strike across the country (Parks, 2013). This swift reaction crushed the railroad strike and much of the energy in the movement to press for better material conditions.

In the wake of the Pullman strike, railroad workers did not have a right to strike. The use of federal injunctions meant that anytime they did walk off the job it would be classified as illegal (Brecher, 1997, p.144). During World War I, workers in America saw themselves empowered as the government needed all hands on deck for the war effort. Under the threat of strikes from railroad unions, President Woodrow Wilson passed the Adamson Act in 1917, which established an eight-hour workday and provided wage increases (Hines, 1928, p. 6). The Supreme Court would ultimately codify the government power to intervene in private rail companies with the *Wilson v. New* decision—the same decision that is cited today as the reason why the government can mandate a contract for railroad workers. Shortly after the passage of the Adamson Act, President Wilson fully nationalized the railroad system to streamline war production after numerous freight slowdowns and crashes under private hands (Kerr, 1967, p. 550).

After World War I, however, deteriorating economic conditions meant railroad workers would walk off the job again. Congress had established the Railroad Labor Board in 1920 with the passage of the Transportation Act to regulate the railroads. However, the panel appointed by President William Harding was generally anti-labor, with the chairman repeatedly criticizing railroad union leaders (Wolf, 1927b, p.33). At its convention, the American Federation of Labor stated that the “the Railroad Labor Board (RLB) has in the overwhelming majority of decisions functioned in the interest of railroad management and against the employees” (Wolf, 1927b, p.10). In 1922, tensions boiled to a head as the RLB promised not to cut the wages of the railroad Brotherhoods, but then cut the wages of many other railroad workers, like shopmen who repaired the trains (Davis, 1992, p.437). Incensed that they had been sidelined by the larger craft unions, 400,000 shopmen went on strike in 1922 to protest the wage cuts (Brenner, 2009).

This time the crackdown came even faster as the government apparatus of strike injunctions had been refined. These strike injunctions challenged the right of workers to withhold their labor at all (Brenner, 2009). Just 11 days after the beginning of the strike, newspapers reported that there were federal restraining orders barring strikers from “illegal picketing and disorders” in every state (Davis, 1992, p.443). Yet the inability of the Railroad Labor Board to properly adjudicate disputes was obvious to all. Labor started a renewed effort to get rid of the Railroad Labor Board entirely. President Harding, who had appointed the anti-labor board, stated that, “The law creating the Railroad Labor Board is inadequate” (United States, 1922). While his criticism was primarily that it needed more enforcement power, there was a consensus among labor, company, and government that reform was necessary.

Sensing the strong resistance from railroad unions to the RLB, companies worked proactively with both congress and the union brass to create a compromise bill; the result was the Railway Labor Act (RLA) (Kaufman, 2015, p. 429). These gains came as a result of the railroad workers' repeated disruption of the system. By the threat and usage of the strike they were able to secure better terms in Congress than the RLB initially offered (Wolf, 1927a, p.429). Workers were able to get a legally protected right to strike protected by the government for the first time. Paradoxically, however, the unions conceded a lot of control of their capacity to strike by ceding the decision of whether or not to strike to a Presidential Emergency Board (Huibregtse, 2010, p.74). The RLA was one of the first pro-labor laws in a period that would be full of legislation expanding labor protections.

In the interwar period the railroad unions suffered more defeats. They were unable to win amendments to the RLA or start new cooperative enterprises as railroad labor leaders picked internal fights, employment on the rail declined, and the memory of large-scale solidarity faded (Huibregtse, 2010, p.91). Far from a totally progressive movement, racism was still rampant in the ranks of rail unions, with amendments made to the RLA in 1934 strengthening the ability of craft unions to exclude people of color and push out even more Black people from operating crafts (Dubofsky and McCartin, 2017). The narrative of progress on the railroad became dominated by the crafts.

After WWII, when the railroads had been nationalized by the government, members of the operating crafts (engineers and trainmen) threatened to walk off the job for pay increases. President Harry Truman threatened them back, demanding that they return to work or risk being drafted into the military (Schlager, 2003). President Truman was able to threaten such unilateral

action due to the expansions of executive power during wartime, but the RLA overall was starting to show weaknesses during this period. The Brotherhood of Railroad Trainmen complained that it could take as long as nine years to resolve grievances under the law (Schlager, 2004). During this large and disruptive industrial action, the railroad workers still permitted some level of commerce to flow. The strikers let milk, military troops, and hospital trains run like normal, ensuring that the most necessary goods still were reaching their destination (Chamberlain and Schilling, 1954, p.142). In the end, however, the strike was completely broken by the government. The workers ended up accepting the wages that were offered to them before the strike was called and did not get any of the rule changes they demanded addressed (Wiese, 2017).

President Truman's blunt back-to-work order was the start of a resurgence of the pre-RLA standard of breaking railroad strikes. Strike breaking was growing in the culture. In 1947 Congress overrode the veto of President Truman to institute more restrictions on organized labor via the Taft-Hartley Act. The law empowered employers to hold mandatory anti-union meetings for workers to scare them from joining a union. It drastically cut down on the regulatory power of the NLRB to support unionization efforts across the board. The act imposed bans on various types of strikes, as well as boycotts and mass picketing (McCammon, 1990). It is important to note that the law only applied to workers organized under the National Labor Relations Act and not the RLA. While the legal code did not change for workers governed by the RLA, they nevertheless started to see more restrictions on their ability to walkout.

In 1963, President John F. Kennedy enforced a form of compulsory arbitration on railroad workers threatening to strike, but in speech still stated that this executive action was

“unlike compulsory arbitration, [because] this method would preserve and prefer collective bargaining and give precedence to its solutions” (1963). Representatives in Congress voted for the president’s plan but expressed reluctance to do so to major news outlets, as they felt it could set a precedent that would hurt the ability of railroad workers to engage in collective bargaining (Pomfret, 1963). Charles Luna, president of the Brotherhood of Railroad Trainmen, stated that President Kennedy “effectively crippled labor’s power at the bargaining table and made it inevitable that management would adopt an intractable position, since labor could not strive to win an issue” (BRT, 1965, p. 78-79).

Railroad workers suffered further defeats with the deregulation of the railroads under the administration of President Jimmy Carter. The president helped pass the Staggers Act of 1980, which sought to increase the competitive ability of railroads by deregulating pricing and reducing the barriers to entry and exit (the opening and closing of rail lines) (Mckinsey Quarterly, 1997). This had adverse effects on employment and work standards; crews were shrunk from five to two or three, and more importantly, the working day was extended from 100 miles to 108-130 miles (Mckinsey Quarterly, 1997). The drop in employment and tougher working conditions was difficult for unions to handle. The Staggers Act generated a regulatory environment that was less favorable to organized labor, resulting in decreases in workers’ real wages (Padilla-Angulo et. al., 2019). The Association of American Railroads estimated that wages after the deregulation of the industry were 20% lower for workers (Braeutigam, 1993).

Further industry changes came in the late 1990s. A new CEO at Illinois Central named Hunter Harrison introduced the idea of Precision Scheduled Railroading (PSR) for the first time. His business plan focused on cutting out any inefficiency in the transit process and keeping as

many locomotives and wagons on the move as possible. It resulted in Illinois Central running a 65% operating ratio and a 12% return on invested capital (Barrow, 2019). Currently five of the six major Class I rail operators in the US (Canadian National [CN], Canadian Pacific Kansas City [CPKS], CSX Corporation, Norfolk Southern Corporation [NS], and Union Pacific Corporation [UP]) all explicitly advertise that they use PSR in their operations (Bowman, 2021). Burlington Northern Santa Fe Corp Railway (BNSF) claims that it does not use PSR in its operations, but workers allege that the massive layoffs and punitive time off policy mean that this claim is in name only (Knowler, 2022). At the same time, PSR promotes an extremely aggressive expense-slashing strategy with companies going as far as cutting parts of their stocks of locomotives (Barrow, 2019). This manner of reorganizing the railroad industry has again had profound impacts on workers. Since 2016, the yearly average of workers employed on Class I railroads has fallen by almost 25% (Marsh, 2021). Workers have less and less leverage on the railroad.

The ability of railroad workers to strike has experienced a dramatic rise and fall in the United States, which has informed the current struggle of railroad workers in 2022. Organizations like the Railroad Workers United (RWU) got their start in 2005 with the Railroad Operating Crafts United, which sought to create a democratic merger of rank-and-file craft workers to create more solidarity (RWU, n.d.). During the 2022 negotiations between the railroad companies and unions, the RWU was a driving force for getting workers to demand changes to PSR and sick leave. Other organizing efforts in the 2010s had a large impact radicalizing workers. The Brotherhood of Maintenance of Way Employees Division of the International Brotherhood of Teamsters (BMWED) recruited a militant organizer to reinvigorate the union in 2015. While they later fired the organizer, the rank-and-file were now interested in

getting results from their contract arbitration and organized the BMWED Rank and File United in 2021 (Grim, 2022). While railroad workers would ultimately lose the fight to get sick days and redress concerns with PSR, the movement is now in a very different place. The traditional complacency of the more conservative sectors of craft unionism continues; they stopped more progressives being added to President Biden's Emergency board (Grim, 2022). Due to further grassroots organizing, workers have been asking for fair treatment. So far, rail's response has been to resist as much as possible.

CHAPTER 3: THE IMPORTANCE OF THE STRIKE

To fully appreciate why the RLA and forced arbitration are so problematic, we must understand the ethical importance of the right to strike. Rights are commonly thought of as protections that every person should be afforded, no matter who they are. They provide the backbone for protecting human dignity, which “recognizes and reflects the equal worth of each and every member of the human family” (Daly & May, 2017, p. 1).

3.1. THE MORAL RIGHT TO STRIKE

Importantly, this protection of dignity takes priority over consequentialist concerns that focus only on results (Rainbolt, 2006, p. 53). For example, if you work for me for three hours and I promise to pay you \$50 for your labor, you might plan on just spending that money on beer. Instead of paying your wage I could donate the money to the local food bank where it would do more good than you buying three cases of beer. However, you have a right to that money, and failing to pay fails to respect your dignity. Nevertheless, rights do not *always* supersede consequentialist concerns in every situation (Rainbolt, 2006, p. 53). To illustrate, consider a far-fetched example in which man with a bomb strapped to his body locks himself in the control room of a nuclear power facility. He gives an ultimatum; he will explode the facility and cause unimaginable harm to the community unless his father’s hand is cut off. His father has a right not to be harmed, but the possible risk of turning the area into the next Chernobyl is so

great that it should be done. In the same way there is some level of economic chaos that would be beyond the pale if railroad workers went on strike. The line where drastic consequences outweigh the possible harms to individual rights is not always clear. Workers should have their individual rights protected, but the government has an interest in preventing them from striking for years on end. Finding the balance between material and moral concerns is at the core of defining what limits exist on our rights.

One of the primary goals behind establishing something as a right is to protect our human dignity. To respect human dignity is to not reduce human beings to only fulfilling their bare minimum economic desires (Daly, 2013, p. 1). That rights are a key bulwark to defending human dignity is precisely why consequences do not easily overtake our rights. Rights are supposed to protect human life from a purely utilitarian reality in which an abstract idea of utility is the only outcome maximized. Thus, upholding human dignity is what is in the balance when deciding if rights should be ignored for a particular policy. Policymakers must ask what will happen to human dignity if they disregard people's rights in certain ways.

It Is one thing to explain what rights *are*, but it's another to show *what sorts of rights people have*. There are certain fundamental rights that every person has, often understood as human rights. Philosopher Merten Reglitz explains that a human right is defined as a right that protects what is needed for a minimally decent life. He defines a minimally decent life as consisting of, in part, "fundamental welfare concerns such as the means of subsistence, physical security, and shelter" (2019, p.2). Material needs come to mind first when thinking about what elements of life should be protected for all human beings no matter the conditions of their country. However, Reglitz continues to explain that while material needs might come to mind

first, they are not the total extent of human rights: “Minimal decency thus also requires important provisions for protecting people’s equal moral status (such as political and civil rights)” (2019, p.2). A minimally decent life is not a life of deprivation nor discrimination. Someone living in an apartheid state in which they are denied freedom of movement (for instance a Palestinian in the Gaza Strip) does not live a minimally decent life.

Perhaps the right to strike is required for a minimally decent life, and is therefore a human right. But this strong claim is not necessary to show that there is a right to strike, because this right to strike can be derived from other fundamental rights. The argument, in brief, is this: First and foremost, all people have a right to control their bodies. This right to bodily autonomy is plausibly needed for a minimally decent life. Second, if people have a right to control their bodies, they necessarily have a right to control the labor that the body provides. Control of the body means control of work; someone cannot be forced to provide labor if they are unwilling. If someone can control when they provide labor, they have a right to withhold that labor. But this withholding of labor is tantamount to a strike; a strike is the collective expression of a multitude of workers withholding their labor to improve working conditions. Thus, if people have the right to control their body, the right to strike must follow.

While I assume that the right to control your body is a fundamental right, there is more to say about why the right to control your body entails a right to control your labor. The ability of the body to labor is one of the elements of the body protected by rights. People generally accept that the work they produce is their own. John Locke describes in his theory of labor that “every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his Hands, we may say, are properly his” (Locke, 1946, p. 15).

Recognizing the importance of the labor that someone provides is important when thinking of rights. The production that comes from using your body is your own. Choosing when and how to use your body is then the decision of the individual, and the equivalent of controlling your labor. G.A. Cohen extends the argument of the body as property, explaining that, “if I am the moral owner of myself, and, therefore, of this right arm, then, while others are entitled, because of their self-ownership, to prevent it from hitting them, no one is entitled, without my consent, to press it into their own or anybody else’s service” (1995, p.68).

If people are to have control over their own bodies and by extension, the work that they produce, they must be able to control when and where they use it. For example, a farmer cannot force you to harvest their crop even if it means that some of the crop is left in the ground to rot and some people end up hungry. This reinforces the idea that a purely consequentialist framework fails to take into account the importance of someone’s right to withhold labor. In other words, people have the right to *withhold* their labor if they so choose and not be compelled to do otherwise by law. Of course, people can enter into voluntary legal contracts in which they forgo their ability to withhold their labor as a part of their conditions of employment. A. John Simmons, a philosopher specializing in Lockean thought, explains further that Locke means that the taking of your labor by any other person without your lawful consent cannot happen without injury (Simmons, 1992, p.255).

If people have a right to control their labor, and this includes withholding that labor, then people have a right to strike. The strike is an economic action in which workers refuse to work unless their employer changes their terms of employment. Critical to the function of a strike is that workers *withhold* their labor from the employer and prevent replacement workers from

coming to extract concessions like wage increases, cost-of-living adjustments, workplace safety, and more. Crucially, it is used collectively by workers to give them leverage in the negotiation process where individually they would have little. Workers withhold their labor in a strike not because they want to stop working but because they want the conditions of their job improved.

This power to influence that comes from withholding labor is the foundation for many people's civil and political rights. Striking workers can hold out for wage increases like in the Great Railroad Strike of 1877, but also for the betterment of the fundamental conditions of their work. Railroad workers in the United States wanted to approve a strike in 2022 in protest of companies refusing to give them paid sick days. The infamous 1937 sit-down strike of the United Auto Workers (UAW) at the General Motors plant resulted in increased wages and recognition of the union in the workplace, but also inspired a wave of strikes at other manufacturers that improved worker conditions across the board (Terrell, n.d.). While it might seem far off now, in 1836, women working in the Lowell textile mills went on strike to protest their 12-hour workdays, constant pay cuts, and abysmal working conditions. They ultimately were unsuccessful in their strike, but they paved the way through their organized union to push a 10-hour workday bill to be passed in New Hampshire (AFL-CIO, n.d.). Politicians faced political pressure to make peace and appease the striking workers even if it would not fulfill all of the worker demands. However, in a world in which no labor stoppage occurs, the pressure on politicians to change is diminished. Why give concessions if the status quo is tenable? In Colombia in 2020, unions went on a general strike in the country to protest the economic austerity measures by the administration of president Iván Duque (Faiola, 2019). Their strike garnered international press attention for their demands and the brutal treatment of protests by the Duque administration.

Someone might object to the idea that *striking* is a right, even if they accept that withholding labor is a right. After all, people have the ability to quit their job, and this is sufficient control over their labor. In response, it is important to point out that strikes support workers' bargaining efforts in a macro sense. A strike can do what quitting can't: improve the job and the community. As a method of pressure on both firms and governments, workers can get their demands heard and met while retaining their economic lifeline of work. Workers protesting mass suppression do not want to leave their job permanently, but they do want to express discontent with the status quo. As James Pope outlines, an individual quitting is not enough to actually redress the harms that people experience in their jobs. After all, if one person quits a job because safety conditions are bad or pay is low, that will not change the workplace. Quitting is only control of your labor in a very minimal sense because to really control your labor you need to have control over not only whether you provide it, but also the conditions in which you work. People without the capacity to withhold their labor are at a severe disadvantage to win rights to safety in their workplace. If workers in a hot climate complain to the boss that they would like their shop to install air conditioning and their boss refuses, what recourse do they have? Asking for a government inspector might work, but will assuredly take a long time and has no guarantee that change would occur. Workers being organized into unions greatly increases safety; in the construction industry union shops were, "19% less likely to have an OSHA violation and had 34% fewer violations per OSHA inspection than non-union worksites" (Ford & Freund, 2022).

The imbalance of power and information between the employer and the employees means striking is necessary to make this possible. The labor power of the employer (capital, resources, etc.) can be easily moved while the labor resources of workers cannot be relocated easily without

major disruption to their lives. The inanimate parts of capital can be liquidated into cash, but human beings cannot be. Workers cannot control the “supply” of their collective labor, so it is easier for employers to find new employees than it is for employees who have been let go to find a new job (Pope, 2010, p. 1556). The Wiehahn Commission, designed in South Africa to give recommendations on a revised labor code, outlined that without the power to strike during negotiations, they ultimately “result in...collective begging” (Conradie, 2016). The suggested revisions emphasize the problem that workers incur when they are left on their own to negotiate with companies. By exercising a right to withhold labor as a group, they can force changes to occur. These major imbalances are what withholding labor collectively, or striking, seeks to remedy.

Now that it is clear that there is a moral right to withhold labor and to strike, there is an important question of how this right should be integrated into the state. John Locke argues that citizens make a social contract with their government. In this contract they submit themselves to the authority of the government in exchange for protections of their, “property, that is, his life, liberty and estate, against the injuries and attempts of other men” (Locke, 1946, pp. 42–43). I justified the right to strike with Locke’s theory of labor that your body and its labor are your property. Striking is a way of controlling labor and your “property,” so then the social contract that protects the “property” of men also protects your right to strike. The government has a responsibility to protect these rights for all workers.

Worker advocates have long felt that the strike is a moral right that must be upheld as a legal right as well. In the United States the government has already established striking as a legal right through legislation on labor law. The National Labor Relations Act (NLRA) establishes the

right for workers to organize into unions, bargain collectively with companies, and most importantly, strike, but with multiple exceptions for agricultural workers, public employees, railroad workers, and aviation workers (McCammon, 1990). This raises an issue of fairness for workers who are excluded from the legal protections for this moral right. Theoretically, railroad and aviation workers can go on strike, but Congress has acted to intervene and enforce a new contract or status quo contract on rail workers 19 times in total (U.S. Chamber of Commerce, 2022). The government gives the full right to strike to other types of transportation workers: UPS, city transit workers, and other logistics workers can all go on strikes. Since striking is such an important moral right, it needs some form of legal protection by the government. That does not mean that the government cannot enact any restrictions on this moral right, but currently workers in rail and air effectively have no such legal right. This imbalance is unfair to these workers. It creates an unjust work environment when workers in different industries have differential protection of rights allowing them to improve their material situation. If the government does not adequately protect the moral right to strike, it implicitly admits that it does not respect the rights of all workers.

The striking restrictions on these workers comes from a school of thought that classifies their work as “essential” and thus exempt from the regular right to strike. The idea is that the economic and social costs that would ensue from the strikes of “essential” workers swamp their right to withhold their labor like other groups of workers. What a country defines as “essential” work varies significantly. The International Labor Organization (ILO) does not object to countries proscribing the right to strike in limited circumstances, as a labor stoppage could result in “public hardship,” but explains that equal measures should be taken to ensure the employee’s ability to collectively bargain (Okene, 2009, p. 558). However, under ILO standards, railway

workers and aviation workers do not fall under this category of “essential workers” (ILO, 2006, p. 121). The ILO clearly suggests that a balance is needed between the disruption of a strike and certain services for societies, but where is that line? There are workers that the ILO fully supports classifying as essential and thus curbing their ability to strike, such as workers in electrical and water facilities. Without these services everyone can incur harm. Denying someone possibly lifesaving treatment would be in direct conflict with a medical professional’s right to go on an extended strike. In the United States, nursing unions are required to give a 10-day notice to their strike and transfer patients from their hospital to other locations to make sure that people are still treated (NNU, 2022). Precautions are taken in the medical sector to guarantee that healthcare workers have the right to strike while still balancing the interests of their patients. The same questions arise for rail and aviation workers. Can the right to strike be protected while minimizing the negative consequences that occur as a result of exercising this right? Finding a balance between the two is key.

Governments usually try to institute strike restrictions when strikes happen in industries that incur greater economic and political liabilities. However, it is important to note that strikes can have significant impacts no matter what sector they take place in. The Teamsters strike of the United Parcel Service in 1997 resulted in a loss of \$780 million for the company within 15 days (Raney, 2013). The recent large strike of UAW workers went on for 41 days in total and private analysts put the total cost at around \$10.4 billion for the economy as a whole (Anderson Economic Group, 2023). On the other hand, the estimated damages of a potential railroad strike in 2022 were put at around \$1 billion in the first week of a potential strike (Anderson Economic Group, 2022). Simply putting a dollar amount on the damages of strikes is clearly not an accurate demonstration of whether or not a strike should be permissible by the federal government. By

totally prohibiting these workers from striking in any fashion, the government is choosing to violate their moral rights. The economy is clearly important for the wellbeing of a country, but so is upholding the moral rights of its citizens. Locke's social contract between state and citizen requires the state to make an effort to protect the individual rights of its own people. The point of a strike is to inflict economic damages so that workers have leverage in negotiations. The US government should protect these classes of workers as it protects other workers.

3.2. CURRENT PERSPECTIVES

So far, I have argued that we need to better protect the labor rights of railroad workers. While there is a limited amount of literature on how we might do this, some possible policy solutions have been suggested, largely involving reforming or replacing the RLA.

Some have championed the growth of restrictions on organized labor in the rail industry. While they might pay some lip service to the importance of the right to strike, they often dismiss the necessity to protect it as one. Within the status quo, some scholars and industry analysts agree that workers *should* have a right to strike—even if they are workers in the railroad industry (McCabe, 1993, p. 137). However, they do not advocate for this right to be expanded in any way, nor do they argue that current restrictions are too strict. The RLA may need to be adjusted in various ways, they admit, but it still should essentially prevent most strikes. The government intervention into union contracts is not in itself a bad thing.

Some scholars posit that the current procedures in the RLA do not need to be changed *at all*, since that government intervention itself is expected in rail negotiations. Professor of Labor Relations Charles Rehums argues that the ad hoc nature of emergency government intervention is to the advantage of all parties. None of the parties involved can use the theoretical intervention

as a tactical device in negotiations (Rehmus, 1990, p. 188). It is important to note, however, that Rehmus's analysis comes before the strike/lockout of 1992 and the most recent government mandated contract of 2022.

Industry scholars that support the RLA include past Vice President of the Association of American Railroads, Frank Wilner. He argues that the RLA is effective in achieving its purpose of limiting industrial strife in critical transportation sectors and that instead only needs to be amended (McCabe, 1993, p. 137). He takes issue with the fact that the RLA allows secondary striking among workers and it should be banned just like it is in the NLRA. Secondary strikes or sympathy strikes are where unions strike in solidarity with another labor union to support their cause through combined action. Usually between unions in closely related fields, sympathy strikes allow the initiating union to gain more power and leverage while building a closer bond between the two groups (Warneck, 2007). Industry supporters like Wilner want this practice banned to limit the spread of strikes.

Other advocates set aside the lip service and argue that workers governed by the RLA should not have access to any self-help procedures. They critique the law for giving the unions too much power because it encourages unions to blow up negotiations so that they can ask for even more at the government negotiating table (McCabe, 2014). They seek policies such as a ban on secondary picketing and boycotts that are currently permitted in the text of the law (Reynolds & Schansberg, 1991). However, they typically want to go further than just light revisions. For instance, some have proposed that top administrative officials be given the ability to enjoin strikes in the rail and airline industry if they believe it would seriously harm the public (Goulard, 1972, p.268). During his presidency, Richard Nixon proposed expanding the presidential powers

of designating “cooling-off” periods, the possibility of partial operation of a struck industry, and final-offer selection (compulsory arbitration) (Kilgour, 1971). John Kilgour still suggests this as a remedy, but caveats that the use of final-offer selection, or compulsory arbitration, would be the most commonly used out of all. This is effectively supporting a formalized end to the collective bargaining rights of the workers. While maybe only a difference in phrasing, these scholars support the outright cessation of any self-help industrial action for railroad workers in clear language as opposed to continuing with the status quo.

Other proposed changes to the RLA from this group generally involve an expansion of compulsory arbitration. William Curtin argues that the best remedial option would be the suggestions of the American Bar Association on the expansion of congressional authority in a meditative manner (Curtin, 1969). Some scholars describe the failures of collective bargaining between management and unions caused by “the personalities, competence, or ambitions of the individuals at the bargaining table,” arguing that this must be resolved by expanding the authority of Presidential Emergency Boards (PEB) (Wisehart, 1967).

These types of proposals don’t fully appreciate the importance of the right to strike for workers. Moderate tweaks or getting rid of workers’ right to strike all together are not viable solutions. Eliminating a right completely raises obvious ethical concerns and incremental changes do little to revise a system that has already radically changed. This is why I next look at what research is being done on how best to advance the protection of workers’ rights on the railroad.

3.3. CURRENT RESEARCH

Scholars differ about the degree to which railroad strikes should be thought of as “national emergencies.” The first pro-labor author proposal on reforming the RLA emphasizes the deep problems strike restrictions cause and argues that this means the RLA as a whole needs to be overturned. While management might normally fear compulsory arbitration because it could lead to further industry controls, railroad companies do not because the existing regulations give them the advantage (Kaufman, 1952, p.274). Other authors supportive of labor have expanded on this, explaining that the RLA prevents strikes altogether, which makes it impossible for rail unions to challenge business practices like PSR (McCartin, 2023). This also happens in the airline industry, regulated by the RLA, which forces workers to seek quicker settlements instead of expanding on their actual demands (McCartin, 2023). There are other criticisms of airline companies in the literature; they have sought remedies in the court to deny unions the right to strike, and greatly delay negotiations as opposed to encouraging productive bargaining (Stephens, 2008).

The problems of the RLA are clearly outlined, but the only proposed solution is that the entire act should be struck from the books. Yet allowing striking without limits of any kind risks reactionism from the government in response to the deep economic harms. The costs of uninhibited strikes could be high and American history around rail strikes shows how viciously these can be dealt with. The authors do support more fundamentalist arguments made by bargaining theorists that some striking is necessary for workers so that they can remind management that their “weapon” is dangerous (Ashenfelter & Johnson, 1969). Yet what that reminder should be is never explicitly spelled out.

The next proposal from scholars is an attempt to find a balance between labor rights and the stated government and business interest of keeping economic order. Variable strike options are offered as an answer to square the balance of the right to strike and the economic impacts such as “selective strikes” in which workers would only strike one company (Kaufman, 1971, p.70). Past labor leaders, particularly in the rail industry, advocated for creative uses of different strikes as a replacement for the traditional open-ended strike. Ideally it is a strike that has a limited scope that would not affect national industry too harshly but would still provide workers the ability to withhold their labor. In general, variable strikes are limited economic actions; they can be limited via participation, duration, and mixes of these different characteristics.

Restricted strikes are a promising strategy to overcome the dangers of government backlash to full walkouts. They offer an alternative that could possibly mediate the worst economic harms that come from an unrestricted strike. However, little has been done to expand on this idea of what restricted strikes would look like and in what way strikes should be limited. It is still unclear in the literature which of the various ways to limit strikes is the most effective at protecting rights while reducing cost.

3.4. CONTINUING RESEARCH

While the literature has some varied opinions on the right of railroad workers to strike, the majority comes from as far back as the 1950s and slows down by the 1980s. In large part this is due to the decline of unions; the U.S. Bureau of Labor Statistics reported that the percentage of Americans in labor unions had gone down by half since 1983 (U.S. Bureau of Labor Statistics, 2022). This has caused a corresponding decline of literature being written about unions as they have become increasingly marginalized. Especially in the United States, both the practice and

study of labor unions, rights, and worker history has dried up. Thus, any literature review inevitably depends mostly upon old sources, even if the issues are still pertinent today.

However, this year could change the dynamic. Multiple strike waves have occurred, possibly influencing more researchers to examine these fundamental economic actions. The outright denial of railroad worker's ability to strike happened in the open this time. Violations of labor rights have become much more open as companies act with impunity. Yet workers are speaking up now and using their labor power to demand more. The UAW strike has been widely reported on with its new strike strategy and far-reaching impact. Ignoring labor in the literature will not be possible as it becomes a more important part of political, social, and economic society. Future authors will have to deal with this new dynamic in the labor movement.

In the following chapter I will look closely at the second proposal in the literature: how and why restricted strikes could take place. Further developing these alternatives will be crucial for the literature going forward. The policymaking options are in reality much more diverse than the current discourse would suggest. Thus, evaluating if they are truly effective is the next step.

CHAPTER 4: METHODOLOGY

So far, I have argued that strikes are an important right that protects a person's dignity and should accordingly be preserved. Yet preserving the right to strike in railroad workers risks harming the economy, given how significant their role is in transporting goods and people across the country. Part of the reason why this problem might seem so challenging, however, is due to a naive belief that striking is an all-or-nothing affair. Either we protect the rights of railroad workers to strike or we don't. Yet in the previous chapter, we saw that Kaufman 1974 suggested selective strikes as a potential solution. There are various categories of strikes, each with certain limitations on how they operate. Drawing inspiration from Kaufman, perhaps railroad workers should have the ability to engage in some kinds of strikes but not others. If certain kinds of strikes will sufficiently protect rights while limiting economic harms, we should legally protect such strikes in our legislation.

In this chapter, I explain various kinds of strikes, classifying each by category. Then I explain how I will evaluate each category of strikes in the following chapter to determine how well it protects rights while limiting economic impact.

4.1. TYPES OF STRIKE POLICIES

I divide the evaluated strikes into two umbrella categories: unrestricted and restricted strikes. Unrestricted strikes, like the name implies, have no limits imposed on them by the

government. Workers can walk off as long as they want where they want. Restricted strikes are industrial actions that have government limitations. The limitations that I will look at for these strikes are participation, duration, and strikes that mix these limits.

4.1.1. UNRESTRICTED STRIKES

The first and most common type of unrestricted strikes are *open-ended strikes* in which all workers walk off the job. These strikes are indefinite until terms are met in the negotiating room. The summer of 2023 was marked by the Writers Guild of America strike, which took five months and saw 11,500 union members participate (Barco, 2023). There was a full stop on all live shows, movie and TV scripts as all workers left the job and did not return until a new contract was hammered out between management and the union.

Next are *wildcat strikes*. These are like open-ended strikes in that all workers walk out of a workplace to cease their work, but they happen spontaneously. The distinction is that economic strikes like that of the UAW are legally recognized as legitimate by the government. The union leadership called for a strike vote, the workers voted to strike, and when sufficient changes were not made at the negotiating table they struck. Wildcat strikes skip all of this and go straight to the strike. They do not have approval of the union leadership that generally makes the decision on whether or not the group should commit to a legally recognized strike. They are in a category to themselves.

Last are "*sickout*" strikes. In this type of industrial action workers call out sick at the same time to give a cover to their wildcat strike. These actions generally last for shorter durations than a full-on wildcat strike due to workers only "striking" when they are out sick. They may or may not have the okay from union leadership. They are illegal in the United States,

so even if a union suggested their workers call out sick they would not admit it for fear of legal liability.

4.1.2. RESTRICTED STRIKES

There are three main types of restricted strikes discussed in the literature: participation limited strikes, limited duration strikes, and mixed strikes. Mixed strikes use some combination of restrictions on participation, and duration.

The *selective strike* is when workers strike a certain company out of a multi-employer bargaining group to win better concessions and force other companies to concede to these terms. Particularly in the realm of railroads, this allows unions to adjust the participation levels by striking workers of certain train operators.

Short strikes for a few days can be used as “warning shots” against companies to bring pressure in negotiations. In the US these are common among healthcare workers who cannot strike for prolonged periods; the recent strike of Kaiser Permanente by nurses lasted for only three days (Isidore, 2023). These strikes are heavily time restricted, as workers are only able to walk off for a limited amount of time.

Intermittent strikes are when workers strike and then return to work on a periodic basis within one industry or company. This can take the form of a strike schedule, as is common when transportation workers strike in Europe, where the various strike dates for the month are laid out. How far in advance and how often a strike schedule is made depends on the union and relevant interests. Depending on the relevant government regulations, workers can notify the public even later about the strike. These strikes primarily rely on duration restrictions in which workers only walk off the job for a certain amount of time each week or month without losing their jobs. In the

cases I look at there are variations in the participation levels of workers in these strikes, but participation is *not* a restriction. All workers could potentially participate in the strike; they are not prevented from striking from a policy standpoint.

Rolling strikes are yet another variant in which a union calls for strikes but orders different types of workers to strike at different times or strike various employers in a multiemployer sector at different times. For example, signalmen strike on Monday, engineers on Tuesday, and dispatchers on Wednesday. Alternatively, workers could call for a strike on Norfolk Southern on Thursday and a strike on BNSF rail on Friday. The repetitive nature of these strikes builds pressure on companies to come to the negotiating table. These strikes use restrictions on the duration of the strike and the number of employees to limit the worker action. Rolling strike strategies may differ in which of these limitations is emphasized (in the example of striking multiple companies at different times, geographical restrictions are highlighted) but are a mix of all restrictions.

Instead of continuing to use a dated labor management law from the 1920s, it is worthwhile for the government to explore alternatives to the current labor regime. The current system always ends in emergency action by the Executive and Congressional branch, yet that is not functional. While it may make commerce flow, that does not mean it is sustainable. The anger of railroad workers this time was palpable. Before the RLA, wildcat strikes of unhappy workers were much more common and caused even more economic chaos. Too much abuse of workers and the government may well end up with an outcome it did not want in the first place. Order may be a priority, but it must be balanced against other rights as well. Workers right now at least think they have the ability to strike codified in law, so the government needs to negate

this fact outright or explain what the right really encompasses. Otherwise they risk further instability.

4.2. METHODS OF ANALYSIS

I consider two factors in determining whether a type of strike is one we should legally protect for railroad workers: cost to the national economy and ability to protect worker rights. Finding a striking strategy that can maximally fulfill both of these criteria is key to creating functional labor law. I compare the effectiveness of strike policies in these criteria to how effective open-ended strikes are. As previously demonstrated, when President Joe Biden or other policymakers think of a rail strike, they only imagine an open-ended strike. Thus, it makes sense to compare other possible policy alternatives to the current strike strategy that is functionally prohibited.

First is the economic impact of the strike itself. Based on duration and strategy, strikes on the railroads can have varying levels of impact on the economy as a whole; not all strikes are created equal. It is important to analyze this point of contention, as it is the primary reason most politicians, President Biden included, cite when passing legislation to lengthen the bargaining period or impose a new contract altogether (The White House, 2022). In the literature, the economic nature of striking is also presented as the most dangerous element of exercising the right. Workers are trying to cause economic damage to the company to extract concessions. As such, I look at the economic cost to the national economy that each strike causes as indicated by the data.

The most common economic indicators that economists look at for rail strikes are the lost wages of workers giving up their labor, direct losses in revenue to operators (governments and

private companies), the effect of production slow-downs, spoiled goods, and indirect losses to adjacent industries. Not all economic analyses of strikes contain all of these variables.

Particularly, those done in the United States do not include indirect losses, as they can be difficult to calculate since a national strike has not happened for some time.

When these data points are not available for the United States, international counterparts are examined to demonstrate what a strike can look like in a modern economy. The criteria for international comparisons are other Organization for Economic Co-operation and Development (OECD) countries with high levels of economic development that experience national-level rail transportation strikes that affect the entire country. Countries that have the most data available on the economic impact analysis of strikes are preferred. In particular, I look at strikes occurring in the United Kingdom and Germany. Both share some characteristics of the US rail system. The UK, like the US, has a fully private rail system, while Germany has a semi-private system where the government-owned Deutsche Bahn runs a majority of track and train services.

In one case, I examine the 2018 rail strike in France, because rail workers were the primary strikers during the time and thus the economic effect can be more clearly determined. Recent rail strikes in France have come as a part of a wave of strikes across all industries against government reform of the pension system. Since all industries went on strike, it would be very difficult to separate out the sole cost of the railroad workers who walked off the job. Substantive economic analyses have been made about the impact of current rail strikes in each country. While not one-to-one comparisons, they offer a window into how other industrialized countries are impacted and provide markers by which to judge the relative scale of a certain strike.

Preliminary industry and governmental reports offer a brief look at what the costs of strikes could be.

Second is the degree to which the strike policy upholds a worker's right to control their labor and the rights that follow as a result. I examine the effect on workers' rights based on the pressure created by the strike. I am not looking for the strike that simply creates the most pressure, but which one creates pressure that most effectively protects worker's rights. I evaluate how the company feels the pressure via the indicators of the economic cost to the operator and the reputational cost to the operator. I look at how successful the pressure was by examining the willingness of the operator to come to an agreement, and the concessions that workers win at the bargaining table. The first two indicators demonstrate how workers reached the results that protect their rights. Not all strikes impact these factors equally. Some may create a massive burden on the other party but end up only winning a small number of concessions. The economic cost to the company is based on the previous cost estimates in the economics section. Reputation is evaluated by the way in which the strike affects the operator's capacity to serve consumers. Willingness to negotiate is determined by the speed at which the operator reaches an agreement. I look at concessions in terms of the final contract agreed upon by the two parties after the dispute and compare these to the concessions that workers had asked for at the beginning.

There are also ways in which outside factors can impact the pressure generated by a strike. Industrial actions do not happen in a vacuum; economic recessions, government and private interests all play a role in determining the outcome of a dispute. Accordingly, it is important to not simply rely on the number of concessions won when evaluating pressure. Some types of strikes may be effective at creating pressure, but due to luck, certain outside factors

impact the ability to make this determination. Taking all of these factors into account when possible will ensure I am able to more accurately determine the pressure a certain type of strike carries.

CHAPTER 5: RESEARCH

I will be using the aforementioned methodology to look at the economic impact of strike actions and their ability to exert pressure for workers' rights. I'll look at unrestricted strikes first, as these are the traditionally more common occurrences in American contexts, and they can provide a baseline for comparison with other types of strikes. Then I will look at the alternative policies of restricted strikes. I will break these down by the aforementioned categories of participation, duration, and mixed strikes.

First it is important to understand that the current system is de facto compulsory arbitration. This is where a government-appointed arbitration board negotiates a settlement that both parties are forced to agree to. The economic cost is zero, as neither side engages in a strike or lock-out ending services. It causes the least disruption in the short term out of any industrial policy and facilitates the fastest movement of goods and continuous service. Yet in terms of rights protections it offers very little to workers. They are not given any sort of ability to withhold their labor; any and all industrial actions become explicitly illegal in this circumstance. If the arbitration board ends up favorable to the companies, there is no counterbalancing action for the workers. The recent negotiations of the PEB called by President Joe Biden demonstrate this. The board did not call for any sick days after the workers had made it one of their largest complaints, and after Congress legislated this contract, workers had little recourse to change the decision.

However, in the US this system historically comes at a risk. Before the RLA in the 1920s the RLB that governed labor relations on the railroad faced similar issues. It functioned as a regulatory body that set out wage scales and regulations of labor conditions on the railroads. While union brass, companies, and government officials had agreed on the system, rank-and-file members were upset by the lack of concessions. Since workers thought it was overly influenced by company officials, there were waves of large strikes, often wildcats, in protest of the decisions the board made on pay scales. The railroad labor movement today is much smaller and less militant than its 1920s counterpart, but the nation's past history with compulsory and binding arbitration cannot be ignored. Continuing this policy risks unbalancing American industrial relations.

5.1. UNRESTRICTED STRIKES

Unrestricted strikes where workers walk off the job indefinitely are the commonly cited counter-balance to the current system in American labor. When President Biden says he wants to avoid a strike it is these industrial actions in particular that he has in mind.

5.1.1. OPEN-ENDED STRIKES

Traditional open-ended walkouts are, in other non-RLA regulated industries, where the most data is available in the United States. No matter the industry, the most common type of legally recognized labor stoppage is a walkout for improved economic conditions during the period when the contract has lapsed between the union and the company. These types of strikes are how workers usually win concessions from employers in the United States. The prior example of the Hollywood strike shows that workers who engage in long-term walkouts can win big.

Additionally, while an open-ended walkout has not happened for decades in the United States, there are significant concerns about the possible economic impact. If the railroad workers had walked off the job in 2022, the Anderson Economic Group estimated the first week could cost \$584,387,959 (Anderson Economic Group, 2022). This number primarily comes from the direct costs of the strike. They explain in their methodology that this number includes direct losses to striking workers in the form of wages, losses in ticket sales for commuter trains, losses to freight companies, and losses to producers in the form of spoiled goods that can't be moved. It is important to note that this estimate does not include the innumerable indirect costs to suppliers of the railroad, the various businesses that depend exclusively on rail to provide goods, and indirect costs to consumers. They also make assumptions on the ways that producers will substitute rail transport with other modes such as boat and semi-truck.

Not all estimates are created equally. The American Association of Railroads, a pro-industry advocacy group, estimated that a possible strike in 2022 could have cost the economy \$2 billion per day (AAR, 2022). However, while this number was cited in multiple outlets, it did not have a clear methodology for reaching this conclusion. In fact, when the Anderson Economic Group (AEG) created their estimate for the cost of the strike they added that this number came from taking the past \$1 billion per day estimate of the Bush Administration in 1992 and simply multiplying it by 2 (AEG, 2022). The analysis, while widely cited, is indicative of the lackluster attempts to understand the impact of American rail strikes. The industry outlet does not try to account for changes in the industry, freight shifting from rail to other modes of transportation, or properly account for the direct costs.

Since open-ended strikes are essentially prohibited for rail workers through Congress imposing contracts, and data is therefore sparse in an American context, I look at how these strikes function in Canada. It is one of the few countries to have indefinite strikes on its rail network. Like the United States, commuter rail is relatively uncommon, so when strikes occur they most acutely impact the flow of commerce. Canada's rail network is also privately held, and the government has the power to intervene in labor disputes much like the US. However, in Canada this power is not as commonly exercised.

As recently as 2019, rail workers went on strike against Canadian National Railway Co. Industry-specific estimates from fertilizer groups put the cost of the eight-day strike at CAD \$200 million to CAD \$300 million. Broader estimates from TD Ameritrade Canada economics research department put the cost of the strike from CAD \$1.6 billion to \$2.2 billion to the economy as a whole. The estimates have wide margins of error, but are indicative of the challenge of precisely estimating the cost of these strikes. Beyond immediate direct costs incurred by industry actors (i.e., the workers, the suppliers, the rail companies) the subsequent indirect costs to the economy are much harder to estimate. The substitution effect also comes into play as rail transport during a dispute is traded for trucks or boats. This can continue even after the strike comes to a close, as some consumers switch to only trucks instead of rail. However, how much of that switch is due to the strike or a general overall shift away from rail as the primary mode of freight transportation? Strikes are difficult to remove from overall macroeconomic situations.

At least in the case of Canada, the strike did not cause an economic recession to take place in late 2019. The economy was still robust until the onslaught of the Covid-19 pandemic, which did in fact cause a recession in the country (C.D. Howe Institute, 2021). While the strike may not have caused a recession, it did cause a significant economic hit to productive sectors reliant on the railroads.

The sources of pressure created by open-ended strikes comes from the first two indicators. The economic costs of the strike as previously stated are very high to the company, creating more pressure to respond to demands. Since the strike can theoretically go on forever, the strike risks exponentially increasing the economic costs. Conversely, at least in the Canadian context, companies were pressuring the government to stop the strike. The pressure was so great that the companies wanted the possibility of open-ended strikes to be gone completely. The government didn't end up stopping the strike but the possibility remains. This means that pressure theoretically could be significantly reduced. In terms of reputation cost, there are only two Canadian rail companies, so the strike of one has minimal effects on consumers' ability to substitute the service. The reputation of the company may suffer to some degree under this form of strike but it depends more on exigent attitudes to the union.

The high levels of economic pressure brought by the strike resulted in more willingness to sign, as the company and the union were able to come to agreement before the government could intervene. In terms of concessions, the worker's primary focus from the beginning of negotiations had been on the matter of new safety measures to address worker fatigue. The union won back rest provisions for conductors, stopped mandatory overtime for exhausted workers,

won extra pay for workers when they are forced to work through their rest periods, and the stipulation that worker's shifts would start at the locker room instead of counting trips to the locker room as off-duty time. They also won wage increases of 8% over three years, a CAD \$1000 ratification bonus, and an increase of the lifetime health and welfare payout cap from \$60,000 to \$75,000 (Meunier, 2020). However, the president of the Teamsters Canada Rail Conference still stated after the negotiations that, "the core problem of fatigue in the rail industry can only be resolved through government regulations." Shortfalls were still apparent in the contract, and while companies have taken some actions, they still refuse to recognize rest and fatigue as safety issues (Ibid). While pressure primarily on the company's finances was high, the union was not able to fully address its greatest safety concerns. High pressure does not guarantee all concessions are accomplished, which is not the only marker of success. This important for understanding the rest of the strikes.

Canadian workers thus enjoy a much fuller expression of their rights. They were able to withhold their labor completely and indefinitely until they reached an agreement with Canadian National Railway. In turn, they won various safety protections to deal with the exhaustion workers confront on long railroading shifts. At the same time, there were high economic costs to the strike. Estimates are inaccurate; the estimate from TD Ameritrade projected the strike to last a few days longer, and the estimate from the fertilizer industry only covers sectoral costs. Yet they demonstrate that the strike did cause high levels of economic damage. It is important to note as well that during their strike there were high levels of pressure on the Liberal government to order the strikers back to work (Connolly, 2019). Canada has a labor law very similar to the US, but the governing center-left party is more permissive with strikes than the current US

government. Workers are still at risk that an unfavorable government would order them back to work. Canada shows that without government intervention, strikes can resolve industrial disputes and help workers win some of their safety aims. However, if the exercise of their rights is only possible during a favorable administration, then the law and constitution of the country are not properly protecting the rights of workers.

5.1.2. WILDCAT STRIKES

Wildcat strikes can turn into some of the most costly strikes. In the United States there is not a recent history of wildcats on the railroads. However, the Pullman Strike of 1894 remains an important example of what they can look like. The strike was initiated not by Eugene Debs or the ATU but by workers at the Pullman train car factory that were fed up with wage cuts. As the strike spread across the United States from Chicago it brought a wave of economic hardship. Even though most of the striking workers were concentrated in parts of the Midwest, the strike practically shutdown the entire system of rail transportation in the United States. Estimates put the number of striking workers as high as 250,000 across 27 states, which effectively halted huge swaths of economic activity (Urofsky, 2024).

Property damage and security cost \$685,308, railroads lost \$4,672,916 in earnings, and workers lost \$1,389,142 in wages (Hannon, 2010, p. 35). Adjusted for inflation in today's dollars these costs would be \$24,576,818 in property, \$167,582,178 in railroad earnings, and \$49,818,024 in wages (Webster, 2024). The abrupt manner and long duration of the strike caused significant economic damage. Rail was still in the process of being integrated into the American economy at this point but the impact was still large.

It is the fullest expression of workers' right to withhold labor. In a wildcat strike there is no mediating barrier through the government or through the union for when workers may exercise their right. They choose to strike and they get to strike. The pressure that these types of strikes create is immense. The economic cost to the operator is huge as they have no way to prepare to run emergency services during the strike. The companies in the case of the Pullman strike had thought they would have regularly operating services, and then the next day they didn't. The reputational cost of a wildcat does not fall that hard on the struck company. Generally, the frustrations of the public center on the striking workers who have ignored the traditional legal processes of declaring a strike to just walk off the job. In the case of Pullman, the legal process to declare a strike did not exist, but generally unions at the time would announce if they were going to strike or not.

While pressure against the companies was high, it was also high against the workers themselves, which set them up for difficult post-strike negotiations. The Pullman strike did not result in massive concessions for workers. In terms of willingness to negotiate, the companies involved in the strike were completely intransigent. Instead, companies sought government intervention. Federal injunctions were quickly issued barring workers from participating in the strike, setting the stage for labor law by conjunction. Concessions by and large were fairly weak. Wage increases were not won, workers still faced discrimination in company towns, and new safety regulations were not introduced. There were no legal mechanisms at the time for workers to win concessions through arbitration or negotiation; these were all voluntary on the part of the company. The combined absence of workable legal remedies and staunch government opposition meant that striking workers won few concessions even though the strike paralyzed the nation.

The effects of the strike were so great that it largely neutralized the ability of labor unions to strike in the near future. If impacts are too cataclysmic the resulting government intervention can end up putting workers further behind.

While the Pullman example is important to discuss in understanding American attitudes and reactions to these types of unrestricted strikes, more recent examples are needed to demonstrate what they look like in a modern context. In France wildcat strikes are more common across industries, including rail transport. While France has much more liberal strike laws, wildcat strikes are still technically illegal. The political strength of the unions means they have more leeway to bend these laws. On December 21, 2023, French rail unions ended a day-long wildcat strike of the Eurotunnel, a train link between France and Britain (Le Monde, 2023). The strike only lasted six hours but still caused massive disruptions for people looking to get home in time for the Christmas holidays (AP, 2023). The workers had been protesting the end-of-year bonus from the company, saying that profits had substantially increased, so they deserved a bonus three times the company offer of 1,000 euros (Ibid).

It is important to note that this specific high-visibility strike was only possible due to a loophole in French law. Normally the requirement that parties are to be notified 48 hours prior is legally enforced, and strikers who do not follow this procedure can face disciplinary measures (Guedes, 2018, p. 4). Additionally, as discussed previously with the 2018 rail strike in France, there are minimum service requirements that mean even if some workers walked out on a wildcat strike, other non-striking workers can be requisitioned by the government to provide what local officials deem as minimum service.

The short duration of the strike means that the economic damage was very limited and thus difficult to calculate. A six-hour stoppage of one rail line primarily affects the commuters who are suddenly stranded. The greatest damage was in terms of distress and anger caused to consumers who were without immediate alternatives to using the tunnel to cross. People did not learn about the strike until they arrived at the station to find their trips canceled.

Wildcat strikes are a very full expression of workers' right to withhold labor. It is an expression of this right with no inhibitions; all the workers protest the conditions of their job without jumping through any of the government or union hoops. The indicators of how the pressure was made during the French strike mirror that of the Pullman strike. The economic cost to Eurotunnel was not very high, but only because the strike lasted less than a day. Many of the day's trips had to be rescheduled, but costs did not extend very far beyond this. If the strike had lasted longer it could have had a much greater impact. In regards to reputation, both the union and the company suffered. The union was the source of most consumer ire since they had not previously announced the strike (Williams, 2023). Nevertheless, common sense would suggest that there was some impact on company reputation due to the strike creating doubts in the company's ability to provide consistent service between England and France.

Primarily due to quirks in French labor law, this wildcat strike was able to turn its high pressure into results. In terms of willingness, the company was clearly very willing to negotiate; the strike did not go on longer than the day, and the two parties had already rejoined negotiations. The concessions won were significant for the workers. The workers had demanded a tripling of their holiday bonus due to the high profits of the company, and they won that bonus

(De Poorter, 2023). Fast concessions and high burden on the rail operators show the high pressure that workers were able to exert. However, most places have fairly developed legal regimes to crack down on these types of strikes, resulting in more oppression of the workers than they were often facing in the first place. The public backlash and institutional backlash to these kinds of strikes makes them very rare, especially in industries of greater importance like railroads. While workers may not be limited when they strike like this, they are not necessarily the most effective way to strike. They do still happen in select circumstances but are often indicative of the workers reaching a breaking point.

Wildcat strikes have some of the largest economic impacts but moreover cause wide public discontent because of their lack of prior warning. For workers on the job, it is a question of strategy to use a wildcats strike to leverage management. However, for consumers who suddenly cannot access the goods and services, it is a question of why suddenly there are massive shortages. Workers are faced with the question to what extent they want to sacrifice the versatility of the strike action. Thus, there is not much recent economic data on prolonged wildcat strikes. Wildcats do not even always succeed in their initial aims to protect worker rights as the government often intervenes to break the strike. Wildcats may seem like the highest pressure strike, but the backlash often impacts the workers the most. The company has less incentive to give into demands, and so the pressure created might be less than in open-ended strikes.

5.1.3. SICKOUTS

Sickouts are a common form of wildcat strikes. A group of workers calls out sick from work to slow down and halt operations but are not explicitly ordered to do so by union staff. Many times, sickouts occur because the rank-and-file membership is unhappy with the union leadership and want to force the hand of management and the union for more concessions.

Recently in 2022, locomotive engineers, a part of the Brotherhood of Locomotive Engineers and Trainmen (BLET), organized a sickout on Juneteenth. Hundreds of engineers called out sick: 205 on Friday, 143 on Saturday, and 133 on Sunday. This caused hundreds of trains out of New Jersey to be canceled (Wilson, 2022). A judge quickly issued an injunction ordering the union members back to work (Ibid).

In terms of economic impact, the short and limited nature of the strike makes it hard to estimate. The economic impact could have potentially been much higher if the strike had gone on for longer. The severity of the economic costs is part of the reason for the government intervention. The New Jersey Transit authority stated that 100,000 commuters use the service every day, and while the strike limited rail service, some trains still ran (AP, 2022a). At the very least, thousands of people had their travel plans temporarily interrupted. Some level of substitutability existed as passengers whose trains were canceled were given free fares on bus, light rail, PATH trains, and ferries from the city (Ibid). While the union officially maintained that it did not call the strike and that members choose to call off by their own violation, the National BLET paid the transit authority \$50,000 as a settlement (NJ Transit, 2023). NJ Transit is still pursuing further legal claims against the union local.

The pressure generated by the strike ran into swift roadblocks. The direct economic costs to NJ Transit were largely limited by the short duration and incomplete participation of the strike. Many trains were canceled, but some were still running. It is worth noting that even before the sickout action the regional rail system was known for numerous canceled trains a week (BLET, 2023a). The reputational cost was twofold: aggravation with union workers who did not announce the strike prior, and further discontent with the NJ Transit authority that had pre-existing reliability issues.

As we can see, both modes of pressure were largely moot; this meant that the willingness to negotiate by the government was largely null since the action was quickly ended via injunction. The same goes for concessions. Workers did not end up winning any of their concessions, although at the very least some of the workers were able to exert their pure right to withhold labor and strike. The union is still working without a new contract in effect. They had struck on Juneteenth not only to make a point about more paid days off, but also because the wages of train engineers in New Jersey were much lower than surrounding operators. The absence of wage increases had caused massive staffing shortages, meaning canceled trains were commonplace in NJ even before the sickout. Wage increases still have not appeared. The union instead is pursuing further industrial action. BLET put out a press release that 81% of the union had voted to go on strike (BLET, 2023b). This strike faces the same obstacles in the RLA that precluded prior rail strikes, but it shows that the union still sees industrial action as the only way for it to push the hand of the state transit authority to offer competitive wages for the region. While the sickout did not facilitate sufficient protections of workers' rights, the union is seeking further action to achieve it.

Sickouts are an example of workers trying to find a middle ground: still a wildcat strike, but with a legal cover. Modern examples show that they can be effective in expressing discontentment of workers, especially when they lack alternative industrial actions codified by law. The economic cost of the disruption is limited because not all workers call off sick, some services are still provided, and they last for short periods of time. However, their random nature means they are hated by companies and the government. Often, they do not bring enough pressure to the negotiating table. Even though NJ Transit workers walked out in 2023, they still do not have a contract and are trying to legally strike this year.

Wildcat and sickout strikes create the highest degree of burden out of the unrestricted strikes due to their total lack of notice. They incur higher economic costs since companies cannot prepare ahead of time. They can also anger consumers much more because they are not notified ahead of time and cannot plan for the industrial action. However, due to the high level of pressure they exert, they allow workers to put maximal pressure on the negotiation table. Workers can exercise their right to strike in an uninhibited manner. Since the pressure is so great, however, it can result in direct government repression of the strike to end the economic harm. They suffer the highest likelihood of government intervention save for unique circumstances.

Open-ended strikes form a baseline for what strikes normally look like in the United States. However, from estimates of both possible strikes in the US and strikes that have occurred in Canada they result in fairly high economic costs. They create enough burden on rail companies by shutting down services. Workers have been able to win wage and moderate safety concessions through these industrial actions. They are functional even in modern countries today.

However, it still raises the question whether the costs can be moderated through some form of restriction while still giving workers the ability to protect their right to strike.

5.2. RESTRICTED STRIKE

Restricted strikes are those that seek to change the basic model of an open-ended strike in certain ways to maximize the effect of the strike. They may have variable levels of legality; some are more legally tenuous than others, but generally are condoned to some degree by the government. They change the basic model around a couple variables: who participates in the strike and how long the strike goes on for. These variables are changed in different ways to create different results for different purposes.

5.2.1. PARTICIPATION-LIMITED STRIKES

Selective strikes are when a group of workers select one company or area to strike to pressure concessions from the struck companies. This is particularly potent in the United States where, because all railroad companies negotiate together for a master national agreement, pressure on one party can help workers move negotiations. It limits the participation in the strike to just the area covered by the struck company.

Railroaders in the United States for a short time used selective striking by only striking certain rail lines to force concessions. It is important to note this happened in the context of various national railroad strikes being ended by the Kennedy and Johnson administration. Railroaders were looking for other options. During the heyday of selective striking under United Transportation Union (UTU) president Charles Luna, the UTU went on a selective strike in 1971. However, it is important to note that this policy has now functionally become illegal in the

United States. In 1992, the Brotherhood of Maintenance of Way Employees voted to selectively strike railroads run by CSX, but the rail companies responded by locking out all union employees on all railroads. Mac A. Fleming, president of the BMWE stated that, "The railroads blackmailed Congress and the nation by holding the economy hostage" (Knutson, 1992). That became true as Congress and President George H. W. Bush passed legislation to end the fabricated strike after two days and force the unions into a process of mandatory arbitration (Eaton & Woutat, 1992). It is still important to evaluate the possible effectiveness of this now defunct American industrial policy.

The economic impact of the strike was largely limited by the scope that it took. Union leaders at the time stated that they specifically struck Union Pacific, the Southern Railway and the Chicago & North Western Railway, because rail transportation could be rerouted and thus it would not create a "national crisis" (Shabecoff, 1971a). That same year, Congress had forced workers going on a national strike back to work twice (Ibid). That the strike went on for 18 days is a clear sign that the economic risk to national interests was not so great that Congress felt the need to intervene (Shabecoff 1971b).

In regards to how well it protects rights, some workers are permitted to withhold their labor. However, the fact that it is "some " workers is more because it is a strategic decision to only permit a few workers to go on strike. The pressure the strike created is as seen in the following two indicators. The economic effect of the UTU strike, as previously stated, was limited to a certain number of companies. We can infer from the long duration of the strike that while it had enough impact to get the companies to negotiate it did not force their hand

immediately. The cost was somewhat moderate. The reputation cost most likely impacted the companies more heavily than the union. Since the workers structured their strike to still permit commerce to flow, companies that had to shut down their operations completely likely suffered some blow to consumer confidence.

These twin points of pressure meant that the companies were somewhat willing to meet with workers and come to an agreement. Yet the long duration of the strike points to how the companies were not so affected by the pressure that they immediately folded. In terms of concessions, the selective strike resulted in wage concessions and in some of their demands for more authority in the reorganization of the industry being met. The burden on the company struck by the UTU was high enough that it felt the need to give the workers some say in the work rule changes. While the workers had to acquiesce to company demands to lengthen daily train runs, they were granted places on labor-management committees that would mediate the increase of daily runs for train crews in the context of a transportation industry rapidly being deregulated in the Carter era (Shabecoff, 1971b). However, other workers in the industry got parity agreements in terms of wages prior to the strike without having to engage in industrial action. Selective strikes are less effective than open-ended strikes in protecting rights, but they offer more protection than forced arbitration.

Selective strikes were effective to a certain degree under the UTU. The economic costs were not so large that they made the headlines of newspapers, but the strike had a large enough impact on the negotiations. Workers got the same wage concessions as the other unions that had

not struck, but they did get slightly more decision-making power in how work rule changes would be made.

5.2.2. DURATION-LIMITED STRIKES

Short strikes, industrial actions limited to a few days, are not common in the railroad sector in the United States. There are some that have happened in the healthcare sector, as previously mentioned, which resulted in successful negotiations for the workers. However, in the German rail system the usage of short strikes has been widely documented. The years after the war in Ukraine have been particularly fraught with industrial action. The German train drivers' union, *Gewerkschaft Deutscher Lokomotivführer (GDL)*, has gone on four strikes over the past six months, with two one-day strikes occurring in 2023, a three-day strike in early January, and a five-day strike most recently (DW, 2024b). During the strike some limited services were still provided, with long-distance trains running at 20% capacity (Tagesschau, 2024). The brief nature of the preliminary strikes is worth evaluating in terms of limiting the impacts of the strike while gaining some form of negotiating leverage.

One-day rail strikes in Germany do not have the same stacking effect as longer strikes. Economists have offered that “the losses are likely to be limited to the transportation industry because factories will continue to operate and many employees will be working from home” (Marsh & Williams, 2023). These warning strikes were followed with further threats from the unions to continue expanded industrial action in the future. Estimates from economist Michael Groemling, head of economic affairs at *IW Koeln*, are that one day of a rail strike could cost the economy 100 million euros (Martinez et al., 2024). He specifies that this estimate comes from

the direct losses to Deutsche Bahn and its partners, disruptions to the manufacturing and agricultural sectors, and losses of consumption and services due to the industrial action (M. Groemling, personal communication, January 29, 2024). The majority of the costs are contained within the industry or in closely dependent industries. The exact breakdown of these numbers is not available, and Mr. Groemling states that the economic costs increase exponentially during the span of the strike. The most recent example of the five-day strike of GDL workers is still yet to receive any greater economic analysis. However, it can be presumed that his estimates provide insight into the prior industrial actions by GDL in 2023.

The pressure of the strike was limited more acutely to the transportation industry, due to its short nature. DB faced high economic pressure to move on demands. Since strikes were kept short, exponential economic impacts to the economy as a whole were limited. Instead the economic pressure in the instance of the short strike was directed at DB. The impact to DB's reputation was mixed. Some consumers reported frustrations after multiple short strikes (Ziady, 2024). At the same time, the union went after the DB, claiming public opinion on its side as the strike was fighting, "so that this rail system is healthy and the people who work there can stay healthy for a long time" (DPA International, 2024). The total picture of German public opinion on the strike is unclear, but with a culture more permissive of strikes than the United States, more people seem willing to bear these costs.

Pressure from the short strikes was spaced out and it was only after the last round of strikes in January that the company was open to negotiations. The strikes had started back in 2023. In terms of concessions after multiple strike waves Deutsche Bahn (DB) has finally struck

a deal with the union. The operator most importantly agreed to a 35-hour work week, allowing workers to choose whether they want to continue to work 40-hours for more pay or 35-hours for the current base (DW, 2024a). Getting concessions on the work week had been the primary sticking point. The leader of the GDL, Claus Welskey, said that, “DB's willingness to negotiate a reduction in working hours for shift workers is of central importance” to avoid future strikes (DW, 2024b). In addition, DB agreed to one-off inflation bonuses: €1,500 in March this year, and another €1,350 in May (DW, 2024a). Pay will go up as well as a result of the strike: €420 monthly in two stages, €210 as of August 1 this year and another €210 as of April 2025 (Ibid). Evaluating the pressure of German short strikes shows that workers were able to capture significant concessions despite the intransigence of DB in prior negotiations. The pressure felt by DB primarily through high short-term economic costs and a damaged reputation meant that it finally came to the table to discuss the issues the union had fought for.

Short strikes have also taken place in the United Kingdom. The country has been under some of the longest rail strikes periods in Europe in recent years, with labor unions opposing rail reforms propagated by the ruling Tory government. The most prominent has been the series of short strikes by the National Union of Rail, Maritime, and Transportation Workers (RMT) against national regional rail operators for their proposed shuttering of ticket offices at train stations as well as numerous other job closures. The RMT workers on strike have primarily been workers on and related to the functions of commuter rail, so freight transportation has been less impacted by the strike.

The RMT, taking estimates from various industry outlets, put the collective overall cost of the 31 short strikes that took place during 2022 and into 2023 collectively at €5.29 billion (RMT Press Office, 2023a). Of the total estimate, €950 million are lost compensation from the lack of ticket sales, €840 million from the lost days of work for employees, and €3.25 billion from estimated losses of revenue in the UK hospitality industry (Ibid). The compensation for lost ticket sales has been picked up by the Tory government funding the train operators to cover these losses. The total costs of the strike to the UK economy could possibly be higher as other industries adjacent to hospitality suffered losses due to these larger economic shocks. The structure of the strike itself is important to note; the RMT followed a rolling strike in which certain days throughout a designated time period would be struck with advance notice (Ibid). Even on strike days, train operators used non-union staff to run a limited number of commuter services, but this did not fully cover for the lack of workers.

The UK economy at large does seem to have been affected by the strike. In 2022 when the strike began, the GDP grew by 4%, while in 2023 it grew by only 0.6% (Clark, 2023). However, determining to what extent the strikes are to blame is difficult. The drop in GDP is largely due to the war in Ukraine along with the associated inflation shocks that rippled across Europe. How much could be attributable to the strike is unclear. In fact, the issue in the UK was that wage growth struggled to keep pace with rapid inflation. The gains from the strike for the workers are one way of combating that economic issue (Ibid). Comparison with France shows that the large 2018 strike only minutely affected GDP; it is likely a similar case in the UK. The strike also only affected rail lines in England, but the GDP loss was shared throughout the

country. At the very least, the strike was not the cause of the depression in growth, but at most only a contributor.

The pressure faced by the British train operators was intense. The economic pressure was high as the operators suffered a €950 million loss from ticket sales. It is important to note that some of this economic pressure was alleviated by the government stepping in and giving assistance. This could possibly explain why the on-and-off period of short strikes went on for so long. The reputation of the rail operators severely suffered during the strike. The government giving the operators money made it seem like they were taking handouts. Additionally, polling done by YouGov found that 42% of the public supported rail strikers and 49% opposed their strike (Smith, 2023). While somewhat more of the public was now tired of the strike, the union still commanded significant support outside of its membership, giving it additional pressure.

These pressure points did not result in a more willingness by the private operators and the government to reach a fast conclusion, however. Various short strikes happened over 2022 and 2023 as the union fought to end work rule changes. Part of this was also due to the government, which proved to be highly invested in disrupting negotiations (Gall, 2023). In terms of concessions, though, the union won big. An interim agreement was finally made between the operators and the union over the issues of the strike. At the end of 2023 a deal was made for workers to receive some back pay for the duration of the strike, job security commitments for the workers including those working ticket booths, and further negotiation and consultation with the government on working conditions (RMTnews, 2023, p. 4). Workers won a pay increase of 5% or €1750, whichever is greater depending on their prior salary (Ibid). Government threats to

restructure the English rail service have merely been put on hold rather than being resolved. It is still a significant win for worker's rights in the rail sector. Thousands of jobs were saved and the union was able to maintain many of the workplace standards it had fought for. The burden was not always consistent; the irregular nature of the short strikes meant that the operators did not always have to face direct harms. However, the uncertainty of future short strikes created more pressure on the companies and government to engage in negotiations.

Important to the rail strike in the UK is the context of the larger system. The United Kingdom government recently passed the Strikes (Minimum Service Levels) Act of 2023 to mandate minimum service requirements in the sectors of education, health, fire and rescue, border security, transportation and nuclear decommissioning (Strikes [Minimum Service Levels] Act 2023, 2023). The act would allow employers to designate certain employees to work during a strike. If workers refuse, the union will face damages in court and the workers will lose their protection from being fired (Ibid). Whether or not this legislation will be implemented is in flux. During a recent strike of train drivers, companies declined to use these new powers as the train drivers' union, Associated Society of Locomotive Engineers and Firemen (Aslef), threatened to go on strike an additional five days if they did (Topham, 2024). The enforcement or nonenforcement of the status quo will reshape how unions in the UK use the strike. The act would function as a participation restriction and would make it more difficult for the workers to exert pressure. If workers are already limiting their strike temporarily, preventing workers from participating would limit their rights even further. The effects remain to be seen as to what the impacts to organized labor could be.

Short strikes in Germany still are costly to the economy but they are much lower than if the strike was allowed to continue on for weeks at end. If this case is any indication, short strikes may limit the bad publicity a union might accrue by going on strike. In comparison to the benchmark of open-ended strikes, short strikes win out. Even in the prolonged UK context strikes were costly but that was over a period of two years of industrial action. A two-year open-ended strike of railroads would be catastrophic. Workers in both instances were able to force the hand of negotiators by progressively increasing the small strike intervals, giving them more say on their rights at the negotiating table. However, the union did feel the need to progressively increase the length of the strikes. DB was unwilling to negotiate on the length of the work day until the fourth strike that was held for five days. This does suggest some leniency should be given in the total number of days railroad workers can strike. The wave of short strikes in the United Kingdom were limited in their total impact to the economy, as they were broken up over time. The various industrial actions did eventually force the government-owned rail operators to capitulate to the demands of the union to stop massive layoffs and restructuring. The periodic nature of the strikes meant that the worst exponential economic effects were avoided in both countries. In both instances, the striking workers won a number of concessions that the companies were unwilling to give before. The burdens on the companies were not as high as those created by open-ended strikes, but still resulted in workers protecting their rights in the face of opposition. Given that short strikes were largely successful in similarly developed countries like the U.K. and Germany they success could be replicated in the US is as well. It is worth noting that the U.K. and Germany are perhaps more dependent on their rail networks since rail public transportation is widely used. In the US there are small corridors were this is the case

but it is largely limited to the freight network. If countries that are more dependent on rail than the US can weather short strikes, we could expect similar results in the US.

There is another type of duration-limited strike: the intermittent strike. These are when workers, after the end of contract period, strike on a regular periodical schedule. The union generally announces a schedule for the strikes, i.e. workers will walkout during X days for X number of months. They are more common in Europe, where workers are allowed to strike and then return to work off and on. This type of strike has been legally allowed under the RLA, but is not legally protected in the US for industries regulated by the NLRA.

Another closely related RLA-regulated group that has experienced intermittent strikes are the airline attendants. In 1993, flight attendants a part of the Association of Flight Attendants union (AFA) for Alaska Airlines implemented the “CHAOS” strike strategy, which consisted of flight attendants striking flights on short, often a few days, notice and causing “chaos.” In all, only 24 flight attendants walked off a total of 7 flights over a period of 9 months (AFA CWA). Alaska Airlines filed a court injunction against this type of strike, but the court ruled in favor of the workers.

In terms of direct economic costs, the losses on seven flights is fairly minimal. In comparison, the full walkout over five days of American Airlines flight attendants that same year cost the company an estimated \$160 million and 1.3 million passengers (Tampa Bay, 1993). That was a full walkout of all flight attendants, whereas only 24 flight attendants walked off in the Alaska Airlines strike. The strikes damaged the company’s image and credibility rather than its bottom line first. Alaska Airlines’ stock was down the year of the strike by 14.37%, but it was

also down the year before the strike by 23.31% (Macrotrends, 2024). In terms of the American economy as a whole, the strike does not appear to have had a determinable impact. However, for Alaska Airlines, being known as a company that randomly cancels flights is a sure-fire way to lose customers and ticket sales.

The first two indicators show that Alaska Airlines underwent pressure. Ironically the economic pressure felt by the airline was fairly minimal; cancellations of just seven flights probably does not even appear in the annual investor report. In terms of pure economic cost, the company suffered fairly little. It was the potential for further and expanded cancellations that created the pressure—fear of what could come if these continued. The blow to Alaska Airlines' reputation was the most severe and created the most pressure. Continued striking on the airline would mean that consumers would opt for other companies substituting the services of Alaska Airlines. Allowing the company's reputation for reliability to be tarnished was a great threat.

In terms of willingness, it took the workers over nine months to eventually get the company to come to the negotiating table with new concessions. Part of the great length of the negotiation process was due to the legal challenge that the company lodged against the union for using intermittent strikes. When the legal challenge was finally struck down the company was forced to confront the possible future economic costs of a continued strike, and thus quickly met out a deal with the union. The concessions that workers won as a result of their pressure were expansive. Alaskan Airlines signed a new contract granting workers as high as a 60% pay increase, shorter duty days, and longer rest periods, which at the time were industry-leading work standards (AFA CWA). While it did not directly affect the bottom line of the company that

much, it did sway consumer confidence. The pressure that this form of intermittent strike created was higher than a traditional open-ended strike.

Intermittent strikes have not been recently used in the United States, nor is there any data about their usage in the American rail sector. In France, rail strikes are much more common than in the US, with a rail strike occurring every year since 1947 (AFP, 2019). Many of these strikes that take place take the form of intermittent strikes, scheduling out strikes in advance for the entire rail system. French strikes have markedly different characteristics because the right to strike is constitutionally protected for the individual, not for those who are members of a labor union. This means that while unions may call strikes, not all workers will always walk off. In 2018, the French government was implementing deregulation of the railroad company, turning it from a state company to a state-owned enterprise. Rail workers struck to protest the reforms and the loosening of their job protections in a country-wide strike. The French intermittent strike meant workers would walk off the job two days out of every five over a period of three months (McAuley, 2018). However, at the beginning of the strike in April, 34% of workers walked off the job, with only 12.78 % striking by June (NEWS WIRE, 2018). This meant that while the French strikes are more common, they are not consistent; there are times when lots of workers heed the call, there are many occasions when they do not.

The strike created significant economic disruption in the transportation sector, causing issues for the tourism and hotel industries. The National Statistics Agency of France estimates that these strikes reduced economic activity in the second quarter of 2018 by 0.1 points of GDP (Insee, 2019). However, the agency does note that it does not estimate the substitution effect of

rail services for other types of transportation. These strike estimates also include a strike on Air France that occurred the same year for 12 days during late March and early May. Other estimates for the direct cost of the strike come from the state-owned enterprise, Société nationale des chemins de fer français (SNCF), that put the price tag for the industrial action at €400 million (Béziat, 2018). This included direct losses to the company as well as the measures that it took to give refunds to consumers with transportation cards, but the losses were lower than projected, as frequency of trains running went from 14% at the beginning of the strike to 66% at the end of May.

The pressure created by the strike was primarily economic. As previously stated, the state-operated SNCF suffered €400 million in losses from the months-long intermittent strike. The economic pain clearly created a lot of pressure on the operator to get the government to be more permissive in negotiations with the union. Reputationally, the effects seem to be moot. In France, rail strikes are very common, so the French public has a more dismissive attitude towards these actions.

The regulation changes were also happening due to the recent election of President Emmanuel Macron. The prior year in 2017, President Macron had won the presidential election by a large margin and captured a large majority in Congress, giving him a political mandate to enact his neoliberal campaign policies (Chrisafis, 2017). Part of his promise was that he would institute neoliberal reforms on the railroads. Thus, the massive public support that he had received through the election made fighting the reforms alongside the union much more difficult. As a result, the reservoir of political goodwill that the government had meant that they were

relatively unwilling to meet quickly and negotiate with strikes. The strike occurred as previously mentioned over a period of three months. Even with the economic costs of the strike the government held out for negotiations. This meant that striking workers were not able to win their major demands. Job guarantees were secured for pre-existing staff for the new train operators, and the government pledged to not sell off its shares of SNCF. However, the SNCF was changed from a state-owned enterprise to a joint-stock company with all of its stock held by the government, many worker privileges and pensions were phased out, and the group's domestic passenger monopoly was set to end in 2020 (Reuters, 2018).

While French strikes sound scary, they do not result in the full stop of all services that happen in places like Germany. In this instance, the watering down of the strike over the intervening months and the obstinance of the government against the strikers meant that French workers largely lost. At the same time, worker's rights to express their frustration about reform through withholding their labor was respected throughout the strike. The government did not punish strikers or make moves to replace them. The burden for the government was high throughout the strike. Even if all workers were not striking, only 14% of trains ran in the first month. Workers were able to bring significant pressure by halting most rail transportation repeatedly over three months but were unable to counter the will of the government. Even though workers did not win major concessions due to political pressure, like preventing the privatization of the SNCF, they were still able to create significant pressure themselves and win some concessions.

Intermittent strikes were highly effective in the aviation industry. The staggered and variable nature of the strike by the AFA won the attendants the best benefits and treatment in the industry. Even without that many members having to withhold their labor, their industrial action won the goods. Economic damages were relatively limited, with flight attendants only striking a few select flights. In the case of France, these strikes were not immediately successful. Declining militancy of the workers meant that as fewer and fewer workers went on strike it became less impactful over time; the staunch opposition of the government meant that it was very difficult for them to actually defeat the reforms. Still, the intermittent nature meant the government could not ignore the strike, and workers were able to win protections in the transition to a newly privatized rail system. Relative to full open-ended strikes, intermittent strikes cause much less economic harm. They also give workers the ability to ramp up pressure on negotiating parties by regularly disrupting commerce. Additionally, the public pressure is lessened as well, since the public is notified of when the strike will happen ahead of time.

5.2.3. MIXED LIMITED STRIKES

Rolling strikes are where unions strike multiple rail companies at different times. The strikes roll across the companies instead of hitting them all at the same time. Within one operator it can also take the form of different types of rail workers striking on different days. In this way, the strike mixes how many people are involved, how many areas are involved, and how long it goes on for. How far ahead a union announces the strikes varies, but generally allowances of several days are made. In the United States, rolling strikes do not occur. In most NLRA industries workers are not allowed to strike and go back to work. Thus, there is no domestic data to draw upon. However, internationally, rolling strikes are a common form of railroad strikes.

In the United Kingdom the RMT has also deployed the rolling strike strategy in different rail disputes. Members of the RMT union working on the London Underground announced a rolling strike of the train system at the end of 2023 due to workers receiving a pay offer that was below current inflation rates (RMT Press Office, 2023b). Train drivers were to walk off first; followed by system controllers and signallers; and lastly engineers, station, and train operators. Each of these groups were to walk off the job for two days (Ibid). The strike only lasted for two days, as the union called off the rest of the rolling strike reporting substantive progress in negotiations with the Tube operator due to the intervention of the London mayor.

Part of the reason that the government cited for working to find a pay solution for the prospective Tube strike were the possible economic damages. Mayor of London, Sadiq Khan, cited an estimate from hospitality industry groups that, if carried out, the strike of the London Tube system could cost the city €50 million in lost income (Lydall, 2024). Since the strike lasted for a very limited amount of time, estimates on the costs incurred during the first two days of the strike are unavailable. Nor are there estimates that include the lost wages for the struck days, indirect costs to rail users for these days, or estimates of how people substituted other modes of transport for the metro system. The economic effect of the first set of workers walking off was likely much more limited than the full estimate cited by the mayor. The strike would've needed more time to create an economic impact that exponentially increases during the disruption, so the first days have the lowest impact. The potential economic costs could come much closer to that of an open-ended strike.

The pressure via economic cost to the Underground operator was significant. Costs would continue to balloon as the strike rolled through the different groups of workers. However, the majority of the pressure in the specific instance of the Underground came from reputational damages. The possibility that Londoners commuting to their jobs would be unable to use their primary mode of transportation for a week put massive pressure on the local government. Consumer dissent would have become more intense. This pressure demonstrates why the local government of London was so quickly willing to meet and renegotiate terms. The strike only lasted for two days before the government and the union resumed negotiations. In terms of concessions, workers were able to secure wins even with a more conservative Tory municipal government in place. Lowest paid workers in the Underground received raises of 8 to 10% while other workers received 5% raises (RMT Press Office, 2024). This was significantly better than the previous wage increases that did not keep up with the higher rates of inflation that developed. The future burden that the local government faced was enough for it to return to the negotiation table with more reasonable wage concessions. Significantly improved concessions and an effective burden on the government meant the rolling strike created heavy pressure.

Rolling strikes have variable effectiveness. The industrial action by the Tube workers was successful in getting workers real wage increases when their prior agreement was overridden by high inflation. The possibility of building economic costs was able to bring the government to the negotiation table. They can also take shape in other ways, with workers going on rolling strikes of different rail operators at different times. However, strikes like these only work in a system with multiple distinct rail operators. If, like in the US, there are only a few major rail companies, a “rolling” strike of different rail companies could functionally be a short strike.

Rolling strikes are still restricted by time, limiting the impact company to company. They have lower economic impacts than a full strike of the entire system. The strike costs for an open-ended strike of the London Tube would likely be higher than the rolling strike estimate. Nevertheless, experimenting with shifting where the industrial action occurs could be useful.

Not all restricted strikes are created equally. Participation restricted strikes, like selective strikes, narrow the focus to one company to build pressure. This helps alleviate the economic harm of striking the entire system as a whole, making the cost to the economy much less than an open-ended strike. However, past instances of these strikes in the US have only been marginally more fruitful than unions that negotiated their contracts without industrial disputes. Duration limited strikes provide more options through intermittent strikes and short strikes. Intermittent strikes build pressure over time with periodic strikes frustrating management. Their costs are less than those of an open-ended strike since the amount of industrial action is limited to certain days. In both rail and aviation contexts they can effectively mount pressure on management to make concessions. The burdens fall more on the company than consumers, as consumers notified of these changes can make adjustments to take into account the strikes. Short strikes offer a way for workers to create a burst of pressure to spark negotiations. The economic cost again is not as high as the open-ended benchmark. However, in the examples of short strikes in the UK and Germany, both unions had to increase their duration at some point to finally exert enough pressure. If there is not a greater possible threat after short strikes, it seems as if their effectiveness would be muted since there would be no future burden for the company. Lastly,

mixed strikes, like rolling strikes, provide a window into combining all the different limitations. Yet while mixed strikes try to restrict the variables in slightly different ways it risks creating a spiraling economic cost that could rival that of open-ended strikes.

By diffusing the strike over multiple companies or departments periodically, workers are shielded from personal economic harm. The spread-out nature causes a ramping effect of the burden felt by the companies. The economic impact is somewhat more limited on consumers because services might only stop for them for a short period before rolling on to the next location. The total cost is less, since these strikes are limited by time as well. However, in an American context, there are only six major Class I railroads and a one-day rolling strike of each of them might be equivalent to a week-long strike due to how interconnected they are. Their applicability, particularly to the United States, is not clear.

CHAPTER 6: RECOMMENDATIONS

Workers are disgruntled. No new rail regulation has passed after the New Palestine disaster, but profits are up. If the status quo of industrial rail policy should be changed, where do policymakers turn? As I outlined in the previous chapter, more options are available, as evidenced by other similarly developed nations. In this closing chapter, I summarize my research and draw conclusions about which types of strikes would be most effective at minimizing economic costs relative to the baseline of open-ended strikes, while also protecting rights through sufficient pressure.

6.1. ECONOMIC COSTS

First is the order of magnitude of the economic impacts of each of the strikes, starting from greatest to least. Wildcat strikes have by far the most disruptive and economically damaging impacts due to the fact that consumers and producers do not know beforehand that they will occur. Therefore, no one can stockpile goods to blunt some of the economic damage. While modern estimates are not available on what the costs would be, the complete chaos of the Pullman Strike should serve as a marker for what these strikes could look like. They cost more than an open-ended strike because operators cannot prepare emergency services for the strike. Additionally, consumers face difficulties with substituting the struck railroad for other modes of transportation on short notice.

Next are rolling strikes. While they have the potential to be lower cost than open-ended strikes, they also have the potential to essentially cost the same. It comes down to how they are “rolled” across the industry. The English example was of workers of different classes who strike at different times. This could conceivably shut down the rail system the entire time, with all workers being necessary to the inner workings of the rail system. Costs could exponentially balloon with a prolonged rolling strike. There is not clear information to determine these possibilities; the London Underground strike was cut short. However, the design of the strike means it could happen, depending on how the union deploys it.

Intermittent strikes come next due to their long, repetitive nature. The French example shows how these strikes can cause large costs to the train operators. On the other hand, the example of the striking flight attendants shows how if these strikes are dealt with early on their impacts can be even smaller. In comparison to open-ended strikes, these industrial actions avoid the worst exponential consequences of permanently ending rail services. The on-off again model allows the system to have some operating capacity and recuperate when striking workers go back on the job.

Sickout strikes come next, with a more variable economic cost. They are wildcat strikes but come with the added legal cover that workers are taking a sick day. Often not all workers take off sick, so some levels of service are available. Sickouts essentially mirror short strikes in their impact because workers can only call out sick for so long. However, there is a large added cost since there is no prior warning for the strike. Similar to wildcat strikes, no preparation for substitution can be made before a sickout. Depending on the number of callouts, sickouts can be damaging strikes or relatively tame.

Next are short strikes. These strikes also limit the economic impacts by breaking up when workers go on strike. These fully shut down the rail network for a few days but do not have the economic impact that consistent intermittent strikes have. The lower frequency and short duration mean that these strikes hit hard for just a moment. In the instance of Germany, one-day rail strikes had an estimated economic effect of €100 million a day. However, it should be noted that part of the pressure from short strikes comes from the risk that the strike could become longer. This is an important limitation to short strikes; often operators are willing to make concessions after a time because they fear the greater economic consequences that could arise.

Selective strikes in theory have the least harmful economic impact. While no data exists on explicit costs for past selective strikes that have occurred, they are greatly limited. These strikes only occur in a distinct geographic region or set of rail lines to put pressure on specified rail carriers. This means the economic damages are limited to a certain zone instead of the entire country. Unions can also strike rail operators in ways that still permit the flow of commerce but force the goods and people to detour around struck operators. However, since there are only six Class I carriers of freight in the United States, a strike at one of the carriers would likely have large ripple effects on the rest of the carriers. Consolidation and mergers among major American rail companies means that it is unclear if being “selective” would truly reduce the economic impact.

6.2. WORKERS’ RIGHTS

The least effective action at securing workers’ rights would be wildcat strikes. The costs of these types of strikes are so great because they occur outside of the regulatory labor apparatus. Since the government perceives workers as defying established industrial order these strikes are

often forcefully ended. The strikes create great pressure via the economic burden on the company, but the pressure from reputational damage is directed to the workers. The illegality of the strike means that while the pressure they create is great they can fail to get workers' demands met. As seen previously, barring exceptional legal circumstances, workers often win no demands. The operators are unwilling to quickly meet with workers and instead clamor harder for government intervention into the strike. With railroads taking such a central role in supply chains, wildcats in this industry are met with swifter and stronger government intervention. Even wildcat-prone French workers only let their wildcat strike of the Eurotunnel go on for six hours. The pressure created by these strikes is quickly dissipated in the interceding government repression. As previously stated in my methodology I am not interested in strikes that create maximum pressure without being effective in protecting workers' rights. In comparison to open-ended strikes, workers end up worse off than they were before.

Sickouts are also not very effective at protecting workers' rights. The level of economic pressure created by the strike on the train operator is high, but only for a short duration. The reputational pressure fell far more on the workers who were the source of consumer ire, since they had not notified the public about their strike. The sickout of the BLET engineers presented earlier demonstrates that the workers were unable to fulfill any of their demands and additionally were forced to pay fines due to the nature of the action. The union moreover has held a strike vote to go on a permanent strike in protest of a new contract. Obviously, the workers themselves do not see it as an effective tactic to use in negotiations with management. While the blowback is not as bad as full wildcat strikes, these actions are not more effective than open-ended actions.

Selective strikes, pioneered by American railroad unions as the opportunity for open-ended strikes ended, brought some pressure to the bargaining table. The economic pressure on

companies is not very clear, but it was primarily directed at three companies who saw their rail services shut down. Reputationally, the companies suffered some, as they were unable to provide reliable shipping services while consumers were able to reroute their shipping through other rail operators. The pressure did not result in a speedy resolution. The strike lasted for 18 days, and the operators showed little willingness to meet quickly. In terms of concessions, the strike only won some changes in the ways restructuring of railroading work would occur. Striking workers were unable to stop increasing work requirements or train sizes. Still, the marginal gains do not seem to greatly outpace the degree to which open-ended strikes were effective at protecting worker rights in Canada. More research is needed to understand if these participation-limited strikes could be effective as more and more railroad companies have merged together.

Rolling strikes appear to be more effective than open-ended strikes in protecting workers rights. The rolling strike of the London Underground engendered significant economic pressure on the operator and related local officials. A strike of the Underground has significant economic costs to the operator, but moreover to the government officials themselves. Reputationally, government officials who control the Underground would suffer the most if the transportation system is not working for a prolonged period. These twin specters of pressure meant that the train operator was very willing to meet with the workers and hammer out a deal. The strike did not even finish its pre-established length before a deal was made. The concessions that the workers won were significant economic improvements in comparison to the previous deal. How these strikes would impact a large network in a national rail strike is unclear. However, they are effective in generating pressure on the operator by slowly rolling the strike across different workers and companies. Similar to the Canadian open-ended strike, workers were able to get

economic needs met, but this time much faster. The expected harms push the operator to act in negotiations.

Short strikes also were effective at protecting workers' rights. The train operators both in the UK and Germany suffered bursts of economic losses from the short strikes. Reputationally, the impact was more ambiguous, with public opinion of the train operators and workers falling more alone than people's perceptions of organized labor. Still, the economic pressure on the system was significant enough to force operators to negotiate, although this also came from the pressure of perceived future economic costs if the strikes continued or got longer. Operators were not very willing to quickly meet with workers; both of these operators only came to new deals after months of short strikes and negotiations. However, the concessions were large as the staggered strikes in Germany slowly built the pressure on DB to negotiate on working hours. DB capitulated on both fronts, giving workers a route to a shorter work week while also increasing wages in the face of inflation. However, part of the pressure that short strikes bring comes from the risk that they could go longer; in Germany workers could technically strike for longer but they choose not to. So, while rights are protected under current German rail workers' strategy, they still have a credible open-ended strike threat hanging over companies. Strikes in the UK by the RMT were able to prevent the government from instituting new work rule changes and terminating thousands of employees. These strikes garnered greater concessions than open-ended strikes. Workers were able to bolster their situation by more than just small adjustments. The more prolonged strike wave cost the economy more, but it was still able to bear this pressure and the network controllers eventually had to give in.

At the top of the list are intermittent strikes. These strikes create the right amount of significant pressure. Economically, the state operator in France faced severe economic costs, and

while flight attendants did not cause as many direct costs, Alaska Airlines faced large future costs if the strikes continued. Reputationally both of the operators in these examples suffered. Alaska Airlines appeared less reliable due to cancellations during the strike. In France the SNCF suffered a massive loss of reliability as well. Willingness to meet looks different for the intermittent strikes because of the context of the strikes. Alaska Airlines tried to stop the strike through the courts, but when this failed, they quickly met to work out a deal. In France, staunch government opposition to the strikers meant the strike would only win when the strikers gave up on their largest demands. This means as far as concessions are concerned in France workers were able to win significant work guarantees for current workers and continued retirement payments for workers who were already enrolled in the system. The French example shows that even under immense government pressure these strikes can preserve workers' rights at the bargaining table. In the United States, intermittent strikes by the AFA were highly successful at getting the company to concede landmark safety standards for the industry as well as improved wages. The barriers that workers faced were far more significant in these examples, so the fact that workers could still get concessions is a testament to their capacity to generate pressure for workers' rights.

6.3. POLICIES AND IMPLEMENTATION

Based on these markers there are two policies that stand out amongst the others. Intermittent strikes and shorts present as the policies that are the most effective while also minimizing costs. There are strikes that cost less; sickouts and selective strikes fit that criteria. However, in the analysis of the capacity of those strikes to protect workers' rights they are not nearly as effective as the prior two policies. Intermittent and short strikes both cost less than a potential longer term open-ended strike by spreading out the impact over time and limiting the

possible exponential growth of a longer term strike. Utilizing time in this strategic way has also shown to allow the negotiating workers to protect their rights and interests.

Allowing workers to utilize both of these strategies is key because much of the pressure of short strikes comes from the risk that further industrial action by the union would be even more damaging. The company is driven to make concessions because they want to avoid worse impacts in the future. Instead of the additional pressure for short strikes coming from a possible open-ended strike, this pressure can come from using different tactics. Allowing unions in America to go on short and intermittent strikes means they can use short strikes to magnify the possible threat of a future intermittent strikes. Combining these policies best fits my methodology of minimizing the impact to the national economy while protecting workers' rights. Time limits mean the costs to the national economy would be less than those of an open-ended strike. In praxis both here in the United States and in European counterparts these strategies have enabled workers to protect their rights. Unions should be given both industrial actions as options. If past industrial disputes and short strikes have been unable to move companies they should not be forced to start with this policy.

Critical in this policy recommendation is that the government must sign away its ability to intervene and legislate contracts. If the government still has this power then the "possibility" of strikes is meaningless because Congress can inevitably draft laws to end them. What the government gains are limits on the length that an industrial dispute can take. Workers would be able to strike, but their strike would be limited to a certain number of days per week or per month. Companies would face risk, but government regulations would dampen economic impacts. The more strategic manner of striking would give workers the opportunity to experiment with pressure in new ways.

There are some important points that are unclear. Primarily, to what length of time should intermittent and short strikes be limited? As far as short strikes go in Germany, the GDL went on a strike as long as five days after previously striking for shorter periods of time. Limiting a short strike to less than a week seems to be the best approach from practice. Similarly, the intermittent strikes in France occurred twice every week for around three months. I think following this guideline would also be the best path. If these time limits were found to be too limiting or too expansive, policymakers could return and revise. The time limits found in other countries should be treated as templates but not immutable concepts.

Implementing these kinds of strikes as legally permissible and removing the governmental ability to intervene would require a congressional revision to the Railroad Labor Act. Past revisions have done things such as bring the aviation industry under the purview of this law.

Unfortunately, there is little likelihood that a bill focused on improving workers' ability to collectively bargain and strike would pass under current political conditions. The Protecting the Right to Organize (PRO) Act, a bill to expand worker rights, was passed by Democrats in the House of Representatives in 2021, but it was never taken up by the Senate (Gonyea, 2021). Even under tripartite governance, the most pro-labor party in the United States was unable to revise some of the most anti-worker labor provisions passed during the Red Scare. The current Rail Safety Act that was sponsored in the wake of the East Palestine disaster has similarly failed to move in Congress. It only concerns safety regulation and still cannot clear the gridlock. However, this means that practically any policy other than compulsory arbitration would not clear the government. While my policy recommendation may be a reform that *should* happen, virtually any attempt to reform the rail industry has failed. Diluting policy proposals to anticipate

a possible compromise is useless when no such compromise currently appears possible.

Discussing how to get the government to engage in rail reforms should be covered in future research. The purpose of this thesis is to engage with the current alternative strike policies and suggest which could function in the United States. That the suggestion isn't feasible right now does not mean it is a shortcoming of the research.

It is still important to discuss what policy options are available. The next round of policy negotiations could devolve into wildcat strikes forcing the hand of the government to rethink its industrial policy. More pro-labor elements could develop in American politics, pushing the current parties to create more holistic strategies on addressing the rampant under-regulation of PSR safety and worker rights violations. Better understanding and developing the literature on American industrial policy is critical as it continues to be an important factor in everyday life.

6.4. LIMITATIONS AND FUTURE RESEARCH

The data itself is the primary limitation of my research. Since there is relatively little data available in the United States, I draw on information from other countries. I analyze specific cases in these different countries. If the case is actually unique for the country, however, I may be drawing conclusions based on anomalies from other countries where there could be substantial differences preventing inferences from being made. The question of how to compensate for the differences between the structure of unions, rail infrastructure, or the political climate of the country remains.

This research leans into analysis of the little existing information and reports made by various groups on the impacts of industrial actions on railroads. An expansion in the analysis of the effects of striking is clearly in need, not only in the realm of railroads. Aside from the lack of

consistency between the different economic reports, they are often made by industry outlets that have a vested interest in ending the strike regardless of the effect on the striking workers. Some of the data from rolling strikes comes from industry associations in the hospitality industries. The methodology for these estimates is not publicly available, so it is difficult to tell how impartial the estimate is.

Both of these issues mean that the research faces significant limitations. However, this does not invalidate the research itself. The data I have drawn from is the data that currently exists and is used by government, companies, and workers to make decisions about how to approach industrial actions. Already, decisions concerning industrial policy are being made with the little information that currently exists. Even while the data is incomplete it is still important to look toward what directions it could point policymakers. The cases that I analyze in other countries, while limited, are still indicative of the general ways that strikes occur in other countries. More cases like them are common where governments permit a diverse number of striking policies. Working with the current information available is important to understand how policymakers could be better informed and how research should be conducted in the future.

East Palestine is still recovering from the chemicals spilled. It will take decades to clean up the community, and the long-term effects of the pollutants on people's bodies is still unknown. Rail safety legislation is stalled; railroad workers have won some sick days but the trains continue to run longer and longer. When the next disaster will hit is uncertain, but the current system of labor laws on the railroad ensures that such disasters will continue. Without a protected right to strike, railroad workers have no voice to make active changes in their workplace for their own safety and the society at large.

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