Analysis of Advocacy Methods for Promoting and Passing State Electric School Bus Policies

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01 EXECUTIVE SUMMARY

The majority of school buses in the United States are diesel powered, which has been linked to serious health and developmental issues for students[1]. Electric school buses (ESBs) offer a solution to this issue by providing zero tailpipe emissions, reduced maintenance and fuel costs, and the potential to reduce peak demand on the electrical grid[2]. However, the cost difference between electric and diesel school buses can be too great for school districts to cover themselves, especially in marginalized communities[3]. Fortunately, there are many funding programs to help schools buy ESBs, including from the Volkswagen (VW) settlement and federal programs such as the Environmental Protection Agency's (EPA) Clean School Bus Program (CSBP)[4]. Due to these funding sources, there are over 12,000 committed ESBs in over 38 states across the country, though the majority are in wealthy, suburban school districts[5]. One solution to get more ESBs, especially in marginalized communities, is through state policy that can help to promote the adoption of and/or give funding for ESBs. However, for advocates who are trying to get these policies passed, it can be difficult to know how to best support these policies or overcome potential roadblocks.

To find out how advocates can better support these policies, interviews, press briefs, and news stories from state advocates and legislators in states where electric school bus policy was passed in 2022 were completed. The fifteen policies that were analyzed were Arizona (AZ) SB1246, California (CA) AB2731, Colorado (CO) SB22-193, Connecticut (CT) SB4, CT HB5506, Maine (ME) LD1579, Maryland (MD) SB528, Massachusetts (MA) SB2943, New Jersey (NJ) A1282, NJ A3139, NJ S759, NJ S886, New York (NY) State Budget Fiscal Year 2023 (FY23), Washington (WA) HB1644, and West Virginia (WV) HB4571. Before the analysis of the bills, I proposed some hypothetical reasons why these bills may have been passed, including looking at the political party in control of the state legislator, the governor's political party, and the state's history of passing other electric vehicle (EV) or environmental justice (EJ) policies. Equity language in the bills was also analyzed in order to see how they prioritized funds for marginalized communities. Analysis of equity language was done, due to advocate concerns over federal prioritization of CSBP funds[6].

01 EXECUTIVE SUMMARY

After the analysis of interviews and secondary sources from key stakeholders, four key takeaways were developed: coalition building; selling the bus and the bill; money and where to find it; and targeting equity language. Coalition building is key to building strong relationships, trust and support amongst many stakeholders who are impacted by ESBs. Coalitions that include a diverse set of stakeholders and have connections with state legislators or governors are key to having the most influence on and support for ESB policies. Selling ESBs and their corresponding bills in different ways can be key to quashing opposition or opening up new avenues of support from different stakeholders. Selling buses using hard to oppose, unconventional, or including funding in larger climate bills can garner broader support for ESB funding. Finding money for ESBs is key as it is the largest issue for advocates, legislators and opposition when it comes to ESB funding programs. Making sure a source for money is secured or finding outside sources to supplement state funding can help to ease the process of passing ESB legislation. Including targeted equity language in ESB bills is an effective way in making sure the most marginalized communities, who need ESBs the most, are prioritized for funding and receiving ESBs. It is not enough to just add equity language to prioritize funding, additionally language is required to make sure there is an equity lens throughout the implementation of the bill. Using these four, key takeaways state advocates can work to better influence, promote, and pass equitable ESB policies in their own states.

02 INTRODUCTION & BACKGROUND

Currently in the United States, the majority of school buses are run by diesel engines. Diesel school buses have been linked to serious health and developments issues for students as well as producing harmful air pollution (WRI, January 2022). School children in predominately low-income, BIPOC communities have been found to be disproportionately affected by the harmful fumes produced from diesel school buses[1]. ESBs are a clear solution to this problem as they have zero tailpipe emissions, which means less negative environmental and health impacts (US EPA, December 9, 2021).

Additionally, ESBs have reduced maintenance costs, potentially reduced fuel costs (depending on electricity prices) and have the potential to shave peak demand on the electricity grid through vehicle to grid (V2G) technologies[2]. These benefits, along with the health and environmental benefits, can also predominately help marginalized communities which are the ones most negatively impacted already from diesel buses. However, the greatest barrier to ESB adoption is the significant upfront cost of ESBs[3]. Since the public benefits are so high for switching from diesel-powered buses to ESBs, one way to help with increasing adoption rate is through government funded policies and programs.

Many states have already started to pass these policies, mainly funded through the VW Settlement created in 2017[7]. This has led to over 12,000 committed ESBs in 38 states across the country (see fig 1)[5]. Additionally, the EPA's new CSBP, which received $5 billion in funding from the Bipartisan Infrastructure Law through FY2022-FY2026, has already announced $913 million in funding to 389 applicants in all 50 states, several territories, registered tribes, and Washington DC[4]. While there is a lot of optimism around these policies and programs, there is still a lot unknown about their impact and how successful they will be.

02 INTRODUCTION & BACKGROUND

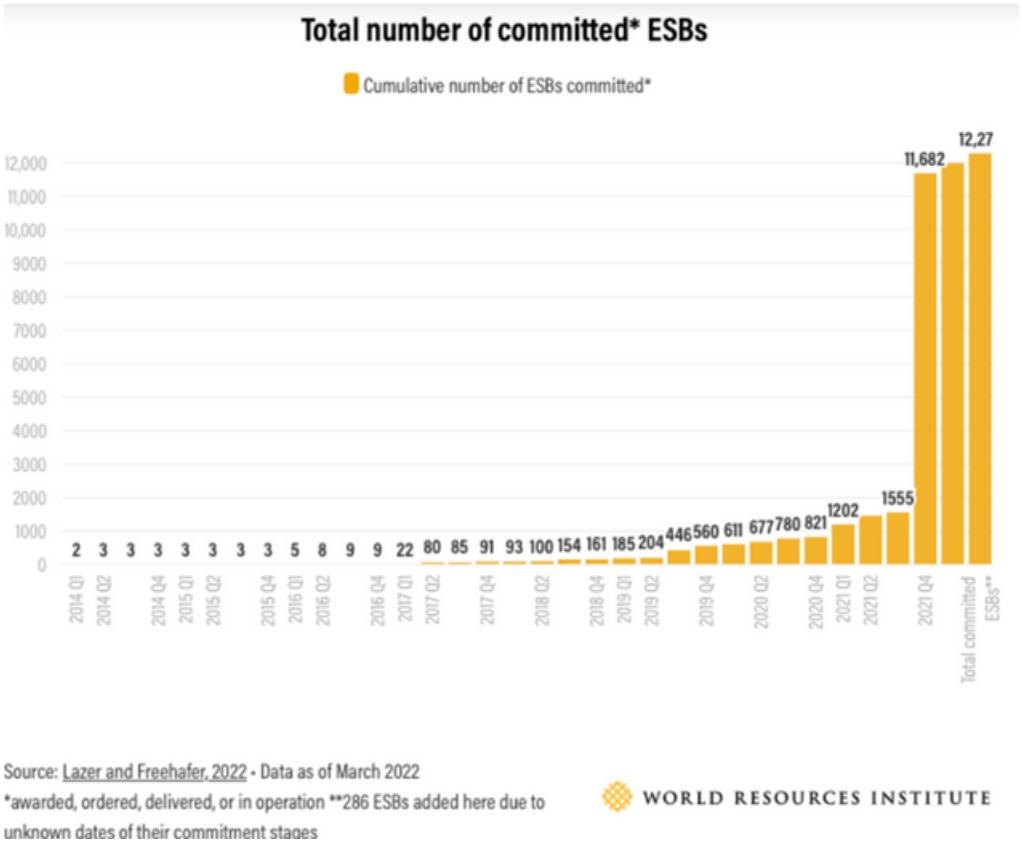

Fig. 1 Number of ESBs committed each year and total from 2014 Q1 – 2021 Q4[5]

Not only are a lot of these policies and programs new (have passed in the last five years), but they also use funding sources that are not a long-term solution. The EPA's CSBP only has funding for the next four years and many of the state programs have used funding from the VW settlement which is running low already[7]. This research will help to see how new state policies that either fund or promote the use of ESBs are being implemented, how effective and equitable they are, and how state advocates can help to promote, influence, and pass these policies.

03 LITERATURE REVIEW

There are a few types of policies and programs that already exist outside of state funded ESB programs that can be looked at for key takeaways. One of the most recent is EPA's CSBP. The CSBP will provide $5 billion in funding over the next four years[8]. The CSBP includes prioritization of funds for, and will offer more funding for, high-need school districts[9]. Similar programs through the EPA, such as the Diesel Emissions Reduction Act (DERA) and the American Rescue Plan (ARP), have helped to provide some funding for ESB rebates, but not at the magnitude of the CSBP[10].

With the CSBP, there are some questions on how impactful it will be. Firstly, the maximum number of buses that can be replaced per applicant is 25, but it does not mean that schools which request more buses to be replaced will be chosen first[11]. Secondly, the prioritization for school districts only accounts for rural and low-income school districts, which may not help marginalized communities that have compounding environmental impacts[11]. In fact, Chispa LCV has advocated for adding more indicators for prioritization such as race and air pollution data to get ESBs to the most impacted communities[6]. Finally, each state will have one school district chosen at a time, until each state has a school district chosen, which could lead to larger states such as California, Texas, and New York not seeing as large as an impact as smaller states[11]. While the CSBP can still have a positive impact and will help to get more ESBs on the road, there is a real concern that it will not have as great as an impact as state policies could.

On the state level there have already been policies put in place to help increase the adoption of ESBs. However, many of these ESBs are "committed", which doesn't mean they are on the road yet and the impact is yet to be known[12]. Another issue with these policies is that many use funding from the VW settlement fund which is slowly drying up and will not be replenished for future ESBs (McLaughlin, 2022). An additional issue for these committed buses is the vast majority is going towards suburban, wealthier school districts (see fig. 2)[12]. This means that the schools who have the least amount of funds to purchase an ESB and overcome the large initial cost are unable to and are continuing to see the worst side effects of diesel-run buses.

03 LITERATURE REVIEW

There are also a lot of areas of improvement for all these different policy areas and there are even more policy possibilities to get more ESB funding. Additionally, a lot of these policies are new, and their impacts are still unclear. Being able to figure out new ways to make efficient and equitable ESB state-funded policies will be important going forward to get more ESBs for schools, especially in marginalized communities.

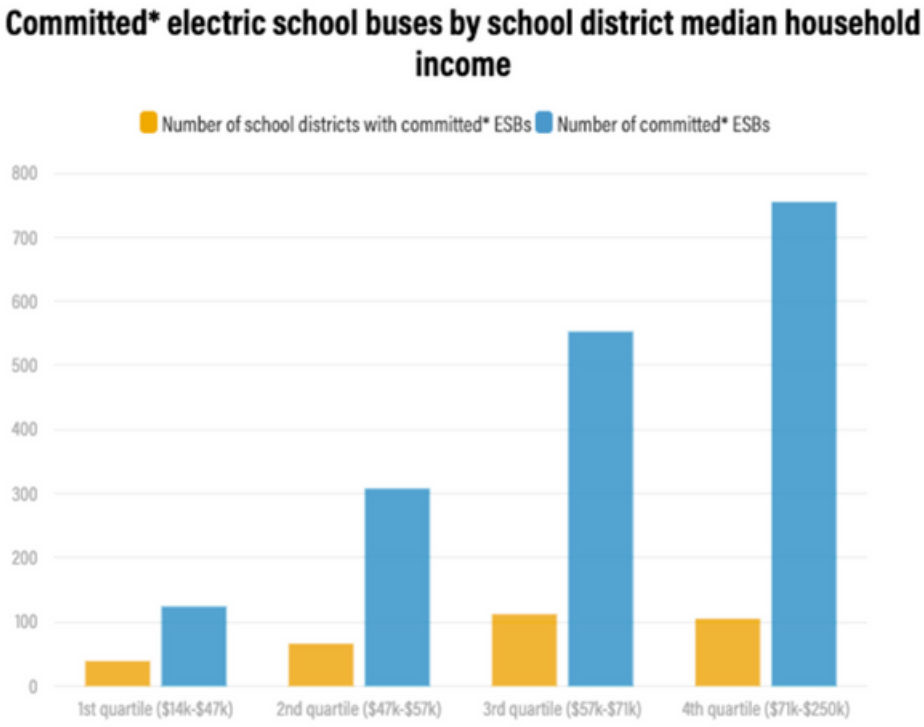

Fig. 2 Median Income Distribution of Committed ESBs (Lazer, 2022).

04 METHODS & ANALYSIS

For this research, qualitative methods, specifically interviewing relevant stakeholders, researching policy language, and analyzing secondary stakeholder sources were used. Interviews with stakeholders who have helped to get state ESB policies passed, at all stages of the policy process, and get implemented helped to get a first-person perspective on the difficulties and steps needed to get the policies passed. Interviews with stakeholders, including state policymakers and state advocates, also helped get diverse opinions on what makes a good policy and what issues can arise during the policy-making process, but also can help fill out all the important steps needed to get the policies passed. For the analysis, state advocates and state legislators were interviewed where an ESB policy was passed and/or introduced 2022 to look at the most recent policies. The interviews include similar questions to better interpret the answers across stakeholders and states (See Appendix I). These interviews provided more insight into the difficulties that can arise in getting ESB policies passed. Where interviews were not possible with state legislators, surveys were sent for them to fill out instead with the same questions as the interviews (See Appendix I).

Researching policy language of the different ESB policies can help to determine the good and the bad of the policies with a focus on equity. Through interviews and secondary source analysis, it was determined what parts of each policy stakeholders believe will allow the policies to be equitable. Policy research helped to bolster interviews and secondary source analysis as it allowed for a more in-depth look at the specific equity language in the policies. Secondary source analysis from press briefs and news stories helped in lieu of and to bolster interviews. To add to interviews or where interviews were not possible, secondary source analysis was used to get in-depth insight and expert testimonial into the process of passing the ESB policies. Secondary sources after policies are passed or from stakeholders who entered the policy-making process after the policy had already been written, but not passed helped to show what steps can be taken by stakeholders who are not part of the policy writing process.

04 METHODS & ANALYSIS

For this master's project, fifteen state ESB policies that were introduced in 2022 were analyzed. These policies include AZ 1246, CA AB2731, CO SB22-193, CT SB4, CT HB5506, ME LD1579, MA SD2943, MD SB528, NJ A1282, NJ A3139, NJ S759, NJ S886, NY State Budget FY2023 WA HB1644, and WV HB4571 (See State Policy Analysis section for specific policy names). Of these bills, eleven were successfully passed, while four (CA AB2731, MA SD2943, and NJ S886 and A3139) did not reach their respective governor's desks. Using personal research and CHISPA's contacts, advocates and legislators were identified that were active in the process of passing these bills. Secondary sources were used to get a bevy of stakeholder opinions on singular policies and help with determining which parts of the policies they believe to be the most impactful. With these opinions from interviews and secondary sources on the most impactful language in each policy, policy analysis was performed on each policy to take out the specific equity language and compare it similar language in the other policies.

Research was also done with states that have had a hard time passing ESB policies and used them as a counterfactual case for state advocates. Researching and interviewing stakeholders from states that have tried but failed to pass ESB policies will help to get a better understanding of what state advocates need to avoid when trying to get ESB policies passed in their states. This analysis was done on the four bills, CA AB2731, MA SD2943, NJ S886 and A3139, that were introduced, but not passed this past year. Those bills will also help get an understanding of why some ESB policies fail to pass in states that have already had success in passing ESB policies. Using these analytical techniques, key takeaways were formed that state advocates can use to better influence, promote, and pass equitable ESB policies.

05 POLICY HYPOTHESES

Based on the background research and literature review, I developed hypotheses for some of the barriers to passing ESB policies and how the policies themselves can be more equitable. The first hypothesis is that it is easier to pass ESB policies in states that are controlled by Democrats. Of the eleven states that have passed ESB policies in the last year, nine (California, Connecticut, Colorado, Maine, Maryland, Massachusetts, New Jersey, New York, and Washington) have state legislatures and governors controlled by Democrats only and only one, West Virginia, has a state legislature and governor controlled by Republicans only[13]. This continues the trend of democratically controlled states that have passed ESB policies, since out of the six other states that fit this criterion, (Delaware, Illinois, Nevada, New Mexico, Oregon, and Rhode Island) only Delaware has yet to pass an ESB policy[14].

Another hypothesis of why states are more likely to pass ESB policies is tied to what other type of policies they have passed in the past. The assumption is that if states already have incentives for EVs and have passed EJ legislation, they are more likely to pass ESB policies since they are EVs and can help in EJ communities. For EV incentives, almost all states have some sort of EV incentive with only three states (North Dakota, Kentucky, and Kansas) not having any EV incentives[15]. For EJ policies, they are less common with only ten states having passed legislation and thirteen states having pending legislation by October 2020[16]. Of the states that have passed or pending EJ legislation, only two states (Georgia and Hawaii) have not passed any ESB policies, though neither has Democrat-controlled state governments (Bruce, 2021). Additionally, two of the states whose policies that were analyzed, Colorado and West Virginia, have not passed or have pending EJ legislation as of October 2020[16].

The last hypothesis is that for ESB policies to be more equitable, it is important to look at trends for which communities are most impacted by environmental and health impacts of diesel buses. As advocated by Chispa LCV for the CSBP, the next criteria for prioritized school districts listed by the CSBP should include race and health outcome data, including asthma rates, which are linked to diesel exhaust fumes[6]. Both of those factors are important when determining the most marginalized communities, whereas prioritizing rural communities might only get at economic disadvantages, not environmental or health disparities necessarily. It also seems that the best way to get ESBs to the most marginalized communities is to include a greater number of indicators when determining who receives funding and how much funding they receive.

06 STATE POLICY ANALYSIS

Arizona

Arizona has a population of 7,151,502 as of 2020 with a diversity index rating of 61.1% ranking it the 13th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 22.5% of Arizona's population is under the age of 18[17]. Arizona's Real GDP was 347,656 million of 2012 U.S. dollars in 2021, which ranked 18th out of all U.S. states and the District of Columbia[18]. For the state politics of Arizona, both the state house of representatives and senate have been controlled by the Republican party since 1992[13]. For the executive office, Arizona has had a Republican governor from 2009 through 2022, however Democrat Katie Hobbs was elected to the position in 2022[13].

SB1246: *School buses; electrification; contracts*

Status: Passed on July 6th, 2022, originated in Education Committee[19].

SB1246, sponsored by Republican Representative Boyer, passed with bipartisan support and allows for school districts to "select preapproved carriers or private parties to provide electric school buses and related infrastructure and services"[19]. Additionally, SB1246 creates the School Bus Advisory Council, which would establish the school bus carrier preapproval process[19]. The bill was supported by environmental organizations and energy industry associations, such as Advanced Energy United (AEE)[20]. The main reason for support on SB1246 was that it would save school's time and money, as it would help to simplify the process of choosing which bus vendors to use[20]. With the support of these organizations and the support of more than two-thirds of Arizonans for ESB investments, it made it easier to garner large, bipartisan support throughout Arizona's state legislature[20].

06 STATE POLICY ANALYSIS

California

A California has a population of 39,538,223 as of 2020 with a diversity index rating of 69.7% ranking it the 2nd most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 22% of California's population is under the age of 18[17]. California's Real GDP was 2,874,731 million of 2012 U.S. dollars in 2021, which ranked 1st out of all U.S. states and the District of Columbia[18]. For the state politics of California, the state assembly has been controlled by the Democratic party since 1996 and the state senate has been controlled by the Democrat party since 1992[13]. For the executive office, California has had a Democrat governor since 2011 with Gavin Newsome having held the office since 2018[13].

AB2731: *An Act to add Sections 17927 and 39803.5 to the Education Code, relating to school buses*

Status: Engrossed on May 27th, 2022, originated in Committee on Education[21].

AB2731, sponsored by Democrat Assemblymember Ting, would have required all newly purchased or contracted school buses to be zero-emission vehicles starting in 2035[21]. The bill would have allowed for some leeway, allowing for a one-time extension of five years for purchasing ESBs[21]. The bill was supported due to its health, environmental, and cost saving benefits by local advocates, businesses, school districts, and state legislators[22]. The bill even received unanimous support in the state assembly, but ended up stuck in the committee on appropriations when it reached the state senate[23]. While AB2731 did not pass in 2022, legislative supporters are trying to get it passed in 2023, by adding a provision that "100% of the buses on the road need to be zero-emission by 2050", which will give more leeway to school districts[24]. While there is already a lot of work on the state level, advocates are trying to be more ambitious and are using local policies to reach these goals faster[24].

06 STATE POLICY ANALYSIS

California

Yasmine Agelidis, Senior Associate Attorney at Earthjustice, has been working with a blue-green coalition, combining labor and environmental groups, to focus their efforts on the Los Angeles Unified School District (LAUSD)[24]. This coalition has already done work on getting other district vehicles to be fully electric and are now working to get LAUSD to have 100% ESBs by 2035[24]. Since the coalition has been working with converting large fleets for a while, they know the ins and outs of procurement, infrastructure, and other technical aspects that might stall action by the district[24]. The big focus for the coalition on LAUSD is threefold. Firstly, it is one of the largest school districts in the country which can help to show that similar ESB transitions can be successfully in smaller districts[24]. Secondly, Los Angeles has a large, underserved population and has some of the worst air quality in the state, which means the impacts to LAUSD will be even larger than other areas of the state[24]. Thirdly, there has already been similar success in this area when the Los Angeles County Metropolitan Transit Authority electrified their fleet[24]. This transition led to the California Air Resources Board putting in a requirement for other agencies in the state to fully electrify their fleets and other states ended up following suit as well[24]. Currently, the biggest barrier is lack of resources for LAUSD, both through current funding and lack of resources to apply for future funding[24]. However, both the LAUSD board and the local utilities are committed to ESBs, and the state has large amounts of funding, so getting grant writers to help apply for grants and passing policies doubling down on their commitment can help to receive current and future funding that will show the state and other school districts how to succeed in similar programs[24].

06 STATE POLICY ANALYSIS

Colorado

Colorado has a population of 5,773,714 as of 2020 with a diversity index rating of 52.3% ranking it the 25th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 21.9% of Colorado's population is under the age of 18 (Bureau, 2020). Colorado's Real GDP was 373,763 million of 2012 U.S. dollars in 2021, which ranked 15th out of all U.S. states and the District of Columbia[18]. For the state politics of Colorado, the state house of representatives has had Democrat control since 2012 and the state senate having Democrat control since 2018[13]. For the executive office, Colorado has had a Democrat governor since 2007 with Jared Polis having held the office since 2018[13].

SB22-193: *Air Quality Improvement Investments. Originated in Committee on Transportation and Energy*

Status: Passed on June 2nd, 2022, originated in Committee on Transportation & Energy[25].

SB22-193, sponsored by Democrat Representatives Froelich and Valdez and Democrat Senators Fenberg and Gonzales, was passed with partisan Democrat support and will create air improvement grant programs including ones for ESBs, electric bicycles, and other air improvement opportunities[25]. As a part of the ESB fund, the legislation includes funds for the purchase of ESBs, repowering of gas and diesel buses, and the purchase of charging infrastructure[25]. SB22-193 was supported by both community and environmental groups, such as Sierra Club, Public Interest Research Group, Electrification Coalition, Green Latinos, and Conservation Colorado, due mainly to its potential to improve air quality in the state, which ranks as one of the worst in the country[26]. There are some concerns that the bill will not go far enough in getting all of Colorado's schools to have 100% ESBs, but it is a good step in the right direction[27]. One priority the bill had was to make Colorado schools more competitive for federal funding from the IRA and CSBP[28].

06 STATE POLICY ANALYSIS

Colorado

State advocates, such as Sarah Clark, Lead Organizer at Sierra Club Colorado, helped to launch a campaign to raise awareness and garner support for ESBs in communities around the state[28]. Clark and other advocates helped to garner support for community members in order to raise further support by their legislators, while other advocates worked with legislators on the language of the bill[28]. Working with state advocates allowed for the addition of sixteen amendments to the bill that which to greaten the impact of the bill[29]. While the bill will have some impact, there are some reasons why there is still room for improvement. The first is helping school districts apply for the funding since they already have limited resources as it is and their priority is getting students to school[28]. Additionally, in Colorado there is a cap on tax spending which makes it harder for larger grants to get passed as was the case with SB22-193 which started with $150 million in funding, but ended with $65 million[28]. Luckily the Democrat caucus and Governor Polis is in support for future legislation, which can help getting more funding for ESBs[29], Additionally, getting the initial ESBs to schools will allow for more interest and support for them as it will raise awareness and knowledge to community members, school districts, and state legislators[28].

06 STATE POLICY ANALYSIS

Connecticut

Connecticut has a population of 3,605,944 as of 2020 with a diversity index rating of 55.7% ranking it the 22nd most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 20.4% of Connecticut's population is under the age of 18[17]. Connecticut's Real GDP was 246,556 million of 2012 U.S. dollars in 2021, which ranked 23rd of all U.S. states and the District of Columbia[18]. For the state politics of Connecticut, the state house of representatives has been controlled by the Democratic party since 1996 and the state senate has been controlled by the Democrat party since 1992[13]. For the executive office, Connecticut has had a Democrat governor since 2011 with Ned Lamont having held the office since 2018[13].

SB4: *An Act Concerning the Connecticut Clean Air Act*

Status: Passed on May 10th, 2022, originated in Committee on Transportation[30].

HB5506: *An Act Adjusting the State Budget for the Biennium Ending June 30, 2023, Concerning Provisions Related to Revenue, School Construction and Other Items to Implement the State Budget and Authorizing and Adjusting Bonds of the State*

Status: Passed on May 7th, 2022, no committee of origination[31].

SB4, sponsored by Democrat Senator Looney and passed with Democrat partisan support will require "all cars and light duty trucks purchased or leased by the state should be alternate-fueled hybrid by 2012 and should be battery electric after 2030"[30]. SB4 will also require "all school buses in the state to be zero-emission by 2040"[30]. HB5506, sponsored by Democrat Senators Looney and Duff and Democrat Representatives Rojas and Ritter, and passed with Democrat partisan support and amends the state's budget, including creating a $10,000,000 voucher for medium and heavy-duty vehicles and buses as well as installation of charging infrastructure[31]. While both policies were successful, SB4 received the majority of support as well as opposition. Advocates for SB4, including Save the Sound, Sierra Club, Conservation Law Foundation, Union of Concerned Scientists, Northeast Clean Energy Council, Center for Latino Progress, and Connecticut LCV, among others, supported the bill due to its health, environmental, cost saving, job creating, and lifesaving benefits[32].

06 STATE POLICY ANALYSIS

Connecticut

Opposition from Republican state legislators and business organizations, such as, the Motor Transport Association of Connecticut, among others, came from concerns over the cost of the bill to taxpayers and local businesses[33]. However, supporters of the bill brought up a few different reasons for the overwhelming support of the bill. First, framing the bill as supporting clean air made it hard to oppose as Democrat Senator Will Haskell said, “You have to wonder who’s going to oppose clean air in Connecticut” [34]. Secondly, SB4 was proposed after the failure of the Transportation Climate Initiative (TCI) in Connecticut in 2022, which did not have any funding mechanisms and was seen as regressive by opponents[34]. SB4 however did include several funding mechanisms, supported by the additional federal funding[34].

Alex Rodriguez, Environmental Justice Specialist at Save the Sound, talked about the transition from TCI to SB4. Rodriguez talked about his work on TCI and other ESB legislation prior to 2022, and while there was some success, having TCI fail ended up being a blessing in disguise[35]. After TCI fell through, the Connecticut EPA and Energy Department released a report that the state was not on track to reach its emission goals it had set in 2018. Rodriguez used this report and community-based advocacy to push legislators to pass greater impacting legislation[35]. Rodriguez and Save the Sound brought in community members to talk to state legislators about the importance of the bill, especially in regard to the impact on their health. This support in addition to support by federal government programs made it easier to garner support for legislators who had been on the fence about past policies such as TCI[35]. Rodriguez said it best when asked about the overall turn from TCI to SB4, “Sometimes you have to fail before you succeed”[35].

06 STATE POLICY ANALYSIS

Maine

Maine has a population of 1,362,359 as of 2020 with a diversity index rating of 18.5% ranking it the least diverse state in the U.S. including the District of Columbia[17]. As of 2020, 18.5% of Maine's population is under the age of 18[17]. Maine's Real GDP was 63,595 million of 2012 U.S. dollars in 2021, which ranked 44th out of all U.S. states and the District of Columbia[18]. For the state politics of Maine, the state house of representatives has been controlled by the Democratic party since 2012 and the state senate has been controlled by the Democrat party since 2018[13]. For the executive office, Maine has had a Democrat governor since 2018 with Janet Mills having held the office since 2018[13].

LD1579: *An Act to Transition State and Local Motor Vehicle Fleets to Plug-in Hybrid Vehicles and Zero-emission Vehicles*

Status: Passed on April 25, 2022, originated in Committee on Energy, Utilities, and Technology[36].

LD1579, sponsored by Democrat Senator Vitelli and passed with Democrat partisan support will require "50% of the vehicles purchased and leased by the state and municipalities to by hybrid electric and zero-emission by 2025, and 100% hybrid electric by 2035"[36]. The bill additionally requires that "75% of public-school bus fleet purchases shall be zero-emission buses by 2035 and creates a working group to develop a plan on how to reach this goal"[36]. LD1579 was supported by environmental organizations, such as Sierra Club, and Democrat legislators as a means of saving schools money and having a large environmental benefit[37]. Even with this support, the bill faced strong opposition from Republican legislators. Republican Representative Foster, along with other Maine Republicans, were against the bill for the perceived cost it would have on taxpayers, calling it an unfunded state mandate on municipalities[38]. To answer some of these concerns, an amendment was added that would only require the switch to zero-emission vehicles "where practicable", which would allow for agencies and municipalities to have the "full range of possible applications of fleet vehicles and to continue using conventional vehicles if needed"[37].

06 STATE POLICY ANALYSIS

Maryland

Maryland has a population of 6,177,224 as of 2020 with a diversity index rating of 67.3% ranking it the 4th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 22% of Maryland's population is under the age of 18[17]. Mayland's Real GDP was 368,571 million of 2012 U.S. dollars in 2021, which ranked 16th out of all U.S. states and the District of Columbia[18]. For the state politics of Maryland, both the state house of representatives and senate has been controlled by the Democrat party since 1990[13]. For the executive office, Maryland has had a Republican governor from 2014 through 2022, however Democrat Wes Moore was elected to the position in 2022[13].

SB528: *Climate Solutions Now Act of 2022*

Status: Passed on June 1st, 2022, originated in Committee on Education, Health, and Environmental Affairs[39].

SB528, sponsored by Democrat Senator Elfreth, was passed with partisan Democrat support and will require "Maryland to reach a 60% reduction of emissions below 2006 levels by 2031, with a requirement to reach net-zero emissions by 2045"[39]. To reach these goals, SB528 created an ESB pilot program with local utilities that would help to cover the costs of ESB purchases[40]. SB528 was supported by environmental organizations, such as Maryland LCV, Maryland Public Interest Research Group, and the Chesapeake Climate Action Network, as well as faith-based organizations, such as Interfaith Partners for the Chesapeake, due to its health and environmental impacts both on future generations and marginalized communities[41]. Republican opposition came from concerns over the overall impact of the bill and the cost it could occur for taxpayers[42].

06 STATE POLICY ANALYSIS

Maryland

However, SB528 passed with great help from environmental advocates such as Ramon Palencia-Calvo, Deputy Executive Director at Maryland LCV. Palencia-Calvo worked with community members to campaign for ESBs around a push for cleaner air and improving health outcomes[43]. Palencia-Calvo started working at the local level to grow initial support through school board resolutions, spreading knowledge around ESBs, and focusing on marginalized communities[43]. Initial attempts to pass legislation were not successful due to concerns of utility-based programs raising ratepayer prices and lack of funding in the state budget[43]. With SB528, Palencia-Calvo used better coordination with community members and environmental groups to target larger climate legislation to secure ESBs and to make sure that there was a focus on marginalized communities (Palencia-Calvo). Making sure that community member voices were heard was especially important for Palencia-Calvo as he said, “It is a road you have to travel”, in talking about the importance of focusing on these communities[43]. Bringing together community members and other organizations, as well as communicating with state legislators and utilities, allowed for successfully creating the utility ESB pilot program that is a part of SB528[43].

06 STATE POLICY ANALYSIS

Massachusetts

Massachusetts has a population of 7,029,917 as of 2020 with a diversity index rating of 51.6% ranking it the 26th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 19.4% of Massachusetts's population is under the age of 18[17]. Massachusetts's Real GDP was 533,102 million of 2012 U.S. dollars in 2021, which ranked 12th out of all U.S. states and the District of Columbia[18]. For the state politics of Massachusetts, both the state house of representatives and senate has been controlled by the Democrat party since 1992[13]. For the executive office, Massachusetts has had a Republican governor from 2014 through 2022, however Democrat Maura Healey was elected to the position in 2022[13].

SD2943: *An Act Promoting Access to Zero-emission School Buses*

Status: Engrossed on April 4th, 2022, originated in Committee on Telecommunications, Utilities, and Energy[44].

SD2943, sponsored by Democrat Senator Creem, would have created a program, through the Massachusetts Department of Energy, to "provide grants or other financial incentives to assist municipalities and school districts with the purchasing or leasing of ESBs", but failed to pass in 2022[44]. SD2943 failed to pass even though similar grants had been given out by the state in the past for ESBs and there was already support by advocates, such as the Aspen Institute, and school districts[45]. Even with past support, both in the state and by stakeholders, there were a few reasons why the bill failed to pass. The first reason was due to questions around the bill including costs, how to include schools that use contractors for transportation, and the willingness for schools to make the switch[46]. In talking with Garrett Casey, Senator Creem's Policy Director, he mentioned that since advocates had not been brought in to support the bill prior to it being introduced, there was less help to answer some of these questions and to raise large amounts of support for the bill in committees[46]. However, with this knowledge, Senator Creem refiled the bill in 2023 after reaching out to more advocates and community members that supported the bill[46]. Senator Creem also changed the language of the bill to focus more on the cost differential of purchasing ESBs after consultation with the State of Maryland[46]. With this new added support and refocus of the bill, Senator Creem's office feels more confident that Massachusetts will put money into ESBs in the future[46].

06 STATE POLICY ANALYSIS

New Jersey

New Jersey has a population of 9,288,994 as of 2020 with a diversity index rating of 65.8% ranking it the 7th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 21.6% of New Jersey's population is under the age of 18[17]. New Jersey's Real GDP was 566,893 million of 2012 U.S. dollars in 2021, which ranked 10th out of all U.S. states and the District of Columbia[18]. For the state politics of New Jersey, the state assembly has been controlled by the Democratic party since 2001 and the state senate has been controlled by the Democrat party since 2003[13]. For the executive office, New Jersey has had a Democrat governor since 2018 with Phil Murphy having held the office since 2018[13].

A1282 & S759: *Requires DEP to Develop and Implement Electric School Bus Program*

Status: Passed on August 4th, 2022, originated in Committee on Transportation and Independent Authorities[47].

S886 & A3139: *Directs NJ Infrastructure Bank to Establish Financing Program for Electric School Buses*

Status: Engrossed on March 7th, 2022, originated in Committee on Environment and Solid Waste (Karabinchak, 2022).

A1282 and S759, sponsored by Democrat Senator Diegnan and Democrat Representatives Timberlake, Haider, and Staley, was passed with partisan Democrat support and will require the NJ Department of Environment Protection (DEP) to establish a financing program for ESBs with $15 million per year over three years in funding[47]. The bills would also require school districts who receive funding for ESBs to report back to DEP on any issues or data from the ESBs and for DEP to create a yearly report on these findings[47]. S886 and A3139, sponsored by Democrat Senator Smith and Democrat Representatives Karabinchak, Benson, and Calabrese, would have directed the NJ Infrastructure Bank to establish a financing program for ESBs with $20 million per year in funding, but did not pass in 2022[48]. A1282 and S759 was supported by environmental and labor organizations, such as Sierra Club, Environmental Justice Alliance, Environment New Jersey, and New Jersey Work Environment Council, due to its health and environmental impacts, especially for marginalized communities[49].

06 STATE POLICY ANALYSIS

New Jersey

While these bills were successful in 2022, it was built on a history of past failures. In an interview with Bill Beren, Transportation Chair of New Jersey Sierra Club, Doug O'Malley, Director of Environment New Jersey, and Gery Fredrick, Chairperson of New Jersey Sierra Club, they talked on the long road for ESB legislation in the state. Four years ago, there was legislation to fund $10 million for an ESB pilot program, but it was going nowhere[50]. However, Sierra Club, Environment New Jersey, and WRI built a coalition that had connections with the governor's office and were able to start building up support for ESB legislation[50]. Even with these connections there were a lot of roadblocks that had to be overcome. Initially, the bill had bipartisan support, but due to an influx of Republican legislators and the upcoming election in 2024, the support of the bill become partisan[50]. Additionally, concerns over where the money for the bill would come from led to issues getting the bill passed and currently getting appropriations for the bill now as DEP is late on a 2022-2025 Regional Greenhouse Gas Initiative funding strategy which could change where money is coming from for the fund[50].

While there are currently many roadblocks, the hope is that once the 2024 election is over and schools start to get more ESBs on the road it will garner more support for current and future ESB policies[50]. Additionally, DEP is required to identify and report on any future roadblocks, which will help with future bills[50]. While there have been many roadblocks to overcome, the coalition building aspect of ESB policies has been very successful. The initial coalition started by trying to fly under the radar, but after getting a grant from WRI for this work, Sierra Club and Environment New Jersey brought in more groups to garner support and extinguish any potential concerns[50]. Since the bill impacted so many groups, the coalition met with different stakeholder groups and added amendments to the bill in order to garner larger support for the bill overall[50]. Part of the strategy was talking to other states, such as Massachusetts, who had run ESB pilot programs and going to school board conventions to raise awareness of the benefits of ESBs and answer any questions that school transportation advisors might have[50]. Overall, the coalition continues to work with different stakeholders and state legislators to make sure any roadblocks are overcome, any concerns are answered, and that future policies can be passed to provide even more funding for ESBs[50].

06 STATE POLICY ANALYSIS

New York

New York has a population of 20,201,249 as of 2020 with a diversity index rating of 61.1% ranking it the 13th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 20.4% of New York's population is under the age of 18[17]. New York's Real GDP was 1,514,779 million of 2012 U.S. dollars in 2021, which ranked 3rd out of all U.S. states and the District of Columbia[18]. For the state politics of New York, the state assembly has been controlled by the Democratic party since 1992 and the state senate has been controlled by the Democrat party since 2018[13]. For the executive office, New York has had a Democrat governor since 2006 with Kathy Hochul having held the office since 2021[13].

State Budget FY23

Status: Passed on April 16, 2022, no committee of origin[51].

The NY State Budget FY23, created by Democrat Governor Hochul, requires all new school bus purchases to be "zero-emission buses by 2027 and that all active school buses have to be zero-emission by 2035"[51]. NY State Budget FY23 will provide $500 million through the Environmental Bond Act to support the purchase of ESBs and charging infrastructure[51]. The NY State Budget FY23 was supported by environmental, community, labor, justice, and parent organizations, such as Earthjustice, LCV, NY Lawyers for Public Interest, Parents to Improve School Transportation, and New York City (NYC) Environmental Justice Alliance, among others, due to its health, environmental, justice and cost saving benefits[52]. The bill was also supported for being a two-pronged approach, grant money and a mandate, that was instrumental in getting robust support from advocates[53].

06 STATE POLICY ANALYSIS

New York

The support from advocates was built out from a coalition of groups that initially worked with NYC policy and helped to set an ESB mandate for the city in 2021[54]. After that success, the coalition shifted their focus towards the state at large and focused on ESB funding after learning that Governor Hochul was interested in including ESB funding in the budget[53]. Since there was already support from the governor and state legislators, it was relatively easy to focus on even more ambitious goals such as locking in the 2035 full ESB mandate[54]. Around this time the Environmental Bond Act was getting written which would have $4.2 billion for environmental projects, and coalition was able to lobby for $500 million to towards ESBs[54]. With the funding from the Environmental Bond, it helped to ease any cost concerns for reaching the 2035 mandate[54].

Even with the support of the state legislators, it was important for the coalition to make sure any other impacted stakeholders had their concerns answered[54]. The coalition met with schools, parent groups, bus contractors, student groups and connected technical experts with state legislators to make sure all concerns were met before the environmental bond was put up for a public vote (Hahn, 2023). With the success of the state budget and funding being secured for ESBs, the next big step is implementation of the grant program and getting ESBs to schools[53]. There is need for both the state agency and school districts themselves, especially marginalized communities, to get the resources, technical assistance, and procurement needs met to make sure that each school in NY can reach its mandated goal[53].

06 STATE POLICY ANALYSIS

Washington

Washington has a population of 7,705,281 as of 2020 with a diversity index rating of 55.9% ranking it the 20th most diverse state in the U.S. including the District of Columbia[17]. As of 2020, 21.8% of Washington's population is under the age of 18[17]. Washington's Real GDP was 575,129 million of 2012 U.S. dollars in 2021, which ranked 9th out of all U.S. states and the District of Columbia[18]. For the state politics of Washington, the state house of representatives has been controlled by the Democratic party since 2002 and the state senate has been controlled by the Democrat party since 2018[13]. For the executive office, Washington has had a Democrat governor since 1985 with Jay Inslee having held the office since 2012[13].

HB1644: *Permitting Funds in the Transportation Vehicle Fund to be Used for Electric and Other Clean Pupil Transportation Vehicle Feasibility Planning and Fueling Station Infrastructure*

Status: Passed on March 30, 2022, originated in Committee on Appropriations[55].

HB1644, sponsored by Democrat Representative Senn, was passed with partisan Democrat support and will create the transportation vehicle fund which can be used to "purchase ESBs, charging equipment, and purchasing repower gas and diesel buses to electric and zero-emission buses"[55]. Overall, the bill was supported by environmental advocacy groups and schools since it would give schools more flexibility in purchasing ESBs, but was a relatively small bill[56]. Organizations such as Washington Climate Solutions have been trying to push the state to pass larger, more impactful programs that would either create mandates and/or create grant programs for ESBs[56].

06 STATE POLICY ANALYSIS

Washington

Leah Missik, Senior Policy Manager at Washington Climate Solutions, talked about pushing for more impactful legislation. Missik said how state legislators and the governor are with advocates in theory, but once it comes down to the specific language and funding of the bill, they are more likely to be less receptive[56]. Missik mentioned a large part to the reason Washington has been less receptive to these bills is the lack of funding the state has for these initiatives, though she mentioned that funding now, even if it is just a little, could help with larger future grants[56]. Passing legislation that gives some funding can help to garner further support for future policies both from school districts and state legislators[56]. In the meantime, support can be increased through already established coalitions of organizations, businesses, and local governments, increasing knowledge for school districts, and bringing in more community members[56]. Leah Missik does see hope on the horizon as current climate investments can be lobbied to be spent on ESBs[56].

06 STATE POLICY ANALYSIS

West Virginia

West Virginia has a population of 1,793,716 as of 2020 with a diversity index rating of 20.2% ranking it the 2nd least diverse state in the U.S. including the District of Columbia[17]. As of 2020, 20.1% of West Virgina's population is under the age of 18[17]. West Virginia's Real GDP was 71,343 million of 2012 U.S. dollars in 2021, which ranked 42nd out of all U.S. states and the District of Columbia[18]. For the state politics of West Virginia, both the state house of representatives and state senate has been controlled by the Republican party since 2014[13]. For the executive office, West Virginia has had a Republican governor since 2016 even though the governor Jim Justice was elected as a Democrat before changing to the Republican party after the election[13].

HB4571: *An Act to amend and reenact §18-9A-7 of the Code of West Virginia, 1931, as amended, relating to increasing the foundation allowance for transportation cost for the portion of the county's school bus system that is fully powered by electricity that is stored in an onboard rechargeable battery or other storage device and for the portion of its school bus system that is manufactured within the state of West Virginia*

Status: Passed March 12, 2022, originated in Education Committee[57].

HB4571, sponsored by Republican Representative Hamrick, was passed with near unanimous support and will "increase the allowance schools get for transportation by 10% for natural gas, propane or electric school buses and an additional 5% if those buses were manufactured in West Virginia"[57]. This bill was passed in conjunction with West Virginia agreeing to purchase a minimum of $15 million in zero-emission buses from GreenPower, an ESB manufacturer. A large part [58]of this deal as well was the availability of federal funding that came from the IRA and CSBP[58]. This agreement and bill were mainly supported due to economic reasons by state legislators. State officials both talked up the jobs created by this agreement as well as supporting the coal industry in West Virginia[59]. Greg Prudich, Mercer County Board of Education President, said that the ESBs are "charged with West Virginia electricity, created by West Virginia coal"[60].

06 STATE POLICY ANALYSIS

State Name	State Population	State Diversity Index	State GDP (Million USD)	State Population Under 18 (%)
Arizona	7,151,502	61.1	347,656	22.5
California	39,538,223	69.7	2,874,731	22
Colorado	5,773,714	52.3	373,763	21.9
Connecticut	3,605,944	55.7	246,556	20.4
Maine	1,362,359	18.5	63,595	18.5
Maryland	6,177,224	67.4	368,571	22
Massachusetts	7,029,917	51.6	533,102	22
New Jersey	9,288,994	65.8	566,893	21.6
New York	20,201,249	61.1	1,514,779	20.4
Washington	7,705,281	55.9	575,129	21.8
West Virginia	1,793,716	20.2	71,343	20.1

06 STATE POLICY ANALYSIS

State & Policy Name	Status as of January 1st, 2023	Committee of Origin	State Legislature Party Control	Governor's Party Affiliation
AZ SB1246	Passed	Education	Republican	Democrat
CA AB2731	Engrossed	Education	Democrat	Democrat
CO SB22-193	Passed	Transportation & Energy	Democrat	Democrat
CT SB4	Passed	Transportation	Democrat	Democrat
CT HB5506	Passed	No Committee	Democrat	Democrat
ME LD1579	Passed	Energy, Utilities, & Technology	Democrat	Democrat
MD SB528	Passed	Education, Health, & Environmental Affairs	Democrat	Democrat
MA SD2943	Engrossed	Telecommunications, Utilities, & Energy	Democrat	Democrat
NJ A1282/S759	Passed	Transportation & Independent Authorities	Democrat	Democrat
NJ A3139/S886	Engrossed	Environment & Solid Waste	Democrat	Democrat
NY State Budget	Passed	No Committee	Democrat	Democrat
WA HB1644	Passed	Appropriations	Democrat	Democrat
WV HB4571	Passed	Education	Republican	Republican

07 EQUITY LANGUAGE ANALYSIS

Equity for which school districts get prioritization for ESBs and funds for these purchases continues to be an issue. As already seen in the literature review, the majority of committed ESBs are in suburban and wealthier school districts who already have the funds and resources to apply for and get ESBs[12]. This is a major issue since school children in predominately environmental justice communities are disproportionately affected by the harmful fumes produced from diesel school buses[1]. Fortunately, many of the policies have equity language in either the policy itself or in broader state policies that impact prioritization for ESBs. Of the 15 policies, seven have specific equity language, five have prioritization through state or federal policies, and only three have no equity language.

The five policies that include specific equity language include four policies that passed, CT SB4; MD SB528; and NJ A1282/S759, and three that didn't pass, MA SD2943 and NJ A3139/S886. CT SB4 gives preference for grant applications from schools that are operated "primarily in an EJ community"[30]. MD SB528 requires when deploying ESBs, that "utilities should consider criteria that benefit students who are eligible for free and reduced-price meals"[39]. MD SB528 also defines underserved and overburdened communities even though it does not prioritize ESBs for these communities[39]. MD SB528 defines underserved communities as "any census tract in which at least 25% of the residents qualify as low-income; at least 50% of the residents identify as nonwhite; or at least 15% of the residents have limited English proficiency"[39]. MD SB528 defines overburdened communities as "any census tract for which three or more of the following environmental health indicators are above the 75Th percentile statewide: particulate matter 2.5; ozone; national air toxics assessment (NATA) diesel PM; NATA cancer risk; NATA respiratory hazard index; traffic proximity; lead paint indicator; national priorities list superfund site proximity; risk management plan facility proximity; hazardous waste proximity; wastewater discharge indicator; proximity to a concentrated animal feeding operation (CAFO); percent of the population lacking broadband coverage; asthma emergency room discharges; myocardial infarction discharges; low-birth-weight infants; proximity to a toxic release inventory (TRI) facility; proximity to a brownfield site; proximity to mining operations; and proximity to a hazardous waste landfill"[39].

07 EQUITY LANGUAGE ANALYSIS

NJ A1282/S759 requires that "at least half of the school districts or school bus contractors selected for the grant program and half of the funds from the program should be awarded to low-income, urban, or EJ communities"[47]. NJ A1282/S759 also requires that "funds should be split equally between the northern, central, and southern counties in the state"[47]. MA SD2943 would have required the department of energy to "provide outreach to and prioritize funding to municipalities and school districts where the median household income is below the commonwealth's median or where the 5-year average rate of emergency department visits for childhood (ages 5-14 years) asthmas is greater than the commonwealth's 5-year average rate"[44]. NJ A3139/S886 would have required criteria being created for prioritization of funding that "gave priority ranking to school districts located in overburdened communities"[48].

The five bills that have prioritization through state or federal policies include four that passed, CO SB22-193; CT HB5506; NY State Budget FY23; and WA HB1644, and one policy that did not pass, CA AB2731. CO SB22-193 and CT HB5506 gave matching grant money for schools that applied for ESBs through EPA's CSBP, which has prioritization for rural and low-income school districts[11]. The Climate Act, passed in New York in 2022, requires "disadvantaged communities receive at least 35 percent, with the goal of 40 percent, of overall benefits of spending on clean energy and energy efficiency programs" and includes a map and list of these communities[61]. This covers NY State Budget FY23 and the $500 million going towards ESBs[51]. In Washington, the Climate Commitment Act, passed in 2022, "requires 35% of revenue from cap and invest program is spent on overburdened communities with a goal of 40%"[56]. In California, an executive order by Governor Newsome required state agencies to embed equity in their policies, which has focused on rural districts[24].

08 KEY TAKEAWAYS

Coalition Building

For all the bills, having a strong coalition of supporters was key. Coalitions that included more diverse groups were able to garner the most support and resist more opposition. For a multitude of the bills that passed, coalitions were formed from environmental, health, labor, education, and community advocate groups. This allows coalitions to answer any questions that different stakeholders may have about ESBs or how the policies will impact the different groups the advocates represent. Even if they do not have the expertise to answer the questions, many coalitions have brought in other groups to make sure those questions are answered. Coalitions, such as the one that helped to pass the NY State Budget FY23, worked with ESB manufacturers to help answer any questions legislators had on the bill[54]. This allows coalitions to avoid risking a conflict of interest by bringing in businesses which could financially benefit but are able to answer any technical questions that community members or state legislators have. Having advocates with connections to state legislators can also help to make sure bills have the best support and can help to keep the support strong when there is a lot of opposition. In talking with Beren, O'Malley, and Fredrick, New Jersey advocates who worked to get A1282/S759 passed, had strong connections with state legislators and were able to work closely with them to maintain support even when the bill became partisan[50].

There is also evidence that not having coalitions is detrimental to passing bills. In talking with Garret Casey, Senator Creem's Policy Director, he said that advocates had not been brought in to support the bill prior to it being introduced, therefore there was less help to answer some of the questions asked by opposition in committees[46]. This exemplifies the importance of coalitions since the lack of coalitions here prevented the legislators from bringing in advocates to ease concerns that state legislators had with the bill. Even when coalitions are not formed, reaching out to important stakeholders, and spreading knowledge can be key to raising support for ESBs and policies, both present and future. Many advocates talked about the importance of raising awareness of ESBs to school districts, especially in rural or marginalized communities[56]. Many others talked about the importance of getting more ESBs on the road in order for school districts and other sceptics to see firsthand the benefit of ESBs[50]. The importance of coalitions, and to a larger extent raising widespread support for ESBs from different stakeholders, is key in getting more impactful ESB policies passed across the country.

08 KEY TAKEAWAYS

Sell the Bill and the Bus

While ESBs have some more obvious benefits, including health, environmental, and cost-saving benefits for communities and schools, sometimes it takes more than that to gain larger support for ESB bills. One way to sell ESBs and the policies is by using language and campaigns that are hard to oppose. CO SB22-193 and CT SB4 are both good examples of naming bills in a way that is hard to oppose as both use language of improving air quality and clean air. In fact, Democrat Senator Will Haskell, a supporter of SB4, said, “You have to wonder who’s going to oppose clean air in Connecticut”[34]. This shows that you can focus on the health and environmental benefits of ESBs but can also make it more on the nose which will make it harder for opposition to argue against the bill. Advocates can constantly name the bill, which will garner more support from people who might not have as much background knowledge on ESBs as they will just know they improve the air quality.

Another way to sell ESBs and ESB funding to those on the fence is to include it in a larger environmental bill. CO SB22-193, CT SB4, CT HB5506, ME LD1579, MD SB528, and NY State Budget FY23 all include ESB funding in larger climate and environmental funding bills. Adding ESB funding or requirements in larger climate bills can be beneficial in getting ESB policies passed as it allows for greater support from different impacted stakeholders. Larger bills usually give funding for a multitude of different projects which boosts support for many different stakeholders, community members, and legislators. Some policies, such as CT SB4 and ME LD1579, specifically focus on switching all state-owned vehicles to electric vehicles[30],[36]. Including ESB funding in larger transportation specific bills is also beneficial as it can have compounding health and environmental effects on switching a larger number of vehicles across the state from gas- or diesel-powered to electric-powered.

08 KEY TAKEAWAYS

Sell the Bill and the Bus

Advocates can also look for innovative ways to promote ESBs based on benefits that are not environmental or health related. While most bills emphasized the health, environmental, and cost saving benefits of ESBs, one bill garnered support for a different reason. WV HB4571, which increases the transportation allowance schools get if they buy West Virginia-based alternate-fueled buses, was promoted more for its jobs creation and economy boosting benefits[57]. The bill was primarily passed in order to reach the state's agreement with GreenPower, an ESB manufacturer, which agreed to put one of their manufacturing plants in West Virginia if the state purchased a minimum of $15 million in zero-emission buses[58]. Additionally, some legislators supported the bill due to ESBs running on electricity, which was powered by West Viriginia coal, boosting the economy[60]. HB4571, which might have seemed politically infeasible to pass, was able to garner support for pro-business instead of pro-environment reasons. While ESBs run on electricity produced from fossil fuels do not have the same environmental benefits as ESBs run on renewable energy, it is still a step in the right direction and shows the importance of getting ESB policies passed in a multitude of different ways.

08 KEY TAKEAWAYS

Money and Where to Find It

One of the largest concerns over ESBs continues to be the cost and that is no different for the bills themselves. For the majority of the bills, the biggest concern from legislators, advocates, and community members was where the money for the ESBs was going to come from and how much it would cost taxpayers. For this reason, it is key for advocates to know where money either is or can come from to fund ESBs. CA AB2731, CO SB22-193, ME LD1579, MA SD2943, NJ A1282/S759, and WA HB1644 all had issues with where funds should come from during the policy-making process. Both CA AB2731 and MA SD2943 both failed to pass, with funding for the bills being a main cause for them failing [46],[62]. Money issues caused CO SB22-193, ME LD1579, and WA HB1644 to all pass lower funded bills or looser requirements for ESB mandate timelines [28],[37],[56]. NJ A1282/S759 was able to pass with the amount of funding that advocates wanted but has run into issues with where the money will come from to fund the ESB program now that it has passed[50]. These bills show the importance of knowing where funds for ESB grant programs will come from before and during the policy-making process, especially where states have less funds available.

If state funds are sparse, one way to make sure ESBs are still funded is by looking for additional funding sources to supplement what the state can give. One way policies have been supplementing state funds is by prioritizing federal funds for ESBs. Through the IRA and CSBP, the federal government has federal funds available for schools to make the switch to ESBs and is prioritizing schools that can receive matching funds[4]. Four policies have used this to prioritize or require schools applying for state funds to apply for federal funds as well. CO SB22-193, CT SB4, CT HB5506, and MD SB528 either require or prioritize school's or grant governing bodies to maximize the possible matching federal funds that are available [25],[30], [31],[39]. Maximizing federal or other private funds is key, especially for states which might not have as large of a budget as wealthier states as Colorado, Maryland, and Connecticut rank 15th, 16th, and 23rd in state GDP respectively[18]. Even for wealthier states, maximizing federal or private funds can allow state funds to go farther and reach more schools, especially those in marginalized communities who cannot afford the high-cost difference between diesel and electric buses.

08 KEY TAKEAWAYS

Targeting Equity Language

While a lot of the policies have more broad language on prioritizing ESBs for EJ or marginalized communities, some policies have added language to target the most overburdened communities. Including language that specifies urban, rural, household income, asthma rates, and number of students that get free or reduced meals allows policies to target the specific populations that are the most impacted by the harms caused by diesel fumes or are the least able to pay for the large upfront cost of ESBs. However, a more concerted effort needs to be taken to make sure the most impacted communities are targeted, especially from policies or states that have too broad or no equity language.

For both CO SB22-193 and CT HB5506, they use the CSBP prioritization which both advocates mentioned was an issue for who gets the funds in their respective states [28],[29]. Clark specifically mentioned the work that needs to be done at the federal level to make sure their prioritization goes to the most marginalized districts since Colorado focuses on matching funds, so the schools which are the most impacted in the state aren't prioritized for funds from either the state or the federal government[28]. Similar issues were voiced by advocates in states with broad language including California, where advocate Agelidis mentioned their hope to change the priority for funds based on air quality and income of families[24]. Using specific targeting language or adopting specific language on what constitutes an overburdened and underserved community, like MD SB528, can help to make sure the most vulnerable populations are prioritized.

Even with better equity language, advocates also talked about the importance of including equity throughout the process of writing the policy, deciding where to give funds first, and overcoming any potential issues that may arise. In Maryland, Palencia-Calvo, talked about the importance of including equity checks at every step of the policy to make sure it is actually considered[43]. Having these checks makes sure that the communities that are targeted can verify that the ESBs are delivered in a way that works best for them and that they get the resources they need to apply for the grants[43].

08 KEY TAKEAWAYS

Targeting Equity Language

A similar concern came up during the interview with Alok Disa, Senior Research and Policy Analyst at Earthjustice, on New York's equity lens in the Climate Act and State Budget FY23[53]. Disa argued that while there was equity prioritization for funding, there was no explicit goal in prioritizing EJ communities in the planning process[53]. The modeling phase of the State Budget does not mention the prioritization of EJ communities and only focuses on larger goal of bill to get all buses to ESBs by 2035[53]. This could lead to state agencies prioritizing non-EJ communities first as it will help them reach their overall goal faster but will leave EJ communities behind when they are the ones who need the funds the most[53]. Disa said that you cannot get to equity by accident, which a lot of state legislators think will happen, saying, "it takes extra work that isn't easy, but is important"[53].

09 CONCLUSION

ESBs are a new solution to the health and developmental issues diesel buses afflict students across the country. By providing zero tailpipe emissions, reducing maintenance and fuel costs, and potentially reducing peak demand on the electrical grid, ESBs can not only benefit the health of students, but improve the environment and transportation costs for schools. Unfortunately, the cost difference between electric and diesel school buses continues to be the greatest roadblock to further ESB adoption, especially in impacted communities. One solution is state policy that either promotes the adoption of and/or gives funding for electric school buses. For advocates who are trying to get these policies passed, it can be difficult to know how to best support these policies or overcome potential roadblocks. Through analysis of interviews and secondary sources from key stakeholders, four key takeaways were developed for stakeholders: coalition building; selling the bus and the bill; money and where to find it; and targeting equity language.

Coalition building amongst diverse stakeholders who are impacted by ESBs creates greater support for ESBs and allows for expertise on any potential concerns that may arise. Being able to sell ESBs and their corresponding bills in innovative ways is key to convincing stakeholders with differing priorities and passing policies in places where it seemed politically infeasible. Making sure a source for grant funds is secured or finding outside sources to supplement state funding can help to ease the process of passing ESB legislation. Since money is commonly the main issue for funding or buying ESBs, it is key for advocates to confirm how much and where funds are coming from. In states where funds are limited, maximizing federal and/or private matching options can help to bolster available state funds for ESBs. Including specific equity language in ESB bills that prioritizes the most vulnerable communities is essential in making sure they are prioritized for funding and receiving ESBs. While putting in equity language to prioritize funding is a good start, adding language that makes sure there is an equity lens throughout the implementation of the bill is key to making sure those who need ESBs the most get them first. Hopefully with this knowledge, more state advocates can better influence, promote, and pass equitable ESB policy in their own states and continue the adoption of ESBs by schools across the country.

10 APPENDIX AND REFERENCES

Appendix I

Interview Questions for State Advocates

1. **Overall, do you support the policy and did that change at all during the policy-making process?**
2. **Were you involved in the policy-making process? If yes, how were you involved in the process? If no, did you feel your voice was at all heard by those in the process?**
3. **Did you consider the policy-making process successful? In what ways was it and wasn't it?**
4. **What would you have changed differently about the policy and the process of getting it passed?**
5. **Do you think the policy will be successful?**
6. **Did you feel that many voices were listened to during the policy-making process? Did that help or hurt the process?**
7. **Do you think the policy will have an equitable outcome? If not, in what ways could it be more equitable?**

Interview Questions for State Legislators

1. **Overall, do you support the policy and did that change at all during the policy-making process?**
2. **Did you consider the policy-making process successful? In what ways was it and wasn't it?**
3. **Did the policy have bipartisan support and if yes in what ways?**
4. **Was it easy or hard to garner support for the bill? Was it easy to get funding for the bill?**
5. **What would you have changed differently about the policy and the process of getting it passed?**
6. **Do you think the policy will be successful?**

10 APPENDIX AND REFERENCES

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